JACARANDA

# HUMANITIES ALIVE 9

VICTORIAN CURRICULUM | SECOND EDITION


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# HOW TO USE

## the *Jacaranda Humanities Alive* resource suite

The ever-popular *Jacaranda Humanities Alive 9* has been re-published for the Victorian Curriculum. It is available as a single 4-in-1 title and as subject-specific titles: *Jacaranda History Alive 9*, *Jacaranda Geography Alive 9*, *Jacaranda Civics and Citizenship Alive 9* and *Jacaranda Economics and Business Alive 9*. The series is available across a number of digital formats: learnON, eBookPLUS, eGuidePLUS, PDF and iPad.

Skills development is integrated throughout, and explicitly targeted through SkillBuilders and dedicated skills topics for History and Geography.

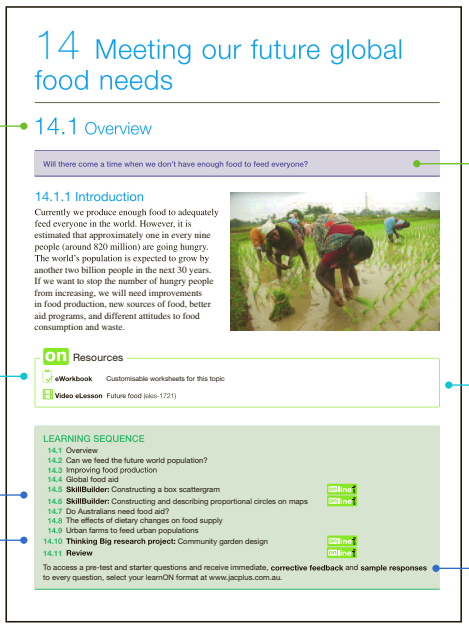
This suite of resources is designed to allow for differentiation, flexible teaching and multiple entry and exit points so teachers can *teach their class their way*.

## Features

All topics start with an **Overview** which includes a pre-test to gauge students' readiness to begin.

An online **workbook** is available for customisation and printing.

**SkillBuilders**, **Thinking Big research projects** and **Reviews** are available online for every topic.



14 Meeting our future global food needs

14.1 Overview

Will there come a time when we don't have enough food to feed everyone?

14.1.1 Introduction

Currently we produce enough food to adequately feed everyone in the world. However, it is estimated that approximately one in every nine people (around 820 million) are going hungry. The world's population is expected to grow by another two billion people in the next 30 years. If we want to stop the number of hungry people from increasing, we will need improvements in food production, new sources of food, better aid programs, and different attitudes to food consumption and waste.

On Resources

eWorkbook Customisable worksheets for this topic

Video eLesson Future food (eles-1721)

LEARNING SEQUENCE

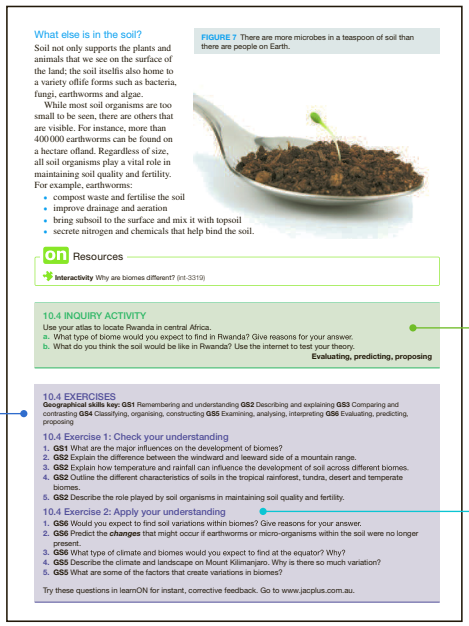
14.1 Overview
14.2 Can we feed the future world population?
14.3 Improving food production
14.4 Global food aid
14.5 SkillBuilder: Constructing a box scattergram
14.6 SkillBuilder: Constructing and describing proportional circles on maps
14.7 Do Australians need food aid?
14.8 The effects of dietary changes on food supply
14.9 Urban farms to feed urban populations
14.10 Thinking Big research project: Community garden design
14.11 Review

To access a pre-test and starter questions and receive immediate, corrective feedback and sample responses to every question, select your learnON format at www.jacplus.com.au.

Topics open with an **inquiry question** to spark students' curiosity about the topic.

**OnResources** feature boxes provide guidance about additional resources online.

**Corrective feedback** and **sample responses** are available online for every question.



What else is in the soil?

Soil not only supports the plants and animals that we see on the surface of the land; the soil itselfis also home to a variety ofife forms such as bacteria, fungi, earthworms and algae.

While most soil organisms are too small to be seen, there are others that are visible. For instance, more than 400000 earthworms can be found on a hectare ofland. Regardless of size, all soil organisms play a vital role in maintaining soil quality and fertility. For example, earthworms:

- compost waste and fertilise the soil
- improve drainage and aeration
- bring subsoil to the surface and mix it with topsoil
- secrete nitrogen and chemicals that help bind the soil.

FIGURE 7 There are more microbes in a teaspoon of soil than there are people on Earth.

On Resources

Interactivity Why are biomes different? (int-3319)

10.4 INQUIRY ACTIVITY

Use your atlas to locate Rwanda in central Africa.
a. What type of biome would you expect to find in Rwanda? Give reasons for your answer.
b. What do you think the soil would be like in Rwanda? Use the internet to test your theory.

Evaluating, predicting, proposing

10.4 EXERCISES

Geographical skills key: GS1 Remembering and understanding GS2 Describing and explaining GS3 Comparing and contrasting GS4 Classifying, organising, constructing GS5 Examining, analysing, interpreting GS6 Evaluating, predicting, proposing

10.4 Exercise 1: Check your understanding

1. GS1 What are the major influences on the development of biomes?
2. GS2 Explain the difference between the windward and leeward side of a mountain range.
3. GS2 Explain how temperature and rainfall can influence the development of soil across different biomes.
4. GS2 Outline the different characteristics of soils in the tropical rainforest, tundra, desert and temperate biomes.
5. GS2 Describe the role played by soil organisms in maintaining soil quality and fertility.

10.4 Exercise 2: Apply your understanding

1. GS6 Would you expect to find soil variations within biomes? Give reasons for your answer.
2. GS6 Predict the *changes* that might occur if earthworms or micro-organisms within the soil were no longer present.
3. GS6 What type of climate and biomes would you expect to find at the equator? Why?
4. GS5 Describe the climate and landscape on Mount Kilimanjaro. Why is there so much variation?
5. GS5 What are some of the factors that create variations in biomes?

Try these questions in learnON for instant, corrective feedback. Go to www.jacplus.com.au.

**Skills keys** identify each question according to the skill targeted, providing insights into skills development. Progress and results can be tracked and filtered by skill online.

A range of activities is provided to promote deeper inquiry, encourage collaboration and help students to develop their research skills.

Exercise sets at the end of each subtopic allow students to **check** and **apply** their understanding.

Content is presented using age-appropriate language, and a wide range of engaging sources, diagrams and images support concept learning.

**Skillbuilders** model and develop key skills in context.

In each topic, a **Thinking Big research project** provides opportunities for students to delve deeper, think creatively and work collaboratively.

## 25.6 SkillBuilder: Preparing a résumé

online only

### What is a résumé?

A résumé is a short summary of your skills, experience and qualifications (also known as a curriculum vitae, or CV) that is a crucial part of the job application process. Constructing an effective résumé is an important skill; a good résumé will help you stand out from other applicants and increase your chances of obtaining an interview for the position.

**Select your learnON format to access:**

- an explanation of the skill (Tell me)
- a step-by-step process to develop the skill (Show me)
- an activity to allow you to practise the skill (Let me do it).

on Resources

Weblink How to write a résumé

## 25.7 Thinking Big research project: Workplace evolution presentation

online only

SCENARIO

Technological advances, online shopping, the introduction of parental leave and carer's leave for employees, the growth of part-time and casual work and 24-hour shopping have changed the way we work. You will choose an industry to investigate and present a report on how jobs have changed over time and how they might change in the future.

**Select your learnON format to access:**

- the full project scenario
- details of the project task
- resources to guide your project work
- an assessment rubric.

on Resources

ProjectsPLUS Thinking Big research project: Workplace evolution presentation (pro-0203)

**FIGURE 5** Unions launched the 'Your rights at work' campaign in response to the Liberal government's WorkChoices laws.

DISCUSS

Consider this statement: 'Interest groups should not be able to donate money to political parties in order to try and influence them or help them win power.'

a. What would be the different positions that the following groups of people would have on this issue?
   (i) A Greens politician who has received a large donation from an environmental group to help her campaign
   (ii) A pro-business lobby group that donates to the Liberal party
   (iii) Undecided voters
b. What values and beliefs may influence their differing perspectives?

**[Ethical Capability, Personal and Social Capability]**

### 19.4.7 Other political party campaign activities

Political parties have a variety of additional campaign techniques that are used in most elections. These include:

- *Letterboxing*. Parties will print and distribute advertising leaflets during an election campaign. These will usually feature a photo and information about the local candidate, as well as information about the party's policies. Local party members then volunteer to walk around the electorate delivering the leaflets to letterboxes.
- *Polling*. As well as opinion-polling companies carrying out surveys of voters' opinions, political parties carry out their own opinion polls, particularly during an election campaign. They want up-to-date feedback on how well their campaign is being received by the voters, whether their policies are popular or not, and how well the leaders are performing. The political parties carry out polling almost every day during an election campaign.

**Discuss** features explicitly address Curriculum Capabilities.

Links to the **myWorld Atlas** and **myWorldHistory Atlas** are provided throughout.

**SOURCE 8** Chinatown in Melbourne. This community was originally established in the 1850s during the gold rushes.

Explore more with myWorldHistoryAtlas

Deepen and check your understanding of this topic with related case studies and auto-marked questions.

- Australia and Asia > **The Chinese diaspora**

7.7 ACTIVITY

(a) Construct a visual diagram that summarises the causes of the Chinese Diaspora. Include both 'push factors' (reasons to leave China) and 'pull factors' (reasons to migrate to a particular country).
(b) On a world map, label the countries and regions, with the dates if possible, to which Chinese migrants primarily travelled.

**Analysing cause and effect**

## 3.13 Review

online only

### 3.13.1 Key knowledge summary

Use this dot point summary to review the content covered in this topic.

### 3.13.2 Reflection

Reflect on your learning using the activities and resources provided.

on Resources

eWorkbook Reflection (doc-31699)
Crossword (doc-31700)
Interactivity The Industrial Revolution crossword (int-7637)

KEY TERMS

**biased account** narrative or description in which a writer presents only one side of an issue in an attempt to convince the reader
**bourgeoisie** capitalist middle classes; the owners of the means of production, distribution and exchange — factories, shipping, banks and other businesses
**cesspits** pits into which householders with no toilets could empty their waste, which was later collected by workers known as nightmen
**cholera** a bacterial disease of the intestines, causing vomiting and diarrhoea. It is transmitted through contaminated water and can lead to death through dehydration.
**impartial observations** comments that recognise all sides and opinions relating to an issue or event, leaving it to the reader to form his or her own judgment
**indoor relief** the provision of assistance to the inmates of a workhouse
**Luddites** a group of protesters who expressed their opposition to industrialisation by smashing factory machines
**naturalist** a term once used to describe a scientist who studies plants and animals. Today such a person would be called a biologist.
**outdoor relief** the provision of assistance to the poor while allowing them to remain in their own homes
**parish** an area of local government centred on the local church, which fulfilled some of the functions that local municipal councils perform in society today
**pauper** a very poor person
**picking oakum** unpicking short lengths of rope coated in tar. Oakum would be rammed between the planks on wooden ships to make them watertight.
**proletariat** the working class, especially industrial wage earners
**repeal** withdrawal of a law or set of laws by Parliament
**royal commission** a special public inquiry set up by government to investigate a particular issue and to make recommendations for changes in the law
**strike** attempt by employees to put pressure on their employer by refusing to work
**suffrage** the right to vote
**typhus** a fatal disease spread through the bites of lice and fleas
**workhouse** an institution built to house the poor

A range of questions and a post-test are available online to test students' understanding of the topic.

**Key terms** are available in every topic review.

## learnON

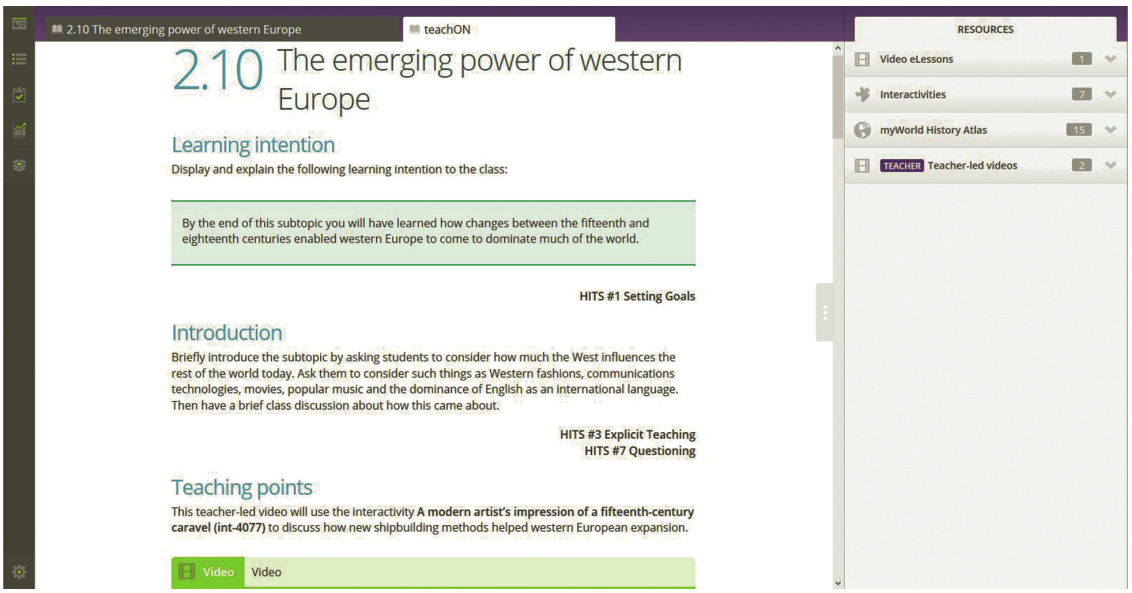
*Jacaranda Humanities Alive learnON* is an immersive digital learning platform that enables student and teacher connections, and tracks, monitors and reports progress for immediate insights into student learning and understanding.

It includes:

- a wide variety of embedded videos and interactivities
- questions that can be answered online, with sample responses and immediate, corrective feedback
- additional resources such as activities, an eWorkbook, worksheets, and more
- Thinking Big research projects
- SkillBuilders
- teachON, providing teachers with practical teaching advice, teacher-led videos and lesson plans.

## teachON

Conveniently situated within the learnON format, teachON includes practical teaching advice, teacher-led videos and lesson plans, designed to support, save time and provide inspiration for teachers.



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# HISTORY

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# 1 Historical skills and concepts

## 1.1 Overview

### 1.1.1 Links with our times

In 2017, a crowd gathered in southern Israel to commemorate the centenary of the Battle of Beersheba. Approximately 100 horsemen from Australia participated in a re-enactment of the cavalry charge. The historical event has often been referred to as 'the last successful cavalry charge in history'.

The Australian 4th Light Horse Brigade was tasked with capturing the fortified desert town of Beersheba on 31 October 1917. The town, which was strategically important and possessed the only water supply in the region, was held by the Turkish army. Comprising troops on horseback, the 4th and 12th regiments of the brigade charged at the Turkish trenches. With bayonets in their hands, they jumped the trenches and rode straight into Beersheba, seizing its water wells and the rest of the town. The victory was a turning point in the campaign to defeat the German-allied Turkish army in the Middle East. It led to the eventual fall of the Ottoman Empire.

We know these things because historians use clues like archives, letters and weapons as well as many other historical sources to bring the past to life. They use evidence that includes all kinds of traces, from skeletons to newspapers, paintings and photographs. The study of history involves using such evidence in an attempt to find the truth about what happened in former times.

### on Resources

**eWorkbook** Customisable worksheets for this topic

**Video eLesson** Investigating the past (eles-1057)

### LEARNING SEQUENCE

**1.1** Overview
**1.2** Why we study history
**1.3** Historical skills
**1.4** Perspectives and empathy
**1.5** **SkillBuilder:** Sequencing events in chronological order online only
**1.6** **Review** online only

To access a pre-test and starter questions and receive immediate, **corrective feedback** and **sample responses** to every question, select your learnON format at www.jacplus.com.au.

# 1.2 Why we study history

## 1.2.1 How and why do we study history?

History is a journey of discovery through time. Often it will excite you, and sometimes it will shock and amaze you. Sometimes it will seem as though the people of past societies were from another planet. At other times their actions and ideas will feel similar to those of your friends and neighbours.

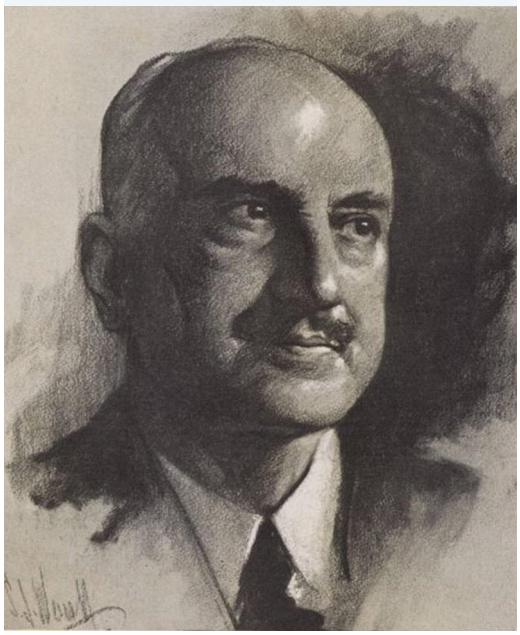
### What is a historian?

A historian is a person who researches, interprets and writes about the past, including the history of countries, people, periods of time, particular events and issues. Historians research into past civilisations, cultures and societies. They try to build up a picture of how people in other times lived and acted. Historians try to make sense of past ideas, customs and beliefs, the ways people were ruled and how they made their living. Historians inquire into the past by examining sources, including archives, diaries, books and artefacts. Historians also try to understand and explain how people's lives were shaped by other people and events, what they thought about their times and how they brought about changes in their own world.

## 1.2.2 The value of history

History is the study of the past and of the causes of historical events. The term comes from the ancient Greek word *historia*, which originally referred to inquiry, or the act of acquiring knowledge through inquiry. Some people question the need to understand the past, but there are many very good reasons for studying history. Knowledge of history helps us to understand our heritage. We start to understand where our ideas, languages, laws and many other aspects of our lives came from. We can also develop more open minds and learn to appreciate cultures that are different from our own.

**SOURCE 1** A drawing of the philosopher George Santayana (1863–1952) from the cover of *Time* magazine in February 1936. He is popularly known for the aphorism, 'Those who cannot remember the past are condemned to repeat it.'



### History, the present and the future

Perhaps you already know that we can never understand the time we live in or what the future may hold if we do not understand the journey that brought us to this point. Human societies did not appear in the present as if from nowhere. They developed over many thousands of years. By understanding the past, we might just be able to avoid repeating past mistakes and make our world a better place in the future.

### History, work and leisure

The kinds of skills you will learn while studying history are also important in many careers. These skills will help you to:

- carry out research
- organise information and check it to determine its accuracy
- draw conclusions and make decisions based on **evidence**
- recognise the difference between fact and opinion
- understand that there is usually more than one way of thinking about any problem
- think critically
- communicate effectively
- present findings and conclusions through reports, the media, books, lectures and exhibitions.

A person trained in history may conduct research and analysis for governments, businesses, individuals, historical associations, and other organisations. They may work in administrative or policy roles where they can make use of their research and analysis skills. A person trained in history may be involved in preserving artefacts or historic records. Conservation work similar to that shown in **SOURCE 2** is one of the key responsibilities of historians and archaeologists.

There are a number of other careers related to the study of history. These include:

- anthropologists
- archaeologists
- archivists and museum workers
- curators
- documentary and film makers
- economists
- history teachers
- lawyer
- lecturers, tutors and researchers
- police and armed forces
- political scientists
- sociologists
- writers and authors.

**SOURCE 2** Conservation works in 2018 on the southern facade and dome of the Royal Exhibition Building, in Melbourne, which was built to host the first official World's Fair in the Southern Hemisphere. It was completed in 1880.

A knowledge of history is important in our everyday lives too. History gives many people great personal pleasure. How much more enjoyment do people experience from travel, books and movies when they know about the history that shaped the places they visit or the stories they read or watch on a screen!

## History and democracy

In Australia we live in a democratic society. This means we have the right to choose our political representatives and leaders through voting. We cannot vote responsibly, however, unless we can make our own judgements about the ideas these leaders put forward. To do that, we need to know something about the past.

### DISCUSS

How might understanding our past help us avoid repeating mistakes in the future? **[Ethical Capability]**

## 1.2 EXERCISES

**Historical skills key: HS1** Remembering and understanding **HS2** Sequencing chronology **HS3** Using historical sources as evidence **HS4** Identifying continuity and change **HS5** Analysing cause and effect **HS6** Determining historical significance

### 1.2 Exercise 1: Check your understanding

1. **HS1** What is history?
2. **HS1** Fill in the spaces in the following passage by choosing words from the box below.

| | | | | | | |
|---|---|---|---|---|---|---|
| civilisations | beliefs | cultures | events | research | sources | people |

Historians conduct _____ into past _____, _____ and societies. Historians try to build up a picture of the ideas and _____ of people in the past, how they lived and acted and how their lives were shaped by other _____ and _____. They inquire into the past by examining _____, including archives, diaries, books and artefacts.

3. **HS1** Why is it important to learn historical skills?
4. **HS1** Who might a person trained in history work for?
5. **HS4** Identify five careers related to learning about history.

### 1.2 Exercise 2: Apply your understanding

1. **HS3** Read George Santayana's quote in **SOURCE 1**.
   (a) Rewrite this quote in your own words.
   (b) How does this quote show that the study of history is important?
2. **HS3** Look closely at **SOURCE 2**. The Royal Exhibition Building is the first World Heritage-listed building in Australia. Why do you think so much effort goes into conserving such traces of the past?
3. **HS5** Think of at least one event from the past where the people involved have *not* learned from earlier experiences and events. Explain what happened.
4. **HS5** Today we live in a world in which people are sometimes killed over differences in religion. How might a knowledge of history help bring understanding between people of different religions?
5. **HS1** What can we gain from understanding our heritage?
6. **HS6** Suggest why any one of the following possible events might have historical significance in the future for a historian researching and writing about the age we are living in.
   (a) There was an increase in the number of Australians who did not practise religion.
   (b) Inequality (the gap between rich and poor) increased in Australia.
   (c) The Australian government took in more refugees.

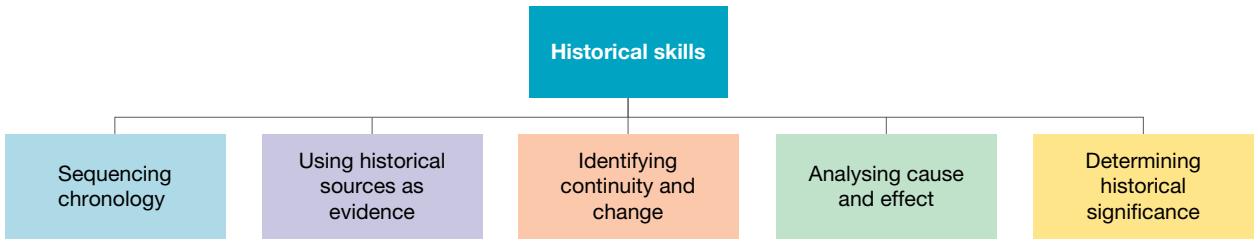
Try these questions in learnON for instant, corrective feedback. Go to www.jacplus.com.au.

# 1.3 Historical skills

## 1.3.1 What are historical skills?

There are a number of historical skills, shown in **SOURCE 1**, which you will develop throughout your study of history. These skills are integral to studying history and are vital for engaging in a historical inquiry. You should recognise most of these skills from your previous studies in history, and you will become more proficient in them as you explore the topics throughout this course. Each historical skill is explained in more detail below.

**SOURCE 1** A diagram showing the five historical skills

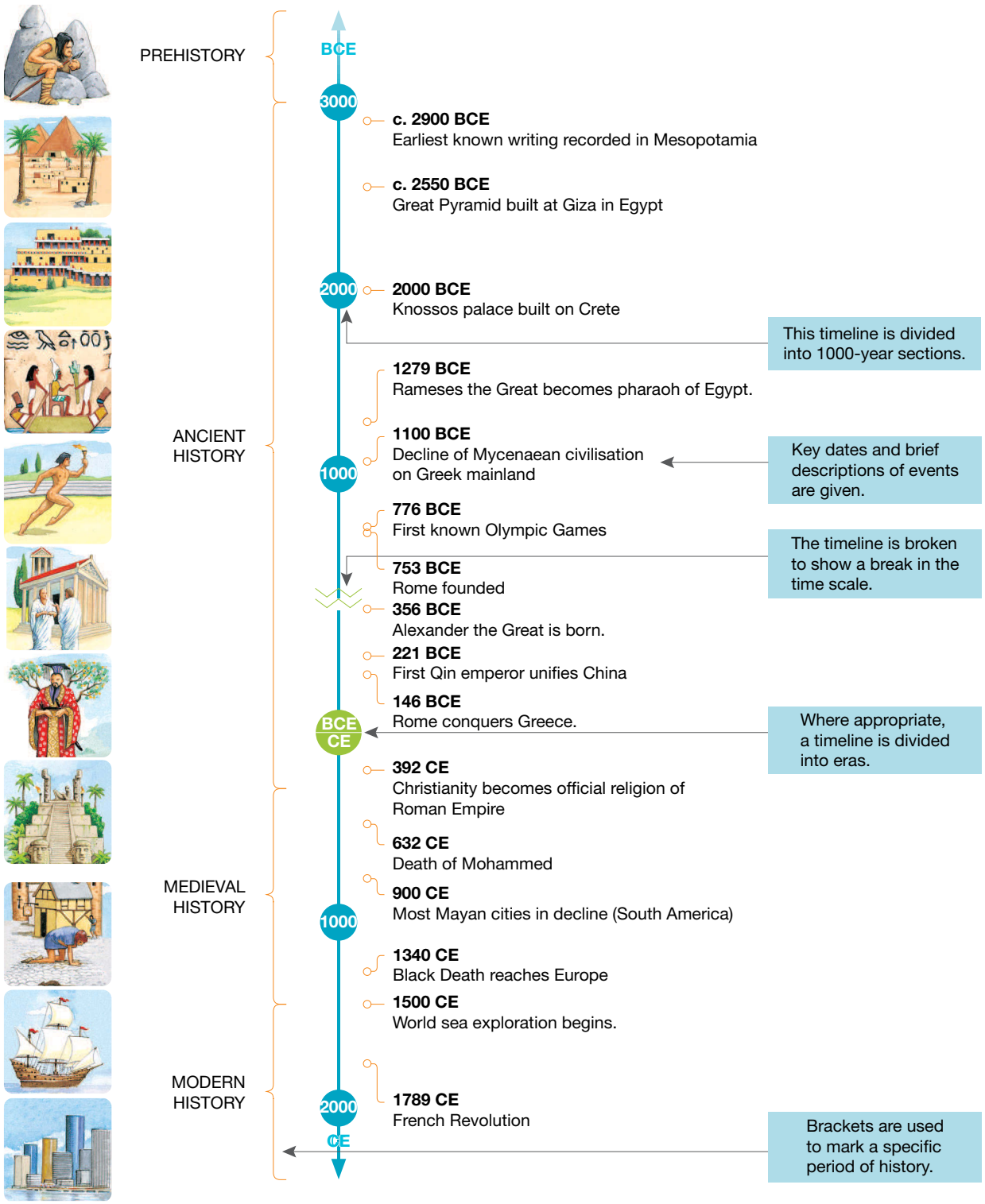



## 1.3.2 Sequencing chronology

**Chronology** involves recording events in order of time. It is an important skill in history because historians need to know the sequence of the events that occurred in order to make sense of what happened. A story will make more sense if we start at the beginning and work towards the end. For example, your morning routine is likely to consist of waking up in the morning, showering, getting dressed, eating breakfast, then brushing your teeth. After this you might travel to school, then attend your first class for the day. This is an example of chronology; it is your sequence of events in order of time for your morning.

A historian will use a **timeline** to see how one event might have contributed to another. A timeline representing some events from 3000 BCE to modern times can be seen in **SOURCE 2**. You should be familiar with the creation of timelines from your previous studies in history. Timelines can cover very short or very long periods of time, and can look very different. For example, they can be horizontal (across the page) or vertical (down the page). However, they always place events in chronological order.

**SOURCE 2** A timeline showing some events from 3000 BCE to modern times



### Dividing the past

To make sense of the past we divide it into ages or periods that have something in common. Prehistory is the prehistoric period (the time before people invented writing as a means of recording activities and events). Prehistory ended at different times in different parts of the world. For example, in China it ended thousands of years ago, while in Australia it ended a little over 200 years ago. We also use the terms Stone Age, Bronze Age and Iron Age. These refer to materials that people had learned to shape into tools and weapons in prehistoric and ancient times. Ancient history covers the time from the earliest civilisations around 3000 BCE to around 650 CE. The Middle Ages, or medieval history, covers the time from around 590 CE to around 1500 CE. In Year 9, we will study the Making of the Modern World (1750–1914) and the Modern World and Australia (World War I, which took place in 1914–1918).

### Counting time

In Australia, the system we have traditionally used to count years is one that was first used in Christian countries in AD 525. In this system, AD stands for anno Domini (Latin for 'in the year of our Lord'). The year AD 2012 means 2012 years since the assumed birth of Christ. This period is also known as the Christian Era. Although this system is still used throughout the world, many historians now use the term CE (Common Era) instead of AD. The dates are the same: 2012 CE is the same year as AD 2012. We count forward, so 50 years later the year would be AD 2062 (or 2062 CE). BC means 'before Christ', and for these years we count backwards. Therefore, 500 BC would be 300 years earlier than 200 BC. Historians now commonly use the term BCE (Before Common Era) instead of BC.

When dates are uncertain we put '*c.*' before them. It stands for *circa* (Latin for 'about').

**DID YOU KNOW?**

There is an easy way of getting it right with centuries. The first 100 years of the Common Era are called the first century CE. The first 100 years before the Common Era are called the first century BCE. To work out what century a date is in, you simply add one (1) to the number of hundreds in a date. The year 2011 has 20 hundreds, so it is in the twenty-first century CE. The year 705 BCE has 7 hundreds, so it is in the eighth century BCE.

### Other ways of counting time

There are other ways to count time. For example, the Islamic calendar starts counting from the time of the flight of the prophet Mohammed from Mecca. This occurred in the year 622 CE.

### Creating timelines

Creating a timeline from the sources that a historian locates can be a difficult task. Historical sources do not always come with the time and date provided, so they may need to be researched further to identify their historical relevance, as well as who produced the source and where it came from. However, there is much more to history than putting events in order and understanding the sequence and flow of events. As a history student, you will also need to be aware of continuity and change, cause and effect, as well as long-term causes and short-term triggers.

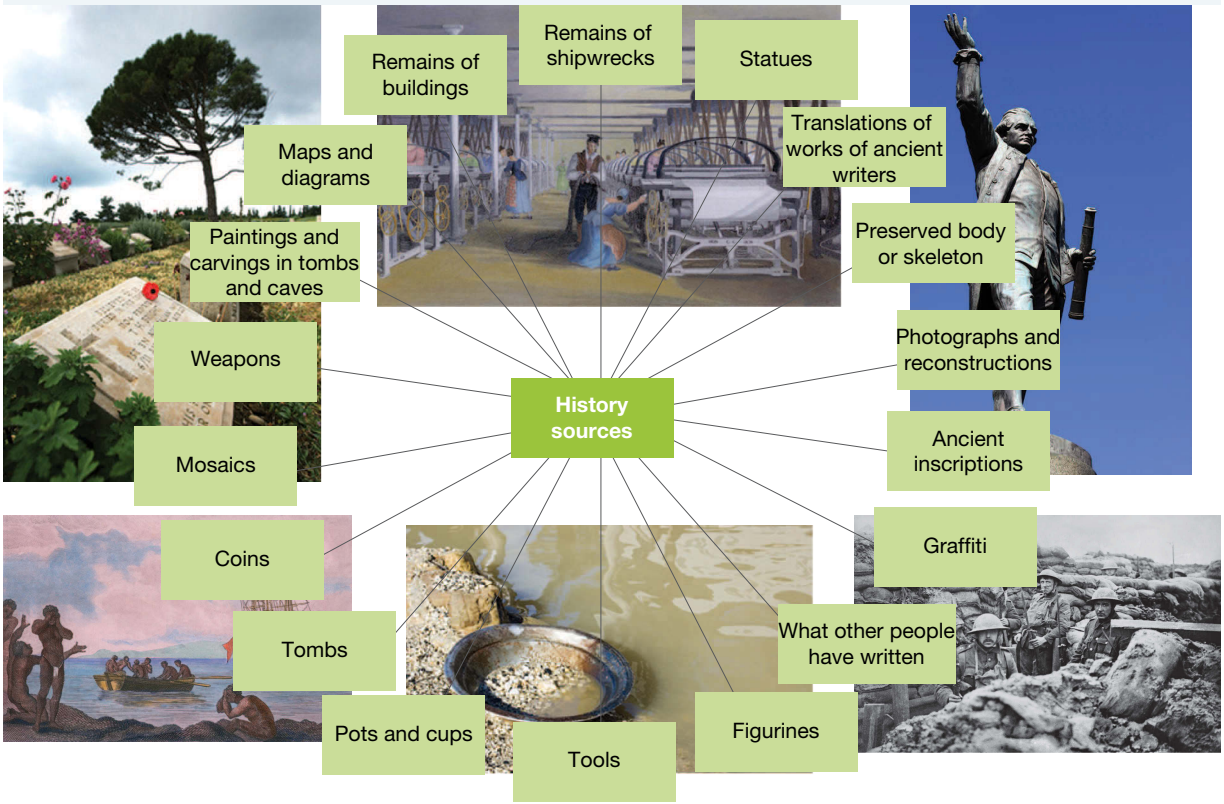
## 1.3.3 Using historical sources as evidence

It is important to analyse sources from the time we are studying to judge how reliable they are and explore the different points of view, or perspectives, of people from the past. This also involves questioning later sources that are interpretations of that time.

### Primary and secondary sources

Evidence refers to the available facts or information that indicate whether something really happened. Evidence can come from two types of sources: **primary sources** and **secondary sources**. Primary sources were created or written in the period of time that they relate to. Secondary sources are reconstructions of the past written or created after the period that they relate to.

**SOURCE 3** Some types of primary sources




Depending on the event and place, primary sources might include weapons, letters, newspapers, art, photographs or many other traces. For most periods of history we can divide primary sources into written and archaeological sources. Written primary sources can include such things as poems, songs, letters, myths and legends. Archaeological sources are objects that were made in the past. They include many kinds of artefacts such as tools, weapons, pottery, coins, games, toys and jewellery. Some **artefacts** have written sources inscribed on them. Archaeological sources also include works of art such as sculptures and paintings, and constructions such as tombs, temples and sometimes entire cities.

Secondary sources include books and articles. They can also include websites, models, timelines, computer software and documentary films. To create secondary sources, historians often:

- locate information in primary sources
- interpret that information
- use it to explain what happened.

## Analysing and evaluating sources

Historical sources are valuable but they do not explain themselves. When using historical sources as evidence, historians will need to ask questions about each source, such as where did the source come from (origin) and why was it created (purpose)? A source may be fact or someone's opinion — that is, it could be **biased**. One way to test sources for reliability is to compare them with other sources. If this evidence leads to the same conclusion, we call it supporting evidence. If it leads to different conclusions, it's called contradictory evidence. When we use sources to try to find out about the past, we have to ask some questions. For example:

- What type of source is this?
- When was the source written or created and by whom?
- Why was this source written or created?
- What evidence does the source provide?
- What was happening at the time the source was written or created?
- Is the source trustworthy?

Using evidence from sources, historians form a **hypothesis** (a possible theory to explain what happened). To test the hypothesis we look for evidence that supports it. We also look for other evidence that contradicts it. We need to be careful. We have to ask: What other information do I need to support my theory?

Just as in the investigation of a modern crime, we look at what contributed to an event and how those things fit together. We ask questions that begin with who, what, where, when, how and why. In this way, history is like any other kind of investigation, but it is more difficult because there are often gaps in our evidence. We usually cannot find all the clues we need. It can be like trying to solve a jigsaw puzzle when many pieces have been lost.

Wherever historians find sources and whatever methods they use to test their hypotheses and interpret the past, there will always be differing interpretations that are debated and contested. The issue of **contestability** is a very important concept in the study of history. Historical debates are ongoing. They occur when, for example, there is a lack of evidence or when different perspectives (points of view) lead to different conclusions. There are ongoing debates on many things, including the causes of particular wars and the roles of particular individuals, groups and ideas in bringing about significant changes.

## 1.3.4 Identifying continuity and change

Historians study the changes that have occurred over time, but some things remain constant over periods of time. It is important to be able to identify when a change has occurred and when things have continued unchanged. This is known as identifying **continuity and change**.

Change refers to something that is different from what has occurred in the past. This may occur over a long period of time and, in this case, it may be difficult to detect the precise moment of change. Change can also occur dramatically or suddenly. Such changes are often associated with single events and are referred to as turning points in history. Continuity refers to the things that endure, relatively unchanged, over time. You will find that many things remain the same across long periods of time in history. Sometimes these continuities last into the modern world.

We can make comparisons between and among historical events occurring at the same time, between and among different historical periods, and between present time and the past. The use of timelines can help to understand the sequence of historical events, which should assist in identifying turning points that produced change.

**SOURCE 4** An elevated view of Melbourne in 1908, showing Flinders Street railway station beside the Yarra River. The current railway station building, which can be seen in development here, was officially opened in 1910.

**SOURCE 5** An elevated view of modern Melbourne along the Yarra River from Flinders Street railway station

## 1.3.5 Analysing cause and effect

In history, events do not simply occur without reason. Every event will have a cause and is likely to be the cause of subsequent effects or consequences. Being able to identify patterns of **cause and effect** is an essential skill that allows historians to explain how and why things happened in the past. This skill can also make it possible to predict what may take place in the future.

Causes may include people, societies, politics, beliefs, economics or any other historical factor. Likewise, effects can include impacts on people, societies, politics, beliefs, economics or any other historical factor. It is important to understand that not all causes leading to a specific event are equally significant — some causes may have more influence than others.

The ability to analyse cause and effect requires a good understanding of sequencing chronology. We can identify series of historical events and developments over time, both in the short term and in the long term. Some causes occur immediately before an event began, while others may have existed for several years, decades or centuries before they caused the event. Some effects occur immediately after an event or action, while other may occur years, decades or centuries following the event or action. Causes and effects may be organised using chronology. For example, a timeline may be used to put events, ideas, movements and turning points in order to identify possible links between the causes and effects and to distinguish between what are long-term and short-term causes and effects.

An example of a series of historical events that has a number of causes and effects, both short term and long term, is the Industrial Revolution. This was a period of major industrialisation and technological innovation that took place between approximately 1750 and 1914. It began in Great Britain and quickly spread throughout the world. The revolution essentially involved the change from the production of goods by hand to the production of goods with machinery in factories. New materials and sources of power, along with new forms of transport, dramatically transformed the way in which many people lived.

The Industrial Revolution that began in Britain in the mid-eighteenth century had a number of causes. One major cause was Britain's influence as a global empire. The British controlled colonies in North America, the Caribbean, the Indian subcontinent and West Africa. This gave them access to raw materials which could be transformed into finished products to sell to an increasing population. Other causes of the Industrial Revolution include:

- the development of new technology, including new machinery and steam engines
- developments in agriculture, including new methods of farming and changes in land ownership
- access to raw materials, including an abundance of convenient deposits of coal and iron ore
- the development of transport systems, including waterways, roads, and railroads
- population growth, including people from the countryside being freed up to work in the factories in the cities
- stability in government, including the rule of law and protection of assets
- the availability of investment, including the willingness of financial institutions and entrepreneurs to finance new ventures.

**SOURCE 6** A Newcomen steam engine used to pump water from flooded coal mines in nineteenth-century Britain

The Industrial Revolution also resulted in a number of effects. There was a huge rise in the rate of population growth. Most of this population growth occurred in the towns and cities. Other effects of the Industrial Revolution include:

- *industrialisation* — machines used to produce goods in factories reduced the need for hard physical labour
- *improvement in living standards* — health improved, leisure time increased, goods became more affordable
- *poor working conditions* — factory workers in factories, including women and children, often worked in unpleasant or dangerous conditions for long hours and low pay
- *social unrest and trade unions* — rapid changes led to unrest and protests; workers formed trade unions to improve their pay and work conditions
- *the growth of new ideas* — economic theories such as capitalism and socialism were developed to explain how business, workers and the economy should operate; political ideas and scientific ideas also flourished
- *impacts on the environment* — air pollution and water pollution increased; deforestation and land clearance resulted in further environmental problems.

**SOURCE 7** A photo taken by Lewis Hine of dust-covered 'breaker boys' at a US coal mine in January 1911. A breaker boy was required to separate impurities from coal by hand.

## 1.3.6 Determining historical significance

Historical **significance** is the importance that is assigned to particular aspects of the past. These aspects may include events, individuals or groups, developments in the past, ideas or movements, and historical sites. There is far too much history to study or learn all of it. We need to make judgements about what is important and what is less important. This is an essential, yet challenging, historical skill.

When we try to establish the significance of an aspect of the past, we have to consider a number of questions.

Such questions include:

- How relevant was it to people living at that time?
- How many people were affected?
- How did it change people's lives?
- How long were people's lives affected?
- How important and long lasting were the consequences?
- How relevant is it to the contemporary world?

**SOURCE 8** Private John Simpson used donkeys to carry men away from the front line at Gallipoli, often exposing himself to fire. This statue stands at the Australian War Memorial.

**SOURCE 9** Stretcher bearers carrying the wounded through the trenches during the Gallipoli Campaign in 1915

## 1.3 EXERCISES

**Historical skills key: HS1** Remembering and understanding **HS2** Sequencing chronology **HS3** Using historical sources as evidence **HS4** Identifying continuity and change **HS5** Analysing cause and effect **HS6** Determining historical significance

### 1.3 Exercise 1: Check your understanding

1. **HS1** Identify the five historical skills.
2. **HS1** Explain what is involved in sequencing chronology.
3. **HS2** Write the meaning of the following terms: ages, BC, AD, BCE and CE.
4. **HS1** Describe the difference between primary sources and secondary sources.
5. **HS1** Provide two examples of written sources and two examples of archaeological sources.
6. **HS1** How do historians create secondary sources?
7. **HS1** Explain what the term 'bias' means and why we might not be able to trust a primary source.
8. **HS1** Describe a way to test primary sources for reliability.
9. **HS1** Complete the following sentences by choosing words from the box below.

| | | | | |
|---|---|---|---|---|
| contestability | theory | debate | contradict | evidence |

   (a) A hypothesis is a _____ or possible explanation that has to be tested by looking for _____ that might support it and other evidence that might _____ it.
   (b) _____ is the situation when particular interpretations of the past are open to _____.
10. **HS1** Explain how a historian identifies continuity and change.
11. **HS1** Outline the difference between short-term causes and effects and long-term causes and effects.
12. **HS1** Describe a way to establish the significance of an aspect of the past.

### 1.3 Exercise 2: Apply your understanding

1. **HS2** Using **SOURCE 2** as a model, make a timeline of your life up to the present. On it, write the important events of your life. Use the terms AD or CE, century and decade. Then explain how your timeline helps you to present an overall picture of your life so far.
2. **HS3** Look at the mind map in **SOURCE 3** and describe each of the sources pictured around the mind map.
3. **HS3** Suggest what we might learn about the past from graffiti or one of the other types of primary sources listed in the mind map.
4. **HS3** Why would it be wrong to think that primary sources are more reliable than secondary sources?
5. **HS3** Make a list of some kinds of primary sources that could be used to create a history of your school (a secondary source). Beside each source in your list, write down what you think you could find out by using it as evidence.
6. **HS4** Examine **SOURCES 4** and **5** closely. Identify the changes that have occurred in Melbourne between 1908 and the present. Identify the similarities (or continuities) between Melbourne in 1908 and the present.
7. **HS5** Look at the image of the steam engine in **SOURCE 6** and the image of the breaker boys in **SOURCE 7**. Imagine that you have travelled back in time to meet the boys. Explain to them the causes of the Industrial Revolution and the effects of this historical period.
8. **HS6** Examine **SOURCE 8** and **SOURCE 9** closely. Why are the actions of John Simpson considered more significant than those of other stretcher bearers at Gallipoli? Explain your answer.

Try these questions in learnON for instant, corrective feedback. Go to www.jacplus.com.au.

# 1.4 Perspectives and empathy

## 1.4.1 Understanding how they thought and felt

It is very important for historians to empathise with those they study. This means trying to understand how people thought and felt at different times in the past. In other words, **empathy** can be defined as imagining what someone else might be thinking or feeling. At different points throughout your study of history you will be asked to put yourself in the situation of someone in the past. This is not a creative writing task, in which you can let your imagination run wild. Rather, you will be using historical imagination. This requires using your imagination, but basing your ideas on evidence.

We try to understand the **perspective** of people in the past by looking at their points of view, attitudes and values. Often we can get a sense of the way people thought and felt through primary sources such as diaries or through visiting museums and historical sites. Using empathy, we work with all the evidence we have in order to imagine what the past was like for people who were there at the time. We need to consider questions such as:

- Who were these people?
- Where did they live?
- How did they live?
- What mattered to them?
- What did they believe in?
- What did they see, hear, taste, smell and feel?
- What did they fear and what did they hope for?
- Did they have feelings similar to or different from ours?
- Did they all think and feel the same as one another, or did they have differing perspectives?

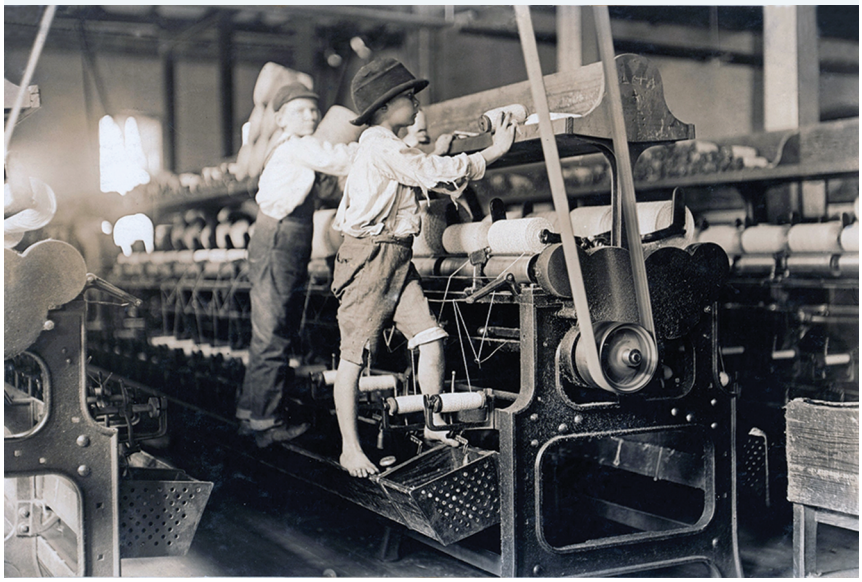
## How should we judge people in the past?

When we learn about some of the things people did in the past, it is natural that we make moral judgements. For example, we naturally see child labour as wrong. What we should try to avoid is judging people in the past by beliefs or standards that did not exist in their time. The Industrial Revolution was a new, unknown period in British history, before which no legal provisions existed regarding child labour. Mine and factory owners needed the skills that at the time and under the circumstances only children could provide. In hiring children, they did not contravene the British laws of the day. The families of the children needed the extra income, and the politicians wanted the economy to function and grow; society on the whole did not view child labour as morally wrong.

We should also remember that, in the future, people may think many kinds of behaviour we consider 'normal' are, by their standards, wrong.

**SOURCE 1** Dust-covered coal-mining breaker boys; their job was to break coal into pieces, sort them by size and separate any impurities (rocks or other materials), all by hand. This was deemed unskilled work, so it was usually undertaken by the youngest workers.

**SOURCE 2** Child labourers working in a cotton mill, mending broken threads, fixing snags and replacing empty bobbin reels



## DISCUSS

Working in small groups, think of something that happens in our own time that some people believe is wrong. An example could be the way some countries are wealthy while in others children die of starvation and preventable diseases. Do you think that at some time in the future people might consider ours to have been an unjust age? **[Ethical Capability]**

## 1.4 ACTIVITY

Using the internet and/or other information sources, find the meaning of the word 'sympathy'. Explain how empathy is different from sympathy. **Remembering and understanding**

## 1.4 EXERCISES

**Historical skills key: HS1** Remembering and understanding **HS2** Sequencing chronology **HS3** Using historical sources as evidence **HS4** Identifying continuity and change **HS5** Analysing cause and effect **HS6** Determining historical significance

### 1.4 Exercise 1: Check your understanding

1. **HS1** What does it mean to empathise with the people you study?
2. **HS1** How is historical imagination different to just letting your imagination run wild?
3. **HS1** What is historical perspective?
4. **HS1** Identify the questions that might be asked when using empathy in order to imagine what the past was like for people who were there at the time.
5. **HS1** Why could it be wrong to judge people from past times by the standards of our times?

### 1.4 Exercise 2: Apply your understanding

1. **HS3** Compare **SOURCES 1** and **2**. What are the similarities and differences between these sources?
2. **HS3** Imagine you are one of the child labourers shown in **SOURCE 1** and describe:
   (a) what you can see, hear, taste and smell
   (b) how you feel about the work you do and how you physically feel after a day's work
   (c) how you feel about the owner of the mine you work in.

3. **HS3** Imagine you are one of the child labourers shown in **SOURCE 2** and describe:
   (a) what you can see, hear, taste and smell
   (b) how you feel about what you are doing and about your factory bosses.
4. **HS3** Imagine you are one of the factory or mine bosses managing child workers. Would you be likely to consider what you are doing immoral or would you accept it as 'the way things are'? Explain your answer.
5. **HS6** Why do you think it is important for historians to empathise with the people they study?

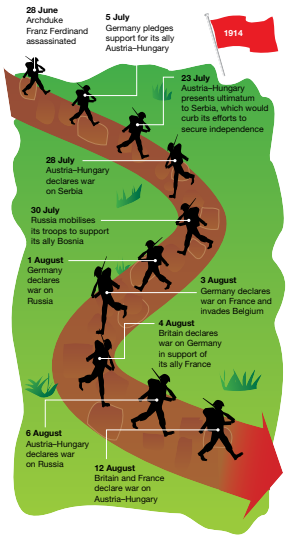
Try these questions in learnON for instant, corrective feedback. Go to www.jacplus.com.au.

# 1.5 SkillBuilder: Sequencing events in chronological order

online only

## What is a timeline?

A timeline is a diagrammatic tool for placing events in *chronological order* (the order in which they happened). A simple chronology would be one, for example, that showed in sequence, or time order, key events of a day in your life. Generally, timelines are constructed using a sequence of dates with the addition of descriptive labels. A timeline may cover a short period or many centuries. Timelines may be as simple as a horizontal or vertical line, or highly visual with use of colour and images.




### Select your learnON format to access:

- an explanation of the skill (Tell me)
- a step-by-step process to develop the skill, with an example (Show me)
- an activity to allow you to practise the skill (Let me do it)
- questions to consolidate your understanding of the skill.

# 1.6 Review

online only

## 1.6.1 Key knowledge summary

Use this dot point summary to review the content covered in this topic.
Select your learnON format to complete review questions for this topic.

### on Resources

**eWorkbook** Crossword (doc-31696)

**Interactivities** Time out: Sources (int-0782)
Historical skills and concepts crossword (int-7635)

## KEY TERMS

**artefact** an object made or changed by humans
**biased** one-sided or prejudiced, seeing something from just one point of view
**cause and effect** the concept that every historical event will have a cause, and every event or action is likely to be the cause of subsequent effects or consequences
**chronology** a record of past events in order of time, from ancient Greek *chronos* (time) and *logos* (to work out)
**contestability** when particular interpretations of the past are open to debate
**continuity and change** the concept that while many changes occur over time, some things remain constant
**empathy** the ability to understand and share another person's thoughts and feelings
**evidence** information that indicates whether something has really happened
**hypothesis** (plural: hypotheses) a theory or possible explanation
**perspective** point of view or attitude
**primary sources** objects and documents that were created or written in the period of time that they relate to
**secondary sources** reconstructions of the past written or created after the period that they relate to
**significance** the importance assigned to particular aspects of the past; for example, events, developments, movements and historical sites
**timeline** a diagrammatic tool representing a period of time, on which events are placed in chronological order

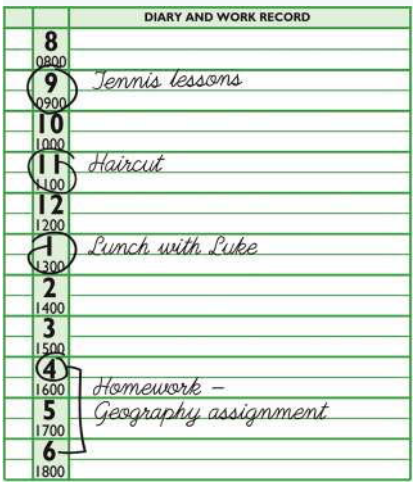
# 1.5 SkillBuilder: Sequencing events in chronological order

## 1.5.1 Tell me

### What is a timeline?

A timeline is a diagrammatic tool for placing events in *chronological order* (the order in which they happened). A simple chronology would be one, for example, that showed in sequence, or time order, the key events of a day in your life.

**SOURCE 1** A simple chronology

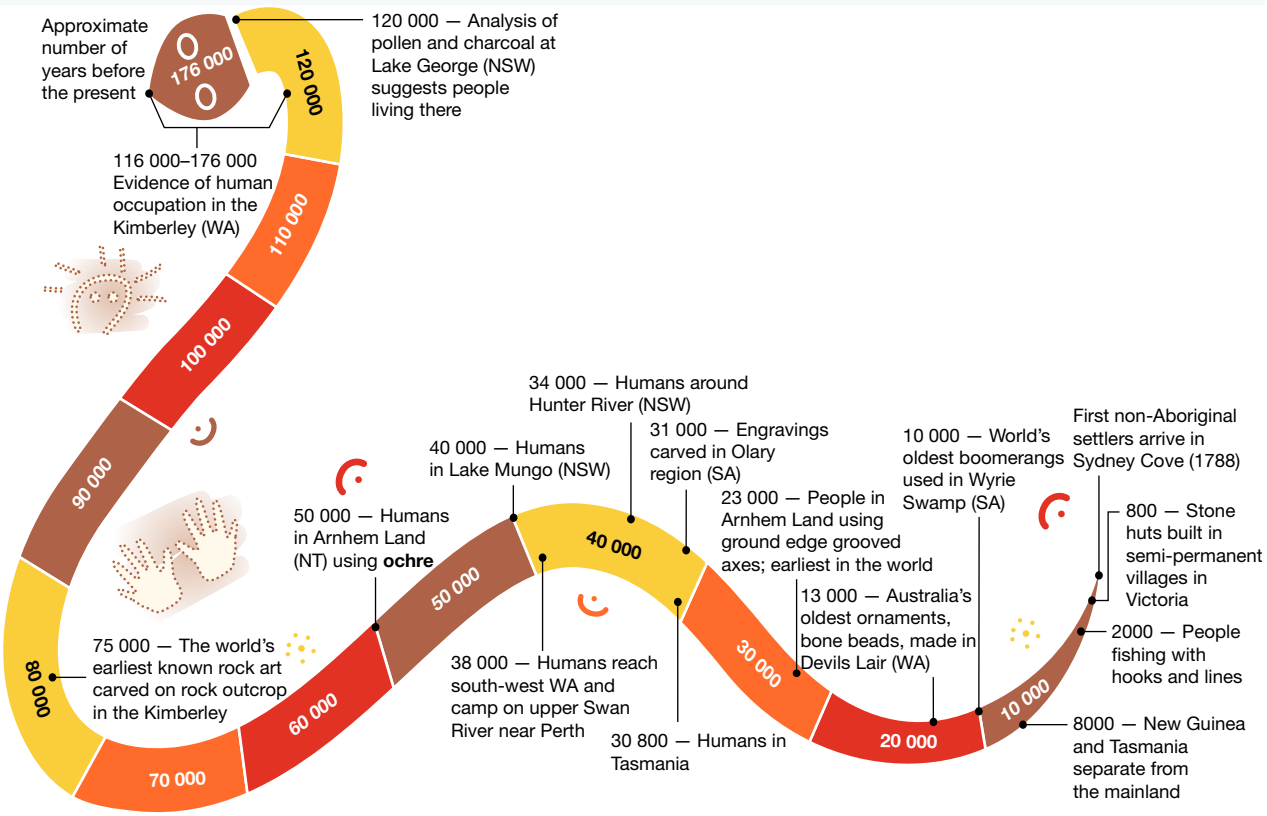



### Why are timelines useful?

Timelines are useful because they can help us make sense of events in the past. Timelines are particularly useful in the study of history. Creating a history timeline will help to:

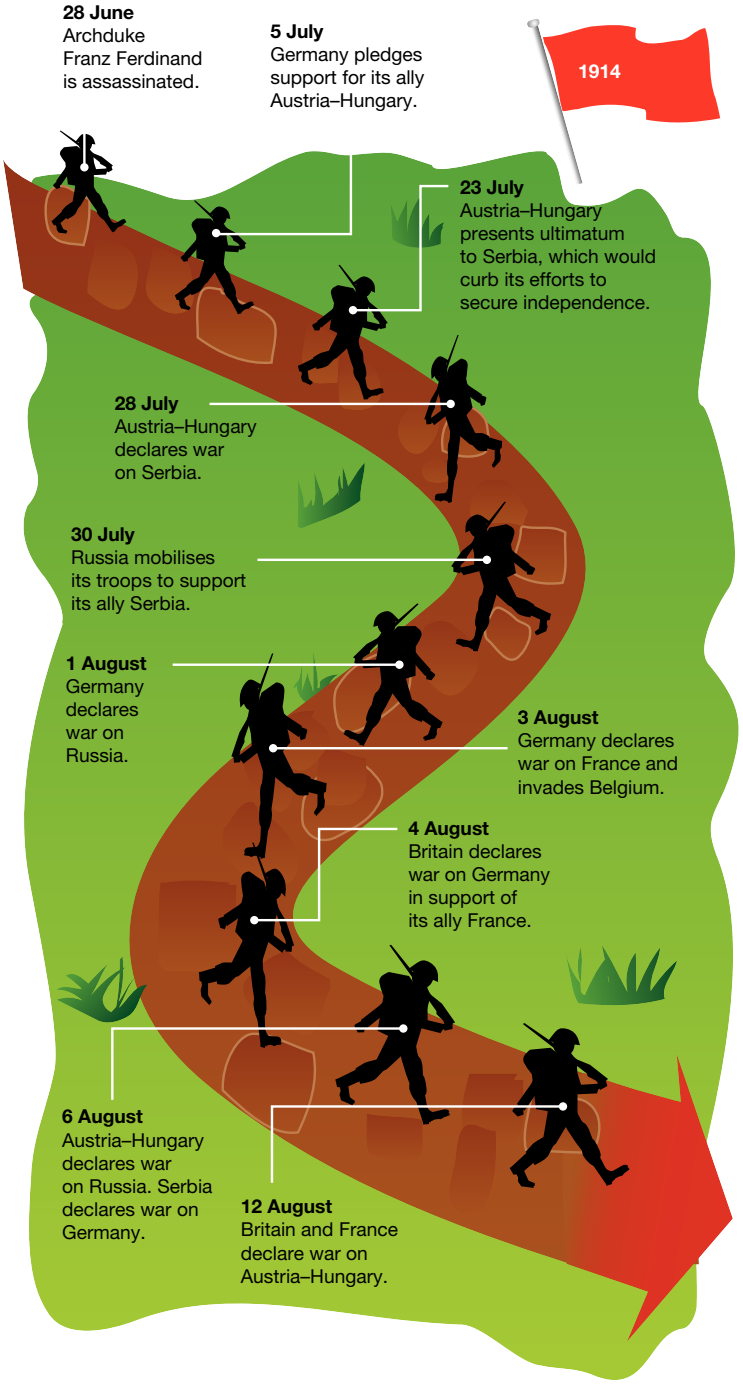
- understand the order in which events occurred
- describe the time distances between events
- identify what has changed over time
- identify what has stayed the same over time
- analyse how one event might relate to other events
- compare what might have been happening in different places at the same time
- assess if one event might have led to another event (cause and effect).

**SOURCE 2** An example of a timeline that covers a long span of time

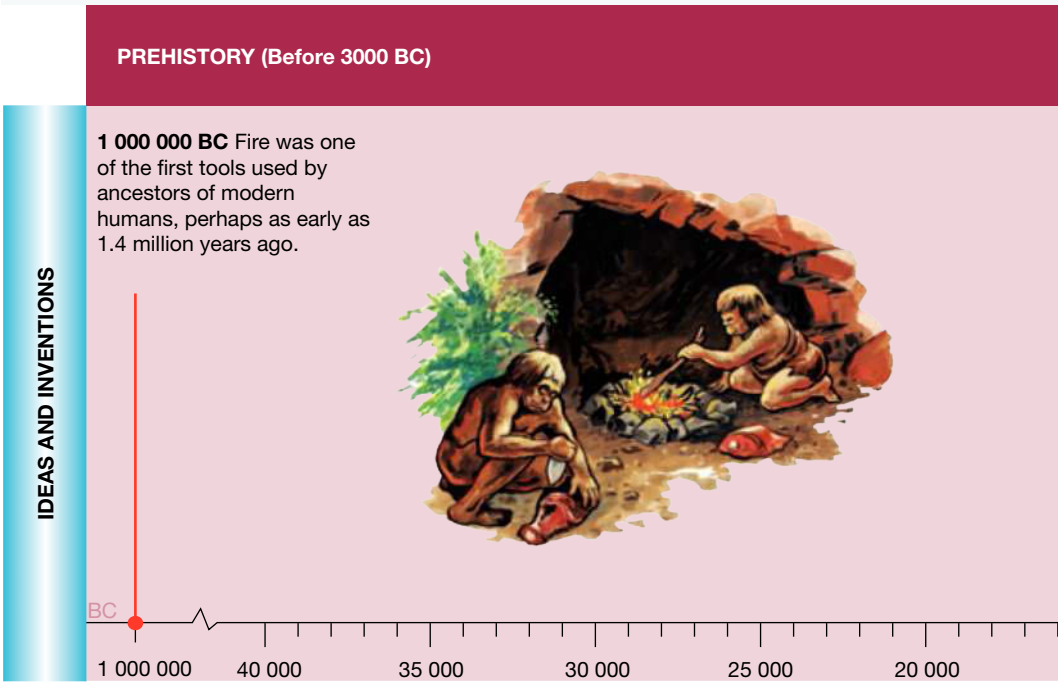


Generally, timelines are constructed using a sequence of dates with the addition of descriptive labels. The timeline may span thousands of years (see **SOURCE 2**) or cover a very short period (see **SOURCE 3**). In print, timelines may be as simple as a horizontal or vertical line, or highly visual, with use of colour and images (see **SOURCES 4**, **5** and **6**). Using digital technology, interactive online timelines can be created; users can click on a date and see a descriptive label, an image or even hear an audio narrative or sound effects.

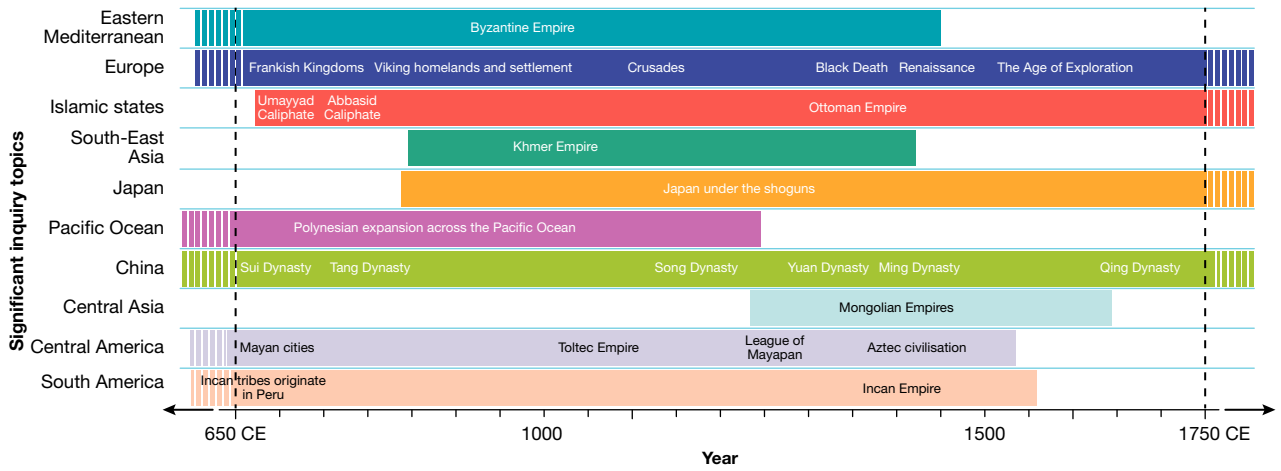
**SOURCE 3** An example of a timeline that covers a short span of time



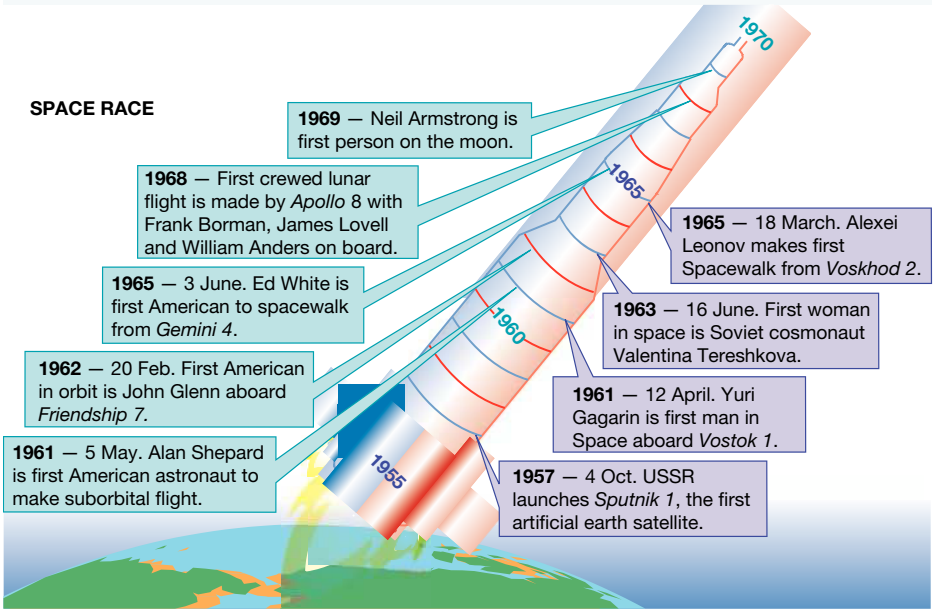
**SOURCE 4** An extract from a timeline that provides some illustrative material to accompany descriptive text labels




**SOURCE 5** An example of a horizontal timeline that uses coloured bars to compare significant events in different places at the same point in time



**SOURCE 6** An example of a timeline that uses a drawing of an object related to the subject or theme of the timeline




## 1.5.2 Show me

### How to create a timeline

Timelines can cover very short or very long periods of time.

- They can focus on just a few months or years.
- They can focus on big, sweeping changes over thousands of years.
- In most cases, they are divided up into equal blocks of time, such as decades or centuries. This is not essential but it helps us to see not only the order of events but how close or how far apart they were.
- A break in the timeline (using a zigzag line, for instance) can show a long span of time between one date and the next.
- To make equal blocks of time you need to use a scale — for example, 1 centimetre = 10 years.
- Timelines can be horizontal (across the page) with the earliest dates on the left and later dates to the right.
- Alternatively they can be vertical (down the page), in which case the dates usually run from the earliest at the top to the latest at the bottom.
- Often we have only approximate dates for events in ancient history. In those cases, we put 'c.' in front of the date. It stands for *circa*, which is Latin for 'around' or 'about'.

#### Step 1

Study the **SOURCE 7** timeline. Look at the way this timeline has been constructed.

- It is a vertical timeline.
- It has been divided into centuries.
- A scale of 1 centimetre = 1 century has been used.

#### Step 2

Mark events alongside the appropriate time period of the timeline — use pointers to indicate the exact location on the timeline where the event belongs.

#### Step 3

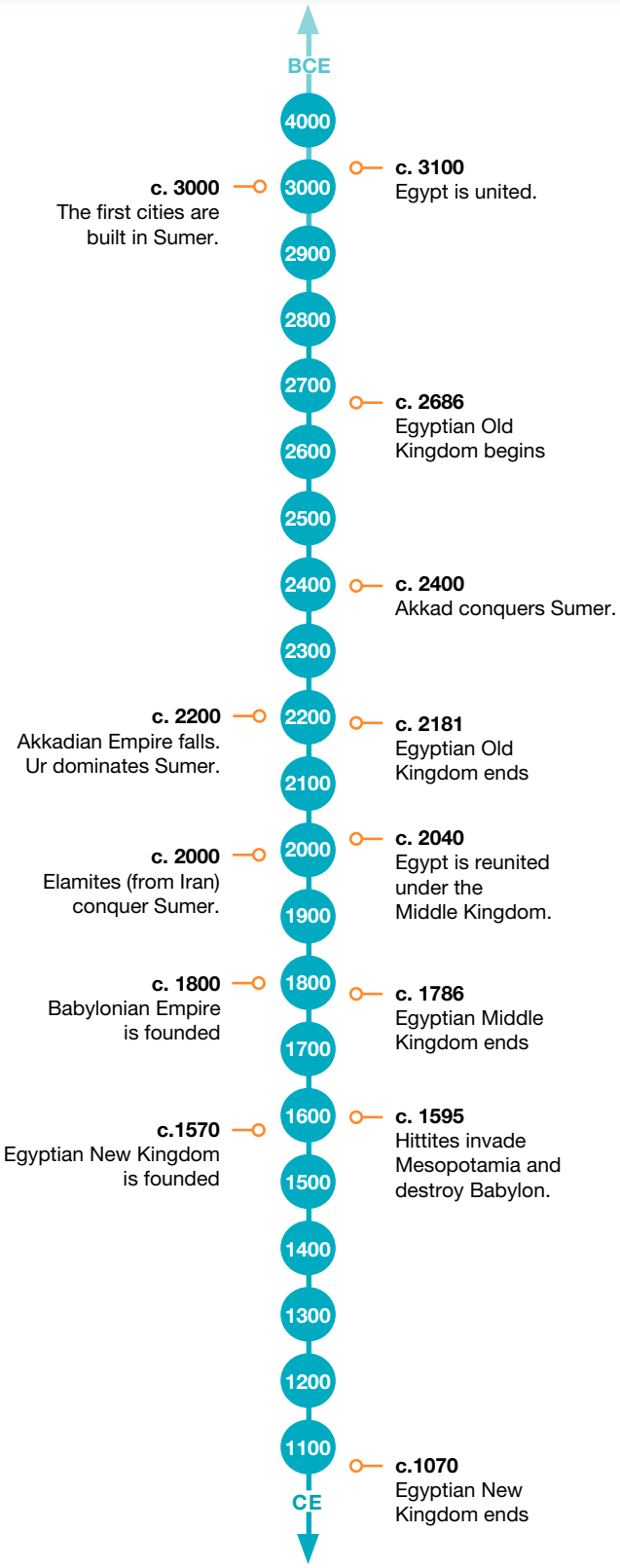
Make sure your completed timeline has a clear title.

The title should state:

- the time period covered
- the subject or theme
- the beginning and end dates.

## Model

**SOURCE 7** Timeline of the rise and fall of kingdoms and empires in Egypt and Mesopotamia between 3000 BCE and 1000 BCE



## 1.5.3 Let me do it

Complete the following activities to practise this skill.

### 1.5 ACTIVITIES

1. Construct a timeline of key events during the periods covered in Year 9 — The Making of the Modern World (1750–1918) and The Modern World and Australia (1914–1918).
   - Use a vertical or horizontal timeline.
   - Decide what scale you will use.

   Key events for your timeline:
   1765 The American Revolution begins.
   1769 James Watt invents a steam engine capable of providing continuous power.
   1783 The Treaty of Paris was signed, formally ending the American Revolution.
   1788 The First Fleet arrives in Botany Bay.
   1789 The French Revolution begins.
   1793 Eli Whitney invents the cotton gin.
   1799 Napoleon Bonaparte stages a coup d'état, marking the end of the French Revolution.
   1830 Stephenson's Rocket hauls the first train on the Manchester-to-Liverpool railway line.
   1833 The Slavery Abolition Act abolishes slavery throughout the British Empire.
   1834 The Poor Law Amendment Act forces the poor to live in workhouses.
   1838 The First Opium War begins.
   1851 Gold is discovered in the newly named Colony of Victoria.
   1861 The American Civil War begins.
   1863 President Abraham Lincoln signs the Emancipation Proclamation, officially freeing the slaves in the United States.
   1865 The American Civil War ends.
   1874 British Parliament passes the Factory Act, setting maximum allowable working hours per week for all workers.
   1876 Alexander Graham Bell patents the first telephone.
   1882 Germany, Austria-Hungary and Italy form the Triple Alliance.
   1894 First Sino-Japanese War begins.
   1901 Australia celebrates Federation.
   1907 Britain, France and Russia form the Triple Entente.
   1914 Britain declares war on Germany.
   1915 The Anzacs land at Gallipoli on the morning of 25 April.
   1918 The Armistice, signed on 11 November, ends the fighting in World War I.

   Your timeline will help you to analyse and compare events. For example, you could use it to answer questions such as:
   - When did the American Civil War begin and end?
   - When did World War I begin and end?
2. Apply your skills to answer the following questions.
   (a) What time span does your timeline cover (i.e. how many years in total are covered by your timeline)?
   (b) How many years elapsed between the start and the end of the French Revolution?
   (c) Which came first — the American Revolution or the French Revolution? What period of time separated the two historical events?
   (d) Identify three significant events during the period of time illustrated on the timeline for:
      i. Britain
      ii. Australia.
   (e) What event of significance for Britain occurred during the period of the American Revolution?
   (f) What was the consequence of Germany, Austria-Hungary and Italy forming the Triple Alliance, then Britain, France and Russia forming the Triple Entente? (*Hint:* Look for an event that happened after the formation of these alliances.)

# 1.6 Review

## 1.6.1 Key knowledge summary

### 1.2 Why we study history

- Historians investigate and interpret the past.
- History helps us to understand our heritage and appreciate other cultures.
- History helps us to understand the present and what the future may hold.
- History provides us with essential skills.

### 1.3 Historical skills

- Sequencing chronology refers to recording past events in order of time.
- Using historical sources as evidence relates to analysing sources to judge how reliable they are and explore the different points of view, or perspectives, of people from the past.
- Identifying continuity and change is the ability to recognise that while many changes occur over time, some things remain constant.
- Analysing cause and effect relates to understanding that every historical event will have a cause, and every event or action is likely to be the cause of subsequent effects or consequences.
- Determining historical significance is the ability to make judgements about the importance assigned to particular aspects of the past, such as events, developments, movements and historical sites.

### 1.4 Perspectives and empathy

- Historians try to discover how people thought and felt at different times in the past.
- Using historical imagination means using your imagination but basing your ideas on evidence.
- We should avoid judging people from the past by the standards of our own age.

## on Resources

**eWorkbook** Crossword (doc-31696)

**Interactivities** Time out: Sources (int-0782)

Historical skills and concepts crossword (int-7635)

## KEY TERMS

**artefact** an object made or changed by humans
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**contestability** when particular interpretations of the past are open to debate
**continuity and change** the concept that while many changes occur over time, some things remain constant
**empathy** the ability to understand and share another person's thoughts and feelings
**evidence** information that indicates whether something has really happened
**hypothesis** (plural: hypotheses) a theory or possible explanation
**perspective** point of view or attitude
**primary sources** objects and documents that were created or written in the period of time that they relate to
**secondary sources** reconstructions of the past written or created after the period that they relate to
**significance** the importance assigned to particular aspects of the past; for example, events, developments, movements and historical sites
**timeline** a diagrammatic tool representing a period of time, on which events are placed in chronological order

# 2 The Industrial Revolution: Technology and progress

## 2.1 Overview

Money, efficiency, innovation. What were the causes and effects of the Industrial Revolution?

### 2.1.1 Links with our times

A revolution is generally thought of as a time of momentous change, during which old ways of doing things are rapidly superseded by new approaches. It is often said that today we are living through a 'technological revolution' that has dramatically changed the way we work, communicate and process information. To the people of the late eighteenth and nineteenth centuries, the changes in manufacturing, transport, agriculture, trade and living conditions that occurred during the Industrial Revolution were every bit as revolutionary as the technological changes happening today.

#### Resources

**eWorkbook** Customisable worksheets for this topic

**Video eLesson** The Industrial Revolution: Technology and progress (eles-2392)

#### LEARNING SEQUENCE


**2.1** Overview
**2.2** Examining the evidence
**2.3** Causes of the Industrial Revolution
**2.4** The agricultural revolution
**2.5** The growth of empire
**2.6** Entrepreneurs, banks and the middle class
**2.7** The population explosion
**2.8** Power: from horses, wind and water to steam
**2.9** Making textiles: from home to factory
**2.10** Coal and iron
**2.11** Canals, roads, railways and shipping
**2.12** Industrial innovation spreads to the world
**2.13** **SkillBuilder:** Identifying continuity and change online only
**2.14** **Thinking Big research project:** Promoting industrialisation online only
**2.15** **Review** online only


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## A timeline of technology in the Industrial Revolution

CE

1680

**1694**
The Bank of England is established.

1700

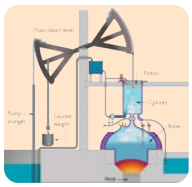
**1700 onwards**
Improvements in agricultural technology contribute to the agricultural revolution.

**1707**
The first turnpike trusts are established.

**1709**
Abraham Darby develops a blast furnace capable of producing high-quality iron.

**1712**
Thomas Newcomen develops the 'atmospheric engine', the first practical steam engine.

1720



1740

**1757**
The Sankey Canal is opened.

**1730s–1780s**
The invention of new and larger spinning and weaving machines shifts textile industry into factories.

1760

**1761**
The Bridgewater Canal is opened.

**1763**
Victory in the Seven Years' War gives Britain increased trade access to colonies in India and North America.

1780

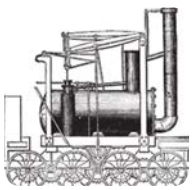
**1769**
James Watt invents a steam engine capable of providing continuous power.

**1785**
The Boulton and Watt steam engine is first used in a textiles factory.

**1783**
Henry Cort's 'puddling' process further improves the quality of iron products.

1800

**1801**
The first official population census is held in Britain.



**1813**
The first working steam locomotive, known as *Puffing Billy*, is built.

1820

**1825**
The first English public steam railway (from Stockton to Darlington) is opened.

**1830**
Stephenson's *Rocket* hauls the first train on the Manchester to Liverpool railway line.

**1830s**
Railway building begins in France and Germany.

1840

**1842**
Samuel Morse develops the single wire telegraph.

**1851**
The Great Exhibition is held in London.

1860

**1876**
Alexander Graham Bell patents the first telephone.

1880

CE

# 2.2 Examining the evidence

## 2.2.1 How do we know about the Industrial Revolution?

In this topic we will look at the great technological changes that took place in Britain during the eighteenth and nineteenth centuries. These changes completely reshaped the way in which food, clothing and other necessities were produced. New materials and sources of power, along with new forms of transport, transformed a society that had not changed dramatically since the Middle Ages. This transformation is the source of many of the features of our way of life today. Britain provided inspiration for the other countries of Europe and North America, which soon experienced industrial revolutions of their own. Today, countries such as China and India are making their own transitions to modern industrialised nations.

### Why industrial 'revolution'?

The term *Industrial Revolution* was first popularised by the English historian Arnold Toynbee in the late 1870s and early 1880s. Historians such as Toynbee looked at the society in which they lived and compared it with what they knew of English society a little over a hundred years earlier. To these observers the nature and speed of the changes they documented were 'revolutionary' because they radically impacted the way many people lived.

### Primary sources

How do we know about the changes that occurred during the period in history known as the Industrial Revolution? We have a number of sources available to us, including the following.

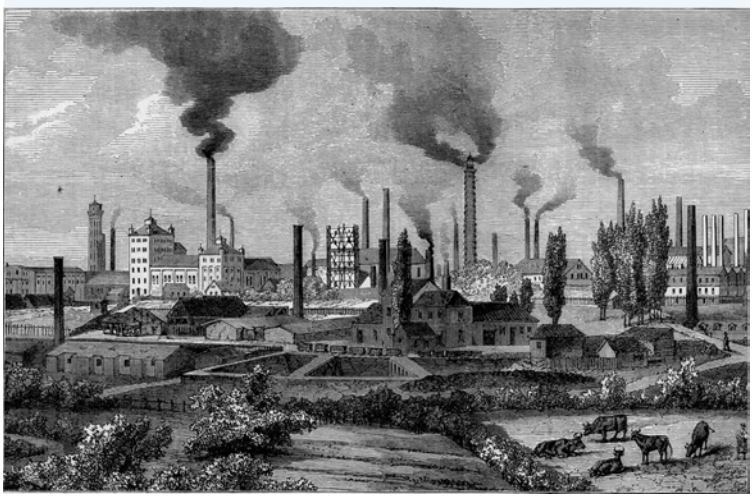
#### Inventions and patents

In the early eighteenth century, farming in Britain was carried out largely as it had been for hundreds of years. The processing and manufacture of goods took place on a small scale in local villages and small towns. By the middle of the nineteenth century, new methods of crop management, **animal husbandry** and new inventions had completely transformed the agricultural landscape. Clothing and other goods were no longer made by hand in homes or small workshops but in factories using large machines. We know about these changes because the creators took out **patents** on their new inventions. Patents could be issued only when the inventor submitted a full written description of their invention, and many of these descriptions survive today. By the mid-nineteenth century, steam was driving machinery of all types. We can trace the development of steam power by examining the models of early steam engines that still exist, and the diagrams and descriptions submitted by their inventors in patent applications.

#### Contemporary writers

Many of the creators of new farming methods wrote books and pamphlets publicising their methods. Other writers of the time wrote first-hand accounts of the improvements in agriculture they had observed. By the mid-nineteenth century, writers were also commenting on working conditions in newly built factories and life in the rapidly growing cities. Clearly, some very dramatic changes had occurred within people's lifetimes, and writers of the time were keen to document these changes.

**SOURCE 1** Contemporary writers commented on life in the rapidly growing cities, and artists used their talents to depict the growth of factory production located in large towns.



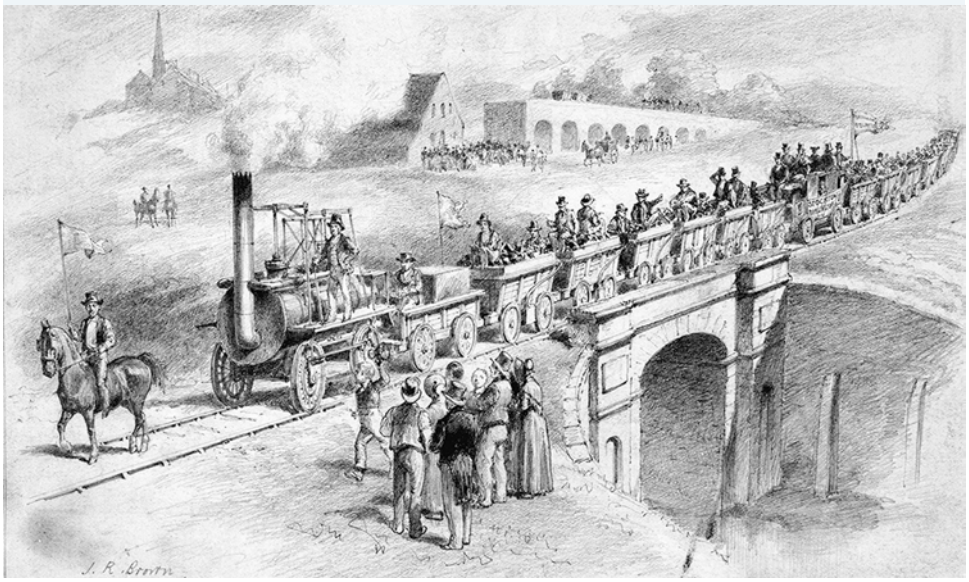
### Census figures

When the first complete population census of England and Wales was taken in 1801, the population was measured at 8.8 million. By 1881 the population had almost tripled to 25.9 million. Never before in history had population growth on this scale been recorded over such a relatively short period of time. These same census figures show a change from a predominantly **rural population**, engaged mainly in farming, to an **urban population**, employed mainly in manufacturing.

### Paintings and drawings

In the eighteenth century, British artists were famous for producing paintings of country landscapes. By the early nineteenth century, artists began to record scenes of the new industrial towns that accompanied the Industrial Revolution. These often contrasted dramatically with the peaceful calm of the country scenes, showing billowing smoke from factory chimneys and the busy activity of the industrial town. Changes in transport, such as the development of railways, also attracted the attention of artists. Many paintings and drawings were produced to celebrate these new developments.

**SOURCE 2** A drawing of the opening of the first British railway line in 1825



## 2.2 EXERCISES

**Historical skills key: HS1** Remembering and understanding **HS2** Sequencing chronology **HS3** Using historical sources as evidence **HS4** Identifying continuity and change **HS5** Analysing cause and effect **HS6** Determining historical significance

### 2.2 Exercise 1: Check your understanding

1. **HS1** Use the words provided in the following table to fill the gaps and complete the paragraph below.

| | | | |
|---|---|---|---|
| Middle | New | Britain | transformation |
| reshaped | clothing | transformed | sources |
| features | not | transport | technological |

Great _____ changes took place in _____ during the eighteenth and nineteenth centuries. These changes completely _____ the way in which food, _____ and other necessities were produced. _____ materials and _____ of power, along with new forms of _____, _____ a society that had _____ changed dramatically since the _____ Ages. This _____ is the source of many of the _____ of our way of life today.

2. **HS1** Why did English historian Arnold Toynbee coin the term 'Industrial Revolution'?

3. **HS1** Explain why the registration of patents provides us with useful information about the period of the Industrial Revolution.
4. **HS4** What sort of significant changes are evident in population census figures for nineteenth-century Britain?
5. **HS4** How can the work of writers and artists inform us of the types of changes occurring during the Industrial Revolution?

### 2.2 Exercise 2: Apply your understanding

1. **HS3** Examine **SOURCE 1**. What evidence is there in this picture of the types of changes brought about by the Industrial Revolution?
2. **HS3** Explain what evidence in **SOURCE 2** suggests that a completely new form of transport was being celebrated.
3. **HS3** What impression of the new industrial towns do you believe the artist of **SOURCE 1** was trying to create for viewers of this work?
4. **HS4** Using examples from the information provided in this subtopic, explain why late nineteenth-century historians believed the changes of the previous hundred years were a major 'revolution'.
5. **HS6** 'The Industrial Revolution created the modern world in which we live.' Based on the material provided in this subtopic, explain why you agree or disagree with this statement.

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# 2.3 Causes of the Industrial Revolution

## 2.3.1 The importance of cause and effect in history

The Industrial Revolution was arguably the most important period of change in modern history. It marked the beginning of the technological revolution that continues to affect our lives. Before the Industrial Revolution, people produced things they needed in ways that had not changed in centuries. The Industrial Revolution saw new ideas being applied to producing goods. It began in Britain in the mid-eighteenth century. By the mid-nineteenth century it had effected enormous changes in the ways people worked and lived, and these changes had begun to spread around the world. Why did it happen when it did? And why did it begin in Britain?

One of the reasons to study history is to identify cause and effect. If we understand the factors that caused something bad to occur in the past, we may be better able as a society to avoid it happening again. If we can recognise the causes of something beneficial, we may be able to repeat it in a different location, or different time. The process of **industrialisation** has raised the **standard of living** of the vast majority of people living in countries that have experienced industrialisation. It is currently raising the standard of living in countries such as China and India. Nevertheless, many countries in the world have not experienced industrialisation, and their inhabitants live in relative poverty. If the citizens and governments of those countries can recognise the factors that have contributed to industrialisation, they may be able to encourage the process and raise their own standard of living.

**SOURCE 1** Farmers in developing countries still use methods that have been used for centuries, while industrialised countries have long since mechanised agriculture.

**DISCUSS**

In either a class discussion or a 'think, pair, share', outline one reason why the process of industrialisation might improve the standard of living of a country. **[Critical and Creative Thinking Capability]**

## 2.3.2 Underlying causes and immediate causes

When we plant a seed in the garden, we expect a plant to grow from that seed. The immediate cause of the plant growing is the placing of the seed in the soil. However, if the soil is of poor quality with low levels of nutrients and the seed is never watered, the plant may not grow. Good-quality fertile soil is an underlying cause of plant growth. We can examine the causes of the Industrial Revolution in a similar manner. The following are often identified as causes of the Industrial Revolution that began in Britain in the mid eighteenth century. Some can be considered as underlying causes or long-term trends — the fertile soil in which industrialisation flourished. Some can be considered immediate causes — the short-term triggers that led directly to the changes we identify as the Industrial Revolution.

### Technology

The Industrial Revolution first took off as a result of two developments in technology. The first was the invention of a number of new machines designed to process raw cotton into cloth. These machines were too large to be locatedin an average house or cottage, so factories were built to accommodate them. The second development was the invention of steam engines capable of powering these cotton-processing machines. The use of steam power allowed factories to become larger and produce huge quantities of cotton cloth. The textile industry set the pattern for other industries, and large-scale factory production soon became the norm across a range of different manufacturing activities.

### Agricultural revolution

Prior to the eighteenth century, most of the population of Europe was engaged in food production. In Britain, two broad changes were occurring by the middle of the eighteenth century:

1. New methods of farming were gaining popularity, improving the quantity and quality of food and the output of fibres such as wool for clothing.
2. Changes in land ownership had been underway for over 100 years. Common land that had been shared by villagers was enclosed by wealthy landowners, creating larger farms on which the new farming methods could be applied.

These changes contributed to an increase in population, but did not require the extra people to work on farms. They would eventually become the factory workers of the Industrial Revolution.

**SOURCE 2** Major sites of industrialisation in Britain

***Source:*** Spatial Vision

## Access to raw materials

Steam engine operation depended heavily on good-quality coal to provide strong reliable heat. Britain had large deposits of coal, most of which were readily accessible, so mining developed alongside the growth in factory production. As **SOURCE 2** shows, the location of coalfields strongly influenced the location of industry during the period of the Industrial Revolution. Britain also had plentiful deposits of iron ore, which could be processed into steel and used for building factory machinery and other useful equipment.

## Wealthy middle class

In medieval Europe and Britain, the vast majority of the population consisted of lower-class peasants who worked the land owned by the upper-class aristocracy. The middle class were the specialised craftsmen and merchants who, relying on trade and commerce, usually lived in the towns; they were a small minority throughout the Middle Ages. As Britain grew to become a major trading nation, many members of the middle class became very wealthy and used their savings to invest in business ventures. It was this investment that funded the growth of factories during the Industrial Revolution.

## Transport

Britain is a relatively compact nation geographically, with easy access to the sea through large ports. The transportation of raw materials to factories and of finished products to customers, both local and overseas, was relatively simple. River transport was very efficient and canals could be built to connect many of these rivers. The development of steam as a means of locomotion eventually transformed transport networks across Britain and later the world.

## Expanding empire

Since the great age of exploration in the sixteenth century, European ships and merchants had sailed to all parts of the world and had discovered a wide variety of new products that could be imported into Europe. The Spanish and Portuguese had conquered most of South America, and the Dutch had colonised the islands that now make up Indonesia. The British had established colonies in North America, the Caribbean, the Indian subcontinent and West Africa. The British were quick to realise the possibilities of importing raw materials from their colonies and transforming them into finished products to sell to the increasing population. Improving the methods of producing finished cotton products to meet this growing market became very important in the latter half of the eighteenth century.

## 2.3 EXERCISES

**Historical skills key: HS1** Remembering and understanding **HS2** Sequencing chronology **HS3** Using historical sources as evidence **HS4** Identifying continuity and change **HS5** Analysing cause and effect **HS6** Determining historical significance

### 2.3 Exercise 1: Check your understanding

1. **HS1** How can an understanding of the causes of a historical event be of benefit to future generations?
2. **HS1** Identify the two key technological advances that allowed industrialisation to take off in Britain in the latter part of the eighteenth century.
3. **HS1** What was the impact of changes in agriculture during the eighteenth century in Britain?
4. **HS1** Describe why the existence of a wealthy middle class was important to the development of the Industrial Revolution.
5. **HS1** Explain why an efficient transport system was useful in the process of industrialisation.
6. **HS1** What contribution did an expanding empire make to the Industrial Revolution in Britain?

### 2.3 Exercise 2: Apply your understanding

1. **HS3** Examine **SOURCE 1**. Explain how you think the farming techniques shown could be made more efficient by the use of mechanical equipment.

2. **HS3** Using **SOURCE 2**, identify the main sites of economic activity and population growth during the Industrial Revolution.
3. **HS3** What does **SOURCE 2** tell us about the importance of access to raw materials and transport during this period?
4. **HS5** Of the causes identified in this subtopic, which do you believe to be underlying causes of the Industrial Revolution and which do you think were immediate causes? Give reasons for your answers.
5. **HS6** Why could the Industrial Revolution be described as the most important period of change in modern history?
6. **HS6** Explain how developing countries could benefit from the example of the Industrial Revolution in Britain.

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# 2.4 The agricultural revolution

## 2.4.1 Traditional open-field farming

At the time of the Industrial Revolution, major changes in farming practices were already occurring throughout Britain. These changes completely revolutionised agriculture. Increases in farm production provided food for the growing population, particularly the expanding urban workforce.

The traditional open-field village was based on **subsistence farming**, producing only enough food for its inhabitants, who were peasants or tenants of the landowner. It usually involved the rotation of different activities across three large fields. One field would carry a crop of wheat or rye, and one a crop of barley, while one would be allowed to lie **fallow**. Each year the crops would be rotated, so each field would lie fallow for one year in every three. Each village household was allotted a number of strips in each field. These would usually be spread out so that everyone had equal access to the best land. There was also an open area of common land where everyone had the right to graze livestock and collect firewood. Grazing also took place in the fallow field, helping to fertilise it, making it ready for planting the following year.

**SOURCE 1** Three-field rotation meant that one-third of the land would lie idle each year.

### Disadvantages of the open-field system

The open-field system had worked well for centuries, and in 1750 about half of all farming in England still relied on this approach. However, the system had a number of disadvantages.

- It was very inefficient because:
  - one-third of the land was left unplanted each year
  - pathways separating the strips of land were not used for crops
  - time was wasted because each farmer had to look after a number of strips scattered across the different fields.
- Weeds and animal diseases could spread easily as everyone was sharing so much of the available land.
- There was very little opportunity to try new crops or new methods because everyone had to grow the same crops and work together.

## 2.4.2 Enclosure

The agricultural revolution involved three main developments:

1. enclosure of the open fields
2. the adoption of new techniques of farming
3. the change to a more business-oriented approach to farming.

**Enclosure** involved the consolidation of open fields into single farms, owned by one farmer and separated from neighbouring farms by hedges or low stone walls. This process had begun as early as the sixteenth century, when some wealthy landowners began to enclose their land, voiding the rights of peasant farmers to pursue their traditional strip farming. If the newly enclosed farm was large enough, it could be subdivided and smaller farms leased out to these same peasants. The peasants were forced either to become paid employees on the enclosed farm or to seek work in nearby towns. Enclosure gave the farmer/landowner greater control over the total area of the farm; less productive land was wasted and animals were kept separate from neighbours' livestock.

**SOURCE 2** Stone walls were often used to enclose farms during the eighteenth century.

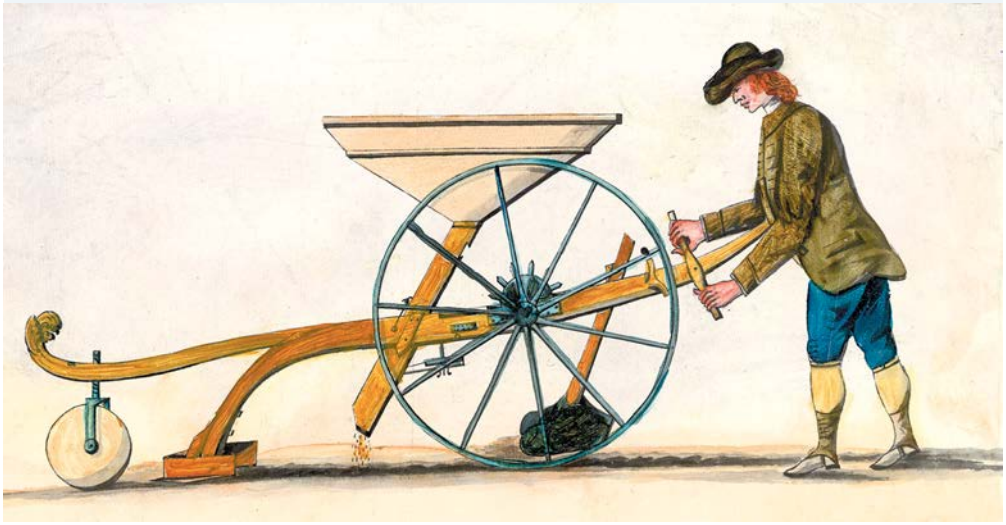
## 2.4.3 Adoption of new techniques of farming

Increased control over their farms and stock allowed farmers to adopt new, more efficient methods of farming, and developments in farming equipment further increased efficiencies.

### Jethro Tull's seed drill

Traditionally seed was scattered by hand into ploughed furrows. This often meant a lot of wastage as the wind could blow much of the seed away or birds could eat it. In 1700, agricultural inventor Jethro Tull developed a horse-drawn seed drill that could plant three rows of seed at a time (**SOURCE 3**). A hole would be drilled for seeds to be dropped in, the hole covered and the drill moved forward to the next planting position. It is estimated that this invention produced a crop five times larger than had been achieved on the same area of land using the old methods.

**SOURCE 3** Jethro Tull's seed drill, as depicted in this nineteenth-century illustration, revolutionised the planting of crops in England.



## The Rotherham plough

In 1730 Joseph Foljambe patented the Rotherham triangular plough. This plough had an iron blade and was lighter and easier to handle than the rectangular wooden ploughs that had been used previously. Instead of being drawn by a team of four oxen, and requiring both a ploughman and an ox driver, the Rotherham plough could be drawn by two horses and handled by one person. The Rotherham plough proved to be quicker and more efficient, and significantly reduced costs for farmers.

**SOURCE 4** Traditional ploughing required a team of four or more oxen, an ox driver and a ploughman to operate the heavy rectangular wooden plough, as shown in this artwork based on fourteenth-century illustrations.

**SOURCE 5** The Rotherham plough, which was developed in 1730, could be operated by one ploughman and two horses, as shown in this artwork.

## Changes in crop rotation methods

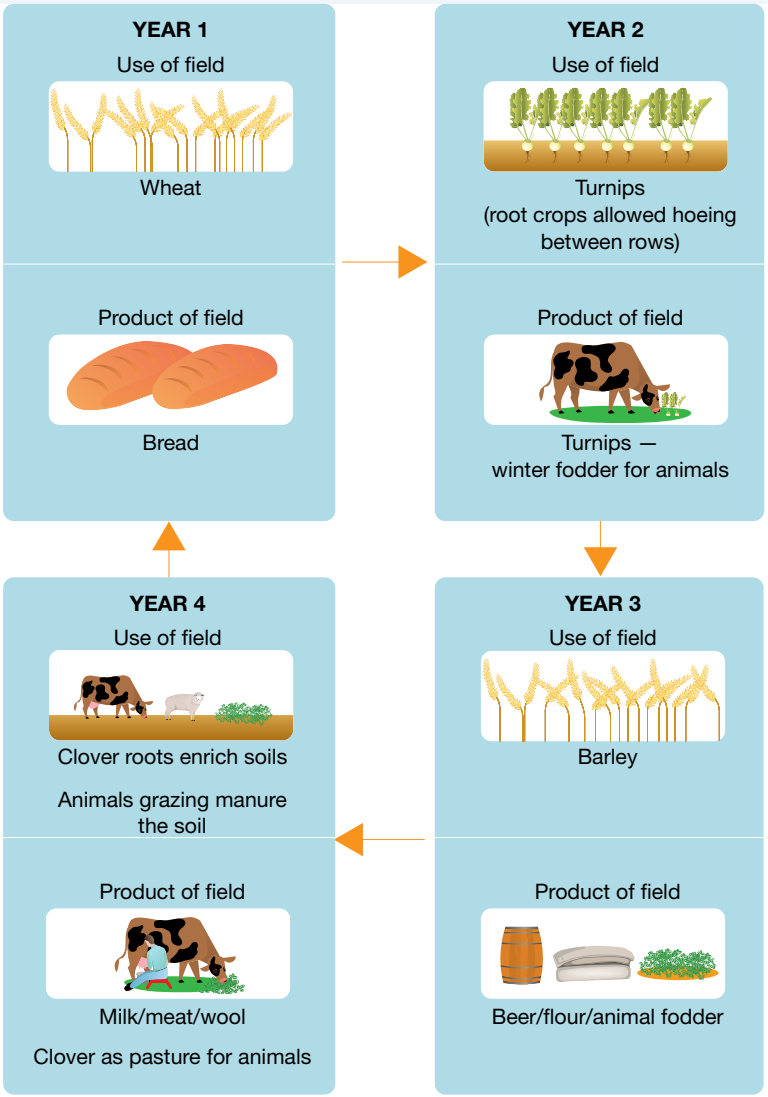
As the open fields were enclosed, new systems of crop rotation were introduced. The most successful of these was the four-crop rotation system introduced by Lord Charles Townshend (or 'Turnip' Townshend, as he became known) on his own estates. His farm was divided into four fields, with wheat in the first, turnips in the second, barley in the third and clover in the fourth. Each year the crops would be rotated by one field,

so that in the second year, the first field would contain clover, the second wheat, the third turnips and the fourth barley. This rotation continued over a four-year cycle. The planting of clover and turnips following the crops of wheat and barley helped replace nutrients in the soil, and therefore helped produce better crops the following year. The clover was used as a nutritious summer food for livestock, while turnips could be fed to animals in winter. This meant that livestock no longer needed to be slaughtered before each winter, as had traditionally been the case.

## Improved stock-breeding methods

Farmers such as Robert Bakewell began selective breeding of sheep and cattle. Only the largest and strongest animals were mated, and this produced offspring with the best characteristics. Bakewell also cross-bred different types of sheep to produce the best breeds for both wool and meat production. His New Leicester breed, introduced in 1755, proved to be a great success.

**SOURCE 6** Four-crop rotation in one field




**SOURCE 7** New Leicester sheep were bred by Robert Bakewell. Can you see why they were successful for both wool and meat production?

## 2.4.4 A business approach to farming

Before the eighteenth century, farming activity was mainly directed towards satisfying local food and clothing needs. Any produce left over could be sold or traded at markets, but this would entail only a small proportion of farming output. The great improvements of the agricultural revolution not only increased the amount of food available to the farmers and their workers, but provided increasing surpluses that could be sold to feed the growing urban population. The rural population grew very slowly, but the output per person employed in agriculture rose dramatically. Exporting grain to other countries also brought profits to farmers who were prepared to innovate and embrace new methods of production.

**SOURCE 8** Improvements in farming output

The agricultural revolution produced great improvements in the quantity and quality of both crops and livestock. In 1705 England exported 150 million kilograms of wheat, but by 1765 this had risen to 1235 million kilograms. In 1710 sheep sold at market weighed an average 13 kilograms, while cattle weighed an average 167 kilograms. By 1795 this had risen to 36 kilograms for sheep and 360 kilograms for cattle.

### 2.4 EXERCISES

**Historical skills key: HS1** Remembering and understanding **HS2** Sequencing chronology **HS3** Using historical sources as evidence **HS4** Identifying continuity and change **HS5** Analysing cause and effect **HS6** Determining historical significance

### 2.4 Exercise 1: Check your understanding

1. **HS1** What is meant by 'enclosure' in relation to farming lands?
2. **HS1** What impact did the enclosure of farms have on the peasants and tenant farmers who had previously worked the land?
3. **HS1** Outline the contribution of each of the following people to the improvements in agriculture in England in the eighteenth century:
   (a) Jethro Tull (b) Joseph Foljambe (c) 'Turnip' Townshend (d) Robert Bakewell
4. **HS1** What do we mean when we refer to 'a business approach to farming'?
5. **HS1** Identify how the business approach to farming differed from the subsistence approach that had operated previously.
6. **HS1** Explain how the traditional three-field rotation system worked.
7. **HS1** What were the major disadvantages of the three-field rotation system?
8. **HS1** Explain how the four-field rotation system operated.

### 2.4 Exercise 2: Apply your understanding

1. **HS3** In **SOURCE 1**, identify the areas that would have been common land.
2. **HS5** What use was made of fallow land? Explain why this would have improved the land for crops for the next two years.
3. **HS3** Examine **SOURCE 2**. Explain why enclosure made the continuation of communal strip farming impossible.
4. **HS3** How could enclosure allow a farmer to maintain good health and breeding within his livestock?
5. **HS3** Compare the different methods of ploughing depicted in **SOURCES 4** and **5**. Explain two ways by which the use of the Rotherham plough could have reduced costs for the farmer.
6. **HS3** By comparing **SOURCES 1** and **6**, explain how enclosure and the use of the four-field system might have overcome the disadvantages of the three-field rotation system.
7. **HS3** Read **SOURCE 8** and answer the following.
   (a) By what percentage did wheat exports rise between 1705 and 1765?
   (b) How might we explain the increase in weight of livestock sold for slaughter between 1710 and 1795?
8. **HS5** Explain why each of the following innovations could only have occurred after the enclosure of farms.
   (a) The four-field crop rotation system (b) Selective breeding of animals
9. **HS5** The Industrial Revolution relied on the availability of an urban workforce to work in factories. Identify and explain two ways in which the changes in agricultural methods supported the growth of such a workforce.

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# 2.5 The growth of empire

## 2.5.1 The British East India Company

In the fifteenth century, European countries such as Portugal and Spain set out to explore the lands around the Atlantic Ocean to expand their trading links. This led to the establishment of **trading posts** on the western coast of Africa, and the discovery of the Americas. In the early sixteenth century, Vasco da Gama found a sea route to India, and the Dutch, French and English soon joined in the race to establish **colonies** and trading posts in the newly discovered lands. As British **maritime power** grew during the sixteenth and seventeenth centuries, Britain began to lay the foundations of what was to become the most extensive of the European **empires**.

In December 1600, Queen Elizabeth I granted a **charter** to a group of merchants, giving them exclusive rights to control trade between England and all areas of Asia east of the Cape of Good Hope at the southern tip of Africa. This became the East India Company, and it sent ships to the Indian Ocean to establish trade links with India and other parts of eastern and south-eastern Asia. The company expanded its influence throughout the sixteenth century, establishing trading links in China, Japan and the Malay Peninsula. Its major area of influence was the Indian subcontinent, and it gradually came to control large areas of the region. The company employed its own private armies and used them to conquer areas of India previously controlled by the French, Portuguese and Dutch. The company engaged in trade in silk, cotton, spices and tea, shipping these in large quantities back to Britain.

**SOURCE 1** The officers of the British East India Company became very wealthy and powerful as they brought more and more of India under their control.

## 2.5.2 The British in North America

The Spanish, Portuguese and French were quick to establish colonies in North and South America during the sixteenth century. The first successful British colony in North America was established in Virginia in 1607, and over the next hundred years, the British set up a string of colonies along the east coast of North America. The Caribbean was also a target of British colonisation, with islands such as Trinidad and Tobago, the Bahamas and Jamaica coming under British control. During this time, the French were also expanding into North America. They had established colonies in what is now Canada, and in 1681 had sailed up the Mississippi River and claimed a huge area that they called Louisiana. This would bring the French into direct conflict with the British, as Louisiana was directly to the west of Britain's thirteen coastal colonies, and the French presence there would prevent the British from spreading inland.

**SOURCE 2** French and British settlements in North America before 1756

***Source:*** Spatial Vision

## 2.5.3 The Seven Years' War (1756–63) and the American Revolution

In 1754 Britain and France both claimed control of the Ohio country, located to the west of Pennsylvania. The dispute soon led to skirmishes between British and French troops in this area, and in other parts of North America. France was successful in maintaining control of the Ohio country, but lacked the military power to attack the established British colonies. Between 1756 and 1760 the British waged a campaign in the Canadian territories, eventually defeating the French and taking control of eastern Canada. During this same period, French troops clashed with the private armies of the East India Company on the Indian subcontinent. The British side ultimately proved victorious and extended British influence over most of India. By the end of the Seven Years' War in 1763, Britain controlled an extensive empire, spreading from North America, through parts of Africa, to India and East Asia.

In 1775 the British colonists in the coastal colonies of North America rebelled against British rule, and a war began which would see Britain lose control of those colonies. In 1783 the Treaty of Paris was signed between Britain and the representatives of the former colonies, which subsequently became the modern-day United States of America. While this war saw the British lose their wealthiest colonies in America, their expansion in India and ongoing rule of Canada and many of the Caribbean islands still left Britain with an extensive empire by the end of the eighteenth century. In 1788 the British also took control of the eastern coast of modern-day Australia with the establishment of the colony of New South Wales.

## 2.5.4 The British Empire and the Industrial Revolution

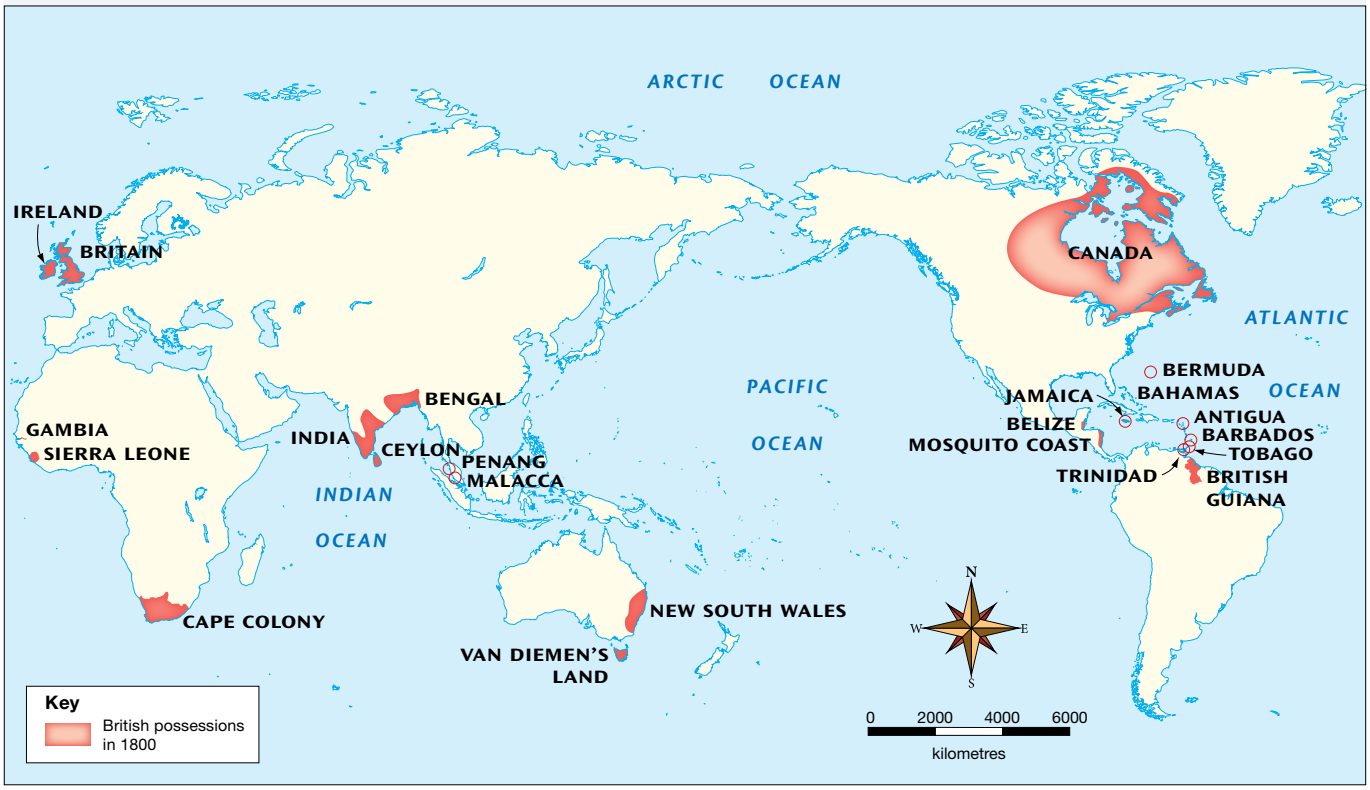
Access to the empire was an essential factor in the industrialisation of Britain. Raw materials would be imported by ship and processed in British factories, and then the finished products exported, often to the same colonies that had provided the raw materials. By 1800, Britain had the beginnings of a worldwide empire, which provided valuable sources of raw materials to feed industrial growth. Initially the cotton

industry was a major source of industrial growth, but British industry was soon able to process raw materials imported from almost every continent. To protect its trading routes, Britain also established the most powerful navy in the world, along with a very prosperous shipbuilding industry.

**SOURCE 3** Main sources of raw materials from different parts of the British Empire

| British colony | Raw materials provided |
|---|---|
| Canada | Furs, timber, fish |
| Jamaica | Sugar, coffee |
| British Guiana | Sugar, tobacco |
| Gambia | Cocoa |
| Bermuda | Salt, whale oil, baleen |
| India | Cotton, tea, timber, sugar |
| Penang and Malacca | Spices, timber |
| Ceylon (now Sri Lanka) | Tea, timber, cocoa |
| New South Wales | Whale oil, baleen, wool |

**SOURCE 4** The British Empire in 1800




***Source:*** Spatial Vision

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- 2.5 The growth of empire > **British Empire**

## 2.5 ACTIVITIES

1. With a partner, discuss whether you think it was fair that Britain expected the colonies to import British manufactured goods rather than encourage them to produce their own. Write a paragraph to explain your view.
   In your response, consider these questions:
   (a) What were the benefits to Britain?
   (b) What were the benefits to the colony?
   (c) Does your opinion change depending on whose perspective you are looking at?
   (d) Is it important to consider 'fairness' when thinking about a historical issue?

   **[Ethical Capability; Personal and Social Capability]**
2. Being part of the British Empire brought wealth, new facilities such as railways, and education to many parts of Asia and Africa, but in return these colonies lost the power to govern themselves.
   (a) Is it more important to have political power or economic wealth? Form small groups to discuss this issue.
   (b) Following your discussion, create a table like the one below to present your arguments.

| Arguments for political power | Arguments for economic wealth |
|---|---|
| | |

   **[Critical and Creative Thinking]**
3. **SOURCE 3** refers to baleen as a raw material imported from the colonies. Research what baleen is and what its various uses were during the nineteenth century. **Remembering and understanding**

## 2.5 EXERCISES

**Historical skills key: HS1** Remembering and understanding **HS2** Sequencing chronology **HS3** Using historical sources as evidence **HS4** Identifying continuity and change **HS5** Analysing cause and effect **HS6** Determining historical significance

### 2.5 Exercise 1: Check your understanding

1. **HS1** What special rights did the charter of 1600 grant to the East India Company?
2. **HS1** How did the East India Company gain control of large areas of the Indian subcontinent?
3. **HS1** What were the main goods the East India Company traded to Britain?
4. **HS1** When and where was the first British settlement in North America?
5. **HS1** Where were the main French colonies in North America?
6. **HS1** What was the dispute that led to the outbreak of skirmishes between the French and British in North America in 1754?
7. **HS1** Which additional territory did Britain gain in North America after 1763?
8. **HS1** How did the British come to lose control of their original colonies on the east coast of North America?
9. **HS1** Why was the development of an empire an important factor in the industrialisation of Britain?
10. **HS1** Why was it important for Britain to have a powerful navy during the eighteenth and nineteenth centuries?

### 2.5 Exercise 2: Apply your understanding

1. **HS3** What does **SOURCE 1** tell us about the relationship between the officers of the East India Company and the native population?
2. **HS3** What evidence is there in **SOURCE 1** of the great wealth of these officers?
3. **HS3** Explain how **SOURCE 2** helps you to understand why Britain and France were likely to come into conflict in North America.
4. **HS3** How many British colonies were there on the east coast of North America by 1756? Name the three largest.
5. **HS3** Examine **SOURCE 3**. Which colonies were the major sources of cotton and sugar for Britain?
6. **HS3** Examine **SOURCE 4**. Why would it have been important to control Cape Colony in southern Africa at this time?
7. **HS3** The English are famous for their love of tea, but the tea plant is not grown in Britain. Identify which colonies supplied their tea.

8. **HS4** Many of the raw materials imported from the colonies were not naturally grown in Britain, but their importation made significant changes to British life. Identify three such raw materials, and explain how they might have had an impact on the lives of ordinary British people.
9. **HS4** At the beginning of the nineteenth century, most of Africa had not yet been colonised by European powers; by the end of that century, most of Africa was under the control of various European empires. From what you know so far about industrialisation and the importance of empire, suggest possible reasons for this huge change during that century.
10. **HS5** Was the growth of the British Empire in the seventeenth and eighteenth century an underlying or an immediate cause of the Industrial Revolution? Give reasons for your answer.
11. **HS5** The British Empire continued to grow even more strongly during the nineteenth century. Explain why the Industrial Revolution may itself have been a cause of this further growth.

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# 2.6 Entrepreneurs, banks and the middle class

## 2.6.1 Entrepreneurship and the middle class

Many of the innovations of the eighteenth century that fuelled the Industrial Revolution could not have occurred without a willingness of people to invest their savings in new enterprises, and a banking system able to channel that money into the most profitable of these businesses.

In medieval Europe, the most powerful class was that of the land-owning aristocracy, while the most numerous group was the peasant class who worked the land. The middle class consisted of the tradesmen, craftsmen and merchants, most of whom lived in the towns. The sixteenth century in Britain saw an increase in trade and commerce, and a growth in the wealth of many of the middle class, including many who bought land from aristocrats and established farming on a commercial basis. Many of these middle-class businesspeople entered parliament and sought to have laws passed that would favour trade and commerce. From 1642, the English Civil War broke out in Britain between the middle-class parliamentarians and their supporters on the one side, and the king and the aristocracy on the other. King Charles I was deposed and executed in 1649, and parliament ruled without a king for 11 years. When the monarchy was restored in 1660, the new King Charles II had to negotiate with a much more powerful parliament. The victory in the civil war had given a powerful place to the middle class in Britain, and the English Parliament came to strongly represent the interests of the merchants, traders and others involved in running businesses.

### Government support for business

Between 1650 and 1673 Parliament passed the Navigation Acts, which required all goods traded between Britain and its colonies to be carried in British ships. There was also stronger enforcement of the Statute of Monopolies of 1623, which protected the rights of inventors to profit from patents on their inventions. By the eighteenth century, an environment that favoured **entrepreneurship** had developed in Britain. Scottish philosopher Adam Smith recognised the value of having a government supportive of trade and commerce in his 1776 book *The Wealth of Nations* (see **SOURCE 1**).

**SOURCE 1** Adam Smith, *The Wealth of Nations*, 1776

To found a great empire for the sole purpose of raising up a people of customers may at first sight appear a project fit only for a nation of shopkeepers. It is, however, a project altogether unfit for a nation of shopkeepers; but extremely fit for a nation whose government is influenced by shopkeepers.

### Entrepreneurship

More and more people saw the advantages of investing in business opportunities. Developments in agriculture encouraged farmers to operate their farms as profit-making businesses. Innovations in the textile industry encouraged investment in larger and larger factories. The increasing demand for iron and coal made investment in larger-scale mining a profitable activity. Much of the progress made during the Industrial Revolution was due to the availability of money through a well-organised banking system, and a willingness of **entrepreneurs** to invest that money in business ventures.

**SOURCE 2** Adam Smith, whose head appears on the British £20 note, believed that entrepreneurship was a significant factor in the creation of wealth.

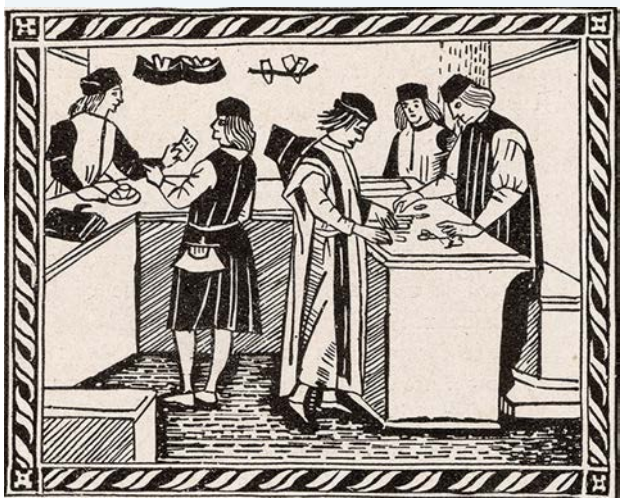
## 2.6.2 The importance of banks

Today we are accustomed to banks as places where we deposit our savings and borrow money for a variety of personal and business purposes. A modern industrial economy could not survive without a banking system. In pre-industrial times, production of textiles was a cottage industry and coalmining took place in shallow pits, so little in the way of expensive equipment was needed. The costs of building a factory and equipping it with machinery, or providing steam-driven pumps for a deep-pit coalmine, however, were a very different matter. Anyone wishing to set up these types of businesses needed access to finance, so a well-organised banking system was essential.

### Growth of the banking system

Modern banking as we now understand it dates from Renaissance Italy, and in particular from the wealthy cities of Venice and Florence. The sixteenth and seventeenth centuries in England and Scotland saw the spread of banking practices that were the forerunners of today's modern banks. Before 1546 in England, it was illegal to charge interest on money lent, but the law was changed after that date. This change provided an opportunity for profits to be made from lending money to merchants wishing to set up business ventures.

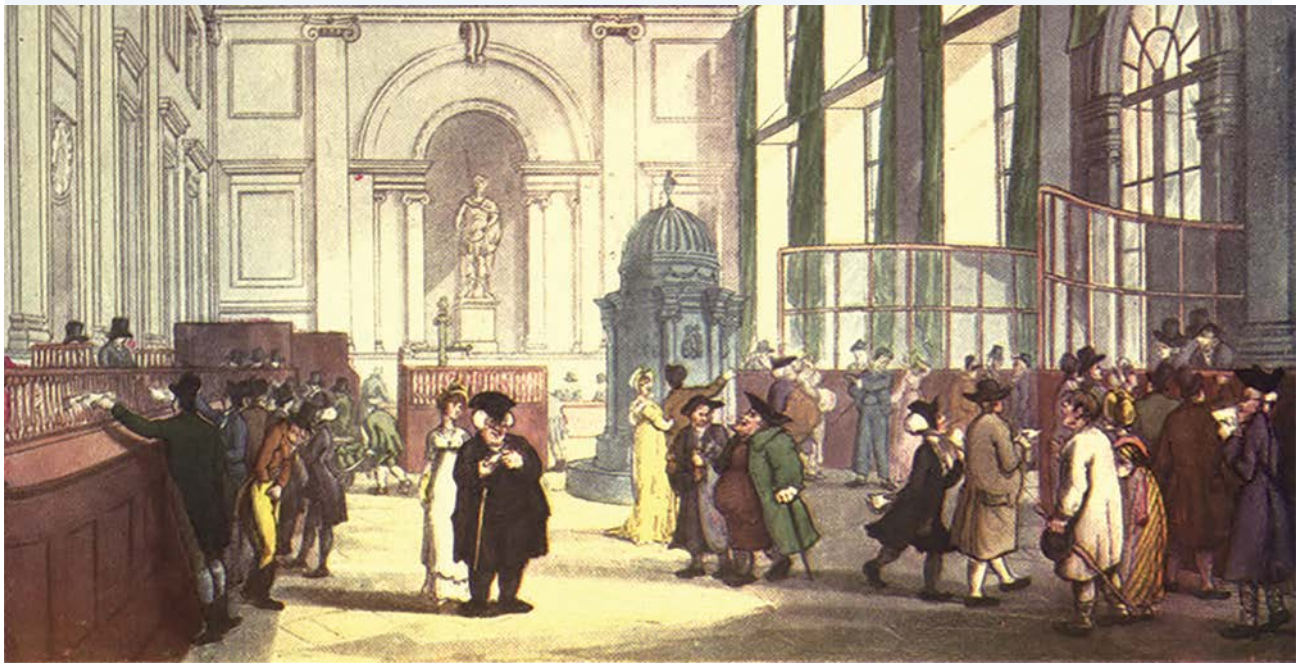
**SOURCE 3** Renaissance Italy was the birthplace of modern banking. This artwork from the fifteenth century shows an Italian banking house.



### Goldsmith bankers

Through the sixteenth and seventeenth centuries, many of the activities we now associate with banks were carried out by **goldsmiths**. While their major activity involved working with gold and other precious metals, goldsmiths could also provide safe custody for money and other valuables. They also kept quantities of foreign currency that could be exchanged by merchants wishing to travel overseas. By the early eighteenth century, these goldsmith bankers had developed a well-organised network of private banks that were ready to lend money for worthwhile business enterprises.

**SOURCE 4** The Bank of England, established in 1694, became the major source of lending for the government. This artwork was created in the nineteenth century.



## DID YOU KNOW?

The first banknotes were issued by goldsmiths as receipts for gold held in safekeeping. The Bank of England was established in 1694 to lend money to the government, and in 1708 gained a virtual monopoly over the issuing of banknotes in England.

## DISCUSS

French leaders are believed to have used Adam Smith's term 'a nation of shopkeepers' as an insult against the British. How might the qualities of 'a nation of shopkeepers' have contributed to the progress of the Industrial Revolution? Discuss in small groups. **[Critical and Creative Thinking]**

## 2.6 ACTIVITY

Adam Smith is often described as the father of modern economics and of modern capitalism. Using the internet and/or library resources, find out who Adam Smith was and what he did to earn these titles.

**Determining historical significance**

## 2.6 EXERCISES

**Historical skills key: HS1** Remembering and understanding **HS2** Sequencing chronology **HS3** Using historical sources as evidence **HS4** Identifying continuity and change **HS5** Analysing cause and effect **HS6** Determining historical significance

### 2.6 Exercise 1: Check your understanding

1. **HS1** How did the middle class in Britain become so powerful by the beginning of the eighteenth century?
2. **HS1** In what ways did the English Parliament support business interests during the late seventeenth and early eighteenth centuries?
3. **HS1** Explain what is meant by *entrepreneurship*.
4. **HS1** Why were cottage industries able to survive without access to a modern banking system?
5. **HS1** What was the role of goldsmiths in the development of the banking system?

### 2.6 Exercise 2: Apply your understanding

1. **HS3** From **SOURCE 1**, explain Adam Smith's attitude to the role of the middle class in influencing government decisions.
2. **HS3** Examine **SOURCE 2**. What can you see depicted in front of Adam Smith's face on this banknote? What does this tell us about the importance that many people place on Adam Smith's ideas as an influence on the Industrial Revolution?
3. **HS3** Compare and contrast **SOURCES 3** and **4**. What does the image of the inside of the Bank of England in **SOURCE 4** tell us about the importance of banking in England, when compared to the activities shown in **SOURCE 3**?
4. **HS6** Explain the significance of the legalisation of the charging of interest on borrowed money in England.
5. **HS5** How important was a successful banking system as an underlying cause of the Industrial Revolution? Explain.

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# 2.7 The population explosion

## 2.7.1 Before the eighteenth century

The period of the agricultural and industrial revolutions saw rapid population growth throughout Great Britain, but particularly in England and Wales. Improved farming methods appear to have been one cause of the population explosion that occurred between 1750 and 1850. The increase in population provided a ready workforce for newly industrialised factory production.

Population figures for most of Great Britain before the nineteenth century are estimates only, as the first official census was not held until 1801. The best information suggests that population levels had moved up and down dramatically between 1300 and 1700. From a high of close to 6 million people in 1300, the influence of the **Black Death** and years of **famine** had seen the population depleted to around 2 million by 1500. During the sixteenth century the population appears to have doubled, but it grew more slowly during the first half of the seventeenth century, reaching only about 5 million by 1650. Disease epidemics such as the Great Plague of the 1660s caused the population to level out during the second half of the seventeenth century and by 1700 it remained at about 5 million.

**SOURCE 1** This seventeenth-century engraving depicts the effects of the Black Death, which struck Europe in the late 1340s, and kept the population low in Britain for centuries.

### DID YOU KNOW?

Bubonic plague, or the Black Death, was caused by bacteria carried by a flea that was a parasite of the black rat. Its eradication in England after the 1660s is said to have occurred because of the arrival in England of the larger brown rat. Brown rats, which did not carry the disease-causing flea, soon drove the black rats out of their habitat.

## 2.7.2 Eighteenth-century population growth

The British population began to increase steadily again during the first half of the eighteenth century, reaching 6 million by the late 1750s. Eradication of the plague and improvements in medical science saw a fall in the death rate. By mid century the changes in agriculture had begun to have an impact, increasing the supply of good-quality food capable of feeding a larger population. Dietary deficiency diseases such as **scurvy** and **rickets** declined as food quality improved, leading also to a decline in the **infant mortality rate**.

### The population explosion

The population really took off in Britain after 1760, doubling over the next 60 years, and doubling again in the following 60 years (see **SOURCE 2**). Agricultural improvements meant that good crops could be relied on every year, removing fears of the periodic famine that had been common for centuries. Fresh meat was now available in winter; cheaper potatoes could be eaten all year round, and dairy produce, such as butter and cheese, was enjoyed more widely. In the latter part of the eighteenth century vaccination against diseases such as smallpox began to reduce deaths from infectious diseases. The widespread use of child labour in factories and mines in the late eighteenth and early nineteenth centuries appears to have encouraged many families to have more children as a means of increasing family income.

**SOURCE 2** Population growth in England and Wales, 1761–1881

| Year | Population |
|---|---|
| 1761 | 6 146 000 |
| 1781 | 7 042 000 |
| 1801 | 8 893 000 |
| 1821 | 12 000 000 |
| 1841 | 15 914 000 |
| 1861 | 20 066 000 |
| 1881 | 25 974 000 |

From J. Gardiner and N. Wenborn (eds), *The History Today Companion to British History*, London, 1995, p. 610

**SOURCE 3** Edward Jenner pioneered vaccination against smallpox in 1796, as shown in this nineteenth-century artwork.

## 2.7.3 Impact of the population explosion

The Industrial Revolution saw small-scale domestic production superseded by factory production. The rapid growth in population provided a market for the products of these new factories, with cheap clothing readily available because of improvements in textile production. The growing demand provided incentives for the owners of factories to increase production and improve their methods. The population explosion also provided a workforce to work in these factories. While wages were not high (see topic 3), if all members of the family were employed, they could earn enough to provide for the basic essentials of food, clothing and shelter.

**SOURCE 4** As seen in this artwork from 1840, all members of a family, including mothers and children, were often employed in English textile factories.

### 2.7 EXERCISES

**Historical skills key: HS1** Remembering and understanding **HS2** Sequencing chronology **HS3** Using historical sources as evidence **HS4** Identifying continuity and change **HS5** Analysing cause and effect **HS6** Determining historical significance

#### 2.7 Exercise 1: Check your understanding

1. **HS2** In which years between 1300 and 1700 was the British population growing?
2. **HS2** During which years of the same period was the population falling?
3. **HS1** What was the estimated population of Britain in 1700?
4. **HS1** Explain how the changes in agricultural production methods contributed to population growth after 1700.
5. **HS1** What medical advances contributed to population growth during this time?
6. **HS1** How might the use of child labour in the early days of the Industrial Revolution have encouraged families to have more children?
7. **HS1** How did the growth in population encourage factory owners to increase production?

#### 2.7 Exercise 2: Apply your understanding

1. **HS3** Explain the influence of the Black Death, or plague, as depicted in **SOURCE 1**, on the British population in the fourteenth century.
2. **HS1** Why did the plague continue to have an influence on the population?
3. **HS3** Using the information in **SOURCE 2**, construct a graph depicting population growth in England and Wales between 1761 and 1881. You may use a bar graph or a line graph; make sure your graph is to scale.
4. **HS3** Explain how we can tell that the medical procedure carried out in **SOURCE 3** was still a relatively new development.
5. **HS3** What conclusions can you draw from **SOURCE 4** about the conditions experienced by women and children working in factories?
6. **HS1** Why was it necessary for whole families to be employed in this way?
7. **HS5** It could be said that population growth in Britain before 1800 helped *cause* the Industrial Revolution, while population growth after 1800 was an *effect* of the Industrial Revolution. Based on what you have learned about industrialisation in Britain in this period, do you agree or disagree with this proposition? Explain.

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# 2.8 Power: from horses, wind and water to steam

## 2.8.1 Horse power

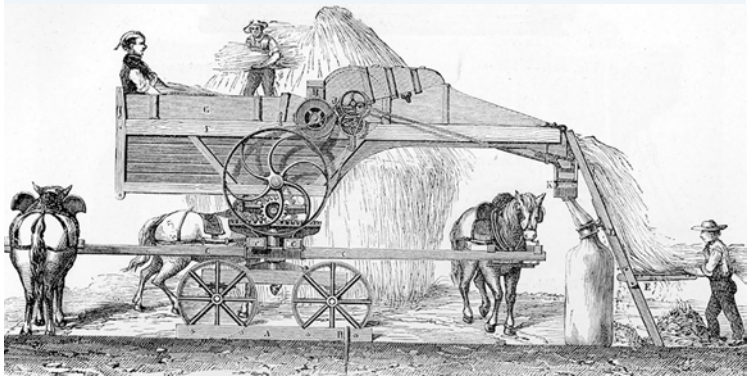
The early years of the Industrial Revolution relied on traditional sources to provide power for agricultural use, for machinery in factories and for transport. With the development of a viable steam engine, steam power rapidly replaced horse, wind and water power.

The oldest form of power available to humans was their own physical muscle power. Horses, donkeys and oxen had been used as beasts of burden since ancient times and were still commonly used in the eighteenth century. Long-distance travel was usually carried out on horseback or in a horse-drawn cart or carriage. Poor people who did not own a horse tended not to travel more than a day's walk from their homes. Carts drawn by teams of oxen were used to transport goods over long distances, and teams of oxen had been used for centuries to plough the fields.

### Horses in agriculture and mining

With the coming of the agricultural and industrial changes of the eighteenth and nineteenth centuries, there was a continuing reliance on horses as a source of power. For example, the horse-powered threshing machine was used to separate grain from the stalks and husks of the wheat plant (see **SOURCE 1**). This machine was invented in 1784 by a Scotsman, Andrew Meikle. Small ponies, known as pit ponies, were used to haul carts full of coal in underground coalmines. Canal boats or barges used to move goods were hauled along by horses walking along tow-paths on the canal bank (see **SOURCE 2**).

**SOURCE 1** Andrew Meikle's threshing machine, shown in this engraving from c. 1850, is an example of a horse-powered machine.



**SOURCE 2** Barges were towed along canals by horses as shown in this c. 1880 artwork.

## 2.8.2 Water power

Water power had been used in England since ancient Roman times. A water wheel with blades or buckets around its rim would be driven by flowing water from a stream or river (see **SOURCES 3** and **4**). The power generated by the turning water wheel was used to mill grain into flour.

Early sawmills used water wheels to power large circular saws. Many of the first textile mills in England were powered by water, with the force of the water sufficient to drive machines in multistorey factory buildings.

**SOURCE 3** A medieval flour mill with water wheel

**SOURCE 4** Early cotton mills were built next to rivers to make use of the water flow for power.

## 2.8.3 Wind power

Like water power, wind power had been used in England for centuries. The wind had been used to drive ships since ancient times, and sailing ships were the standard form of sea transport for several hundred years until the mid-nineteenth century. Windmills were introduced to England in the twelfth century. They were used primarily for milling grain to make flour, and later to drive pumps to drain surplus water from marshlands.

**SOURCE 5** This sixteenth-century English windmill was used to mill grain into flour.

## 2.8.4 Steam power

One of the most significant advances of the Industrial Revolution was the development of steam power. While the potential of using steam to provide power had been known for centuries, the first practical steam engine was the 'atmospheric engine' developed by Thomas Newcomen in 1712 (see **SOURCE 6**). This machine used steam to drive a piston, which powered a large horizontal beam. The Newcomen atmospheric engine was used primarily to pump surplus water out of underground mines, particularly coalmines.

### Steam power in coalmines

The Newcomen engine was a huge step forward because it allowed underground coalmines to be sunk to greater depths. The inability to remove excess water had always been one of the barriers to deep-pit

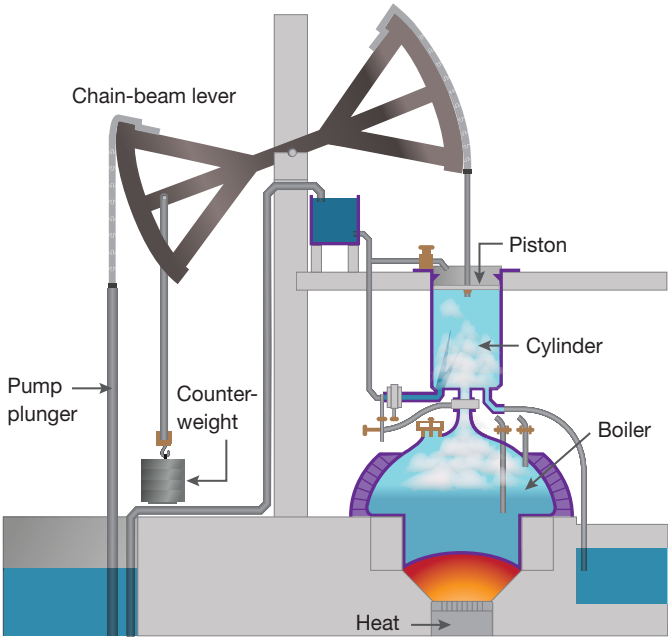
mining, and so had restricted the amount and quality of coal that could be extracted (see subtopic 2.10). The coalmining industry really took off from the mid-eighteenth century. As the Industrial Revolution gathered pace, coal would prove to be a very important fuel.

## James Watt's steam engine

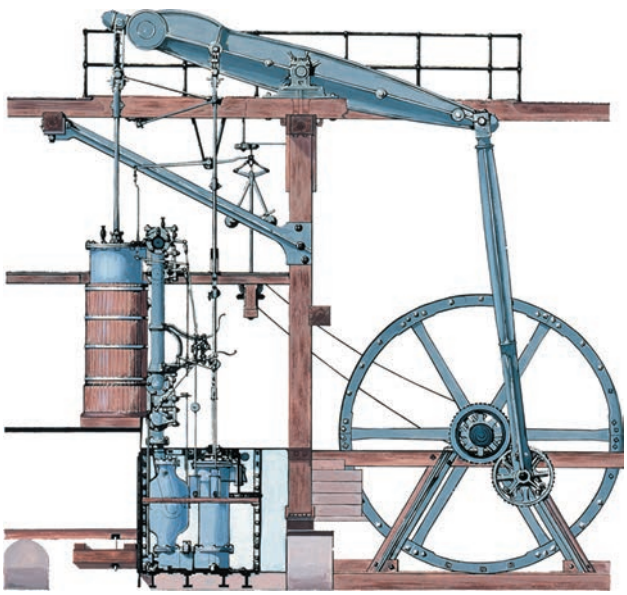
The next big step forward was James Watt's steam engine, developed around 1769. Watt produced an engine that had a separate compartment for cooling the steam back to water, after it had been used to drive a piston. Instead of driving a large beam, Watt's steam engine powered a large flywheel, so it could provide the same type of continuous power that had previously been possible only with a water wheel. This meant the steam engine sold by Watt and his partner, Matthew Boulton, could be used to power many different types of machinery (see **SOURCE 7**).

The development of the steam engine was to be a pivotal event in the Industrial Revolution. Steam engines were able to power larger and larger machines, which in turn led to bigger factories (see **SOURCE 8**). Their successful use in coalmines saw coal replace wood as the major fuel source. Steam was to revolutionise both land and sea transport in the nineteenth century as railways and steam-driven ships came into use.

**SOURCE 6** The Newcomen steam engine drove a large beam that worked a pump to remove water from underground mines.




**SOURCE 7** The Boulton and Watt steam engine drove a large wheel that could be used to power many different types of machines.



**SOURCE 8** Artwork of factories in the English city of Manchester, c. 1840

## DID YOU KNOW?

James Watt developed the idea of 'horsepower' as a unit of measurement of power. His original calculations compared the power of a steam engine with the work done by horses in providing power to drive machines. The term is still used today to measure the output of many different types of engines. The 'watt', as a unit of energy, was named after him.

## 2.8 EXERCISES

**Historical skills key: HS1** Remembering and understanding **HS2** Sequencing chronology **HS3** Using historical sources as evidence **HS4** Identifying continuity and change **HS5** Analysing cause and effect **HS6** Determining historical significance

### 2.8 Exercise 1: Check your understanding

1. **HS1** Explain why horses and similar animals were very valuable in pre-industrial times.
2. **HS1** Identify and explain two examples of the use of animals as a source of power that continued even after the agricultural and industrial changes of the eighteenth century.
3. **HS1** Explain how water was traditionally used to provide power.
4. **HS1** Outline two uses of wind power in traditional pre-industrial society.
5. **HS1** What is the major limitation of wind power?
6. **HS1** Explain how the Newcomen steam engine operated.
7. **HS1** Explain how the Boulton and Watt steam engine operated.

### 2.8 Exercise 2: Apply your understanding

1. **HS3** Explain how **SOURCE 1** demonstrates the combination of new technology with traditional sources of power.
2. **HS3** Identify the advantages that the towing of barges full of goods, as shown in **SOURCE 2**, has over the transportation of goods in a horse-drawn cart on land.
3. **HS3** In **SOURCE 3**, where is the water coming from to drive the mill wheel? What method might be used to stop the wheel?
4. **HS3** Explain why the site shown in **SOURCE 4** was chosen as a suitable location for a water-powered textile mill.
5. **HS3** What does **SOURCE 4** tell us about the limitations of water power as a means of driving factory machines?
6. **HS3** Explain why, although power from a windmill such as that seen in **SOURCE 5** might have worked well for milling grain, wind power would have been unsuitable for driving machinery in a factory.
7. **HS3** Compare **SOURCES 6** and **7** and explain how Watt's improvements to the steam engine would have increased the usefulness of steam as a source of power.
8. **HS3** Explain what **SOURCE 8** tells us about the main form of power in Manchester, England, by the middle of the nineteenth century.
9. **HS4** The early years of the Industrial Revolution did not rely on new forms of power, but made innovative use of traditional forms of power. Outline two examples where this was the case.
10. **HS5** Many historians claim that the Industrial Revolution did not really take off until steam power was widely used. Identify and explain three major contributions that steam power made to the Industrial Revolution.
11. **HS6** Newcomen's steam engine is often compared unfavourably with that of Boulton and Watt. Given that the Newcomen engine was developed more than fifty years before Watt's improvement, and considering its main use, why is it still considered a significant historical development?

Try these questions in learnON for instant, corrective feedback. Go to www.jacplus.com.au.

# 2.9 Making textiles: from home to factory

## 2.9.1 The traditional textile industry

Historians generally agree that it was the textile industry, and particularly the cotton industry, that was the main driver of the Industrial Revolution. During the second half of the eighteenth century the production of cotton textiles changed from being a **cottage industry** to a factory-based enterprise.

Textile production had been an important part of the English economy for centuries, but the emphasis was mainly on woollen goods. Cotton cloth was produced only in small quantities, as English cotton producers could not compete in quality or price with imported cloth from India. Until the eighteenth century, textile production was a cottage industry, carried out by farmers and agricultural workers in their homes after normal working hours. Children would clean and prepare the raw fibres, women would spin the yarn, and men would weave the cloth. Raw wool was sourced from English sheep, while raw cotton came largely from the West Indies, the eastern Mediterranean area, and America, where it was grown by slaves (see topic 4).

Raw fibre was delivered to villages by merchants, who later collected the finished products, and paid the villagers for their work. The traditional textile production steps of **carding**, **spinning** and weaving are described in **SOURCES 1–3**.

**SOURCE 1** Traditional textile production step 1: The rough fibres were first manually carded, using two hand-held paddles to untangle and straighten the fibres.

**SOURCE 2** Traditional textile production step 2: The fibres were spun into thread using a spinning wheel.

**SOURCE 3** Traditional textile production step 3: The thread could then be woven into cloth on a hand loom, by passing a shuttle carrying a thread (known as the **weft**) horizontally through fixed vertical threads (known as the **warp**).

## 2.9.2 Innovation in the textile industry

Early innovations in the textile industry applied to both cotton and woollen production, but the period after the 1750s saw a greater demand for cotton products. This was due to an increased foreign market for cotton goods, particularly in Europe, and increases in population and domestic incomes. With the domestic industry no longer able to meet this demand, inventors began to develop spinning and weaving machines to improve both the quantity and quality of cloth produced.

### Spinners and weavers

Traditionally, one weaver required three or four spinners to provide enough yarn for the loom. Patented in 1733, John Kay's flying shuttle (see **SOURCE 4**) made weaving more efficient, and it could then take the output of up to a dozen spinners to supply the necessary yarn for one weaver. As the flying shuttle came to be used more widely during and after the 1750s, it became clear that a more efficient method of spinning was needed. The development of the spinning jenny in the 1760s responded to this need (see **SOURCE 5**). Early models could spin eight spindles of yarn simultaneously, and later models were able to hold more than 100 spindles at one time.

## The move to factory production

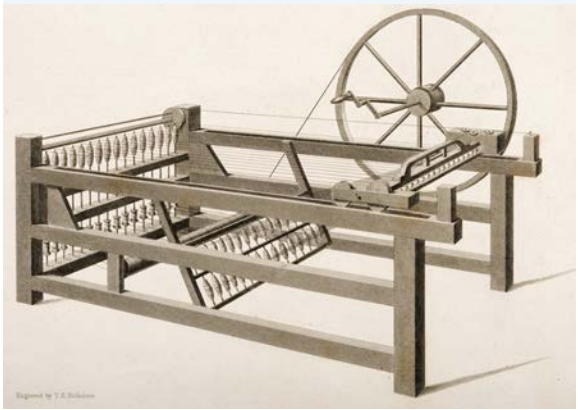
The new spinning and weaving machines outgrew the cottages of spinners and weavers. Larger buildings were needed to house them, and textile production began to be moved into specialised factories, known as cotton mills. By the 1780s all stages of textile manufacture were becoming centralised in mills, particularly in the growing towns of Lancashire in northern England. **SOURCES 4–8** show the progress made in the textile industry over 50 years.

### DID YOU KNOW?

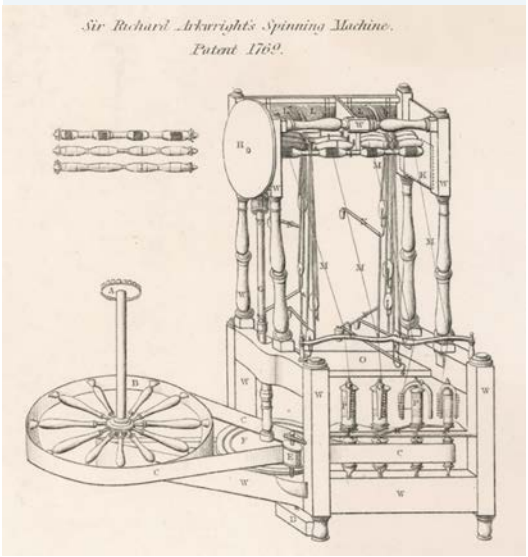
The first large textile factories in England were located in and around the city of Manchester. The term *manchester* is still used in Australia today to describe household cotton-based items such as bed linen, tablecloths and towels.

**SOURCE 4** Innovation in the textile industry, 1733: John Kay invented the flying shuttle, which allowed weaving to be performed more quickly.

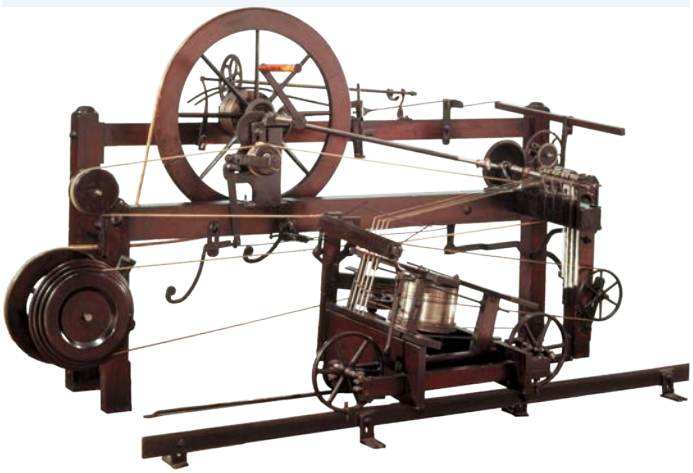
**SOURCE 5** Innovation in the textile industry, 1764: John Hargraves developed the spinning jenny, which could spin multiple threads simultaneously.



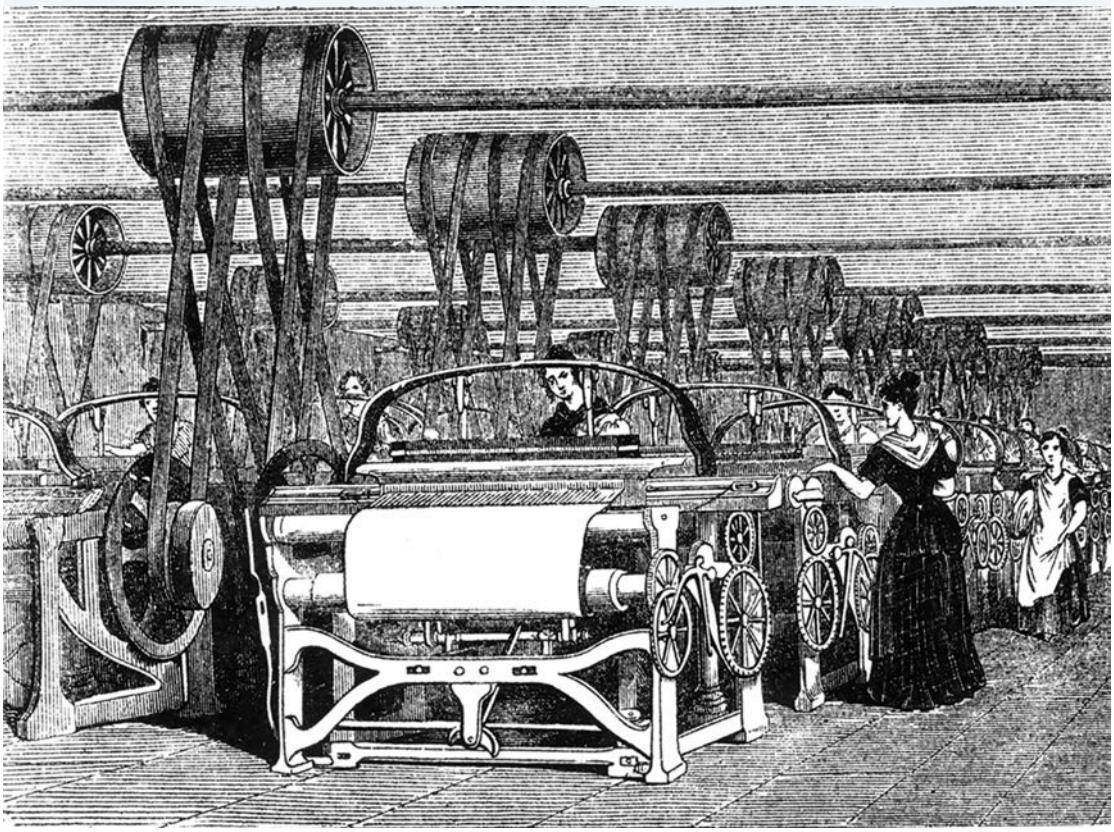
**SOURCE 6** Innovation in the textile industry, 1769: James Arkwright patented the water frame, a spinning machine powered by running water. Similar machines were later powered by steam.




**SOURCE 7** Innovation in the textile industry, 1779: Samuel Crompton invented the spinning mule, which improved the spinning process to produce better quality thread.



**SOURCE 8** Innovation in the textile industry, 1780s: Textile production began to be centralised in factories. Initially they were built close to rivers to draw on water power, but eventually this became unnecessary as steam power was adopted. Edmund Cartwright developed the power loom, shown in this artwork from c. 1844, which mechanised the weaving process.



## 2.9 EXERCISES

**Historical skills key: HS1** Remembering and understanding **HS2** Sequencing chronology **HS3** Using historical sources as evidence **HS4** Identifying continuity and change **HS5** Analysing cause and effect **HS6** Determining historical significance

### 2.9 Exercise 1: Check your understanding

1. **HS1** Why was the English textile industry traditionally based on wool rather than cotton?
2. **HS1** Create a flow chart to outline the step-by-step process by which textiles were produced.
3. **HS1** Until the eighteenth century, textile production was a cottage industry, carried out in the homes of workers. Outline the production tasks performed by children, women and men.
4. **HS1** Explain two factors that led to an increased demand for cotton products by the 1750s.
5. **HS1** Why did it become necessary to move away from cottage textile production to factory production?

### 2.9 Exercise 2: Apply your understanding

1. **HS3** What is happening in **SOURCE 1**? Which members of the family would carry out this task?
2. **HS3** What function is carried out by the machine depicted in **SOURCE 2**?
3. **HS3** With reference to **SOURCE 3**, explain the difference between the warp and the weft in the process of weaving.
4. **HS3** Explain why the invention of the flying shuttle shown in **SOURCE 4** made it necessary for a machine such as the spinning jenny (**SOURCE 5**) to be invented.
5. **HS3** Explain the significance of machines such as those shown in **SOURCES 6** and **7** in the move away from cottage industry.
6. **HS3** The power loom in **SOURCE 8** was originally powered by water, and later by steam. Examine the source and explain how either source of power drove the loom.

7. **HS4** It is often said that 'necessity is the mother of invention'. Describe the ways in which each of the new inventions in the eighteenth-century textile industry was a response to necessity.
8. **HS5** Most historians agree that the Industrial Revolution in Britain began with the textile industry. Explain whether you think the developments in this industry were an underlying or an immediate cause of the Industrial Revolution.
9. **HS6** Imagine you were a farm worker earning extra money by spinning or weaving in your cottage.
   (a) What effect would the change to factory production have on your way of life?
   (b) Why would you have regarded this as a significant change?
   (c) Explain your likely reaction to this change.

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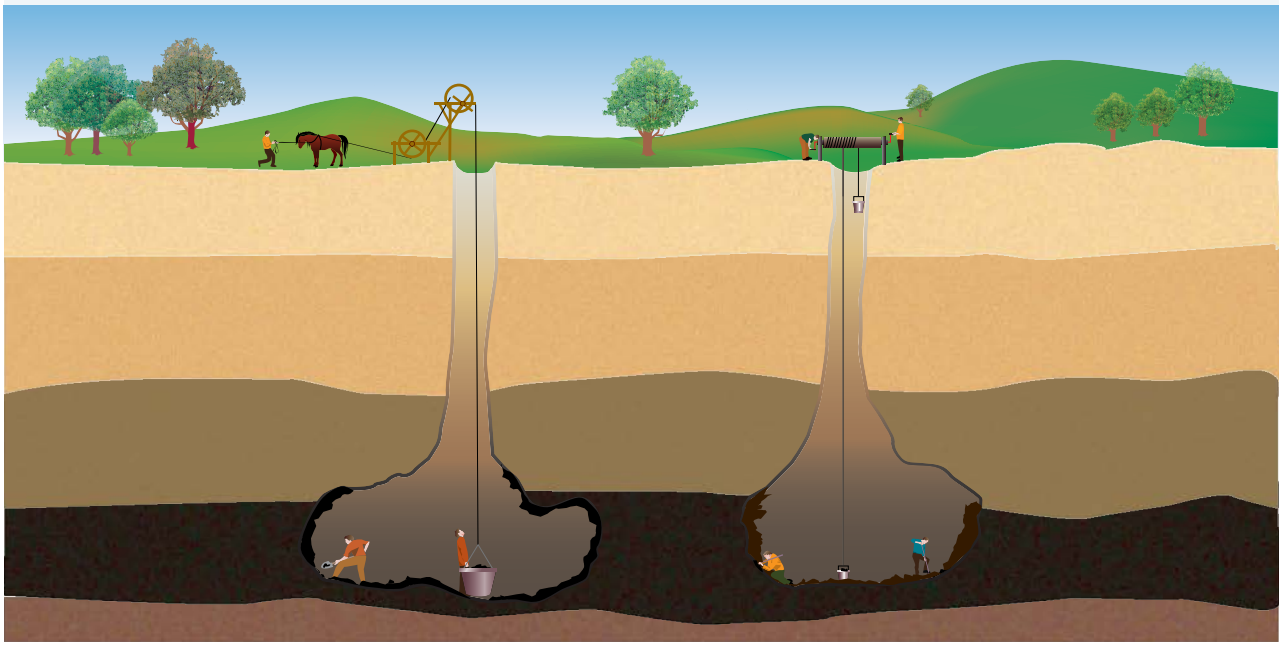
# 2.10 Coal and iron

## 2.10.1 Coalmining

The progress of the Industrial Revolution was assisted by the increased use of coal, a more efficient fuel than wood and charcoal. Also, improvements in the production of iron and steel resulted in metals that were stronger and cheaper to produce and could be applied to a wider variety of uses.

Coal is a much more efficient fuel than wood; that is, a given weight of coal will burn for longer and provide greater heat than a similar weight of wood. Britain had a very rich supply of coal, but traditional coalmining practice allowed only the extraction of coal from shallow **bell pits** (see **SOURCE 1**). This meant that coal was not widely available and was therefore more expensive than wood. Deep-pit mining could not be pursued because of the amount of water that would flood the shafts. Pumping out surplus water from mines with the use of steam-driven pumps (see subtopic 2.8) made coal more readily available and cheaper to mine. This coal could be used as fuel for the steam engines that would come into more widespread use as the Industrial Revolution progressed.

**SOURCE 1** Coalmining was traditionally carried out in shallow bell pits.



## 2.10.2 Developments in iron production

Methods of producing iron had been known throughout Europe since ancient times. To produce iron that could be used for tools, weapons and other implements, iron ore extracted from the ground had to have various impurities removed. This was achieved by a process known as smelting, in which heat was applied to the ore in a **blast furnace**. For centuries the source of heat for English blast furnaces had been charcoal, obtained by the heating and partial burning of wood. The product of the blast furnaces was known as **pig iron**.

### DID YOU KNOW?

Pig iron was so called because of the method of casting molten iron from blast furnaces into moulds. These moulds were laid in a row in a bed of sand, and fed the molten iron from a common channel. The process was said to resemble a litter of piglets being fed by a mother sow, so the iron at this stage was called 'pig iron'.

### Burning coke in blast furnaces

The growth in coal production meant that coal became more widely available for use in the smelting process, but impurities in the coal tended to contaminate the iron, compromising its quality. During the seventeenth century, methods of burning out the impurities in coal to produce **coke** were improved. In 1709 Abraham Darby developed a blast furnace that burned coke to produce iron of a superior quality. The use of coke also allowed the construction of larger blast furnaces capable of producing greater quantities of pig iron.

### Henry Cort and 'puddling'

Although pig iron had many uses, it was brittle because it contained carbon. In 1783 Henry Cort developed a method of reducing the carbon content of pig iron through a process known as 'puddling'. This resulted in a product that was stronger and could be bent, rolled or cast into many different shapes. High-quality iron could now be used for making machinery, boilers for steam-driven engines, and a huge variety of tools and implements, as well as bridges and the framework for buildings.

As iron production methods improved, quantities increased and large-scale production made good-quality iron cheaper. By 1850 Britain was producing more than 70 times as much iron as it had in 1760 (see **SOURCE 3**).

**SOURCE 2** The Iron Bridge in Shropshire, England, built by the grandson of Abraham Darby, is an example of late eighteenth-century iron construction.

**SOURCE 3** British pig iron production, 1760–1850

| Year | Tons |
|---|---|
| 1760 | 30 000 |
| 1785 | 50 000 |
| 1796 | 125 000 |
| 1806 | 244 000 |
| 1823 | 455 000 |
| 1830 | 677 000 |
| 1840 | 1 400 000 |
| 1850 | 2 200 000 |

***Source:*** P. Riden, 'The output of the British iron industry before 1870', in *Economic History Review*, 2nd series, pp. 443, 448, 455

## 2.10 EXERCISES

**Historical skills key: HS1** Remembering and understanding **HS2** Sequencing chronology **HS3** Using historical sources as evidence **HS4** Identifying continuity and change **HS5** Analysing cause and effect **HS6** Determining historical significance

### 2.10 Exercise 1: Check your understanding

1. **HS1** Why was coal a preferable fuel to the burning of wood?
2. **HS1** How did deep-pit mining become possible during the eighteenth century?
3. **HS1** What process was employed to remove impurities from iron ore extracted from the ground?
4. **HS1** What had been used as the traditional source of heat for English blast furnaces?
5. **HS1** What was the name of the product that came from the blast furnace?
6. **HS1** Identify the problem that Abraham Darby was able to solve and explain his solution.
7. **HS1** In what way did Henry Cort improve the production of iron?

### 2.10 Exercise 2: Apply your understanding

1. **HS3** Describe how coal was extracted from the bell pits depicted in **SOURCE 1**.
2. **HS3** Explain how this method of mining limited the use of coal before the eighteenth century.
3. **HS3** The Iron Bridge shown in **SOURCE 2** was opened in the 1780s. Explain why such a bridge would not have been practical before this time.
4. **HS3** Present the information in **SOURCE 3** as a line graph. Make sure you keep it to scale.
5. **HS4** Would it have been possible to increase the quantities and improve the quality of iron products if coalmining techniques had not also improved at around the same time? Give reasons for your answer.
6. **HS5** Would you describe the improvements in coalmining practices in the eighteenth century as an immediate or underlying cause of the Industrial Revolution?
7. **HS5** Would you describe the developments in production of higher-quality iron in the eighteenth century as an immediate or underlying cause of the Industrial Revolution?
8. **HS6** In what ways do you think the figures in **SOURCE 3** suggest that a revolutionary change occurred in Britain between 1760 and 1850?

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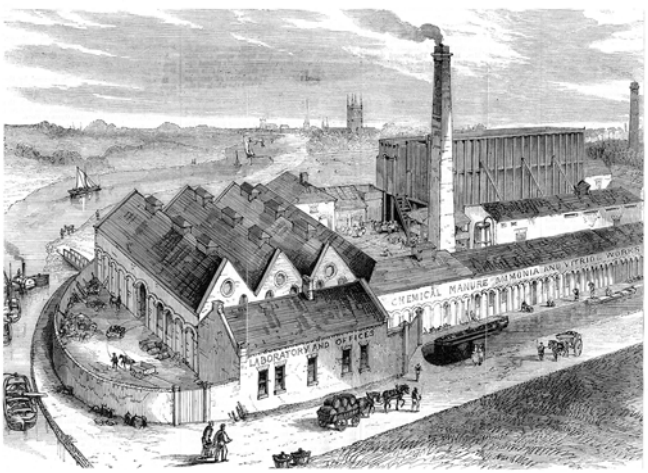
# 2.11 Canals, roads, railways and shipping

## 2.11.1 The importance of transport

As new technologies were transforming agriculture, the textile industry and mining, the Industrial Revolution also brought great changes in the field of transport. Rapid improvements in methods of transport greatly increased the availability of the raw materials needed to feed the new factories. They also allowed the rapid distribution of finished products to larger numbers of customers.

In pre-industrial times, most goods were produced in small quantities by local producers to suit local needs. Industrialisation often meant that production moved away from local supplies and local markets. If a factory relied on water power, it had to be located next to a fast-flowing river. If it relied on steam power, proximity to coal and water supplies would be necessary. Factories were not producing just for the local market. They needed reliable means of transporting large quantities of raw materials to the factory and finished products away from the factory.

**SOURCE 1** A factory needed access to efficient means of transport to bring in raw materials and send out finished products.



## 2.11.2 Canals

Transportation of goods by water had always been important in the island nation of Britain. With a large number of navigable rivers, coastal and river shipping had been widely used for centuries. Most roads were still no more than muddy tracks and horse-drawn carts could carry only small loads without getting bogged. Much larger loads could be transported on boats and barges, so rivers and canals were one answer to transporting the products of industrialisation. The first major canals of the Industrial Revolution were built to transport coal from the Lancashire coalfields to newly developing industrial cities. The Sankey Canal, built to carry coal to the city of Liverpool, was opened in 1757. The Bridgewater Canal, financed by the Duke of Bridgewater and opened in 1761, carried coal from the Duke's mine to the growing city of Manchester. Alongside each canal was a tow-path on which the horse towing a barge would walk (see subtopic 2.8). One horse could tow a barge carrying ten times the weight that could be loaded onto a cart.

### 'Canal mania'

The canals were privately owned, so those who built them were able to charge a fee to anyone wishing to transport goods on them. This meant they paid for themselves within a few years of being built and were soon making a profit for their owners. Even with the fees paid to canal owners, transporting coal by canal was considerably cheaper than transporting by road. In a few years, the price of coal in cities like Liverpool and Manchester had halved, making steam power even more economical. The financial success of the Sankey and Bridgewater canals inspired many others to invest in canal building, and the next fifty years saw a period of 'canal mania'. Between the 1760s and 1815 more than three thousand kilometres of canals were built across England to carry raw materials to factories and finished products away to markets.

**SOURCE 2** An artwork from around 1754, depicting the Duke of Bridgewater

**SOURCE 3** Canals became the major method of transporting goods to and from factories.

## 2.11.3 Roads

Before the eighteenth century, every man in a village was expected to provide his labour free of charge for a certain number of days each year to maintain local roads. Major roads between large towns and cities received little maintenance and were often in a very poor state of repair. In the late seventeenth century, local magistrates were given the power to charge tolls on the use of main roads to provide funds for maintenance.

### Turnpike trusts

From 1707 onwards, groups of nominated **trustees** were given the power to collect these tolls and supervise road maintenance. These toll roads were known as **turnpikes**, and the groups of trustees called **turnpike trusts**. By the 1750s most of the main roads leading to London had been converted to turnpikes. By the

1830s more than 30 000 kilometres of turnpikes connected most of the major cities in England, Wales and Scotland. The quality of roads between major cities improved dramatically during this time, although the less important roads remained in a poor state. Eventually the railways took business away from the turnpikes, rendering them unprofitable, and road maintenance became the responsibility of local councils.

**SOURCE 4** Main roads were often in a poor state of repair, as shown in this artwork from c. 1824.

**SOURCE 5** Extracts from the toll sign at Aberystwyth turnpike in Wales

RATE OF TOLL TO BE TAKEN AT THIS GATE
For every Horse or other Beast drawing any Coach, Chariot, Berlin, Landau, Landaulet, Barouche, Chaise, Phaeton, Vis-a-vis, Calash, Curricle, Car, Chair, Gig, Hearse, Caravan, Litter, or any such like Carriage — 6 d [pence]

For every Horse or other Beast except Asses drawing any Waggon, Wain, Cart, or other such like Carriage — 4 d.

For every Ass drawing any Cart, Carriage, or other Vehicle — 2 d

For every Horse or Mule, laden or unladen, and not drawing — 1½ d

For every Ass, laden or unladen, and not drawing — 1 d

EXEMPTION FROM TOLLS
Horses or Carriages attending her Majesty, or any of the Royal Family, or returning therefrom; Horses or Carriages employed for the repairs of any Turnpike Roads, Highways or Bridges; Horses or Carriages employed in conveying Manure (save Lime) for improving Lands ...

## 2.11.4 Railways

One of the biggest advances in transport came with the growth of the railways. This development came as a result of applying steam engines to tramway systems. In coal and iron ore mines, horses were used to draw wagons out of the mines along tracks. By the beginning of the nineteenth century steam technology had developed sufficiently for experiments to begin in the use of steam to drive moving vehicles. The first

locomotives were used to haul trucks loaded with coal from mines. These inspired the engineer George Stephenson to promote the use of steam locomotives to haul a wide variety of goods, as well as passengers.

## The first successful railways

The first public railway was opened in north-east England in 1825. Designed to carry coal from mines near Darlington to the port of Stockton, it employed George Stephenson's 'Locomotion No. 1' locomotive. Before long, the owners expanded its activities to provide a passenger service with a regular timetable.

In the meantime, Stephenson and his son Robert were contracted to build a railway line between Manchester, the largest textile-producing city, and Liverpool, a major port almost 60 kilometres away. Opened in 1830, the line was constructed as a double track to allow trains to travel in both directions. It was designed to bring imported raw materials to Manchester and to return completed goods to Liverpool for export. Stephenson's latest locomotive, the 'Rocket', was used to haul both goods and passengers between the two cities. The line was a huge financial success and became the model for a succession of railways that were soon constructed throughout Britain.

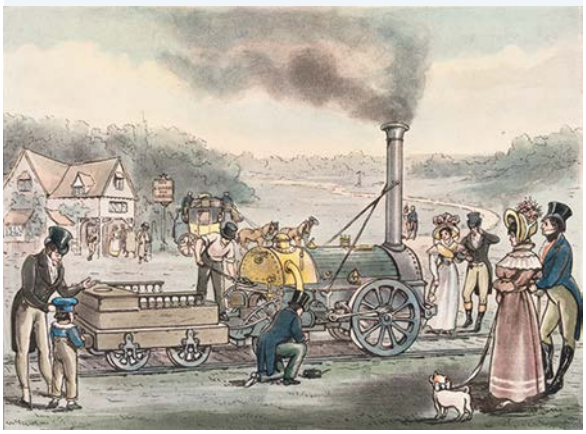
**SOURCE 6** Steam locomotives were first used to haul trucks from coalmines, as shown in this nineteenth-century artwork.

## The railways expand

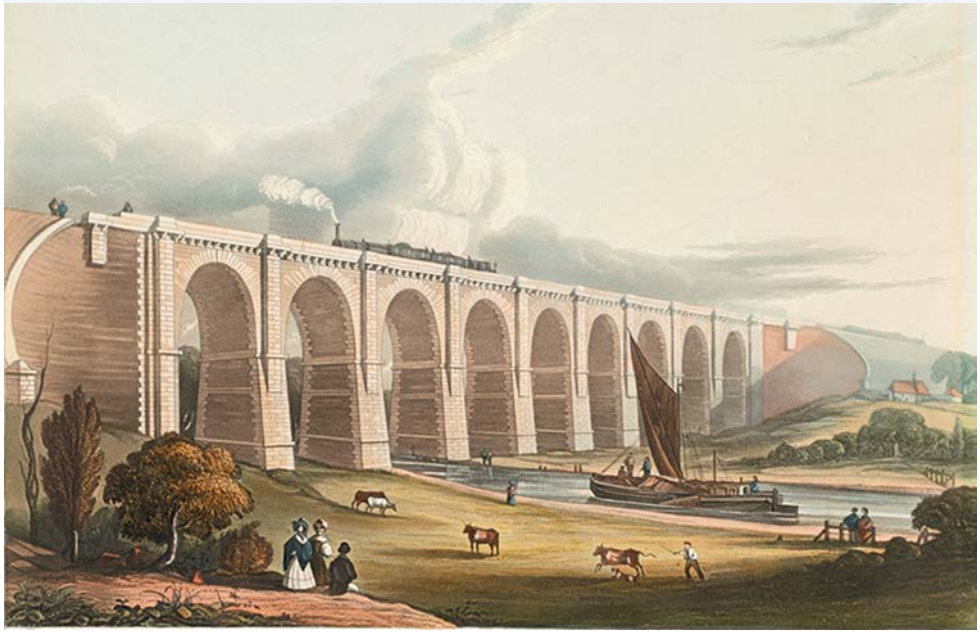
The growing demand for fast, efficient transport for both raw materials and the products of industrialisation led to a rapid expansion in railway construction. The following 20 years saw huge growth in the rail network. By 1852 there were more than 10 000 kilometres of track in Britain. Lines extended from London to the coast of Wales and north to Glasgow and Edinburgh in Scotland. The industrialised north and Midlands of England were serviced by extensive rail networks, transporting both passengers and a huge variety of goods.

**SOURCE 7** Stephenson's *Locomotion No. 1* is now on display at the Darlington Railway Museum.

**SOURCE 8** Stephenson's *Rocket*, shown in this 1894 illustration, was first used on the very successful Manchester to Liverpool line.



**SOURCE 9** The march of progress! In the 1830s, a railway bridge was built over the original Sankey Canal. This artwork was published in 1831.



## 2.11.5 Developments in shipping

Until the late eighteenth century, all ships were built of timber and powered by sail. The Industrial Revolution brought two major changes to shipping. Advances in the processing of iron led to the development of iron hulls for ships. The strength this gave the hull allowed the building of larger ships able to carry more cargo. The second change was the application of steam power to shipping.

### The age of the clippers

Despite the development of steam power, square-rigged sailing ships continued to be widely used until the 1870s. Built for speed, these ships were said to travel at a 'good clip' (or speed), and were therefore known as clippers. They generally had iron hulls and were able to compete with steam-driven ships because they were much faster than the early steamships and did not need to use valuable cargo space to carry coal for fuel. Clippers were used extensively from the 1840s until the 1870s for trade between Britain and British colonies.

**SOURCE 10** Clippers such as the *Cutty Sark*, shown in this twentieth-century artwork, could transport goods more quickly than many steamships of the time.

**DID YOU KNOW?**

The owners and crews of clipper ships were very proud of the speeds their ships could achieve and regularly set out to break new records. The fastest time recorded for a clipper to sail from Plymouth in England to Sydney, New South Wales, a distance of 22 130 km, was recorded by the *Cutty Sark*, which completed the journey in 72 days. The ships of the First Fleet took around 250 days to complete the same voyage in 1787–88.

## Steam power

The first steam-driven ships were paddle steamers, either with one large rear-mounted paddle, or with paddles mounted on either side of the hull. While these proved effective for travel in rivers and for coastal use, paddle-driven ships were not really suitable for ocean travel. It was not until the development of the screw propeller in the 1840s that large ocean-going steamships began to dominate sea travel, both for freight and passenger travel.

## 2.11 EXERCISES

**Historical skills key: HS1** Remembering and understanding **HS2** Sequencing chronology **HS3** Using historical sources as evidence **HS4** Identifying continuity and change **HS5** Analysing cause and effect **HS6** Determining historical significance

### 2.11 Exercise 1: Check your understanding

1. **HS1** Why were reliable methods of transport more important to the process of industrialisation than they had been in pre-industrial society?
2. **HS1** What was the purpose of the first canals built in Britain?
3. **HS1** Why was the use of a barge towed by a horse on a canal more economical than a loaded cart pulled by a horse?
4. **HS1** Why was the period between the 1760s and 1815 known as the period of 'canal mania'?
5. **HS1** Who was responsible for the maintenance of local roads before the eighteenth century?
6. **HS1** Why did main roads between larger towns and cities so often fall into a state of disrepair?
7. **HS1** What were turnpike trusts and how were they able to improve road transport?
8. **HS1** What was the purpose of the first locomotives built in Britain?
9. **HS1** When was the first railway built in Britain and what was its purpose?
10. **HS1** What specific features did the railway line between Manchester and Liverpool have that made it a model for other railways?
11. **HS1** How did the construction of railways revolutionise transport in Britain between 1830 and 1852?
12. **HS1** Identify the two main changes to shipping that resulted from the Industrial Revolution.
13. **HS1** Why were paddle steamers not appropriate for international trade? Which development ultimately allowed steamships to take over international shipping?

### 2.11 Exercise 2: Apply your understanding

1. **HS3** Describe the methods of transport available to the factory in **SOURCE 1**.
2. **HS3** Why would **SOURCE 2**, the portrait of the Duke of Bridgewater, have been painted with the particular background depicted?
3. **HS3** Explain the likely location of the scene shown in **SOURCE 3**. What do you think would be the function of the building on the right side of the painting? Give reasons for your answer.
4. **HS3** What message was the artist who produced **SOURCE 4** attempting to convey?
5. **HS3** Examine **SOURCE 5**. Identify three groups of people who were exempt from tolls on the Aberystwyth turnpike in Wales.
6. **HS3** What does **SOURCE 8** tell us about the possible future use of rail transport in the period after 1830, when compared with **SOURCES 6** and **7**?
7. **HS3** Explain why it is appropriate to label **SOURCE 9** 'the march of progress'.
8. **HS3** What does **SOURCE 10** tell us about the two main advantages of clipper ships as a form of transport for goods to and from Britain?
9. **HS2** Draw up a timeline that shows the developments in road, canal, rail and shipping transport in Britain between 1700 and 1860. For each point on the timeline, explain why you think it was a major step forward.
10. **HS5** Were improvements in transport during the eighteenth and nineteenth centuries an immediate or underlying cause of the Industrial Revolution? Justify your conclusion.
11. **HS5** Canals and railways were initially privately owned and designed to make a profit for their owners. Explain why a factory owner might be prepared to pay these additional transport costs.
12. **HS6** While initially designed to carry goods, railways soon began carrying passengers, and were able to do so at a relatively cheap fare. What impact might this have had on ordinary people and their families?

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# 2.12 Industrial innovation spreads to the world

## 2.12.1 Industrialisation in Europe

As the first country to experience industrialisation, Britain led the world in factory production and the mechanisation of transport and agriculture.

By 1850 Britain had become the most dominant industrial power in the world. It produced more than half the world's textile products, 80 per cent of its coal and close to half of its iron. Other countries turned to British engineers to build their railways and imported British machinery to set up their own factories. British steam engines were the biggest and most powerful and were exported to all parts of the world.

With the end of the **Napoleonic Wars** in Europe in 1815, Britain and the continent of Europe were once again free to exchange ideas and trade. The new industrial methods that had been pioneered in Britain were quickly taken up in other countries.

### France

In France, the first railways were begun in 1832. While these were financed by French entrepreneurs and banks, virtually all railway construction was carried out under the supervision of British engineers. Imported British locomotives were used until the 1850s, when French industry began to produce its own. Industrialisation progressed slowly during the nineteenth century in France, where agriculture remained the dominant economic activity.

### Germany

Germany did not become a unified country until 1871. Industrialisation occurred initially in Prussia, the most powerful of the independent German states. With access to the rich coal and iron ore deposits of the Rhineland, the Prussians quickly established a thriving iron and steel industry. The first German railways were built in 1835 but by 1850 the German states had built almost half as much railway track as in Britain, and twice as much as in France. After unification in 1871, Germany quickly expanded its industrial production; by the beginning of the twentieth century it was producing more steel than Britain.

**SOURCE 1** Coloured lithograph, created in 1856, showing German iron smelting. Germany was to become Europe's largest iron and steel producer by 1900.

## 2.12.2 The United States industrialises

The Industrial Revolution also spread quickly to North America. Following their independence from Britain in 1783, the Americans set about developing their own industries, with innovations of their own. In 1794 Eli Whitney developed the cotton gin, a machine for separating the seeds from raw cotton. Samuel Slater introduced the technology for water-powered textile production in 1793. The application of steam power to boats was pioneered by American inventors such as Robert Fulton in the early nineteenth century. Samuel Morse developed the telegraph in the 1840s, and Alexander Graham Bell was the first to patent a workable telephone in 1876; both inventions were to revolutionise communications. As in Europe, the Americans were also quick to develop iron and steel industries, and to push through a network of railways during the nineteenth century.

**SOURCE 2** Alexander Graham Bell was the first to patent a workable telephone. In this photograph, he is making the first call from New York to Chicago in 1892.

**DID YOU KNOW?**

By 1900 the United States had overtaken Britain as the world's leading industrial power. By this time the industrial output of the US was almost seven times what it had been in 1870. Large US corporations run by entrepreneurs such as Cornelius Vanderbilt, Andrew Carnegie and John D. Rockefeller were by then among the most prosperous in the world.

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- Making a better world? > **Industrial Revolution**

## 2.12.3 Japan industrialises

From the early seventeenth century until 1868, Japan had largely turned its back on the outside world. However, in 1868 the newly installed Meiji Emperor decided that Japan should look to the west to modernise, and so began a series of reforms. He built up the navy and sent Japanese ships all around the world to trade. A modern communications system was set up and railways were constructed to connect all of the major cities and towns. An education system was set up based on modern western knowledge and practices, and Japanese students travelled the world to learn of the latest technological developments. Japan learned from Britain about the significance of a successful textile industry, and quickly overturned the traditional home-based industry into modern factory production. By the beginning of the twentieth century, Japanese textiles were competing successfully on world markets. The Japanese also learned of the importance of importing raw materials and exporting finished products, and they established a successful iron and steel industry based largely on imported iron ore and coal.

**SOURCE 3** Japanese industrial growth 1875–1913. Industrialisation was a key part of Japanese modernisation in the late nineteenth and early twentieth centuries.

| Year | Coal production (metric tonnes) | Railway distances (kilometres) | Rolled steel production (metric tonnes) |
|---|---|---|---|
| 1875 | 600 000 | 30 | |
| 1885 | 120 000 | 750 | |
| 1895 | 5 000 000 | 3500 | |
| 1901 | 10 000 000 | 5800 | 5000 |
| 1905 | 13 000 000 | 7850 | 65 000 |
| 1911 | 19 000 000 | 10 500 | 184 000 |
| 1913 | 21 300 000 | 11 850 | 219 500 |

***Source:*** Adapted from http://www.sjsu.edu/faculty/watkins/meiji.htm and *The Cambridge History of Japan*, Volume 6 at p. 430

## 2.12 EXERCISES

**Historical skills key: HS1** Remembering and understanding **HS2** Sequencing chronology **HS3** Using historical sources as evidence **HS4** Identifying continuity and change **HS5** Analysing cause and effect **HS6** Determining historical significance

### 2.12 Exercise 1: Check your understanding

1. **HS1** In what ways was Britain the dominant industrial power in the world in 1850?
2. **HS5** How did the end of the Napoleonic Wars in 1815 contribute to the spread of industrialisation into Europe?
3. **HS1** Describe the key features of the spread of the Industrial Revolution into France.
4. **HS1** In what way was Germany able to overtake Britain in the industrialisation process by the beginning of the twentieth century?
5. **HS1** Give two examples of innovations contributing to industrialisation that were pioneered in the US.
6. **HS1** How were American inventors able to contribute to the eventual development of worldwide communications networks?
7. **HS1** Outline two aspects of industrialisation that the Japanese were able to learn from the established industrial powers.
8. **HS1** Why did Japan concentrate so heavily on education in its modernisation program?

### 2.12 Exercise 2: Apply your understanding

1. **HS3** Identify another form of technology that **SOURCE 2** tells us was in common usage by the end of the nineteenth century.
2. **HS3** Calculate the percentage growth between 1875 and 1913 of:
   (a) Japanese coal production
   (b) Japanese railway distances.
3. **HS3** Japanese steel production only commenced in 1901. Construct a line graph demonstrating the growth in production between 1901 and 1913.
4. **HS6** Based on the experiences of Europe, the US and Japan, identify three factors that you believe are necessary for a pre-industrial society to make the transition to an industrial society in a relatively short period of time.
5. **HS5** Britain, France, Germany and the US were all able to industrialise using their own resources of coal and iron ore. How was Japan able to industrialise without having these natural resources?

Try these questions in learnON for instant, corrective feedback. Go to www.jacplus.com.au.

# 2.13 SkillBuilder: Identifying continuity and change

online only

### Identifying and evaluating continuity and change in the Industrial Revolution

The period of the Industrial Revolution brought more rapid change than had ever occurred previously anywhere in the world. It is important to be able to identify turning points that caused change, and to be able to describe the rate and extent of the change by examining the significance of events, ideas, people and groups.

**Select your learnON format to access:**

- an explanation of the skill (Tell me)
- a step-by-step process to develop the skill, with an example (Show me)
- an activity to allow you to practise the skill (Let me do it)
- questions to consolidate your understanding of the skill.

# 2.14 Thinking Big research project: Promoting industrialisation

online only

### SCENARIO

As a member of the Victorian colonial parliament of the 1870s, you are aware of the wealth that industrialisation could bring to the colony. You will research and prepare a speech to be delivered in parliament, promoting greater industrialisation in the colony and convincing others of its value.

**Select your learnON format to access:**

- the full project scenario
- details of the project task
- resources to guide your project work
- an assessment rubric.

**on Resources**

**ProjectsPLUS** Thinking Big research project: Promoting industrialisation (pro-0181)

# 2.15 Review

online only

### 2.15.1 Key knowledge summary

Use this dot point summary to review the content covered in this topic.

### 2.15.2 Reflection

Reflect on your learning using the activities and resources provided.

## on Resources

**eWorkbook** Reflection (doc-31697)
Crossword (doc-31698)

**Interactivity** The Industrial Revolution: Technology and progress crossword (int-7636)

## KEY TERMS

**animal husbandry** breeding and caring for livestock, usually in a farm environment
**bell pit** a traditional form of coalmining in which a shaft is dug down to a seam of coal and then excavated outwards, with the coal raised to the surface using a winch and buckets
**Black Death** a deadly disease that ravaged Europe, killing between a quarter and a half of the population in the second half of the fourteenth century. It continued to occur periodically over the next 300 years.
**blast furnace** a type of furnace into which air is forced to raise the temperature sufficiently to carry out the smelting of iron ore
**carding** the process of untangling and straightening raw wool or cotton fibres
**charter** a written grant from a sovereign, providing certain rights or privileges to the holder
**coke** a type of fuel produced by using heat to remove impurities such as coal gas and tar from coal
**colony** an area of land settled by people from another country. This can involve military conquest if the original inhabitants resist that settlement.
**cottage industry** small-scale manufacturing in which raw materials are processed in workers' homes
**empire** a number of different countries or colonies controlled by the government of one country
**enclosure** consolidation of open fields and common land into single farms owned by one farmer, and fenced off from neighbouring farms
**entrepreneur** a person who organises a business venture, and assumes the financial risks associated with it, in the hope of making a profit
**entrepreneurship** the act of being an entrepreneur
**fallow** land left unplanted
**famine** a severe shortage of food, leading to starvation, usually due to crop failures over a sustained period of time
**goldsmith** a craftsman who works with gold and other precious metals
**industrialisation** the process by which a country transforms itself from mainly agricultural production to the manufacturing of goods in factories and similar premises
**infant mortality rate** a means of measuring the percentage of babies who fail to survive their first birthday
**maritime power** having strong naval forces
**Napoleonic Wars** a series of wars between the French Empire, led by Napoleon Bonaparte, and a number of other European nations between 1803 and 1815
**patent** a legally enforceable right to make or sell an invention, usually granted by government, to protect an inventor's idea from being copied
**pig iron** the initial product resulting from the smelting of iron ore in a blast furnace
**rickets** a softening of the bones, leading to deformity of the limbs, caused by a deficiency of calcium and vitamin D
**rural population** people living in the countryside, rather than in towns or cities
**scurvy** a disease caused by poor diet, especially a deficiency of vitamin C
**spinning** the twisting of carded fibres into lengths of continuous thread or yarn
**standard of living** how well off a country or community is, often measured by the level of wealth per head of population
**subsistence farming** farming that provides only enough to satisfy the basic needs of the farmer or community
**trading post** a store or settlement established by a foreign trader or trading company to obtain local products in exchange for supplies, clothing, other goods or cash
**trustee** an individual or group appointed to manage property on behalf of another person or organisation
**turnpike trusts** organisations established by parliament with the power to collect tolls on particular roads, and use the money to pay for maintenance of those roads
**turnpike** a type of toll road
**urban population** people living in cities or large towns
**warp** the fixed vertical threads used in the weaving process
**weft** the horizontal movable thread that is woven through the warp to create cloth

# 2.13 SkillBuilder: Identifying continuity and change

## 2.13.1 Tell me

### The importance of identifying continuity and change

We study history to help us understand the world around us and the society we live in. Our society never stands still, and change is all around us. Nevertheless, many elements of society have remained constant for long periods of time. By recognising those elements, and comparing them with those things undergoing rapid change, we can begin to understand the significance of those changes. For example, as we have seen in this topic, farming practices in Britain at the start of the eighteenth century had changed very little in over 600 years. This is an example of long-term continuity. During the eighteenth century, farming practices were revolutionised so that in less than 100 years there had been a complete change. It is the speed of that change that makes it so significant. The period of the Industrial Revolution brought more rapid change than had ever occurred previously anywhere in the world. It is important to be able to identify turning points that caused the change and to be able to describe the speed, rate and extent of the change, by examining the significance of events, ideas, people and groups.

## 2.13.2 Show me

### How to identify continuity and change

We learn to identify periods of continuity and periods of change by examining a variety of historical sources. Contemporary writers and artists often record rapid change happening around them. Statistics from the period in question can often inform us of dramatic or significant change. Look back at the statistical tables in subtopics 2.6 and 2.9. In each case the figures demonstrate periods of significant change through the Industrial Revolution. They contrast with statistics from previous centuries that indicate very little change over long periods of time.

### Examining an example: the growth of the railways

One dramatic change that occurred during the period of the Industrial Revolution was the development of the railways. In 1825 and 1830, the first railway lines were experiments in attempting to use steam power to transport goods and people. Within 50 years, railway lines crisscrossed all of Britain and rail travel had become a major form of transport.

Consider the following question:

'To what extent did the development of the railways bring significant change to the way of life of people in Britain?'

We can begin to answer this question by examining the following historical sources.

**SOURCE 1** Transport capability

| Method of transport | Tonnage carried | Distance travelled in a day |
|---|---|---|
| Horse-drawn cart | 2 tonnes | 30 kilometres |
| Railways | 40 tonnes | 300 kilometres |

**SOURCE 2** Journey times from London (in hours)

| Destination | By horse-drawn carriage (1836) | By train (1850) |
|---|---|---|
| Edinburgh | 43 | 12 |
| Liverpool | 24 | 7 |
| Exeter | 18 | 5 |
| Birmingham | 11 | 3 |
| Brighton | 6 | 1.5 |

**SOURCE 3** Total British railway length (in kilometres)

| Year | Total length |
|---|---|
| 1840 | 3000 |
| 1845 | 4000 |
| 1850 | 10 000 |
| 1860 | 14 000 |
| 1880 | 25 000 |
| 1900 | 30 000 |

**SOURCE 4** Number of passengers carried

| Year | Total population | Total number of passengers carried |
|---|---|---|
| 1845 | 18 million | 30 million |
| 1900 | 32 million | 1100 million |

**SOURCE 5** A description of a major railway junction on the outskirts of London in 1876 from A. Trollope, *The Prime Minister*, 1876

It is quite unnecessary to describe the Tenway Junction, as everybody knows it. From this spot, some six or seven miles distant from London, lines diverge east, west, and north, north-east, and north-west, round the metropolis in every direction, and with direct communication with every other line in and out of London. It is a marvellous place, quite unintelligible to the uninitiated, and yet daily used by thousands who only know that when they get there, they are to do what some-one tells them. The space occupied by the convergent rails seems to be sufficient for a large farm. And these rails always run one into another with sloping points, and cross passages, and mysterious meandering sidings, till it seems to the thoughtful stranger to be impossible that the best trained engine should know its own line.

What conclusions can we draw from these sources in response to the above question? Look first at **SOURCE 1**.

**What change occurred?** These figures show us that one train hauling a number of goods wagons could carry 20 times the weight of goods as a horse-drawn cart, and could cover 10 times the distance in a day.

**What was the impact of the change?** This ultimately meant that both raw materials for factory production, as well as finished goods, could be transported more cheaply, because of the greater volumes and speed. It also meant that fresh food could be transported to the growing cities and still be fresh when it arrived, as the journey would not take much more than a day.

**Conclusion:** Access to cheaper goods and a greater variety of food would have brought significant change to the way of life of people in Britain.

**SOURCE 2** allows us to draw similar conclusions about the level of changes to people's way of life.

**What change occurred?** Before the nineteenth century, most people did not travel far from their hometown or village. The railway allowed people to travel more easily and quickly.

**What was the impact of the change?** With the ability to travel to other towns and cities in around a quarter to a third of the time, people could become more mobile and travel greater distances, to find work or for other purposes.

**SOURCES 3** and **4** help us draw similar conclusions.

**What change occurred?** By the middle of the nineteenth century, most of Britain was accessible by rail with all major cities connected to each other. This rail network continued to expand, so that by the end of the century there was hardly anywhere in Britain that was more than a few kilometres from a railway line or a station.

**What was the impact of the change?** In 1845 the railways carried 30 million passengers, with a total population of 18 million – the equivalent of 1.6 rail journeys per head of population for the year. By 1900 this had grown to the equivalent of 34 rail journeys per head of population.

**Conclusion:** This level of usage is a clear indication of a major change in the way of life of the British people in little over half a century.

Anthony Trollope's description in **SOURCE 5** carries some additional implications.

**What change occurred?** Trollope was born in 1815, so he was 60 years old when he wrote these words. He had grown up in the era before the railways, and had lived through the period of its greatest expansion.

**What was the impact of the change?** His description of the junction as a 'marvellous place' and 'quite unintelligible to the uninitiated' is an indication of his amazement at the rail system and the way it had grown so rapidly. Most people of his age would have had similar feelings about this new technology.

**Conclusion:** This extract also tells us how sophisticated the system had become by 1876, with large rail junctions controlling dozens of trains going in all directions across the country.

Each of these sources tells us of a revolutionary rail transport system that not only captured the imagination of people in Britain (and ultimately around the world), but brought major changes to people's way of life. So efficient and effective was rail transport that it is still a highly favoured means of transport today. This change that occurred so rapidly in the nineteenth century has continued to influence our lives even in the twenty-first century.

## 2.13.3 Let me do it

Complete the following activities to practise this skill.

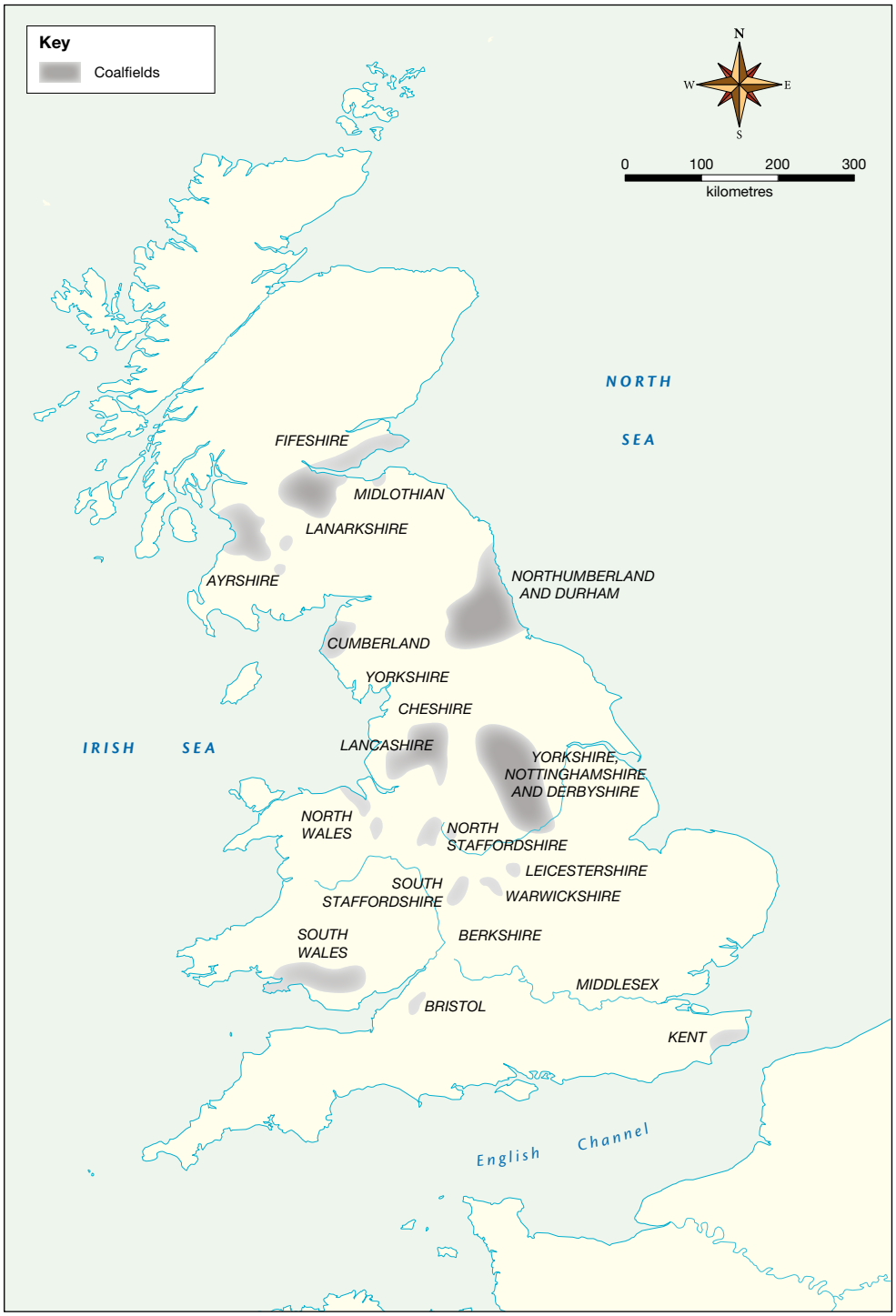
### 2.13 ACTIVITIES

1. Using the example above as a model, and **SOURCES 6**, **7** and **8**, explain the relationship between the following significant changes that occurred in Britain during the nineteenth century:
   - improvements in coalmining
   - the use of steam power
   - the growth of the textile industry
   - rapid increases in the population of particular cities.

   Consider the following questions in your answer:
   (a) What change occurred?
   (b) What was the impact of the change?
   (c) What conclusions can you draw about the individual change?
   (d) What conclusion can you draw about all the changes looked at together?
2. Based on what you have learned in this SkillBuilder, apply your skill in identifying continuity and change to answer the following questions.
   (a) Outline two changes caused by improvements in coalmining.
   (b) How did the development of steam power affect the location of textile factories?
   (c) What general conclusions about the changes in population patterns can you draw from the sources in this SkillBuilder?
3. Reflect on your development of this skill by answering the following questions.
   (a) Do you understand the concepts of continuity and change? Define these terms in your own words.
   (b) How would you rate your ability to explain continuity and change using sources? Score yourself out of 5, with 1 being weak and 5 being strong.
   (c) How can you improve your ability to use sources to explain continuity and change?

**[Personal and Social Capability]**

**SOURCE 6** A map of Britain showing the location of major coalfields




***Source:*** Spatial Vision

**SOURCE 7** Number of cotton mills in Great Britain, 1787 and 1835

| | 1787 | 1835 | | |
|---|---|---|---|---|
| County | | Operating | Empty | People employed |
| Berkshire | 2 | — | — | — |
| Cheshire | 8 | 109 | 7 | 31 512 |
| Cumberland | — | 13 | — | 1658 |
| Derbyshire | 22 | 93 | 3 | 11 585 |
| Durham | — | 1 | — | 33 |
| Lancashire | 41 | 683 | 32 | 122 415 |
| Leicestershire | — | 6 | — | 592 |
| Middlesex | — | 7 | — | 350 |
| Nottinghamshire | 17 | 20 | — | 1723 |
| Staffordshire | — | 13 | — | 2048 |
| Westmorland | 5 | — | — | — |
| Yorkshire | 11 | 126 | — | 11 211 |

***Source:*** From R. Burn, *Statistics of the Cotton Trade (1847)*, p. 26; in A. Aspinall and E. Anthony Smith (eds), English Historical Documents, XI, 1783–1832, Oxford University Press, New York, 1959, p. 512.

**SOURCE 8** Population growth in major English cities 1750–1861

| Town/city | 1750 (estimated) | 1801 | 1861 |
|---|---|---|---|
| London | 675 000 | 959 000 | 2 804 000 |
| Bristol | 45 000 | 64 000 | 154 100 |
| Birmingham | 24 000 | 74 000 | 296 000 |
| Liverpool | 22 000 | 80 000 | 443 900 |
| Manchester | 18 000 | 90 000 | 338 300 |
| Leeds | 16 000 | 53 000 | 207 200 |
| Sheffield | 12 000 | 31 000 | 185 200 |

***Source:*** British census figures

# 2.14 Thinking Big research project: Promoting industrialisation

## Scenario

We tend to think of Australia as primarily a source of raw materials, exported to other countries. It is true that Britain relied on Australian wool for its textile industries, and Australia was one of the largest exporters of gold following the gold rushes of the 1850s. In fact, the Australian colonies were engaged in small-scale manufacturing almost from the time of early European settlement. After the gold rush period, many immigrants to Australia brought knowledge and skills relevant to industrialisation, creating an environment favourable to the further development of industrialisation in the Australian colonies.

## Task

As a member of the Victorian colonial parliament of the 1870s, you are aware of the wealth that industrialisation could bring to the colony. You will research and prepare a speech to be delivered in parliament, promoting greater industrialisation in the colony and convincing others of its value. Your speech should include:

- examples of successful industrialisation that have already occurred in Victoria and other colonies
- possible future industrial opportunities, based on the raw materials available, particularly those that are currently being exported in their raw state.

## Process

- Open the ProjectsPLUS application in the Resources for this topic. Click on the **Start new project** button tab to enter the project due date and set up your project group if you wish to. You can work independently or with a partner, which will allow you to swap ideas, but you will need to deliver your speech independently. Save your settings and the project will be launched.
- Navigate to the **Research forum**, where you will find starter topics loaded to guide your research. You can add further topics to the Research forum if you wish. In the **Media centre** you will find an assessment rubric and some helpful weblinks that will provide a starting point for your research.
- Conduct your research.
  - Research details of early industrialisation in Australia, such as manufacturing, processing of raw materials, the building of factories, and making use of different sources of power to run those factories. These will provide examples of existing successful industrialisation.
  - You should also find out what raw materials were being exported from Australia by the 1870s, where they were being exported to, and the industries that were making use of those raw materials. For example, the huge population growth in Victoria and across Australia between 1850 and 1880 caused by the gold rushes would have provided both a workforce and market for a local textile industry.
  - You could research relevant population figures to support your argument.
  - All the information you gather needs to be used to provide arguments in favour of increased industrialisation in Victoria.
- Remember to record details of your sources so you can create a bibliography to submit with your completed speech transcript. Add your research notes and source details to the relevant topic pages in the Research forum. When you have completed your research, you can print out the **Research report** in the Research forum to easily view all the information you have gathered, if you wish.
- Once you have completed your research, prepare your speech and bibliography.
- Present your speech to the class and submit your speech transcript and bibliography to your teacher for assessment.

### Resources

**ProjectsPLUS** Thinking Big research project: Promoting industrialisation (pro-0181)

# 2.15 Review

## 2.15.1 Key knowledge summary

### 2.2 Examining the evidence

- The term 'Industrial Revolution' was coined to describe the rapid changes that had occurred in Britain from the late eighteenth century through the nineteenth century.
- New inventions that contributed to changes were usually patented, so we have details of these inventions and the years they were introduced.
- Contemporary writers and artists depicted the developments they saw around them during the changes brought by the Industrial Revolution.
- Census figures can provide us with details of population growth, as well as the locations of increased population.

### 2.3 Causes of the Industrial Revolution

- Technological developments were a major contributing factor to the growth of industrialisation in Britain during the eighteenth and nineteenth centuries.
- Changes in agriculture became an underlying cause of the Industrial Revolution, by contributing to population growth.
- Easy access to raw materials also contributed to the development of industrialisation in Britain.
- A wealthy middle class willing to invest in new production methods was another contributing factor.
- The development of transport systems assisted the movement of raw materials and finished products.
- The growth of empire provided a source of raw materials, as well as markets for the sale of finished products from British factories.

### 2.4 The agricultural revolution

- British agriculture had used the traditional open-field system, which had a number of disadvantages.
- Enclosure of farming land consolidated open fields into large farms, changing farming methods.
- New techniques in seed planting, ploughing and crop rotation improved the efficiency of farming and increased crop yields.
- Improved stock breeding methods also improved the quality of farm animals.
- The introduction of a business approach to farming provided farmers with the opportunity to sell surplus produce for a profit.

### 2.5 The growth of empire

- The British East India Company began trading with a number of Asian regions in the early seventeenth century and eventually brought most of India under British control.
- The 13 North American colonies and colonial possessions in the West Indies had become important parts of the British Empire by the middle of the eighteenth century.
- The Seven Years' War provided Britain with further opportunities to expand empire in both North America and India.
- The American Revolution eventually saw Britain lose the 13 colonies, but retain control of Canada.
- The empire became an important source of raw materials to fuel the Industrial Revolution in Britain.

### 2.6 Entrepreneurs, banks and the middle class

- The seventeenth century saw the rise of a powerful middle class in Britain, with strong commercial interests.
- The growth of the banking system provided middle-class merchants and factory owners with a source of finance to invest in new industrial processes.
- The British government strongly supported the growing commercial middle class, passing laws that favoured trade and commerce.
- The middle class developed strong entrepreneurial attitudes, which made them willing to embrace new methods of production.

### 2.7 The population explosion

- Prior to the eighteenth century, the British population had been kept fairly stable because of regular reappearances of the plague, as well as recurring famines.
- Improvements in medical science and the eradication of the plague saw a steady increase in the British population during the first half of the eighteenth century.
- Improvements in farming led to a more regular food supply, which contributed to a population explosion from the mid-eighteenth century onwards.
- The rapid rise in population provided a market for new cheap industrial goods, as well as a workforce for the new factories.

### 2.8 Power: from horses, wind and water to steam

- Horses had been a traditional source of power in medieval Europe, both for personal transport and the haulage of goods.
- Horse power was used for agricultural machinery and to haul barges along newly constructed canals.
- Water power had traditionally been used for milling of grain, and it became the first power source for newly built factories.
- Wind power was another traditional source of power in Britain.
- Steam power proved to be a great advance for both mining and manufacturing by providing a reliable means of driving machinery.

### 2.9 Making textiles: from home to factory

- Until the eighteenth century, textile manufacturing had been carried out in the homes of farm workers.
- During the eighteenth century, larger and more efficient spinning and weaving machines were developed and needed factories to house them.

### 2.10 Coal and iron

- Coalmining had traditionally taken place in bell pits, but these could not be made very deep because they would soon flood with water.
- The introduction of steam-driven pumps to pump out the surplus water allowed for larger, deeper coalmines, and a consequent increase in coal production.
- The use of coke in blast furnaces resulted in the improvement of quality of the iron produced.
- New techniques such as ‘puddling’ produced a stronger, more flexible form of iron, which led to an increased variety of uses.

### 2.11 Canals, roads, railways and shipping

- Large factories needed reliable transportation to bring raw materials, and to distribute the goods produced to the marketplace.
- The building of canals to supplement river and coastal transport provided quick and efficient movement of goods.
- The establishment of turnpike trusts in the latter part of the eighteenth century saw improvements to the maintenance of roads.
- The use of steam to drive locomotives revolutionised transport in Britain after 1830.

### 2.12 Industrial innovation spreads to the world

- With the end of the Napoleonic Wars, countries in Europe became more interested in adopting many of the industrial techniques pioneered in Britain.
- France and Germany began to industrialise during the 1820s, and began building their own railways during the 1830s.
- The United States had begun to industrialise soon after its break from Britain in the early 1780s, and American inventions were to revolutionise communications during the nineteenth century.
- Following the Meiji restoration, Japan looked to the west and soon adopted industrialisation as a means of modernising its economy.

A timeline of technology in the Industrial Revolution

CE

1680

**1694**
The Bank of England is established.

1700

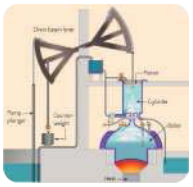
**1700 onwards**
Improvements in agricultural technology contribute to the agricultural revolution.

**1707**
The first turnpike trusts are established.

**1709**
Abraham Darby develops a blast furnace capable of producing high-quality iron.

**1712**
Thomas Newcomen develops the 'atmospheric engine', the first practical steam engine.

1720



1740

**1757**
The Sankey Canal is opened.

**1730s–1780s**
The invention of new and larger spinning and weaving machines shifts textile industry into factories.

1760

**1761**
The Bridgewater Canal is opened.

**1763**
Victory in the Seven Years' War gives Britain increased trade access to colonies in India and North America.

**1769**
James Watt invents a steam engine capable of providing continuous power.

1780

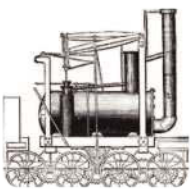
**1785**
The Boulton and Watt steam engine is first used in a textiles factory.

**1783**
Henry Cort's 'puddling' process further improves the quality of iron products.

1800

**1801**
The first official population census is held in Britain.

**1813**
The first working steam locomotive, known as *Puffing Billy*, is built.



1820

**1825**
The first English public steam railway (from Stockton to Darlington) is opened.

**1830**
Stephenson's *Rocket* hauls the first train on the Manchester to Liverpool railway line.

**1830s**
Railway building begins in France and Germany.

1840

**1842**
Samuel Morse develops the single wire telegraph.

**1851**
The Great Exhibition is held in London.

1860

**1876**
Alexander Graham Bell patents the first telephone.

1880

CE

## 2.15.2 Reflection

Complete the following to reflect on your learning.

### 2.15 ACTIVITIES

Revisit the inquiry question posed in the Overview:

**Money, efficiency, innovation. What were the causes and effects of the Industrial Revolution?**

1. Now that you have completed this topic, what is your view on the question? Discuss with a partner. Has your learning in this topic changed your view? If so, how?
2. Write a paragraph in response to the inquiry question, outlining your views.

### on Resources

**eWorkbook** Reflection (doc-31697)
Crossword (doc-31698)

**Interactivity** The Industrial Revolution: Technology and progress crossword (int-7636)

### KEY TERMS

**animal husbandry** breeding and caring for livestock, usually in a farm environment
**bell pit** a traditional form of coalmining in which a shaft is dug down to a seam of coal and then excavated outwards, with the coal raised to the surface using a winch and buckets
**Black Death** a deadly disease that ravaged Europe, killing between a quarter and a half of the population in the second half of the fourteenth century. It continued to occur periodically over the next 300 years.
**blast furnace** a type of furnace into which air is forced to raise the temperature sufficiently to carry out the smelting of iron ore
**carding** the process of untangling and and straightening raw wool or cotton fibres
**charter** a written grant from a sovereign, providing certain rights or privileges to the holder
**coke** a type of fuel produced by using heat to remove impurities such as coal gas and tar from coal
**colony** an area of land settled by people from another country. This can involve military conquest if the original inhabitants resist that settlement.
**cottage industry** small-scale manufacturing in which raw materials are processed in workers' homes
**empire** a number of different countries or colonies controlled by the government of one country
**enclosure** consolidation of open fields and common land into single farms owned by one farmer, and fenced off from neighbouring farms
**entrepreneur** a person who organises a business venture, and assumes the financial risks associated with it, in the hope of making a profit
**entrepreneurship** the act of being an entrepreneur
**fallow** land left unplanted
**famine** a severe shortage of food, leading to starvation, usually due to crop failures over a sustained period of time
**goldsmith** a craftsman who works with gold and other precious metals
**industrialisation** the process by which a country transforms itself from mainly agricultural production to the manufacturing of goods in factories and similar premises
**infant mortality rate** a means of measuring the percentage of babies who fail to survive their first birthday
**maritime power** having strong naval forces
**Napoleonic Wars** a series of wars between the French Empire, led by Napoleon Bonaparte, and a number of other European nations between 1803 and 1815
**patent** a legally enforceable right to make or sell an invention, usually granted by government, to protect an inventor's idea from being copied
**pig iron** the initial product resulting from the smelting of iron ore in a blast furnace

**rickets** a softening of the bones, leading to deformity of the limbs, caused by a deficiency of calcium and vitamin D
**rural population** people living in the countryside, rather than in towns or cities
**scurvy** a disease caused by poor diet, especially a deficiency of vitamin C
**spinning** the twisting of carded fibres into lengths of continuous thread or yarn
**standard of living** how well off a country or community is, often measured by the level of wealth per head of population
**subsistence farming** farming that provides only enough to satisfy the basic needs of the farmer or community
**trading post** a store or settlement established by a foreign trader or trading company to obtain local products in exchange for supplies, clothing, other goods or cash
**trustee** an individual or group appointed to manage property on behalf of another person or organisation
**turnpike trusts** organisations established by parliament with the power to collect tolls on particular roads, and use the money to pay for maintenance of those roads
**turnpike** a type of toll road
**urban population** people living in cities or large towns
**warp** the fixed vertical threads used in the weaving process
**weft** the horizontal movable thread that is woven through the warp to create cloth

# 3 The Industrial Revolution: The impact on people

## 3.1 Overview

The Industrial Revolution was a period of rapid technological progress and social transformation; did the changes that occurred benefit everyone?

### 3.1.1 Links with our times

The population in Britain increased dramatically during the Industrial Revolution. Changes in agricultural practices and job opportunities in the newly established factories brought large numbers of people into rapidly growing towns and cities. This influx of people was not matched by the provision of the types of services that we take for granted today, such as running water, electricity and sewerage. Housing was often hastily and shoddily built, and urban slums quickly developed.

While today a range of laws and regulations protect workers' rights with regard to fair wages and safe working conditions, in the early years of the Industrial Revolution no such legal safeguards existed. Working conditions were often dangerous and unhealthy, and employers could get away with paying very low wages. Similarly, the safeguards that exist today to ensure access to education and to prevent the exploitation of young people did not exist two hundred years ago, and children as young as four could be employed in mines and factories.

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LEARNING SEQUENCE


**3.1** Overview
**3.2** Examining the evidence
**3.3** The impact of enclosure
**3.4** Conditions in factories and mines
**3.5** Child labour
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**3.7** Poor laws and workhouses
**3.8** Social unrest and trade unions
**3.9** The growth in ideas
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A timeline of changes during the Industrial Revolution

CE

1790

**1795**
Food riots in parts of England protest high bread prices.

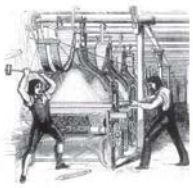
1800

**1799–1800**
Parliament passes the Combination Acts, making trade unions illegal.

1810

**1811–13**
Luddites engage in damaging textile machines.

**1819**
Parliament passes a Factory Act limiting hours of factory work by children. Large numbers of protesters are killed or injured in the Peterloo Massacre.



1820

**1824**
The Combination Acts are repealed, allowing workers to form trade unions.

1830

**1830**
The 'Swing Riots' result in damage to farm machinery in parts of rural England.

**1833**
Parliament passes a Factory Act banning children nine years and younger from working in factories.

**1834**
The Poor Law Amendment Act forces the poor to live in workhouses. The six 'Tolpuddle Martyrs' are transported to Van Diemen's Land for swearing an oath of loyalty to their trade union.

1840

**1842**
The Mines Act bans the employment in coalmines of girls and women, and boys under the age of 10.

**1848**
The Public Health Act sets up Boards of Health to deal with sanitation problems in cities and towns.

1850

1860

**1871**
The Trade Union Act gives unions official legal status.

1870

**1874**
Parliament passes a Factory Act, setting maximum allowable working hours per week for all workers.

**1875**
The Public Health Act extends the powers of Health Boards to control water supply and sewerage systems.

1880

CE

# 3.2 Examining the evidence

## 3.2.1 How do we know about life during the Industrial Revolution?

In this topic we will look at the effects of the Industrial Revolution on many of the ordinary people in Britain. These were the people who worked in factories and mines and lived in the towns that sprang up around these workplaces. Many of them had lost access to their livelihood because of the enclosure of traditional farming land and had suddenly been thrown into poverty.

### Contemporary writers and commentators

In Britain, the enormous changes in technology, the development of large factories, the rapid growth of cities and dramatic changes in methods of transportation all happened within little more than one lifespan. Inevitably, the writers of the time commented on the changes taking place around them. While some set out to record **impartial observations** of the changes, many others gave **biased accounts**. Charles Dickens wrote about the working and living conditions of the factory workers and the poor in novels such as *Oliver Twist, Hard Times* and *Little Dorritt*. Others, such as Karl Marx and Friedrich Engels, used their observations as a basis for attacks on the political system of Britain. By contrast, supporters of the changes to agriculture and industry gave glowing accounts of the economic benefits of these changes, while ignoring the negative effects on workers and their families.

**SOURCE 1** Painting from the cover of a modern edition of Charles Dickens' novel *Hard Times*.

**SOURCE 2** Illustration from an early edition of *Oliver Twist*. Dickens used his novels to publicise social issues of the time.

### Government statistics

In the eighteenth and nineteenth centuries the government began to collect statistics on all aspects of British life. In addition to total figures for population growth, census figures also recorded changes in the numbers of people living in large towns and cities compared with those living in the country. Records of birth and death rates in cities and rural areas can provide information about the health of the people. Wage levels, when compared with the prices of food, clothing materials and housing, can give us information on people's standard of living. All statistics require interpretation, but when combined with other evidence they can often add much to our picture of the past.

### Records of government inquiries

The rapid social changes taking place in Britain in the nineteenth century sometimes prompted the government to set up special inquiries to investigate the effects of the changes. Written records include evidence given by witnesses to these inquiries. Many of these witnesses described their own experiences, while others gave accounts of incidents and conditions they had observed. The findings of these inquiries would later be published in reports, and this material also survives today in official government records.

**SOURCE 3** Testimony of Thomas Wilson, Esq., of the Banks, Silkstone, owner of three collieries, before the 1842 Mines Commission

I object on general principles to government interference in the conduct of any trade, and I am satisfied that in mines it would be productive of the greatest injury and injustice. The art of mining is not so perfectly understood as to admit of the way in which a colliery shall be conducted being dictated by any person, however experienced, with such certainty as would warrant an interference with the management of private business. I should also most decidedly object to placing collieries under the present provisions of the Factory Act with respect to the education of children employed therein.

## Paintings and drawings of contemporary artists

Given the dramatic impact of these events on people's lives, it is not surprising that artists were keen to document the changes they saw happening around them. Surviving paintings and drawings can give us further insights into the conditions in which people lived.

**SOURCE 4** *Coalbrookdale by Night*, painted around 1800 by Philip James de Loutherbourg

## 3.2 EXERCISES

**Historical skills key: HS1** Remembering and understanding **HS2** Sequencing chronology **HS3** Using historical sources as evidence **HS4** Identifying continuity and change **HS5** Analysing cause and effect **HS6** Determining historical significance

### 3.2 Exercise 1: Check your understanding

1. **HS1** Why can the works of writers provide us with source material in relation to changes taking place in Britain during the Industrial Revolution?
2. **HS1** Give two examples of the way in which government statistics can provide information about changes in society.

3. **HS1** What is a weakness in using statistics as a historical source?
4. **HS1** Explain why the records of a government inquiry can be a useful historical source.
5. **HS1** The use of photography became common in the second half of the nineteenth century. Why might photographs be of more use to historians than paintings?

### 3.2 Exercise 2: Apply your understanding

1. **HS3** Charles Dickens' novel *Hard Times* is set in the fictional industrial town of Coketown. Describe the impression that the **SOURCE 1** painting, which was used on the novel's cover, gives of life in Coketown.
2. **HS3** Charles Dickens' novel *Oliver Twist* is the story of a poor orphan in nineteenth-century England. The illustration in **SOURCE 2** depicts a well-known scene from the novel, in which, on his first day at the orphanage, Oliver outrages the master by daring to ask for more food. Explain what the illustration tells us about the treatment of orphans at this time.
3. **HS3** Refer to **SOURCE 3** to answer the following questions.
   (a) What is the opinion of Thomas Wilson on the role of the commission and of government regulation of coalmining?
   (b) What do we know about Thomas Wilson that may have influenced his opinion?
   (c) Do you agree or disagree with his opinion? Give reasons for your answer.
4. **HS3** Coalbrookdale was a coalmining and iron-smelting town in the English Midlands.
   (a) From an examination of **SOURCE 4**, describe what you think it would have been like to live in this town.
   (b) Do you think the artist had a favourable or unfavourable opinion of the town? Explain your answer.
5. **HS3** Identify two ways in which you might be able to detect whether or not a writer, painter or witness at a government inquiry is biased or impartial in their presentation of information.
6. **HS3** What strategy could you use to ensure that you get the most accurate information about the past?

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# 3.3 The impact of enclosure

## 3.3.1 Changes in population

Agricultural change that accelerated during the eighteenth century led to an improvement in the quality and quantity of food produced and enabled Britain to support a larger population (see subtopic 2.4). Most of this population growth occurred in the growing towns and cities. Population statistics tell us that from the second half of the eighteenth century, rural population growth slowed in comparison with urban population growth (see **SOURCE 1**).

**SOURCE 1** Urban and rural population growth in England and Wales, 1751–1861

| Year | Total | Urban population | Rural population | Urban (%) | Rural (%) | Urban increase | Rural increase | Urban increase (%) | Rural increase (%) |
|---|---|---|---|---|---|---|---|---|---|
| 1751 | 5 772 000 (estimated) | 1 443 000 (estimated) | 4 329 000 (estimated) | 25.00 (estimated) | 75.00 (estimated) | — | — | — | — |
| 1801 | 8 893 000 | 3 009 000 | 5 884 000 | 33.84 | 66.16 | 1 566 000 | 1 555 000 | 108.52 | 35.92 |
| 1821 | 12 000 000 | 4 805 000 | 7 195 000 | 40.04 | 59.96 | 1 796 000 | 1 311 000 | 59.69 | 22.28 |
| 1841 | 15 914 000 | 7 693 000 | 8 221 000 | 48.34 | 51.66 | 2 888 000 | 1 026 000 | 60.10 | 14.26 |
| 1861 | 20 066 000 | 11 784 000 | 8 282 000 | 58.73 | 41.27 | 4 091 000 | 61 000 | 53.18 | 0.74 |

## 3.3.2 The impact on people in the countryside

The owners of farms and large estates throughout Britain benefited enormously from enclosure and other changes to agriculture. Running a farm in a more businesslike manner usually brought good profits, and many landowners became very wealthy during this period. On the other hand, there is evidence to suggest that many in the countryside suffered greatly as a result of these changes.

Before enclosure, labourers living on rural estates had some independence and did not rely only on their wages. They were free to gather firewood from the estate, to keep a cow or pig they could graze on common land, and to raise a small crop of their own. Enclosure removed all these benefits, so the labourer was forced to rely on wages alone. In addition, the opportunity to earn extra money from spinning yarn and weaving cloth disappeared with the growth of textile factories.

Most farm labourers were employed on a casual basis. They were paid a daily rate, according to how much work they did. If the employing farmer had no work on any particular day, the labourer did not get paid. If crops were poor in any given year, a smaller harvest would result in less work for the farm labourer.

**SOURCE 2** While wealthy farmers benefited from enclosure of their farms, poor farm labourers and their families often suffered.

### The Speenhamland system

Food shortages and low wages in the 1790s meant that many rural families were very poor, and often close to starvation. As we will see in subtopic 3.7, looking after the poor was very much a local problem, with each village community required to look after its own. In 1795 in the village of Speenhamland, Berkshire, in south-east England, a system was devised to help the poor. It involved providing a subsidy to poor families, calculated using a formula based on the price of bread, the level of wages and the number of children in a family.

The formula was used to calculate an amount by which the wages of farm labourers could be topped up to prevent the family from starving. The money was raised by requiring landowners to pay an amount into a central fund, controlled by the local overseer of the poor. In the early stages it was quite successful and it was soon copied by other villages throughout England.

The longer the Speenhamland system remained in place, the less successful it became. Before long, many wealthy farmers realised they could pay low wages because they knew the overseer of the poor would make up the difference. On the other hand, some landowners were having to pay higher and higher amounts into the central fund to cover the increased subsidies to labourers. Many small landowners had to sell their land to cover this cost, and they became labourers themselves.

The system was demoralising for labourers, for no matter how hard they worked, their wages were never sufficient to support a family, and this forced them to rely on charity. More and more people became dependent on the system, which cost landowners increasing amounts. The Speenhamland system was eventually abolished in 1834.

**SOURCE 3** From F. Moore, *Considerations on the Exorbitant Price of Proprietors*, 1773

In passing through a village near Swaffham in the county of Norfolk a few years ago ... I beheld the houses tumbling into ruins, and the common fields all enclosed; ... I was informed that a gentleman of Lynn had bought that village and the next adjoining to it; ... he had thrown one into three, and the other into four farms; which before the enclosure were in about twenty farms; and upon my further enquiring what was becoming of the farmers who were turned out, the answer was that some of them were dead and the rest were become labourers.

**SOURCE 4** From D. Davies, *The Case of the Labourers in Husbandry*, 1795

... for a dubious economic benefit, an amazing number of people have been reduced from a comfortable state of partial independence to the precarious condition of mere hirelings ...

## 3.3.3 Protests and riots

Conditions in many rural areas became so bad for poor farm labourers that some were driven to extreme action to survive and to try and protect their traditional way of life.

### The food riots of 1795

By the 1790s most country people had to buy food using the wages they earned working on the enclosed farms. Bad weather in 1794–95 had seriously reduced wheat crops throughout Britain. In addition, Britain was at war with France, so importing grain was more difficult than usual. This shortage led to a steep rise in the price of wheat, forcing up the cost of bread. High prices led to protests, known as the 'food riots', in various parts of the country.

**SOURCE 5** From the *Ipswich Journal*, August 1795

' ... a band of women ... entered various houses and shops, seized all the grain, deposited it in the public hall, and then formed a committee to regulate the price at which it should be sold.'

**DID YOU KNOW?**

The food riots of 1795 involved very little violence. In most cases the rioters took control of the distribution of food, selling it at what they thought was a fair price, and handing the proceeds over to the owners.

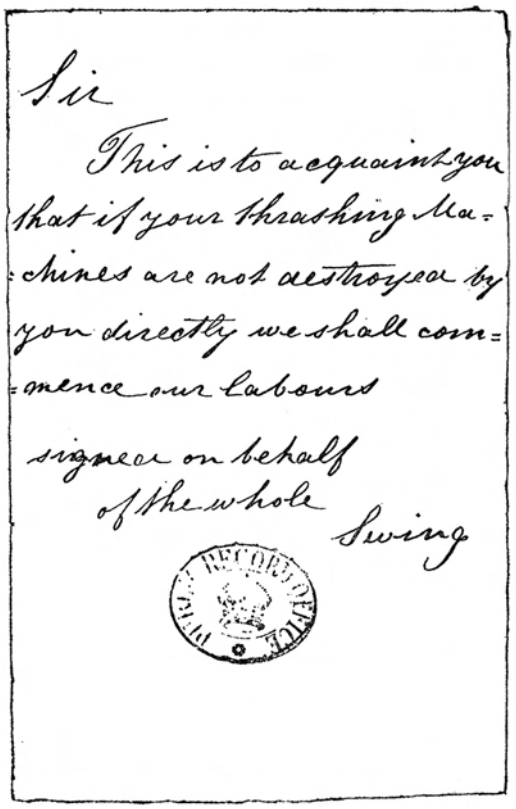
### Swing Riots of 1830

In the 1820s the increasing use of labour-saving technology such as the threshing machine (see subtopic 2.8) forced large numbers of labourers and their families into poverty. This placed pressure on the systems in place to care for the poor (see subtopic 3.7). In 1830 riots broke out in the south and east of England. The rioters were generally unemployed farm workers, who would burn down haystacks (see **SOURCE 6**) and damage the farm machinery that they blamed for their hardship. The unrest became known as the Swing Riots because wealthy farmers were sent threatening letters signed by a 'Captain Swing'. It was a name made up by rioters in the county of Kent, but its use soon spread to other parts of England.

**SOURCE 6** Burning of haystacks at night was one tactic of the Captain Swing rioters.

The authorities came down very heavily on the rioters when they were caught. Records show that 19 were executed and another 505 were sentenced to transportation to the Australian colonies.

**SOURCE 7** Letters threatening to destroy threshing machines were often signed by the fictitious Captain Swing.



Sir

This is to acquaint you that if your thrashing Machines are not destroyed by you directly we shall commence our labours

signed on behalf of the whole

Swing

**SOURCE 8** The authorities actively hunted down those involved in the Swing Riots of the early 1830s.

# Ten Pounds REWARD.

**WHEREAS late last Night, or early this Morning, the Premises of Mr. RICHARD MARSH, of the Parish of RIPPLE in the County of Kent, were unlawfully entered by some Person or Persons at present unknown, and a**

## Thrashing Machine

**THEREIN WAS**

**Feloniously Broken and Destroyed;**

**THIS IS THEREFORE TO GIVE NOTICE, --- THAT active Exertions are now making to discover the Offender or Offenders, and a REWARD of TEN POUNDS is hereby offered to be paid by the said RICHARD MARSH, to any Person who will give such Information as will lead to the Conviction of such Offender or Offenders.**

***Ripple, 5th August, 1831.***

DEVEREUX, PRINTER AND BOOKBINDER

## 3.3.4 A surviving open-field village

Despite the widespread enclosure of farming land in the eighteenth and early nineteenth centuries, some instances of open-field farming survived. One example is the village of Laxton in Nottinghamshire, in the English Midlands. While farming is carried out using some modern methods — the tractor has long ago replaced the horse-drawn plough — many features of the open-field system remain. The three open fields are divided into strips as they were in medieval times, and nearly everyone in the village has rights to some of the land; everyone has grazing rights on common land. The village is said to be prosperous and the villagers are very proud of their heritage. The village and its farming practices have become an educational resource for school and university students. The University of Nottingham even has a website dedicated to the village and its farming practices.

**SOURCE 9** The open-field land around the farms forming the English village of Laxton was never fully enclosed and still operates the traditional three-field rotation system managed by a Court Leet and Jury.

## 3.3 EXERCISES

**Historical skills key: HS1** Remembering and understanding **HS2** Sequencing chronology **HS3** Using historical sources as evidence **HS4** Identifying continuity and change **HS5** Analysing cause and effect **HS6** Determining historical significance

### 3.3 Exercise 1: Check your understanding

1. **HS5** Outline one major cause of the increase in population in Britain during the eighteenth and nineteenth centuries.
2. **HS1** Which group in society appears to have benefited most from enclosure? In what ways did this group benefit?
3. **HS1** What benefits did farm labourers lose as farms were enclosed?
4. **HS1** Give two reasons why a farm labourer's wages might vary greatly from week to week or season to season.
5. **HS1** What was the aim of the Speenhamland system?
6. **HS1** Why did the Speenhamland system ultimately fail?
7. **HS1** Describe two factors that led to the high price of bread in 1795.
8. **HS1** Why had large numbers of farm workers been reduced to poverty by the 1820s?
9. **HS1** How did these workers respond to their hardship?
10. **HS1** What was the origin of the name 'Swing Riots'?
11. **HS1** What features of the traditional open-field system have been retained by the village of Laxton in England?
12. **HS1** Other than the use of tractors, what other modern methods could be employed by the farmers of Laxton that wouldn't disrupt their open-field system?

### 3.3 Exercise 2: Apply your understanding

1. **HS3** Examine **SOURCE 1** and answer the following questions, providing evidence from the statistics.
   (a) Was the rural population rising or falling in the period from 1751 to 1861?
   (b) During which period did the urban population experience the greatest increase in actual numbers?
   (c) Between 1751 and 1801 the urban and rural populations grew by a similar number — a little over 1.5 million each. Why does the table show such a huge difference in the *percentage* increase between urban and rural population growth during this period?
   (d) In approximately which year did the population split equally between urban and rural?
   (e) If the trends shown in the table continued beyond 1861, what would you expect the statistics for 1881 to show?
2. **HS3** In what ways do **SOURCES 2** and **3** demonstrate that different groups of people were affected differently by the enclosure movement?
3. **HS3** Explain what the writer in **SOURCE 4** means when he writes that farm labourers were reduced from a state of 'partial independence to the precarious condition of mere hirelings'.
4. **HS3** What does **SOURCE 5** tell us about the nature of the food riots of 1795?
5. **HS3** While most of the Swing rioters' anger was directed at threshing machines (see **SOURCES 7** and **8**), why do you think they would have engaged in burning haystacks as well?
6. **HS3** What does the writer in **SOURCE 7** mean when he says 'we shall commence our labours'?
7. **HS3** Examine **SOURCE 9**.
   (a) Describe two features that you can see as evidence of the open-field system.
   (b) Explain why the villagers would have been proud of their system of farming.
8. **HS3** From the information provided in this subtopic, do you believe the food riots of 1795 were justified? Identify one piece of information from the sources that would convince you to either support or oppose the activities of the protesters.
9. **HS4** Given the negative effects of enclosure on many of the people, do you believe it would have been better to retain the open-field system as the village of Laxton did? Give reasons for your answer. (You may need to refer back to material in topic 2 to examine both sides of this issue.)

Try these questions in learnON for instant, corrective feedback. Go to www.jacplus.com.au.

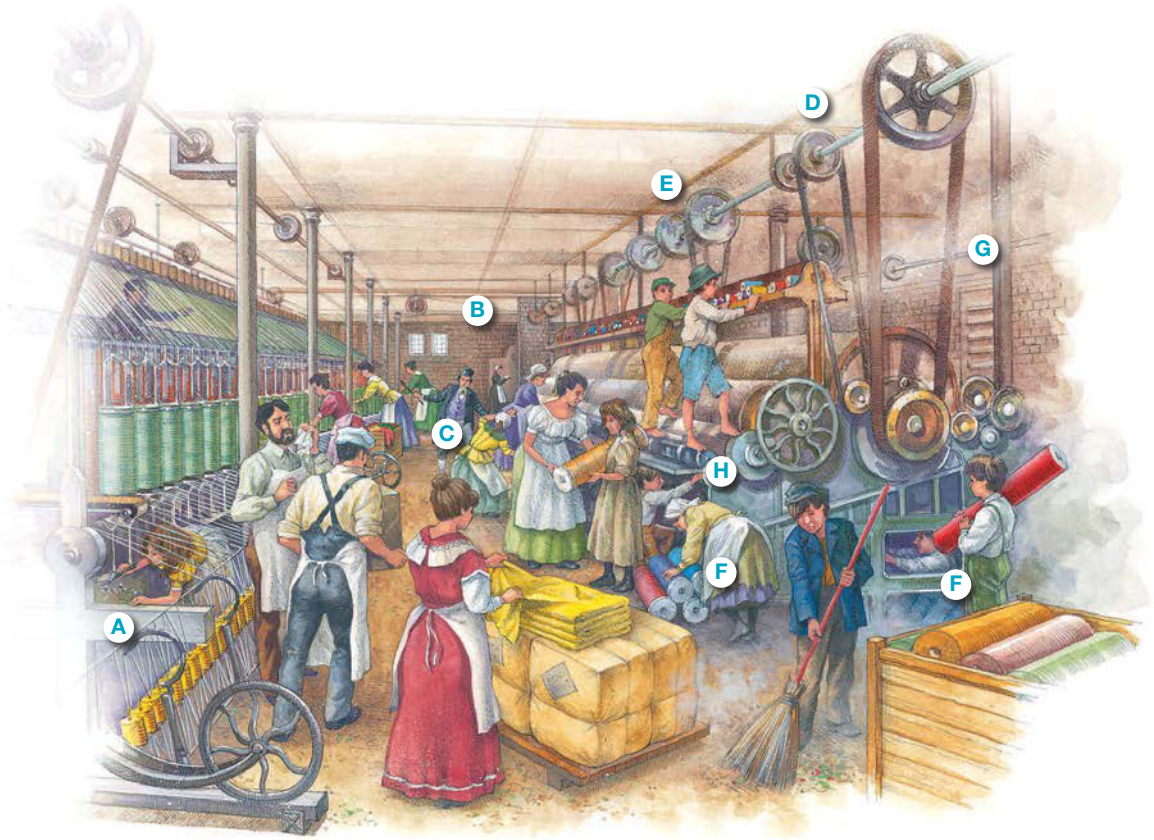
# 3.4 Conditions in factories and mines

## 3.4.1 Inside a textile factory

Australian employees today are protected by Occupational Health and Safety laws. These laws place a legal obligation on the employer to provide a safe and healthy workplace. At the time of the Industrial Revolution no such laws existed, and workplaces such as factories and mines could be dangerous and unhealthy places.

An early nineteenth-century textile factory was a dangerous and unpleasant place to work. Long working hours — 12 hours or more per day — were common practice. Poor light and ventilation and excessive heat made working conditions very uncomfortable. Machines were not fenced off and had no safety guards around moving parts, so workers were always at risk of injury. Children were often employed to climb under or between machines to keep them operating, so they were in particular danger.

**SOURCE 1** An early nineteenth-century textile mill was a dangerous and unhealthy place to work.




A Some children were employed as 'scavengers'; they would collect loose pieces of cotton from under machines while the machines were running.
B Small windows and lack of ventilation made the factory air hard to breathe.
C Overseers would punish anyone responsible for slowing or stopping the machines for any reason.
D Machines were driven by belts attached to drive shafts that were powered by a water wheel or steam engine.
E Machines had no safety fences or guards around them, so workers were always at risk of injury.
F Constant bending and working in cramped conditions often led to physical deformities in factory workers.
G Dust and other residues from the cotton found their way into the workers' lungs, causing severe illness.
H Some children were employed as 'piecers'; they had to repair broken threads on spinning machines while the machines were still running.

**SOURCE 2** From an interview with James Patterson, a factory worker, before a parliamentary committee, June 1832

I worked at Mr. Braid's Mill at Duntruin. We worked as long as we could see. I could not say at what hour we stopped. There was no clock in the mill. There was nobody but the master and the master's son had a watch and so we did not know the time. The operatives were not permitted to have a watch. There was one man who had a watch but it was taken from him because he told the men the time.

**SOURCE 3** From an interview with former factory worker Sarah Carpenter, published in *The Ashton Chronicle*, 23 June 1849

There was a young woman, Sarah Goodling, who was poorly and so she stopped her machine. James Birch, the overlooker, knocked her to the floor. She got up as well as she could. He knocked her down again. Then she was carried to the apprentice house. Her bed-fellow found her dead in bed. There was another called Mary. She knocked her food can down on the floor. The master, Mr. Newton, kicked her where he should not do, and it caused her to wear away till she died. There was another, Caroline Thompson. They beat her till she went out of her mind.

**SOURCE 4** From the testimony of Dr Michael Ward before a parliamentary committee, 25 March 1819

I have had frequent opportunities of seeing people coming out from the factories and occasionally attending as patients. Last summer I visited three cotton factories with Dr. Clough of Preston and Mr. Barker of Manchester and we could not remain ten minutes in the factory without gasping for breath. How is it possible for those who are doomed to remain there twelve or fifteen hours to endure it? If we take into account the heated temperature of the air, and the contamination of the air, it is a matter of astonishment to my mind, how the work people can bear the confinement for so great a length of time.

## 3.4.2 Working in the coalmines

As the development of steam engines allowed for the pumping of water from mines, these mines became much deeper and more hazardous for mine workers. Problems included:

- inadequate ventilation
- the presence of explosive gases
- the need to haul the coal greater distances to the surface.

The lack of ventilation could lead to miners breathing in poisonous gases or coal dust, both of which could lead to serious lung disease. Other gases were likely to explode when exposed to the flame of a miner's lamp, causing death through cave-ins of shafts and tunnels.

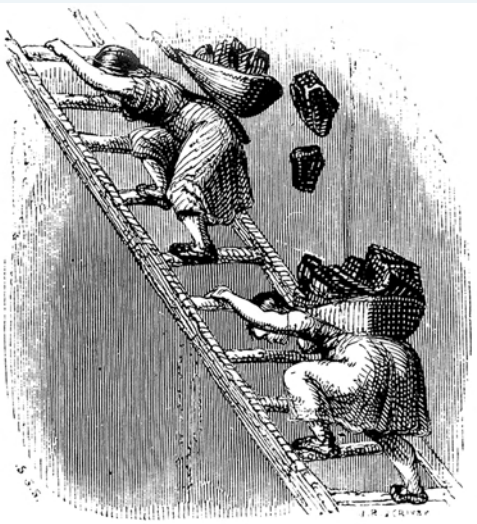
### Who worked in the mines?

In the early days of deep-pit mining, coal was mined and brought to the surface using human muscle rather than machinery. Whole families were often employed in coalmines. Fathers and sons would 'hew' (cut) the coal with picks, while mothers and daughters 'hurried' (carried) the coal to the surface. This was done in a number of different ways. Sometimes the younger girls would crawl along narrow tunnels, towing a small cart loaded with coal. Older girls and women would climb ladders and steps with baskets of coal on their backs. These baskets were held in place by a strap around the head, wearing away hair and skin.

**SOURCE 5** Coalmines were dark, dangerous places, where miners were exposed to many risks.

**SOURCE 6** In the early days of deep-pit mining, human muscle was used to 'hurry' carts of coal through narrow passages, as shown in this nineteenth-century artwork.

**SOURCE 7** Older girls and women had the hazardous task of hauling baskets of coal up narrow ladders.



## 3.4.3 The Mines Commission, 1840–42

In 1840 the British Parliament established a commission to inquire into working conditions in the mines. Over the next two years, many mine workers were called to give evidence, recounting their personal experiences. As a result of the findings of the commission, Parliament passed the *Mines Act 1842*. This changed the law to prevent all girls and women, and boys under 10, from working underground in the mines.

**SOURCE 8** Testimony of Isabel Wilson, aged 38, before the 1842 Mines Commission

I have been married 19 years and have had 10 [children]; seven are [alive]. When [I worked in the mines] I was a carrier of coals, which caused me to miscarry five times from the strains, and was [very] ill after each ... [My] last child was born on Saturday morning, and I was at work on the Friday night. Once I met with an accident; a coal broke my cheek-bone, which kept me idle some weeks. I have [worked] below 30 years, and so has my husband; he is getting touched in the breath now.

**SOURCE 9** Testimony of Jane Johnson, aged 26, before the 1842 Mines Commission

I could carry 2 hundredweight [just over 100 kilograms!] when 15 years of age but I now feel the weakness upon me from the strains. I have been married near 10 years and had 4 children; have usually (worked) till within one or two days of the children's birth. Many women lose their strength early from overwork and get injured in their backs and legs; was crushed by a stone some time since and forced to lose one of my fingers.

**SOURCE 10** Testimony of Agnes Kerr, aged 15, before the 1842 Mines Commission

... [I] make 18 to 20 journeys a-day; a journey to and fro is about 200 to 250 fathom [one fathom equals 1.8 metres]; have to ascend and descend many ladders; can carry 1.5 hundredweight [approximately 76 kilograms]. I do not know how many feet there are in a fathom ... : know the distance from habit; it is sore crushing work; many lassies cry as they bring up the burdens. Accidents frequently happen from the tugs breaking and the loads falling on those behind and the lasses are much (inflicted) with swelled ankles. I cannot say that I like the work well; for I am obliged to do it.

## DID YOU KNOW?

Because of the high temperature in the coalmines, miners wore little or no clothing. When Parliament passed the Mines Act in 1842, the moral question of women and men working together in these circumstances was an important issue. The record of the debates in Parliament indicates that the fact that young girls were working in the presence of 'near-naked' men was seen to be a bigger problem by members of Parliament than the harsh working conditions.

## 3.4 EXERCISES

**Historical skills key: HS1** Remembering and understanding **HS2** Sequencing chronology **HS3** Using historical sources as evidence **HS4** Identifying continuity and change **HS5** Analysing cause and effect **HS6** Determining historical significance

### 3.4 Exercise 1: Check your understanding

1. **HS1** Why were early nineteenth-century textile factories unpleasant places to work?
2. **HS1** Why were children in these factories in particular danger?
3. **HS1** Why did mining become more dangerous as mines became deeper?
4. **HS1** In what ways might all members of a family be engaged in coalmining?
5. **HS1** In addition to mine workers, who else might have been called to give evidence before the Mines Commission of 1840–42?
6. **HS1** What were the consequences of the commission's findings?

### 3.4 Exercise 2: Apply your understanding

1. **HS3** Examine **SOURCE 1** and answer the following.
   (a) Identify two examples of the unhealthy nature of the atmosphere in the factory.
   (b) Identify two examples of the work carried out by children in the factory.
   (c) What was the method used to drive the machines?
   (d) How do we know that factory owners were not interested in the safety of their workers?
2. **HS3** Explain why factory owners would not want their employees to have access to a clock or watch, as indicated in **SOURCE 2**.
3. **HS3** Examine **SOURCE 3**. How were factory workers punished for stopping their machines, or not following factory rules?
4. **HS3** What does **SOURCE 4** tell us about working conditions in a typical textiles factory in 1819?
5. **HS3** From the images in **SOURCES 5**, **6** and **7**, identify and explain three possible sources of injury to mine workers.
6. **HS3** Did pregnant women receive any special treatment while working in the mines? Support your answer with evidence from **SOURCES 8** and **9**.

7. **HS3** In **SOURCE 8**, Isabel Watson describes her husband as being 'touched in the breath'. Explain what you think she means by this statement.
8. **HS3** From information in **SOURCE 10**, calculate the total distance that Agnes Kerr travelled each day while working in the mines, and the total weight of the coal she 'hurried' each day.
9. **HS3** Examine the individual eyewitness accounts in **SOURCES 2, 3, 4, 8, 9** and **10**.
   (a) For each source, explain why you find the testimony believable or not believable.
   (b) Most of these sources were evidence given before parliamentary committees or commissions. Why do you think the British Parliament carried out so many inquiries into working conditions at this time?

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# 3.5 Child labour

## 3.5.1 Children in the textile factories

In the eighteenth century it was normal practice for children to work to help support their family. In agricultural or domestic work situations this had often been under the supervision of parents, who could have some influence over the type of work carried out by their children. This changed in the early years of the Industrial Revolution. Children who worked in factories and mines were subjected to harsh and often brutal conditions.

Owners of textile mills were quick to recognise that they could employ children for lower wages than adults. Indeed, children often outnumbered adults in factory work. It has been estimated that in 1788 more than two-thirds of employees in cotton mills in England and Scotland were children. While older children and teenagers could often take charge of running a spinning or weaving machine, it was the work carried out by younger children that was the most dangerous.

### Piecers and scavengers

Children employed as 'piecers' were required to lean over the spinning machine and repair broken threads. They had to do this while the machine was running, and often had more than one machine to watch. It is estimated that a piecer looking after a number of machines could walk as much as 30 kilometres a day. Other children were employed as 'scavengers'. They had to crawl under machines collecting loose cotton and other waste. This task, also performed while machines were running, was particularly dangerous.

**SOURCE 1** From *A Narrative of William Dodd, A Factory Cripple*, 1841

At the age of six I became a piecer ... each piecing requires three or four rubs, over a space of three or four inches; and the continual friction of the hand in rubbing the piecing upon the coarse wrapper wears off the skin, and causes the finger to bleed. The position in which the piecer stands to his work is with the right foot forward, and his right side facing the frame. In this position he continues during the day, with his hands, feet, and eyes constantly in motion ... the chief weight of his body rests upon his right knee, which is almost always the first joint to give way ... my evenings were spent in preparing for the following day — in rubbing my knees, ankles, elbows, and wrists with oil, etc. I went to bed, to cry myself to sleep.

**SOURCE 2** From F. Trollope, *Michael Armstrong, the Factory Boy*, 1840

A little girl about seven years old, whose job as scavenger was to collect incessantly from the factory floor, the flying fragments of cotton that might impede the work ... while the hissing machinery passed over her, and when this is skilfully done, and the head, body, and the outstretched limbs carefully glued to the floor, the steady moving, but threatening mass, may pass and repass over the dizzy head and trembling body without touching it. But accidents frequently occur; and many are the flaxen locks, rudely torn from infant heads, in the process.

## 3.5.2 Children in the mines

Children in coalmines were employed as 'hurriers' and 'trappers'. Hurriers were required to carry baskets or tow trucks of coal to the surface. Girls as young as six or seven could be employed in this way, and would continue this work into their teens. The belt or chain around a girl's waist could damage the pelvic bones, and many women who worked in the mines as children later died in childbirth.

Children as young as four or five were employed as trappers. Their job was to open and close the ventilation doors in the underground tunnels to allow the hurriers pulling their carts to pass through; they often sat in the dark for up to 14 hours a day.

**SOURCE 3** This sketch of a young person pulling a truck full of coal was created c. 1842.

**SOURCE 4** A young trapper opening the door for a truck of coal pushed by children

## 3.5.3 The ‘climbing boys’

Another occupation that employed large numbers of children, some as young as six, was that of chimney sweep. A sweep would employ a number of young boys, known as ‘climbing boys’, to climb up into chimneys and clean them with a hand brush or metal scraper. It was a dangerous and dirty job. Many choked to death from breathing in the dust and soot, while others were injured by falling or by becoming stuck in narrow chimneys.

**SOURCE 5** Young boys employed as chimney sweeps worked in dangerous and dirty conditions.

### DID YOU KNOW?

The British Parliament passed laws in 1788, 1834, 1840 and 1864 that aimed to control the employment of ‘climbing boys’ by chimney sweeps, but most of these laws were ignored. It was not until after 1875, when the police gained the power to enforce these laws, that the practice of employing young boys in this way was finally stopped.

### DISCUSS

Child labour is still a reality in many parts of the world today. In small groups discuss what might be done to solve this issue. From your discussion, come up with three possible solutions. **[Ethical Capability]**

### 3.5 ACTIVITY

We look back on the child labour of the early years of the Industrial Revolution as something quite foreign to our society today, but at that time the children of peasants and the working classes worked beside their parents from a young age. Families often relied on every member working in order to survive.

Working with a partner, complete the following tasks.

**(a)** Outline what you believe the attitudes of each of the following individuals might have been towards child labour in the 1830s:

i a factory or mine owner
ii working-class parents of young children
iii working-class children
iv Members of Parliament in favour of reform to factory and mine working conditions.

**(b)** Why do you think early Factory Acts only reduced rather than abolished child labour? Explain your view. **[Ethical Capability]**

### 3.5 EXERCISES

**Historical skills key: HS1** Remembering and understanding **HS2** Sequencing chronology **HS3** Using historical sources as evidence **HS4** Identifying continuity and change **HS5** Analysing cause and effect **HS6** Determining historical significance

#### 3.5 Exercise 1: Check your understanding

1. **HS1** Why was the employment of children so attractive to the owners of textile factories?
2. **HS1** Describe the roles of 'piecers' and 'scavengers' in a textile factory.
3. **HS1** Explain the roles of 'hurriers' and 'trappers' in coalmines.
4. **HS1** What were the risks faced by young girls employed as hurriers in coalmines?
5. **HS1** Describe the job carried out by climbing boys, and the hazards that they faced.

#### 3.5 Exercise 2: Apply your understanding

1. **HS3** From **SOURCE 1** identify the main types of injuries that could be suffered by piecers in a textile factory.
2. **HS3** Using **SOURCE 2**, explain why the job of scavenger in a textile factory was so dangerous.
3. **HS3** The artists who drew **SOURCES 3** and **4** were attempting to present the negative side of child labour in coal mines. Explain how each artist has achieved this in their drawings.
4. **HS3** What impression was the artist trying to create in **SOURCE 5**? Explain how this has been achieved.
5. **HS3** The drawings in **SOURCES 3** and **4** were originally published in the report of the Parliamentary Mines Commission in 1842. Why would the Commission have included drawings of this type in its official report?
6. **HS4** In rural communities children had helped with many different tasks, so the employment of children was not new. Explain why child labour became more of a problem during the Industrial Revolution.

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# 3.6 Urban conditions and people's health

## 3.6.1 Urbanisation and overcrowding

Increases in population during the late eighteenth and early nineteenth centuries occurred mostly in the Midlands and north of England and in the Lowlands of Scotland and southern Wales. Towns and cities grew most quickly close to coal and iron deposits, as these were also the major areas of factory development.

Industrialisation led to the rapid growth of British cities and large towns. In the first 30 years of the nineteenth century, cities such as Birmingham and Sheffield doubled in population. The population of Manchester, Liverpool, Leeds and Glasgow more than doubled during this time. Urban growth occurred without planning or government supervision. Much of the housing was built by factory owners, to be rented out to workers. Wanting to keep costs down, housing was often poorly constructed, with as many houses as possible built on one site. Some families rented older houses that had previously belonged to the wealthier classes. In such cases, each family was often crowded into one room for cooking, eating and sleeping.

**SOURCE 1** From Alexis de Tocqueville, a French aristocrat writing about Manchester in 1835

A sort of black smoke covers the city. Under this half-daylight 300 000 human beings are ceaselessly at work. The homes of the poor are scattered haphazard around the factories. From this filthy sewer pure gold flows. In Manchester civilised man is turned back almost into a savage.

**SOURCE 2** From a letter to a parliamentary inquiry in 1840, written by Dr Roberton, a Manchester surgeon

Manchester is a huge overgrown village, built according to no definite plan. The homes of the work-people have been built in the factory districts. The interests and convenience of the manufacturers have determined the growth of the town and the manner of that growth, while the comfort, health and happiness [of the workers] have not been considered. Manchester has no public park or other ground where the population can walk and breathe the fresh air. Every advantage has been sacrificed to the getting of money.

**SOURCE 3** From Dr William Duncan, *Report on the Sanitary Condition of Liverpool*, 1839

In the streets inhabited by the working classes, I believe that the great majority are without sewers, and that where they do exist they are of a very imperfect kind unless where the ground has a natural inclination, therefore the surface water and fluid refuse of every kind stagnate in the street, and add, especially in hot weather, their pestilential influence to that of the more solid filth ... the only means afforded for carrying off the fluid dirt being a narrow, open, shallow gutter, which sometimes exists, but even this is very generally choked up with stagnant filth.

## 3.6.2 Housing and sanitation

Houses were built with the cheapest possible materials and were often built back to back and without any gardens. Amenities that we take for granted, such as water supply, were ignored. Streets were narrow, with poor drainage, and were filled with rubbish and raw sewage. There were no sewerage pipes to remove waste and no council rubbish collection as we know today. Groups of houses relied on **cesspits** for the disposal of sewage, but overcrowding meant that these frequently overflowed, contaminating rivers and wells that were the only sources of drinking water. Diseases such as **cholera** and **typhus** were common and spread quickly through densely populated urban areas.

**SOURCE 4** Most factory workers lived in poor-quality, overcrowded housing without sanitation.

A Rubbish was thrown into the street and left to rot, as there was no organised rubbish collection.
B Houses had small windows or no windows at all.
C Sewage was collected in cesspits, which were emptied by 'nightmen', although not always as regularly or often as necessary.
D Crime, such as pickpocketing, flourished in these squalid conditions.
E Houses were of poor quality, built using the cheapest possible materials.
F Families were often crowded into a single room.
G There was no piped water supply, so water was collected from communal wells or nearby rivers.
H Streets were no more than narrow lanes, with open drains running down the middle.

## DID YOU KNOW?

In 1696 the English Parliament introduced a Window Tax, which taxed all houses based on the number and size of their windows. This tax was not removed until 1851, so most builders providing cheap housing in the first half of the nineteenth century used as few windows as possible. Lack of light and fresh air made living conditions even more unhealthy.

## 3.6 EXERCISES

**Historical skills key: HS1** Remembering and understanding **HS2** Sequencing chronology **HS3** Using historical sources as evidence **HS4** Identifying continuity and change **HS5** Analysing cause and effect **HS6** Determining historical significance

### 3.6 Exercise 1: Check your understanding

1. **HS1** Why did the population of cities such as Birmingham, Manchester and Leeds grow so rapidly in the first 30 years of the nineteenth century?
2. **HS1** Explain two ways in which the builders of houses in factory towns kept costs down.
3. **HS1** Choose the appropriate words from the following table to fill the gaps and complete the paragraph below about housing in industrial towns.

| | | | |
|---|---|---|---|
| newer | wealthier | family | lower |
| one | ample | child | older |

Some families rented _____ houses that had previously belonged to the _____ classes. In these cases, each _____ was often crowded into _____ room for cooking, eating and sleeping.

4. **HS1** How did people living in these areas get rid of their rubbish and human waste?
5. **HS1** Why would disease have spread quickly in towns such as Manchester and Liverpool?

### 3.6 Exercise 2: Apply your understanding

1. **HS3** Explain what the writer in **SOURCE 1** meant by, 'From this filthy sewer pure gold flows.'
2. **HS3** Identify the two main criticisms that Dr Roberton (see **SOURCE 2**) expressed in relation to the planning and layout of Manchester.
3. **HS3** How might the conditions described in **SOURCE 3** have contributed to the spread of diseases such as cholera?
4. **HS3** Use **SOURCE 4** to identify five features of nineteenth-century industrial cities and towns that would have made them unpleasant places to live in.
5. **HS4** Identify the differences and similarities in living conditions that a family might notice when moving from a small country village to a large industrial city.
6. **HS5** Why might crime have flourished given the conditions that prevailed in large cities in the nineteenth century?
7. **HS5** What is meant by the term 'urbanisation'? Why would you expect there to be a strong connection between industrialisation and urbanisation?

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# 3.7 Poor laws and workhouses

## 3.7.1 The Old Poor Law

Various structures for helping the poor had existed in Britain since the Middle Ages. In the 1830s this system was reformed and relief for the poor was restricted largely to those who lived in special institutions called workhouses.

By the time of the Industrial Revolution, the poor in England were looked after by a system that had been set up in the late sixteenth century. Each village or **parish** had to take care of its own poor, and those who owned property paid a special tax called the Poor Rate. Some of the money was used to supply food or other necessities for **paupers** living in their own homes. This was called **outdoor relief**. In some villages or parishes, special places were built to house and feed the poor. Known as **workhouses**, they were often very crowded, unpleasant places to live. Requiring the poor to live in these places was called **indoor relief**.

**SOURCE 1** This nineteenth-century painting shows a family living in poverty. Under the Old Poor Law system the workhouse was an unpleasant place to live, but families could at least stay together.

## 3.7.2 The New Poor Law

Following the Swing Riots of 1830 (see subtopic 3.3), the British government set up a **royal commission** to investigate the operation of the Poor Laws. The commission made the following recommendations:

- Outdoor relief should be abolished.
- Only those living in the workhouses should be entitled to any assistance.
- The workhouse should be as unpleasant as possible to discourage anybody capable of working from wanting to live there.

In 1834 Parliament passed the Poor Law Amendment Act to put these recommendations into effect. This set up a system known as the New Poor Law, and 350 new workhouses were built by 1839. The workhouse system continued into the early twentieth century.

**SOURCE 2** From a Rochester correspondent to *The Times*, 26 December 1840

Upwards of half-a-dozen girls in the workhouse, some of them verging on womanhood, have at times had their persons exposed in the most brutal and indecent manner, by the Master, for the purpose of inflicting on them cruel floggings; and the same girls, at other times, have, in a scarcely less indecent manner, been compelled by him to strip the upper parts of their persons naked, to allow him to scourge them with birch rods on their bared shoulders and waists, and which, from more than one of the statements from the lips of the sufferers, appears to have been inflicted without mercy. One girl says, 'My back was marked with blood'.

### DID YOU KNOW?

A scandal arose in 1845 over conditions in the workhouse in the town of Andover. The Master, Mr McDougal, was a bully and a drunk who savagely beat small children and regularly raped women under his care. He had kept rations to such a minimum that starving inmates were found to be trying to eat animal bones they were supposed to be grinding up for fertiliser. The story, published in *The Times* newspaper in London, caused a national outcry.

## 3.7.3 Life in the workhouse

Conditions in workhouses were deliberately made as unpleasant as possible. Under the Old Poor Law, families in workhouses could stay together, but under the new system families were split up. Men and women were kept separate and their children were removed from their care. All inmates of the workhouse, except for the very youngest children, were put to work. This work usually consisted of hand-grinding corn, breaking stones or **picking oakum**.

### Imposition of strict rules

The workhouse was run by the Master, who was expected to manage it on a very tight budget. Strict regulations were imposed on the inhabitants of the workhouse, and the Master had the power to impose savage punishment on those who disobeyed the rules. Parents were rarely allowed to see their children and outside visitors were not allowed. Meals were kept to the bare minimum necessary to sustain life and had to be eaten in silence. In Charles Dickens' *Oliver Twist*, young Oliver asks for more food and is punished by being placed in solitary confinement. Children were given very little education and were usually apprenticed out to local employers at an early age. In Dickens' story, young Oliver Twist was to be apprenticed to a chimney sweep but is eventually apprenticed to an undertaker at the age of nine.

**SOURCE 3** This nineteenth-century photograph shows women in a workhouse unpicking short lengths of tar-coated rope — a task known as 'picking oakum'.

**SOURCE 4** Workhouse inmates were fed a minimal diet and forced to eat in silence, as shown in this nineteenth-century photograph.

### 3.7 EXERCISES

**Historical skills key: HS1** Remembering and understanding **HS2** Sequencing chronology **HS3** Using historical sources as evidence **HS4** Identifying continuity and change **HS5** Analysing cause and effect **HS6** Determining historical significance

#### 3.7 Exercise 1: Check your understanding

1. **HS1** Who was responsible for looking after the poor in pre-industrial England?
2. **HS1** What was the Poor Rate?
3. **HS1** Explain the difference between indoor relief and outdoor relief.
4. **HS4** What were the three main changes brought in with the passing of the New Poor Law?
5. **HS1** Why was there a deliberate policy to make the workhouse an unpleasant place to live?
6. **HS1** Give two examples of the ways in which life in the workhouse was made as unpleasant as possible.
7. **HS1** In what types of activities were workhouse inmates employed?
8. **HS1** Explain how children were treated in the workhouse.

#### 3.7 Exercise 2: Apply your understanding

1. **HS3** In **SOURCE 1**, the adult male is obviously very ill and possibly dying. Given that the man would probably have been the main wage earner in the family, describe what message about poverty the painter was attempting to convey.

2. **HS3** From what you can identify in **SOURCE 2**, what methods were used to make the workhouse as unpleasant as possible?
3. **HS3** What was oakum? Explain why the women in **SOURCE 3** were given the task of picking oakum.
4. **HS3** Identify two things that **SOURCE 4** tells us about life in the workhouse.
5. **HS4** Consider life for the poor under the Old Poor Law and the New Poor Law.
   (a) Create a table to compare conditions under each law.
   (b) Do you think life became easier or harder for paupers after 1834? Give reasons for your answer.
6. **HS5** Identify what the treatment of paupers under the New Poor Law tells us about attitudes towards poverty in nineteenth-century Britain. How does this relate to the high value placed on business success and entrepreneurship at this time?

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# 3.8 Social unrest and trade unions

## 3.8.1 Social unrest, protests and riots

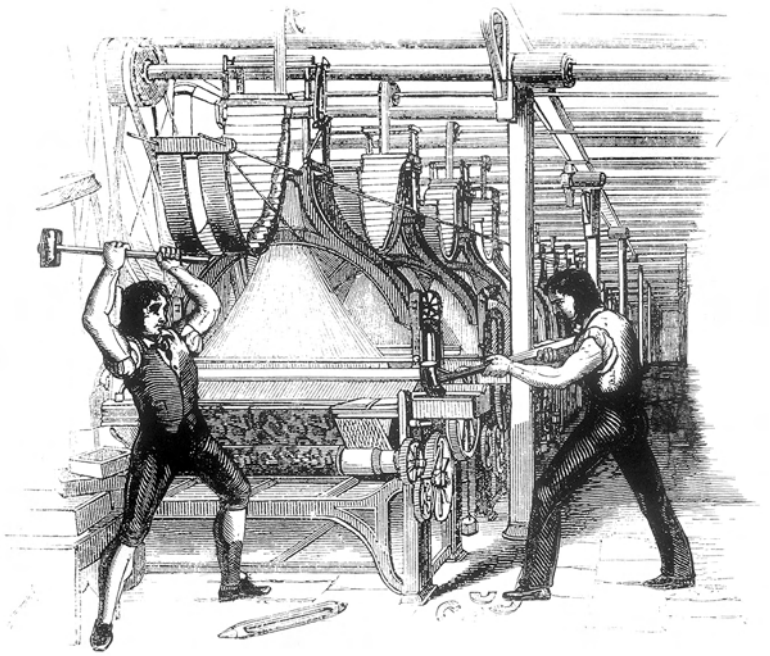
As the industrial and agricultural revolutions progressed, many factory, mine and farm workers were dissatisfied with their working conditions. Initially this materialised as protests and even riots, but as the nineteenth century progressed, workers began to organise into unions to work towards improvements in their working lives.

The social upheaval resulting from the agricultural and industrial changes led to a number of protest movements by ordinary working people in the early nineteenth century.

### The Luddites

Many skilled artisans of the old cottage textile industry felt that the use of machines in factories had robbed them of their livelihood. Between 1811 and 1817, groups of these workers protested by destroying the new machines. They were known as **Luddites**, after their probably fictitious leader, King Ned Ludd. In 1811 more than 1000 industrial machines were smashed. Between 1812 and 1813, 14 Luddites were executed and many more were transported to the colonies for life.

**SOURCE 1** This nineteenth-century artwork depicts Luddites smashing power looms in a cotton mill.



### Peterloo Massacre

The most infamous incident of this period was known as the Peterloo Massacre. In August 1819 a group of around 50 000 protesters gathered peacefully at St Peter's Fields near Manchester to demand economic and political reform. They were attacked by mounted troops; 15 were killed and more than 600 seriously wounded. Incidents such as this helped awaken many to the social problems that had arisen from the agricultural and industrial revolutions.

**SOURCE 2** An 1819 cartoon depicting the Peterloo Massacre. The officer is calling to his men: 'Remember, the more you kill, the less Poor Rates you'll have to pay, so go to it, lads, show your courage and your loyalty!'

## 3.8.2 Trade unions

Trade unions had first developed as associations of people who worked in similar trades. They had very little impact until the growth of factories brought large numbers of workers together in one place. Employers in these factories were opposed to the formation of unions that might have campaigned for improved wages or working conditions. They convinced Parliament to pass laws severely restricting union activity.

### The Combination Acts

In 1799 and 1800 Parliament passed the Combination Acts, which effectively banned workers from combining to form unions. The Combination Acts were **repealed** in 1824, but a series of **strikes** led to the passing of the Combination Act of 1825. This allowed unions to bargain with employers over wages and hours of work, but banned them from using strike action.

### The Chartists

The right to vote for the election of members of the British Parliament had always been restricted to men who owned property worth a relatively substantial value. This meant that the majority of men could not vote, and that no women could vote. In the period after the end of the Napoleonic Wars (1803–1815), many groups were formed to promote the idea of making the vote more democratic. The meeting that led to the Peterloo Massacre was an example of these campaigns.

In 1832, the Parliament passed the Reform Act, which lowered the value of the property that a voter was required to own, and allowed tenant farmers paying rent above a certain level to vote. In the minds of many people this did not go far enough. When the Poor Law Amendment Act was passed in 1834, it further angered many people, because it was seen to be punishing people who had no voting rights.

In 1836 a group of tradesmen formed the London Working Men's Association. Its leaders, William Lovett and Henry Hetherington, had been active in promoting greater rights for the working class. Hetherington had printed a number of newspapers promoting universal adult male **suffrage**. In 1838 the association published its People's Charter, which set out six aims. These were:

1. the vote for all men over the age of 21
2. secret ballot at elections
3. no property qualification for members of parliament
4. payment of members of parliament, so that standing for parliament was not restricted to the rich
5. equal-sized electorates, so that each vote had equal value
6. annual elections for parliament.

Supporters of the People's Charter became known as Chartists. A number of large public meetings were then held in various parts of England, Wales and Scotland, supporting the aims of the charter. These meetings were attended by many thousands of working-class people.

In 1839 the Chartists presented a petition signed by 1.3 million working people, but the parliament refused to hear the petition. Protest marches were held throughout the country, some of which were met with armed troops. Some Chartist leaders were arrested, and Lovett himself spent a year in prison. In 1842 large numbers of workers went on strike in support of improved wages and the principles contained in the People's Charter. Many were arrested and more than fifty Chartists were sentenced to transportation to the Australian colonies. All six aims of the charter, except for annual elections, were eventually adopted within Britain, and have formed the basis for democratic government in many countries around the world.

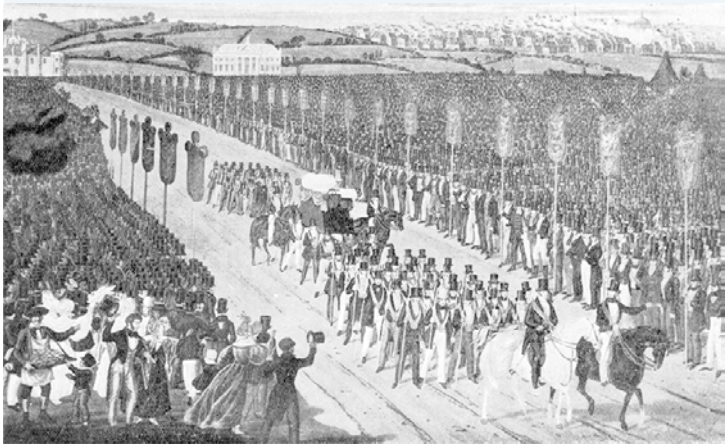
### DID YOU KNOW?

British Chartism clearly influenced the Eureka Rebellion at Ballarat, Victoria in 1854 (see subtopic 6.3); the miners' demands were inspired by Chartist ideals. The first president of the Ballarat Reform League was Welsh-born Chartist John Basson Humffray, and Reform League members Henry Holyoake and Thomas Kennedy had both been active Chartists in England.

## The Tolpuddle Martyrs

In 1834, six farm labourers in the village of Tolpuddle in Dorset were arrested for swearing an oath of loyalty to their union, the Friendly Society of Agricultural Labourers. It was no longer illegal to belong to a union, so they were prosecuted under an obscure law relating to the swearing of oaths. They were sentenced to seven years' transportation to Van Diemen's Land. Outraged public opinion and the presentation of a huge petition to Parliament led to their being pardoned in 1836. They became an important symbol of the right of free association for workers.

**SOURCE 3** More than 50 000 trade union members gathered on 21 April 1834 in Copenhagen Fields (outside London) to present a petition to the Prime Minister in support of the Tolpuddle Martyrs.



## The New Model Trade Unions

In the 1850s groups of skilled tradesmen set up their own unions, beginning with the Amalgamated Society of Engineers in 1851. These unions provided members with a wide range of services, such as sickness benefits. They attracted strong support and soon became a model for other worker groups. Consisting largely of skilled tradesmen, these unions tended to be quite conservative and concentrated on negotiation with employers, rather than strike action. This helped make unions more 'respectable' in the eyes of many.

## Improved legal status

In response to the growth of unions, in 1867 Parliament set up a royal commission to investigate trade unions. The commission found that most 'new model' unions served a useful social purpose and should have legal status. The Trade Union Act of 1871 gave unions many of the same legal rights as businesses, including the right to own property. In 1875, unions in Britain gained the legal right to bargain on behalf of their members, including the right to strike.

### 3.8 ACTIVITY

The term 'Luddite' is still used today. Find out what the term means in its modern usage, and discuss whether or not you believe this is an appropriate use of the term. **Identifying continuity and change**

### 3.8 EXERCISES

**Historical skills key: HS1** Remembering and understanding **HS2** Sequencing chronology **HS3** Using historical sources as evidence **HS4** Identifying continuity and change **HS5** Analysing cause and effect **HS6** Determining historical significance

#### 3.8 Exercise 1: Check your understanding

1. **HS1** Who were the Luddites, and what activities did they engage in?
2. **HS5** What was the effect of the Peterloo Massacre on attitudes to social problems that had arisen from the Industrial Revolution?
3. **HS1** Why were factory owners opposed to the formation of unions?
4. **HS1** What was the purpose of the Combination Acts?
5. **HS5** Explain the issues that led to the formation of the London Working Men's Association.
6. **HS1** Outline the demands included in the People's Charter of 1838.
7. **HS1** Where did the main support for the charter come from?
8. **HS1** What was the response of the British government at the time to the demands of the Chartists?
9. **HS1** Why were the Tolpuddle Martyrs transported as convicts to Van Diemen's Land (Tasmania) in 1834?
10. **HS1** Explain how trade unions had become an accepted part of society by 1875.

#### 3.8 Exercise 2: Apply your understanding

1. **HS3** Examine **SOURCE 1**. Do you think the artist here was opposed or sympathetic to Luddites? Support your answer with evidence from the source.
2. **HS3** Identify three features of **SOURCE 2** that tell us that the artist was opposed to the actions taken by the troops in the Peterloo Massacre.
3. **HS3** Consider **SOURCE 3**.
   (a) What does it tell us about the nature of the protest against the Tolpuddle Martyrs' punishment?
   (b) Why would an artist regard the Tolpuddle Martyrs protest as an important event to document?
4. **HS4** To what extent do you believe that the development of the People's Charter in 1838 was a major turning point in both British and Australian history? Give reasons for your answer.
5. **HS5** Support for the Tolpuddle Martyrs and the People's Charter demonstrates that many people were becoming more politically active.
   (a) Identify and explain two underlying or long-term causes of this increased activism.
   (b) Which events might have provided the short-term triggers that motivated people to become active?
6. **HS5** How can we tell that the British Parliament was more strongly influenced by the interests of factory owners than by those of ordinary workers? Why might this have been the case?

Try these questions in learnON for instant, corrective feedback. Go to www.jacplus.com.au.

# 3.9 The growth in ideas

## 3.9.1 Economic ideas

The seventeenth and eighteenth centuries had been a period of great intellectual growth in Britain and Europe. The Scientific Revolution of the seventeenth century saw great advances in physics, mathematics, chemistry and biology. For the first time, scientists began to draw conclusions from experimentation and observation of the world around them, instead of simply accepting religious explanations. In the eighteenth century, the period known as the Enlightenment saw a challenge to traditional views of the structure of society and the role of religion, and asserted the rights of individuals to participate as equals, no matter what their social status. The willingness to question existing beliefs and to formulate new philosophies continued into the nineteenth century.

Many of the new ideas related to the operation of the economy, overturning the traditional feudal approach that still operated throughout much of Europe.

### Capitalism

A belief in the ability of individuals to create wealth through their own entrepreneurship was central to the ideas of capitalism. These principles were strongly promoted by Adam Smith and others late in the eighteenth century. Central to Smith's beliefs was the removal of excessive regulation of business, so that all businesses were free to compete in open markets. He believed that if all individuals were free to pursue their own self-interest, this would lead to a better and wealthier society for all individuals. He described this as 'the invisible hand' that improves society, even though none of the individuals participating may have had this as their main aim (see **SOURCE 1**). Central to the belief in capitalism was a belief in competition. By competing against each other, businesses that charged the lowest prices would attract more customers, and therefore be the most successful. Lower prices would be the social benefit that would flow from this competition. By the end of the nineteenth century, capitalism had become the predominant economic theory of Britain, Europe, the United States, and most of the industrialised world.

**SOURCE 1** Adam Smith, *The Wealth of Nations*, 1776

By preferring the support of domestic to that of foreign industry, he intends only his own security; and by directing that industry in such a manner as its produce may be of the greatest value, he intends only his own gain, and he is in this, as in many other cases, led by an invisible hand to promote an end which was no part of his intention. Nor is it always the worse for the society that it was no part of it. By pursuing his own interest he frequently promotes that of the society more effectually than when he really intends to promote it.

### Socialism

Opposed to capitalism were the ideas of socialism. There were many influential socialist thinkers in the nineteenth century. They shared a belief in greater economic and political equality. They believed this could be achieved only by workers owning and running enterprises collectively or by the state owning these enterprises on their behalf. The British reformer Robert Owen held strong socialist ideals. Another significant proponent of socialism was Karl Marx, a nineteenth-century German philosopher. Marx believed that history was shaped by struggles between social classes. He predicted that revolutions throughout Europe would completely change societies. As the Industrial Revolution proceeded, those who had nothing but their ability to work — the **proletariat** — would overthrow the **bourgeoisie**. The workers would then create a socialist society in which wealth would be shared fairly. Marx thought that socialism would eventually lead to a stage of even greater equality that he called 'communism' (see **SOURCE 2**).

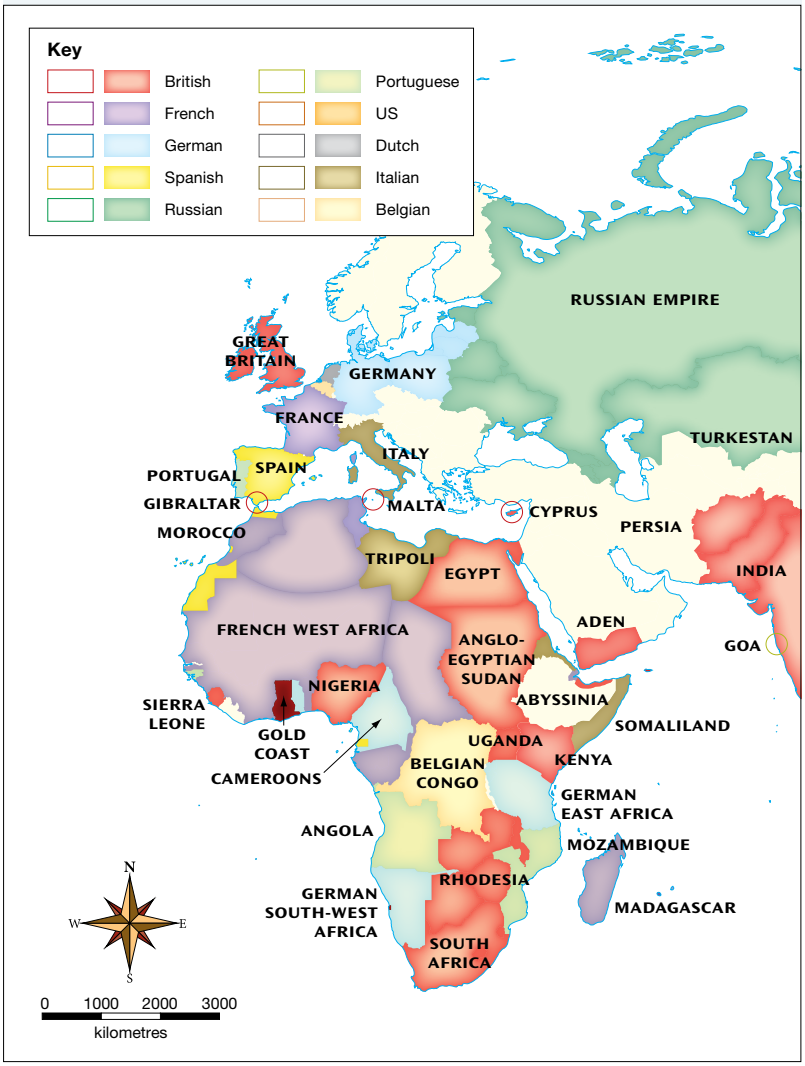
**SOURCE 2** Karl Marx and Friedrich Engels, *The Communist Manifesto*, 1848

Society as a whole is more and more splitting up into two great hostile camps, into two great classes directly facing each other — the bourgeoisie and proletariat ... The Communists ... openly declare that their ends can only be attained by the forcible overthrow of all existing social conditions. Let the ruling classes tremble at a Communist revolution. The proletariat have nothing to lose but their chains. They have the world to win. Working men of all countries unite!

## Imperialism

Imperialism was the theory behind the expansion of European empires, particularly during the eighteenth and nineteenth centuries. Instead of simply trading with foreign countries, an empire could be created by conquering those countries and taking control of their resources. Britain had been able to accelerate its industrial growth through the expansion of its empire, which gave it access to a range of raw materials. This served as a model for other European countries during the nineteenth century. In particular, Britain, France, Belgium, Germany and Italy expanded their empires into Africa during the latter half of the nineteenth century, so that by the beginning of the twentieth century, the African continent had been almost completely divided up between the European powers (see **SOURCE 3**).

**SOURCE 3** European imperial territories in Africa, 1914




***Source:*** Spatial Vision

## 3.9.2 Political ideas

Traditional European feudal society had been divided into strict social classes. At the top were royalty and the aristocracy, who owned most of the land, and who passed on their land and titles to their offspring. Then there was the middle class: the tradespeople, artisans and businesspeople. At the bottom were the lower class, the vast numbers of peasants who worked the land for the aristocracy. As Britain industrialised, large numbers of these peasants moved to the towns and became industrial workers. The higher up you were in the social classes, the more power and wealth you held. During the Enlightenment of the eighteenth century, this structure and power imbalance came to be challenged by a number of writers. From 1789 onwards in France, this social structure was completely overthrown by the French Revolution.

### Egalitarianism

Egalitarianism was the belief that all people are created equal and should all have equal rights. It was an idea proposed by a number of European writers and philosophers during the eighteenth-century Enlightenment and was completely at odds with the traditional division of the population into strict social classes with unequal rights and power. Americans such as Benjamin Franklin had visited Europe and been inspired by many of the ideas of the Enlightenment. Principles of egalitarianism were the foundation of the United States *Declaration of Independence* in 1776 (see **SOURCE 4**), even though equality was not granted to slaves of African descent at that time.

**SOURCE 4** United States *Declaration of Independence*, 1776

We hold these truths to be self-evident, that all men are created equal, that they are endowed by their Creator with certain unalienable Rights, that among these are Life, Liberty and the pursuit of Happiness. That to secure these rights, Governments are instituted among Men, deriving their just powers from the consent of the governed ...

Egalitarianism was also at the heart of the French Revolution. The delegates to the National Constituent Assembly adopted the *Declaration of the Rights of Man and of the Citizen* in August 1789 (see **SOURCE 5**). This document enshrined the ideals of egalitarianism for all citizens, including an equal right to elect representatives to make laws. Ideas of egalitarianism strongly influenced reformers like Robert Owen, the Chartists and many socialist writers such as Marx and Engels.

**SOURCE 5** National Constituent Assembly of France: *Declaration of the Rights of Man and of the Citizen*, 1789

*Article I* — Men are born and remain free and equal in rights. Social distinctions can be founded only on the common good.

*Article II* — The goal of any political association is the conservation of the natural and imprescriptible rights of man. These rights are liberty, property, safety and resistance against oppression.

*Article III* — The principle of any sovereignty resides essentially in the Nation. No body, no individual can exert authority which does not emanate expressly from it.

*Article IV* — Liberty consists of doing anything which does not harm others: thus, the exercise of the natural rights of each man has only those borders which assure other members of the society the enjoyment of these same rights. These borders can be determined only by the law.

*Article V* — The law has the right to forbid only actions harmful to society. Anything which is not forbidden by the law cannot be impeded, and no one can be constrained to do what it does not order.

*Article VI* — The law is the expression of the general will. All the citizens have the right of contributing personally or through their representatives to its formation. It must be the same for all, either that it protects, or that it punishes. All the citizens, being equal in its eyes, are equally admissible to all public dignities, places and employments, according to their capacity and without distinction other than that of their virtues and of their talents.

### Nationalism

Nationalism developed as a doctrine during the French Revolution. Prior to this time, loyalty by inhabitants of a country was directed towards the king or a similar monarch. Soldiers fought for the monarch rather than for the broader concept of the 'nation'. Article III of the *Declaration of the Rights of Man and of the Citizen* states that: 'The principle of any sovereignty resides essentially in the Nation. No body, no individual can exert authority which does not emanate expressly from it' (see **SOURCE 5**). This changed the focus of loyalty from the King to that of the 'Nation'. When France found itself at war against other European powers in 1793, it introduced a form of conscription called the *levée en masse*, in which all French citizens were to devote all their energies to the defence of the nation (see **SOURCE 6**). Nationalist ideas also spread from France in unintended ways. In lands conquered by French armies during the Revolutionary Wars, other groups discovered a sense of national identity as they resisted French rule. This was even more marked during the wars waged by the French Emperor Napoleon Bonaparte, who seized absolute power in 1804 and ruled France until his defeat in 1815.

**SOURCE 6** Declaration of the French National Convention, 23 August 1793

From this moment until such time as its enemies shall have been driven from the soil of the Republic, all Frenchmen are in permanent requisition for the services of the armies. The young men shall fight; the married men shall forge arms and transport provisions; the women shall make tents and clothes and shall serve in the hospitals; the children shall turn old lint into linen; the old men shall betake themselves to the public squares in order to arouse the courage of the warriors and preach hatred of kings and the unity of the Republic.

Following the defeat of Napoleon, the old European empires were restored. One of these was the Austro-Hungarian Empire, even though it contained peoples of many nationalities including the Czechs, Slovaks, Poles, Romanians, Croatians, Bosnians and Italians. Nationalism continued to cause unrest in many parts of Europe. Nationalists in the Ottoman and Austro-Hungarian empires wanted the right to form their own nations. Greece won autonomy from the Ottoman Empire in 1829. Belgium became independent from the Netherlands two years later. In 1848, nationalist revolutions broke out in many parts of Europe, although these were not successful and most failed within twelve months. Among Italians and Germans in their many states, there were those who wanted to create one Italy and one Germany. Italy achieved national unity in 1870 and Germany in 1871.

## 3.9.3 Scientific ideas

The scientific developments of the seventeenth and eighteenth centuries were seen by many as a challenge to the authority of the Christian religion in Europe. Many people still believed in the literal interpretation of the Bible, that God had created the Earth and all life in seven days, and that all human beings were descended from Adam and Eve. The discoveries and publications of Charles Darwin were to challenge these fundamental beliefs.

### Darwinism

Charles Darwin was a **naturalist** who, aboard the HMS *Beagle*, sailed around the world between 1831 and 1836. On his travels, he began to notice variations and similarities between different animals, plants and birds, and came to the conclusion that some species may have changed over time. In his journals he suggested that life may have evolved over time to adapt to changing environmental circumstances. Those organisms that adapted best were most likely to survive and continue to breed and produce offspring. This theory was described as the 'survival of the fittest', and it proposed that only the strongest/most adaptable would survive because the others would not be able to compete with them.

In 1859, Darwin published *On the Origin of Species*, in which he laid out his theory of evolution through natural selection. He proposed that genetic variations in all plants and animal species led some to be more

successful than others, and that this continuous process had produced the wide variety of different species we see around the world today. His 1871 book, *The Descent of Man, and Selection in Relation to Sex*, set out his view that humans were descended from an ape-like creature. Darwin's theories were very controversial at the time and became known as 'Darwinism'.

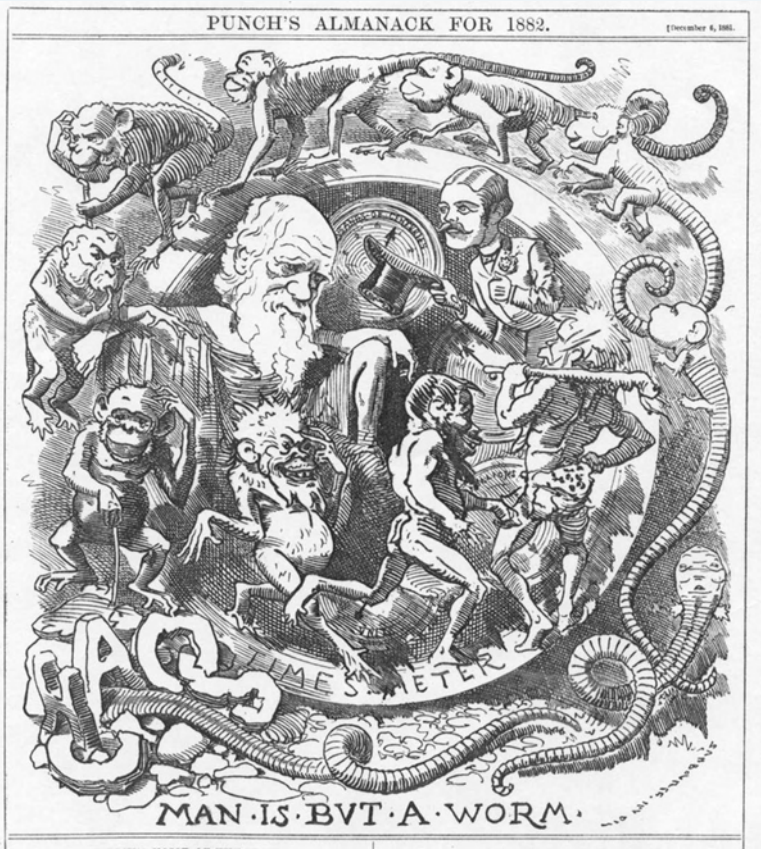
**SOURCE 7** Charles Darwin, *On the Origin of Species*, 1859

As many more individuals of each species are born than can possibly survive; and as, consequently, there is a frequently recurring struggle for existence, it follows that any being, if it vary however slightly in any manner profitable to itself, under the complex and sometimes varying conditions of life, will have a better chance of surviving, and thus be *naturally selected*. From the strong principle of inheritance, any selected variety will tend to propagate its new and modified form.

## Religious responses to Darwinism

Darwin's theories of evolution directly contradicted the Christian churches' teachings about the creation of the world and life within it. The reaction of religious groups to Darwin's theories varied considerably. Leaders of more conservative churches dismissed his theories completely and refused to accept anything other than the literal interpretation of the Biblical creation story. Liberal church leaders claimed the mechanism of evolution as the means by which God had created life and saw no inconsistency between Darwin's theory and their own beliefs. While the scientific community accepts the general principles of Darwin's approach, the theory of evolution remains controversial to this day. There are still some Christian groups that only accept the Biblical creation story.

**SOURCE 8** Many cartoonists made fun of Charles Darwin and his theories. This cartoon was published in *Punch* magazine in 1882.

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- Making a better world? > **Nationalism: The Congress of Vienna**
- Making a better world? > **Nationalism: Italy and Germany**
- Making a better world? > **Imperialism: the Boer War**

## 3.9 EXERCISES

**Historical skills key: HS1** Remembering and understanding **HS2** Sequencing chronology **HS3** Using historical sources as evidence **HS4** Identifying continuity and change **HS5** Analysing cause and effect **HS6** Determining historical significance

### 3.9 Exercise 1: Check your understanding

1. **HS1** In what way did Adam Smith believe that society as a whole would benefit from the efforts of entrepreneurs?
2. **HS1** In what ways were the beliefs of socialists completely opposed to those of capitalists?
3. **HS1** What did Karl Marx believe would ultimately happen in industrialised European countries?
4. **HS1** How did the British Empire provide a model for other European countries to follow as they became industrialised?
5. **HS1** How did imperialism impact on the African continent in the second half of the nineteenth century?
6. **HS1** What were the key principles of egalitarianism?
7. **HS1** Identify two examples of the application of the principles of egalitarianism.
8. **HS1** Explain how the concept of nationalism developed in France during the French Revolution.
9. **HS1** How were nationalist ideas spread to other European countries?
10. **HS1** Name four countries that were created as a result of nationalist sentiment in Europe during the nineteenth century.
11. **HS1** What experience did Charles Darwin have that led him to develop his ideas about the 'survival of the fittest'?
12. **HS1** Why was Darwin's *The Descent of Man, and Selection in Relation to Sex* so controversial?
13. **HS1** What was the reaction of the established churches to Darwin's theories?
14. **HS1** Why were some church leaders able to accept Darwin's theories?

### 3.9 Exercise 2: Apply your understanding

1. **HS3** Explain Adam Smith's concept of the 'invisible hand' as referred to in **SOURCE 1**, and give an example of how it might work.
2. **HS3** Describe what sort of action Marx and Engels were promoting in **SOURCE 2**.
3. **HS3** Examine **SOURCE 3**. Identify two areas in Africa that were not controlled by European powers.
4. **HS3** According to **SOURCE 3**, which European countries had the largest areas of Africa under their colonial control?
5. **HS3** Explain what is meant by the following sentence in **SOURCE 4**: 'Governments are instituted among Men, deriving their just powers from the consent of the governed ... '.
6. **HS3** Identify the wording in **SOURCE 5** that directly negates the idea of different social classes having different rights and privileges.
7. **HS3** Prior to 1789, the law in France consisted largely of decisions made exclusively by the king and his advisors. Describe how Article VI in **SOURCE 5** directly opposes this idea of royal lawmaking power.
8. **HS3** Examine **SOURCE 6**. In what ways was this declaration designed to appeal to the national loyalty sentiments of French citizens at the time?
9. **HS3** Explain what Darwin meant by the term 'naturally selected' in **SOURCE 7**.
10. **HS3** Identify what is being suggested by the cartoon in **SOURCE 8**.
11. **HS5** Identify some of the possible ways in which Adam Smith's ideas might have influenced the attitudes of many factory owners in Britain during the Industrial Revolution.
12. **HS5** Were the ideas of egalitarianism an underlying cause or an immediate trigger for the American and French revolutions? Give reasons for your answer.
13. **HS5** How did theories of nationalism affect Europe during the nineteenth century?
14. **HS4** Why would the principles of egalitarianism have led to a major change in any European country in which they were introduced?
15. **HS4** Explain why many religious groups might have trouble accepting the theories of Charles Darwin.
16. **HS6** Why is Charles Darwin regarded as one of the most important and significant scientists of the nineteenth century? Give reasons for your answer.

Try these questions in learnON for instant, corrective feedback. Go to www.jacplus.com.au.

# 3.10 Reformers and progress

## 3.10.1 Influential reformers

The early years of the Industrial Revolution were marked by appalling working and living conditions for factory and mine workers. Many prominent citizens became concerned about the conditions experienced by ordinary working people and actively sought to bring about change. Improvements began to be introduced during the nineteenth century, with laws passed to protect workers and improve living conditions often being the result of determined campaigning by these prominent individuals.

### Robert Owen

Robert Owen bought a share in the New Lanark cotton mills in Scotland in 1800 and managed them for the next 25 years. Owen disagreed with the widespread attitude among factory owners that workers had to be paid low wages and treated poorly to ensure the biggest profits. He stopped employing children under 10 in his factories, provided schooling for the younger children and limited the working hours for children over 10 so they could also attend school. He provided clean, comfortable housing as well as a pleasant working environment for his workers. His business was very successful and he travelled all around Britain promoting his ideas.

**SOURCE 1** At Robert Owen's New Lanark mill, education, including dancing classes, was provided to children.

### Lord Ashley (later the Earl of Shaftesbury)

As a member of Parliament, Lord Ashley promoted the passing of laws to improve the working conditions of ordinary working people. He was responsible for introducing some of the Factory Acts that restricted the use of child labour in textile mills. He supported the Mines Act of 1842 that outlawed the employment of women and young children in coalmines (see subtopic 3.4). Lord Ashley was also responsible for setting up the first free schools for poor children.

### Edwin Chadwick

Edwin Chadwick was a lawyer who initially became involved in both Poor Law reform and the issue of child labour in the early 1830s. As a member of the Poor Law Commission he was largely responsible for the provisions of the Poor Law Amendment Act of 1834. He also contributed to a government report that recommended reductions in working hours for children in factories. Many of his ideas were included in the Factory Act of 1833. In 1842 he published a report on the unsanitary living conditions of the working classes in the overcrowded towns and cities. He became a strong campaigner for clean water supplies and proper sewerage systems to improve levels of public health.

## 3.10.2 Factory reform

During the nineteenth century Parliament passed a number of Factory Acts, most of which were designed to restrict the employment of women and children in factories, and to limit the number of hours that could be worked in a day.

**SOURCE 2** Factory reform

*Factory Act 1819* — Limited the hours worked by children to a maximum of 12 per day
*Factory Act 1833* — Banned employment of children under 9 and limited 10–13-year-olds to a 48-hour week in the textiles industry. To enforce this rule, factory inspectors were introduced (although there were initially only four inspectors for all of England).
*Factory Act 1844* — Reduced the maximum working hours for women to 12 hours per day
*Ten Hour Act 1847* — Reduced maximum working hours for women and children to 10 hours per day
*Factory Act 1850* — Prohibited women and children from working in a factory before 6 am or after 6 pm
*Factory Act 1874* — Set a maximum of 56.5 hours of work per week for all workers

## 3.10.3 Public health reform

Edwin Chadwick's *Report on the Sanitary Conditions of the Labouring Population of Great Britain* in 1842 highlighted the need to improve the living conditions of the poor in major towns and cities. Progress took years to achieve. In some parts of Britain, improvements did not occur until well into the twentieth century.

### The Public Health Act of 1848

The Central Board of Health, of which Chadwick was a member, was set up, with the power to establish local boards in areas where the death rate from disease was particularly high. These local authorities had the power to manage street cleaning, collection of refuse, supply of clean water and installation of sewerage systems. This system led to improvements in some towns but was not very effective across the whole country.

**SOURCE 3** The construction of sewers in London removed cesspits from the streets and improved sanitation.

### London sets the standard

As the largest city in Britain, London experienced particularly bad sanitation problems. In 1847 the Commission of Sewers was set up to remove all the cesspits and replace them with underground sewerage. By 1865 a sewerage system had been established for all of London.

## The Public Health Acts of 1872 and 1875

These laws divided the whole country into sanitary districts, setting up local health boards to control water supply and sewerage systems. Further laws passed at this time gave local councils the power to purchase whole slum districts, demolish them and replace them with improved housing, including parks and gardens.

### DID YOU KNOW?

People living in crowded houses would frequently empty their toilet pot out the window, often from one or two storeys above the street. To warn anybody walking below, they would call out the French, *Gardez l'eau!* ('Beware of the water!'). This came to be expressed as 'Gardey loo!' and is said to be the origin of the word loo as an alternative term for toilet.

### 3.10 ACTIVITY

Compare the provisions of the various Factory Acts with today's employment standards. Give two examples of these Acts not going far enough to protect workers. **Identifying continuity and change**

### 3.10 EXERCISES

**Historical skills key: HS1** Remembering and understanding **HS2** Sequencing chronology **HS3** Using historical sources as evidence **HS4** Identifying continuity and change **HS5** Analysing cause and effect **HS6** Determining historical significance

#### 3.10 Exercise 1: Check your understanding

1. **HS1** Outline two of the achievements of Robert Owen in improving the lives of factory workers and their children.
2. **HS1** How did Owen demonstrate that it was not necessary for factory owners to exploit their workers?
3. **HS1** How did Lord Ashley use his position as a member of Parliament to deal with issues of child labour?
4. **HS1** Describe the contribution made by Edwin Chadwick to the improvements in sanitation in England.
5. **HS5** How did the Factory Acts of 1819 and 1833 and the Ten Hour Act of 1847 affect the working hours of children?
6. **HS1** Which of the Factory Acts limited the number of hours that could be worked in a week?
7. **HS1** What was the role of the Central Board of Health, created by the Public Health Act of 1848?
8. **HS1** In what way did London set the standard for the rest of the country in dealing with sanitation issues?
9. **HS4** Explain the improvements that occurred as a result of the Public Health Acts of 1872 and 1875.

#### 3.10 Exercise 2: Apply your understanding

1. **HS3** From **SOURCE 1**, suggest some of the classes other than dancing that might have been taught at Robert Owen's New Lanark school.
2. **HS3** Do you think the artist who produced **SOURCE 1** was a supporter or opponent of Owen's ideas? Give reasons for your answer.
3. **HS3 SOURCE 2** indicates that initially only four factory inspectors were appointed to enforce the Factory Act of 1833. Explain how well you think this Act would have been enforced. Give reasons for your answer.
4. **HS3** Examine **SOURCE 3** and explain why the provision of an underground sewerage system can be regarded as a major achievement.
5. **HS3** What methods can you identify in **SOURCE 3** that were used to build the sewers?
6. **HS2** Draw up a timeline to demonstrate the improvements in urban living standards that occurred in Britain after 1842.
7. **HS5** What effect would you expect the improvements in sanitation to have had on population growth in Britain? Explain why you would come to this conclusion.

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# 3.11 SkillBuilder: Analysing different perspectives

online only

## Identifying and analysing different perspectives of people in the Industrial Revolution

When examining any historical issue or event, we should try to build up an accurate picture of what actually happened in the past. If we are relying on a primary source in the form of an eyewitness report of an event, we need to be aware of possible bias or prejudice on the part of that eyewitness.

### Select your learnON format to access:

- an explanation of the skill (Tell me)
- a step-by-step process to develop the skill, with an example (Show me)
- an activity to allow you to practise the skill (Let me do it)
- questions to consolidate your understanding of the skill.

# 3.12 Thinking Big research project: City life visual diary

online only

### SCENARIO

As a 14-year-old living in one of the large industrial towns in Britain during the Industrial Revolution, you want to leave a record for future generations to understand what life was like for working-class people at this time. You will create an annotated visual diary of your daily life to describe the living and working conditions that you and your family experience.

### Select your learnON format to access:

- the full project scenario
- details of the project task
- resources to guide your project work
- an assessment rubric.

**on Resources**

**ProjectsPLUS** Thinking Big research project: City life visual diary (pro-0182)

# 3.13 Review

online only

## 3.13.1 Key knowledge summary

Use this dot point summary to review the content covered in this topic.

## 3.13.2 Reflection

Reflect on your learning using the activities and resources provided.

### on Resources

**eWorkbook** Reflection (doc-31699)
Crossword (doc-31700)

**Interactivity** The Industrial Revolution: The impact on people crossword (int-7637)

## KEY TERMS

**biased account** narrative or description in which a writer presents only one side of an issue in an attempt to convince the reader
**bourgeoisie** capitalist middle classes; the owners of the means of production, distribution and exchange — factories, shipping, banks and other businesses
**cesspits** pits into which householders with no toilets could empty their waste, which was later collected by workers known as nightmen
**cholera** a bacterial disease of the intestines, causing vomiting and diarrhoea. It is transmitted through contaminated water and can lead to death through dehydration.
**impartial observations** comments that recognise all sides and opinions relating to an issue or event, leaving it to the reader to form his or her own judgment
**indoor relief** the provision of assistance to the inmates of a workhouse
**Luddites** a group of protesters who expressed their opposition to industrialisation by smashing factory machines
**naturalist** a term once used to describe a scientist who studies plants and animals. Today such a person would be called a biologist.
**outdoor relief** the provision of assistance to the poor while allowing them to remain in their own homes
**parish** an area of local government centred on the local church, which fulfilled some of the functions that local municipal councils perform in society today
**pauper** a very poor person
**picking oakum** unpicking short lengths of rope coated in tar. Oakum would be rammed between the planks on wooden ships to make them watertight.
**proletariat** the working class, especially industrial wage earners
**repeal** withdrawal of a law or set of laws by Parliament
**royal commission** a special public inquiry set up by government to investigate a particular issue and to make recommendations for changes in the law
**strike** attempt by employees to put pressure on their employer by refusing to work
**suffrage** the right to vote
**typhus** a fatal disease spread through the bites of lice and fleas
**workhouse** an institution built to house the poor

# 3.11 SkillBuilder: Analysing different perspectives

## 3.11.1 Tell me

### What is historical perspective?

A historical perspective is a point of view from which historical events, problems and issues can be analysed. For example, the perspective of a factory owner in the early nineteenth century would be quite different from that of a child working in a factory or coalmine. Also, the way we view events today may be quite different from the way people viewed them in the past. Our expectation today is that all children attend school from the age of five or six until their mid or late teens. Two hundred years ago in Britain and most other European countries only the children of the wealthy were educated. Most children were expected to work to help the family as soon as they were physically able. Our perspective on child labour is completely different from the perspective of those living in the late eighteenth or early nineteenth centuries.

### Why is it important to recognise a historical perspective?

When examining any historical issue or event, we should be trying to build up an accurate picture of what actually happened in the past. If we are relying on a primary source in the form of an eyewitness report of an event, we need to be aware of possible bias or prejudice on the part of that eyewitness. If we know the particular perspective or point of view of that eyewitness, we can take any such prejudices into account when assessing the accuracy of their account. Gathering eyewitness reports from a number of people, all with different perspectives of the events in question, will help us form the most accurate picture. In order to do this we need to know the perspective of each eyewitness.

## 3.11.2 Show me

### How to identify or recognise historical perspective

The more we know about the person providing the evidence, the better able we are to identify that person's perspective. We know a good deal about factory reformer Robert Owen from his writings and his actions. If we read a report by Owen in which he praised the management of a particular textile factory, we would expect that the factory was being run in a manner similar to that of Owen's own New Lanark mills. We know enough about Owen to be able to recognise his perspective. If we were to read the opinions of another factory owner, we would want to find out as much as possible about that person to determine their perspective. This would allow us to assess their opinions and identify any bias or prejudice.

#### Examples of historical perspective

**Example 1:** William Bell Scott was a nineteenth-century painter, and one of the first to produce paintings celebrating the achievements of the Industrial Revolution. His most famous work, *In the nineteenth century the Northumbrians show the world what can be done with iron and coal* (see **SOURCE 1**), was painted in 1861, and contains a broad range of activities associated with the industrial changes that had occurred in Britain during the previous hundred years. It was one of a series of paintings produced for a wealthy family in Northumberland. Bell Scott had visited Robert Stephenson's engineering workshop in Newcastle in the county of Northumberland.

When we analyse the painting, a number of features stand out. In the centre are three working men, with large hammers raised ready to hit an object, possibly the wheel of a locomotive. A fourth man is in the background, also busy at work. These men are all powerfully built and probably represent the ideal of the British worker – powerful and determined. They do not look undernourished or ill, or the victims of exploitation. In the bottom right-hand corner of the painting, a newspaper is draped over a mechanical drawing of a locomotive of the type built by Robert and George Stephenson. In the background, a similar locomotive crosses an iron bridge. This bridge is the same as the high-level iron bridge designed by Robert Stephenson, which crossed the Tyne River in Newcastle.

In the foreground of the painting are a number of products of the Industrial Revolution – the iron anchor, a marine pump, the artillery barrel the little girl is sitting on, and a small pile of artillery shells next to it.

**SOURCE 1** Bell Scott's painting celebrating the achievements of the Industrial Revolution

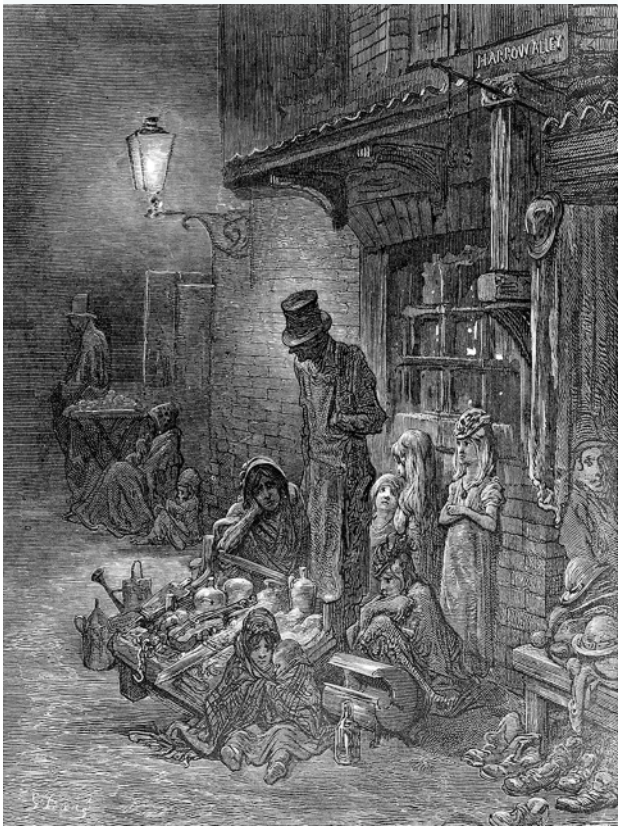
All of these illustrate Britain's military and naval power. The little girl herself looks healthy and well fed, and may be the daughter of one of the workmen. She holds a package that could be her father's lunch, as well as a school book, signifying that she is attending school and being educated. Education for working-class children was considered an ideal in Victorian England, and this painting suggests that ideal was being achieved.

Behind the little girl a young boy stands, looking out over the dockside activities. In his right hand he holds a lamp of the type used in coal mines. This suggests that he works in the mines, and yet he also looks healthy and well dressed. On the river below we see both steamships and sailing ships, as well as a barge carrying coal. Coal was a very important part of Northumbrian life, as the area was a major source of coal. On the dockside, two businessmen are talking in the lower left-hand corner, a young woman carries a pail on her head, and other people seem actively occupied. Across the top of the painting we see poles carrying telegraph wires, signifying improvements in communication that came with industrialisation. When we take in the painting as a whole, we see a very positive depiction of the effects of the Industrial Revolution.

**Example 2:** William Blanchard Jerrold was a writer and journalist. In 1869 he collaborated with French artist Gustave Doré to produce a book called *London: A pilgrimage*. Published in 1872, this book featured descriptions and drawings of many of the poorest parts of London and its most impoverished inhabitants. It included 180 engravings by Doré showing slum areas, extreme poverty and the depressed state of much of the population. Jerrold and Doré were accused by many of showing only the worst aspects of London, but they clearly wanted to make their readers more aware of the conditions suffered by the poor. Examine **SOURCE 2**.

This illustration from Jerrold and Doré's book shows a poor family trying to sell a few trinkets on the street. All the family look thin and poorly clothed. The street looks dark and dirty. The fact that the whole family is present suggests they may be homeless. The whole scene is designed to show just how distressing poverty could be on the streets of London. When we understand Doré's perspective we realise that he may have deliberately exaggerated the scene to get his message across to the reader.

**SOURCE 2** This engraving by Gustave Doré of a scene in the London street of Houndsditch appeared in *London: A pilgrimage* in 1872.




## 3.11.3 Let me do it

Complete the following activities to practise this skill.

### 3.11 ACTIVITIES

1. Examine **SOURCES 3–5**. For each quote:
   (a) Find out as much as you can from the school library or the internet about the author and write a brief statement about that person's perspective in relation to child labour in mines and factories. Consider the following questions in your research:
      i. Who are they?
      ii. When are they writing?
      iii. Why are they writing about it?
      iv. What are they trying to achieve or what point are they trying to make?
   (b) Explain how the quote demonstrates that perspective.

**SOURCE 3** From Michael Sadler, in a speech in the House of Commons, 16 March 1832

> The parents rouse them in the morning and receive them tired and exhausted after the day has closed; they see them droop and sicken, and, in many cases, become cripples and die, before they reach their prime; and they do all this, because they must otherwise starve. It is a mockery to contend that these parents have a choice. They choose the lesser evil, and reluctantly resign their offspring to the captivity and pollution of the mill.

**SOURCE 4** Henry 'Orator' Hunt, in a speech in the House of Commons, 16 March 1832

The question is, whether the children of the manufacturing poor should work for more hours than human nature can sustain. If the honourable members were to see hundreds of the poor, unfortunate wretches employed in the cotton-mills in Lancashire, they would feel the absolute necessity of adopting an active interference. I say, let the manufacturer keep double the number of workmen, but do not let him destroy the health of the rising generation.

**SOURCE 5** Henry Thomas Hope, in a speech in the House of Commons, 16 March 1832

The right honourable member [Michael Sadler] seems to consider that it is desirable for adults to replace children. I cannot concur with that opinion, because I think that the labour of children is a great resource to their parents and of great benefit to themselves. I therefore, on these grounds, oppose this measure ... I believe that the bill will be productive of great inconvenience, not only to persons who have embarked large capital in the cotton manufactures, but even to workmen and children themselves ...

2. Based on what you have learned in this SkillBuilder, apply your skill in analysing different perspectives to answer the following questions.
   (a) Which extract do you find most convincing? Why?
   (b) For each extract, identify the values or beliefs the author is revealing.
   (c) For each extract, identify what benefit the author stands to gain if his point of view is persuasive.
3. Reflect on your development of this skill by answering the following questions.
   (a) Do you understand what a historical perspective is? Define the term in your own words.
   (b) How would you rate your ability to analyse different perspectives and recognise bias in historical texts? Score yourself out of 5, with 1 being weak and 5 being strong.
   (c) How can you improve your ability to use sources to analyse different perspectives and recognise bias in historical texts? **[Personal and Social Capability]**

# 3.12 Thinking Big research project: City life visual diary

## Scenario

As a 14-year-old living in one of the large industrial towns in Britain during the Industrial Revolution, you want to leave a record for future generations to understand what life was like for working-class people at this time. To do this, you have decided to create an annotated visual diary of your daily life to describe the living and working conditions that you and your family experience.

## Task

Create an annotated visual diary of your daily life.

- The diary should be presented in the form of a booklet, as a poster on A2-sized cardboard (or similar), or as a PowerPoint presentation.
- It should consist of a series of images that represent different aspects of life in Britain in the industrial towns of the time.
- To create the images, you may use your own artistic abilities, or you can download images from online sources.
- Each image should contain a paragraph in your own words explaining what is happening, and how it relates to life as a 14-year-old during the Industrial Revolution.
- If you choose to present your work in the form of a booklet, each page should include one image and explanation, and the booklet should have a cover page with an appropriate title.

## Process

- Open the ProjectsPLUS application in the Resources for this topic. Click on the **Start new project** button to enter the project due date and set up your project group if you wish to. You can work independently or with a partner, which will allow you to swap ideas and share responsibility for the project. Save your settings and the project will be launched.
- Navigate to the **Research forum**, where you will find starter topics loaded to guide your research. You can add further topics to the Research forum if you wish. In the **Media centre** you will find an assessment rubric and some helpful weblinks that will provide a starting point for your research.
- Conduct your research and locate or create appropriate images.
- Remember to record details of your sources so you can create a bibliography to submit with your completed diary. Add your research notes and source details to the relevant topic pages in the Research forum. When you have completed your research, you can print out the **Research report** in the Research forum to easily view all the information you have gathered, if you wish.
- Write the 'diary entry' text to accompany each image.
- Check your diary thoroughly, ensuring that you have used correct spelling and grammar.
- Submit your completed visual diary and bibliography to your teacher for assessment.

### on Resources

**ProjectsPLUS** Thinking Big research project: City life visual diary (pro-0182)

# 3.13 Review

## 3.13.1 Key knowledge summary

### 3.2 Examining the evidence

- Contemporary writers and commentators can give us an insight into the changes that took place in Britain during the Industrial Revolution.
- During the eighteenth and nineteenth centuries, the British government began collecting statistics about population, recording information about where people lived and the changes that occurred in society during this time.
- The evidence given at special government inquiries can provide evidence of people's living conditions.
- Painters and other artists are useful sources of information in relation to changes during the Industrial Revolution.

### 3.3 The impact of enclosure

- Agricultural improvements led to a large increase in the population from the latter part of the eighteenth century onwards.
- The enclosure of farmland was of benefit to landowners, but ordinary farm workers suffered as a result.
- The Speenhamland system was established to provide aid to the poor in rural towns and villages.
- Food riots in 1795 and the Swing Riots of 1830 are examples of unrest in rural areas.

### 3.4 Conditions in factories and mines

- Working conditions in textile factories were very unpleasant and often dangerous, with factory workers, including women and children, forced to work long hours.
- Men, women and children all worked in coalmines, in dangerous and unhealthy conditions.
- The Mines Commission of 1840–42 heard evidence on the working conditions in mines.
- The Mines Act of 1842 placed restrictions on the employment of women and children in coalmines.

### 3.5 Child labour

- Young children were employed in textile factories in the dangerous jobs of 'piecers' and 'scavengers'.
- Young girls were employed in mines as 'hurriers', pulling carts of coal along narrow tunnels.
- Children as young as four or five were employed in mines as 'trappers', opening and shutting ventilation doors.
- Young boys were also employed to climb into chimneys and clean them.

### 3.6 Urban conditions and people's health

- Near textile factories, towns grew into large cities, with overcrowding, a lack of sanitation and very little planning.
- Buildings were often erected cheaply, so accommodation for factory workers was of very poor quality.

### 3.7 Poor laws and workhouses

- Following a government inquiry, the Poor Law of 1834 forced the poor into workhouses.
- Life in the workhouses was made as unpleasant as possible, with families split up, and cruel punishment for those breaking the rules.
- Inmates of the workhouses were put to work at menial tasks.

### 3.8 Social unrest and trade unions

- Rapid changes led to unrest and protests such as those of the Luddites.
- Trade unions had been banned, but were allowed to operate after 1824.
- The Chartist movement developed during the 1830s, calling for democratic reforms in the election of parliament.
- As the nineteenth century progressed, trade unions gradually became established as legitimate organisations.

### 3.9 The growth in ideas

- Economic theories such as capitalism and socialism presented different ideas as to how businesses, workers and the economy should operate.
- The development of imperialism saw the expansion of European empires into Asia and Africa.
- The political idea of egalitarianism grew from the eighteenth-century European Enlightenment, and inspired both the American and French revolutions, as well as the aims of groups such as the Chartists.
- Nationalism first developed in France as a response to the wars against other European powers, and became a driving force behind the unification of Italy and Germany in the nineteenth century.
- Charles Darwin proposed a scientific theory of evolution, which became known by many as 'Darwinism'.

### 3.10 Reformers and progress

- Prominent reformers such as Robert Owen and Lord Ashley campaigned for improved working conditions in mines and factories.
- Reformers such as Edwin Chadwick campaigned for improved sanitation in large cities.
- During the nineteenth century, parliament passed a number of Factory Acts, gradually improving conditions for ordinary workers.
- Large cities such as London were given the power to improve urban living conditions, and gradually worked to deal with public health issues, such as the need for sewerage systems.

A timeline of changes during the Industrial Revolution

CE

1790

**1795**
Food riots in parts of England protest high bread prices.

1800

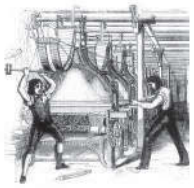
**1799–1800**
Parliament passes the Combination Acts, making trade unions illegal.

1810

**1811–13**
Luddites engage in damaging textile machines.

**1819**
Parliament passes a Factory Act limiting hours of factory work by children. Large numbers of protesters are killed or injured in the Peterloo Massacre.

1820



**1824**
The Combination Acts are repealed, allowing workers to form trade unions.

1830

**1830**
The 'Swing Riots' result in damage to farm machinery in parts of rural England.

**1833**
Parliament passes a Factory Act banning children nine years and younger from working in factories.

**1834**
The Poor Law Amendment Act forces the poor to live in workhouses.
The six 'Tolpuddle Martyrs' are transported to Van Diemen's Land for swearing an oath of loyalty to their trade union.

1840

**1842**
The Mines Act bans the employment in coalmines of girls and women, and boys under the age of 10.

**1848**
The Public Health Act sets up Boards of Health to deal with sanitation problems in cities and towns.

1850

1860

**1871**
The Trade Union Act gives unions official legal status.

1870

**1874**
Parliament passes a Factory Act, setting maximum allowable working hours per week for all workers.

**1875**
The Public Health Act extends the powers of Health Boards to control water supply and sewerage systems.

1880

CE

## 3.13.2 Reflection

Complete the following to reflect on your learning.

### 3.13 ACTIVITIES

Revisit the inquiry question posed in the Overview:

**The Industrial Revolution was a period of rapid technological progress and social transformation; did the changes that occurred benefit everyone?**

1. Now that you have completed this topic, what is your view on the question? Discuss with a partner. Has your learning in this topic changed your view? If so, how?
2. Write a paragraph in response to the inquiry question, outlining your views.

### on Resources

**eWorkbook** Reflection (doc-31699)
Crossword (doc-31700)

**Interactivity** The Industrial Revolution: The impact on people crossword (int-7637)

### KEY TERMS

**biased account** narrative or description in which a writer presents only one side of an issue in an attempt to convince the reader
**bourgeoisie** capitalist middle classes; the owners of the means of production, distribution and exchange — factories, shipping, banks and other businesses
**cesspits** pits into which householders with no toilets could empty their waste, which was later collected by workers known as nightmen
**cholera** a bacterial disease of the intestines, causing vomiting and diarrhoea. It is transmitted through contaminated water and can lead to death through dehydration.
**impartial observations** comments that recognise all sides and opinions relating to an issue or event, leaving it to the reader to form his or her own judgment
**indoor relief** the provision of assistance to the inmates of a workhouse
**Luddites** a group of protesters who expressed their opposition to industrialisation by smashing factory machines
**naturalist** a term once used to describe a scientist who studies plants and animals. Today such a person would be called a biologist.
**outdoor relief** the provision of assistance to the poor while allowing them to remain in their own homes
**parish** an area of local government centred on the local church, which fulfilled some of the functions that local municipal councils perform in society today
**pauper** a very poor person
**picking oakum** unpicking short lengths of rope coated in tar. Oakum would be rammed between the planks on wooden ships to make them watertight.
**proletariat** the working class, especially industrial wage earners
**repeal** withdrawal of a law or set of laws by Parliament
**royal commission** a special public inquiry set up by government to investigate a particular issue and to make recommendations for changes in the law
**strike** attempt by employees to put pressure on their employer by refusing to work
**suffrage** the right to vote
**typhus** a fatal disease spread through the bites of lice and fleas
**workhouse** an institution built to house the poor

# 4 Movement of peoples (1750–1914)

## 4.1 Overview

From slaves, to convicts, to migrants, in what ways did people move around the world in the past?

### 4.1.1 Links with our times

These days it is not unusual for families or groups of people to migrate from one part of the world to another. It is emotionally and physically exhausting to start a new life in a different part of the world, and the situation in the eighteenth and nineteenth centuries was not so very different. Political upheavals in Europe and the social and economic dislocation brought about by the Industrial Revolution changed how people lived and worked. Rapid urbanisation forced many people away from one region and towards another — sometimes voluntarily, sometimes against their will, as slaves or convicts.

Today slavery is outlawed, but it still occurs in some countries. Slavery has existed in many cultures for thousands of years, but it was during the eighteenth and nineteenth centuries that it played a tragic role in the development of the modern world. In Australia, convict transportation and emigration led to many leaving their homeland to make a new life; most never saw their homeland again.

**on Resources**

**eWorkbook** Customisable worksheets for this topic

**Video eLesson** The movement of peoples (eles-2394)

**LEARNING SEQUENCE**


**4.1** Overview
**4.2** Examining the evidence
**4.3** Overview of slavery
**4.4** Slavery and the cotton trade
**4.5** The end of slavery?
**4.6** Crime and punishment
**4.7** Transportation to Australia
**4.8** Convict life
**4.9** Emigration to Australia
**4.10** Migration to the goldfields
**4.11** **SkillBuilder:** Analysing cause and effect online only
**4.12** **Thinking Big research project:** A migrant's letter home online only
**4.13** **Review** online only


To access a pre-test and starter questions and receive immediate, **corrective feedback** and **sample responses** to every question, select your learnON format at www.jacplus.com.au.

A timeline of key events relating to movement of peoples, 1750–1914

CE

1740

**1742**
The first blast furnaces are used in England.

1760

**1769**
James Watt invents the steam engine.

**1770**
Captain Cook first sights the east coast of Australia.

1780

**1788**
The First Fleet arrives in Botany Bay.

**1789**
The French Revolution begins.

**1793**
Eli Whitney invents the cotton gin.

1800

**1807** The British Parliament passes a Bill abolishing the trading of slaves in their territories.

1820

1840

**1847**
Freed American slaves found the Republic of Liberia in West Africa.

**1845–57**
A potato blight in Ireland creates widespread famine.

**1851**
The Victorian gold rush begins.

1860

**1861**
The American Civil War begins.

**1863**
Abraham Lincoln issues the Emancipation Proclamation.

**1865**
The American Civil War ends.

1880

1900

**1901**
Australia celebrates Federation.

**1914**
World War I begins.

1920

CE

# 4.2 Examining the evidence

## 4.2.1 How do we know about the movement of peoples?

A wide range of historical sources reveal a great deal of useful information about the years between 1750 and 1914. The Industrial Revolution changed the way many people lived and worked. Governments and employers kept records of the people who worked for them. Artists and writers recorded their own impressions of the period.

### Historical sources

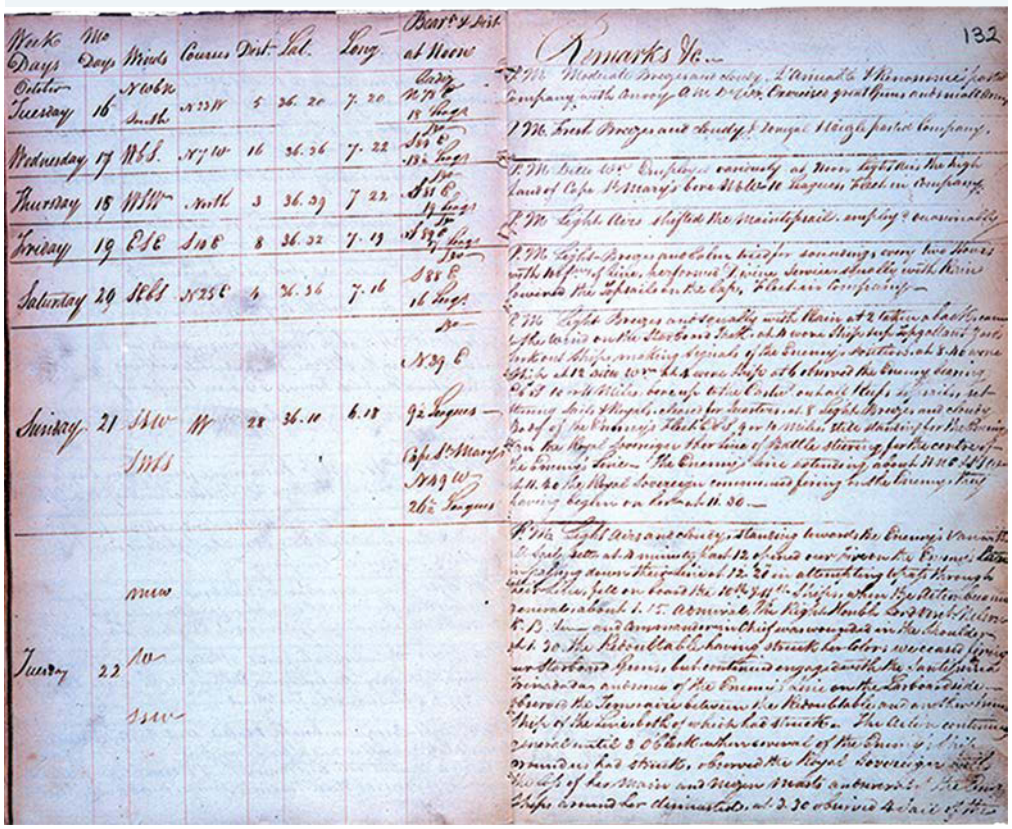
Historians have learned much about the period between 1750 and 1914 by studying a wide range of historical sources. These include written sources such as personal diaries and memoirs, official government reports and other publications. They also include visual sources such as photographs (from the 1830s onwards) and illustrations.

Information about any historical period comes from two main types of sources — primary sources and secondary sources. As you already know, a primary source is a first-hand source produced by someone who witnessed the event being studied. Secondary sources, usually produced at a later time, interpret primary sources.

It is important to bear in mind that a primary source is not necessarily more valuable than a secondary source. Both have value and limitations for historians and history students. Every source may be useful in some ways but less useful in others.

**SOURCE 1** shows a page from a ship's logbook. The logbook provides useful information on the technical aspects of the voyage, such as wind speed and course (the direction in which the ship is travelling). However, there is information that it does not provide. For example, we don't know what the ship is carrying and we cannot discover what the passengers and crew were thinking.

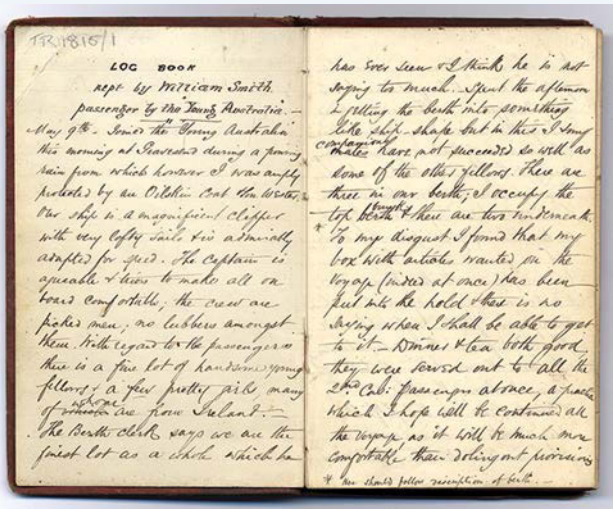
**SOURCE 1** A page from a ship's log. It indicates the ship's course and the wind strength and direction, and allows room for comments by the captain.



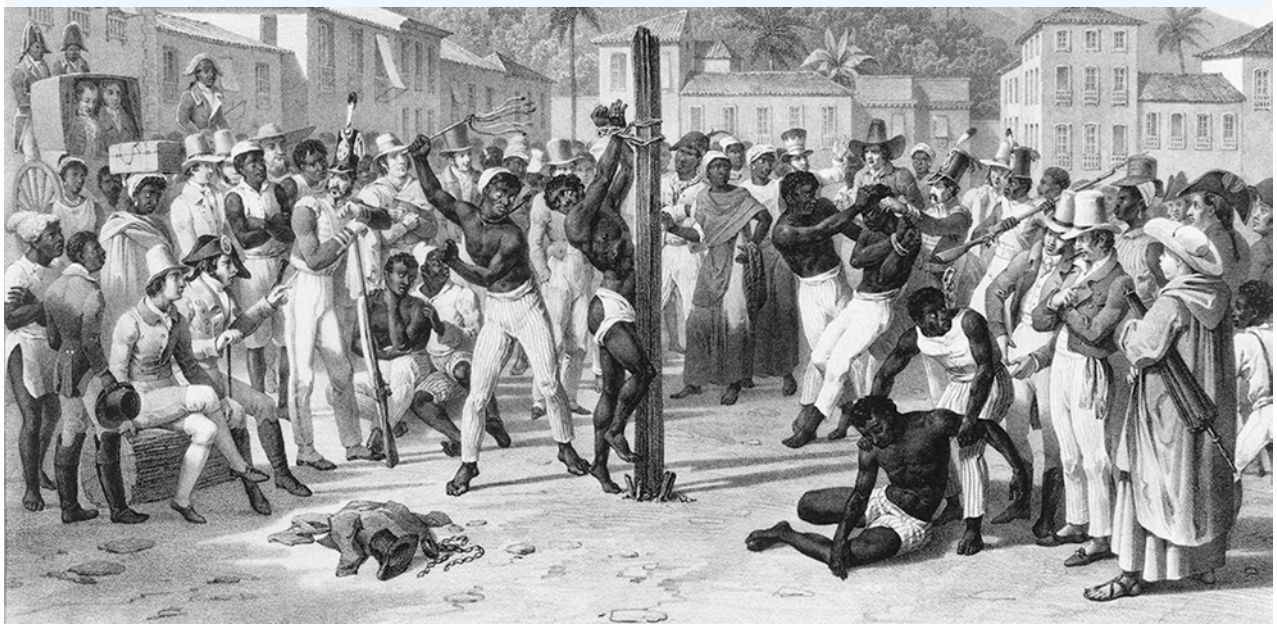
**SOURCE 2** offers very different information from **SOURCE 1**. It gives an insight into a migrant's life and reveals one individual's personal feelings, rather than technical information.

**SOURCE 3** provides another interesting perspective. It is an illustration that shows a slave being punished. Although this sort of punishment was certainly common, it is difficult to know whether the scene portrayed recorded an actual event or depicted an event imagined by the artist. Because of this it has both value and limitations as a historical source.

**SOURCE 2** This page from a migrant's diary is a very different type of source from **SOURCE 1**.


LOG BOOK
kept by William Smith
passenger by the Young Australia.—
May 9th. Joined the Young Australia this morning at Gravesend during a pouring rain from which however I was amply protected by an Oilskin Coat from Wester. Our ship is a magnificent clipper with very lofty sails & is admirably adapted for speed. The Captain is agreeable & tries to make all on board comfortable; the crew are picked men; no lubbers amongst them. With regard to the passengers there is a fine lot of handsome young fellows & a few pretty girls, many of whom are from Ireland.—
The Berth clerk says we are the finest lot as a whole which he has ever seen & I think he is not saying too much. Spent the afternoon in getting the berth into something like ship-shape but in this I sorry compagnion have not succeeded so well as some of the other fellows. There are three in our berth; I occupy the top berth & there are two underneath.
To my disgust I found that my box with articles wanted on the voyage (indeed at once) has been put into the hold & there is no saying when I shall be able to get to it.— Dinner & tea both good, they were served out to all the 2nd Cab: passengers at once, a practice which I hope will be continued all the voyage as it will be much more comfortable than doling out provisions
* we should follow description of berth.—

**SOURCE 3** This nineteenth-century illustration shows a slave being flogged. We don't know if this specific event actually happened or whether it represents a typical slave punishment.



## 4.2 EXERCISES

**Historical skills key: HS1** Remembering and understanding **HS2** Sequencing chronology **HS3** Using historical sources as evidence **HS4** Identifying continuity and change **HS5** Analysing cause and effect **HS6** Determining historical significance

### 4.2 Exercise 1: Check your understanding

1. **HS1** How did the Industrial Revolution contribute to the way historians are able to study the past?
2. **HS1** Give two examples of (a) primary sources and (b) secondary sources. Explain what makes each source primary or secondary.
3. **HS1** Why are primary sources not necessarily more valuable to historians than secondary sources?
4. **HS1** What can **SOURCE 2** tell us that **SOURCE 1** cannot? Does this make it a more valuable source overall? Why or why not?
5. **HS1** What challenges does **SOURCE 3** raise for historians studying this time period?

### 4.2 Exercise 2: Apply your understanding

1. **HS3** Identify whether each of the following would be a primary or a secondary source for the period studied in this subtopic.
   (a) A diary of a migrant coming to Australia
   (b) A photograph of slaves at work on an American cotton plantation
   (c) An 1863 newspaper report about a shipwreck
   (d) A cartoon from a newspaper portraying life on board a migrant ship
   (e) A poster advertising an upcoming slave auction
2. **HS3** In what way is the illustration in **SOURCE 3** useful to a historian? What limitations does this image have as a source? Explain what this tells us about the importance of also studying other types of sources.
3. **HS6** Explain how the significance of a historical source can change depending on what information a historian is trying to find.
4. **HS6** How significant would **SOURCE 1** be to a historian who is researching personal stories of migrants? Is there another source that you think would be more useful? Explain.
5. **HS6** Explain why government reports can be a significant historical source.

Try these questions in learnON for instant, corrective feedback. Go to www.jacplus.com.au.

# 4.3 Overview of slavery

## 4.3.1 The origins of the slave trade

Slavery has existed for thousands of years. Many different civilisations around the world have used, and sometimes even still use, slavery in one form or another. But it was only after the arrival of Europeans in the Americas in the late fifteenth century that the slave trade became an **intercontinental** industry. Over the next four hundred years, millions of slaves were transported from Africa to support the industry and economies of America and much of Europe. Slavery helped build the wealth of America and England, but the slaves themselves saw none of that wealth.

When Christopher Columbus reached the Caribbean island of Hispaniola in 1492 he immediately saw the prospective wealth that the New World could bring to Europe. After leaving Spain he had sailed along the coast of Africa and he already had Africans working on his ship. As Spanish settlers began to follow Columbus to make their wealth in the Americas, they realised they needed large numbers of workers. In the early years of the New World, when the Spanish were the most numerous Europeans there, many among the local populations of Native Americans were killed or reduced to slavery.

The slaves were used for labour in South America and to help build the empire of **New Spain** as it expanded northwards. Most were put to work in the goldmines. Facing 18-hour days, six days a week, in terrible conditions, thousands were worked to death or died of starvation or beatings. Thousands more died from introduced diseases, brought by the Europeans, against which the native population had little resistance or immunity. Replacements were needed so African slaves, who had already had contact with Europeans and had built some resistance to European diseases, were transported to New Spain.

When the English began to establish plantations in the Caribbean islands and the American mainland to grow sugar, cotton and tobacco, they too imported slaves from Africa. They saw the native population as unsuitable for labour and besides, as in New Spain, they were quickly being used up through disease and overwork. African slaves soon became a vital part of the economy of the Americas.

**SOURCE 1** shows the importance placed on slavery by one English plantation owner. Some European labourers and convicts were put to work, but in general European servants were hard to find. Most had come to America to work for themselves, not for someone else. Soon African slaves became household servants as well as manual labourers.

**SOURCE 1** Emanuel Downing, a plantation owner from Massachusetts, 1645

I do not see how we can thrive until we get a stock of slaves sufficient to do all our business.

## 4.3.2 Kidnapped and traded

Early European slave traders raided the African coast and kidnapped any able-bodied Africans they could capture. Sometimes they tempted their victims close to the ships with displays of brightly coloured cloth or decorated beads. Later they developed trading arrangements with African tribal chiefs who raided weaker tribes in the interior and brought the slaves they captured to the coastal depots set up by European slavers. Here slaves would be held until there were enough to fill a slave ship. Once sold, slaves were branded with a red-hot iron to indicate who had bought them. Europeans established coastal forts to protect the valuable trade.

**SOURCE 2** Gathering of slaves in Africa, before transportation, created in 1845

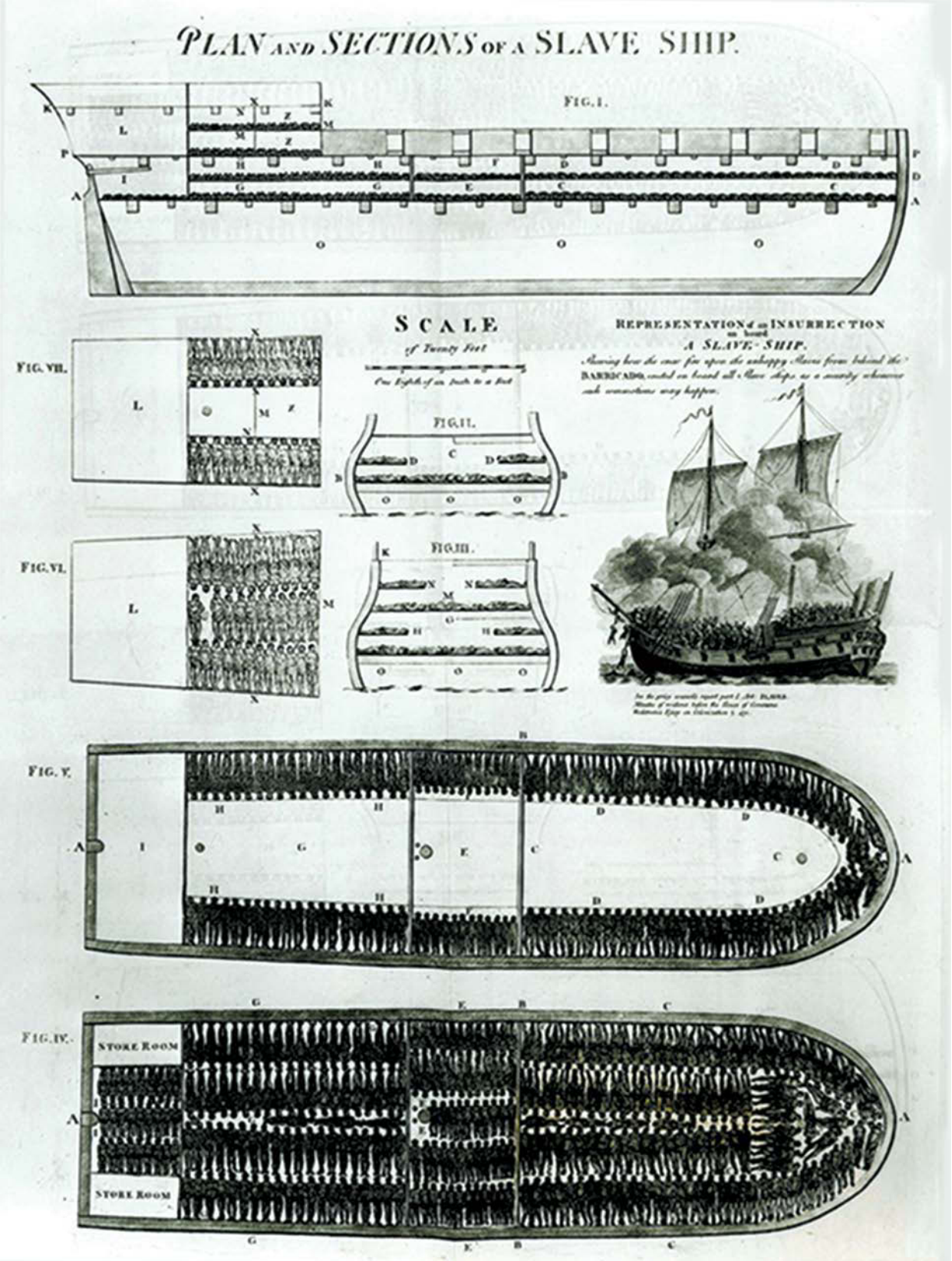
## 4.3.3 The Middle Passage

The route taken by slave ships across the Atlantic Ocean forms a rough triangle, hence the Atlantic slave trade is often referred to as the Triangular Trade. Ships left Europe with goods to sell in West Africa. There they sold the goods and filled their ships with slaves. The map in **SOURCE 3** shows the main route of the Triangular Trade. This 'cargo' was packed tightly in the ship's holds for the terrible Middle Passage, crossing the Atlantic Ocean to the Americas (see **SOURCE 4**). Conditions on slave ships were appalling. Those who did not survive the journey, perhaps as many as one-quarter of the total, were simply thrown overboard. For the final leg of the triangle the ships were loaded with goods and raw materials such as sugar, rum, cotton and tobacco to be sold on their return to Europe. These raw materials would be processed in Britain and then sold for profit.

**SOURCE 3** This map shows the route the slave ships took in the Triangular Trade.

***Source:*** Spatial Vision

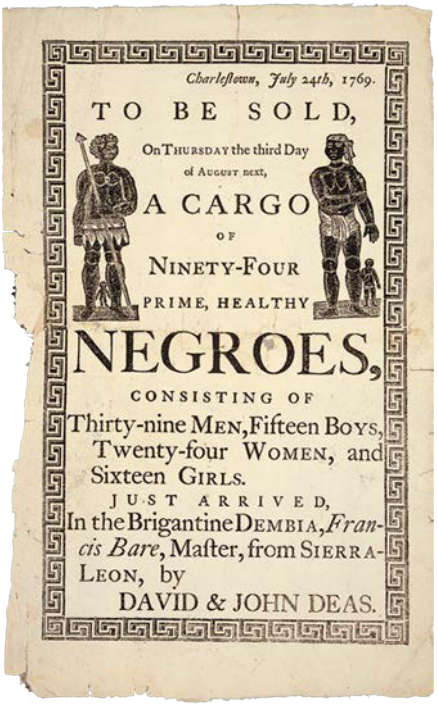
**SOURCE 4** This plan of a slave ship from 1789 shows how tightly packed the slaves were.



## 4.3.4 Sold

As slave ships arrived at ports in the Caribbean and along the coast of North America, plantation owners would gather to make their purchases. Posters like the one shown in **SOURCE 5** advertised upcoming ship arrivals, detailing the number of slaves available and their state of health. There were generally two ways in which a slave sale would take place. The first, referred to as a 'scramble', must have been particularly terrifying for the slaves. Upon arrival in port the slaves were herded together either on the deck of the ship or in a nearby auction yard. Buyers paid a fixed amount before the sale and at a given signal rushed at the slaves, grabbing as many as they could. In the process families would often be separated, husbands from wives, parents from children.

**SOURCE 5** A poster advertising an upcoming slave sale


Charleſtown, July 24th, 1769.

TO BE SOLD,

On THURSDAY the third Day of AUGUST next,

A CARGO OF NINETY-FOUR PRIME, HEALTHY

NEGROES,

CONSISTING OF

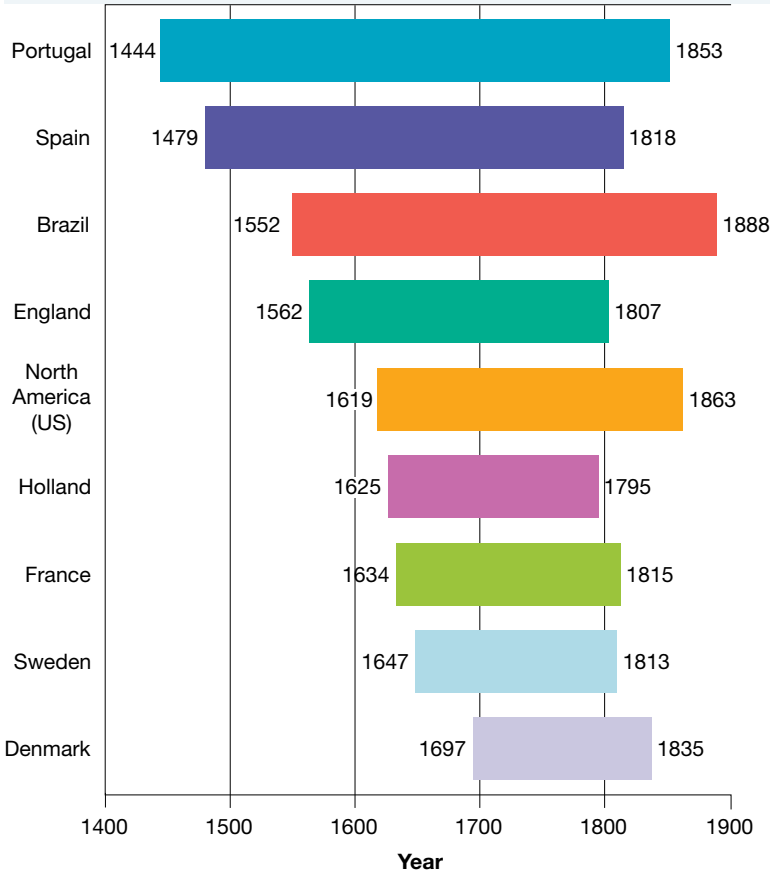
Thirty-nine MEN, Fifteen BOYS, Twenty-four WOMEN, and Sixteen GIRLS.

JUST ARRIVED,

In the Brigantine DEMBIA, *Francis Bare*, Maſter, from SIERRA-LEON, by

DAVID & JOHN DEAS.

**SOURCE 6** A chart showing the approximate time that different countries became engaged in the slave trade




The other type of sale took place at an auction at which individual slaves were sold to the highest bidder (see **SOURCE 7**). Slaves were made to stand on a raised platform so they could be inspected by prospective owners. Their teeth would be examined to check their health. Signs of beatings could lower the price because they suggested a poor worker or potential escapee. In reality, scars were more likely to be a sign of violent abuse than of insolence. Sometimes unscrupulous doctors would buy weak or sick slaves in the hope of strengthening them and selling them on for a profit.

**SOURCE 7** This painting by German artist Friedrich Schulz illustrates what a slave auction in the southern states of the United States may have looked like.

**SOURCE 8** 'Price, Birch & Co., dealers in slaves' — slave auction house, Virginia c. 1860.

During the entire ordeal the slaves themselves knew nothing of what was going to happen to them. They did not speak the language of their captors and had no knowledge of their world. They were alone, usually separated from their families. Once sold, they were often given a new name and branded a second time by their new owner before being sent to work.

Precise figures are unknown, but it is believed that some 12.5 million slaves were transported from Africa, with approximately 10.7 million surviving the Middle Passage to disembark in the Americas.

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Deepen and check your understanding of this topic with related case studies and auto-marked questions.
- Making a better world? > **Slave trade**

### 4.3. EXERCISES

**Historical skills key: HS1** Remembering and understanding **HS2** Sequencing chronology **HS3** Using historical sources as evidence **HS4** Identifying continuity and change **HS5** Analysing cause and effect **HS6** Determining historical significance

#### 4.3 Exercise 1: Check your understanding

1. **HS1** Why did the English prefer to use slaves from Africa rather than Native American people?
2. **HS1** Why did slavery become a vital part of the American economy?
3. **HS1** How did slave traders take advantage of rivalry between different African tribes?
4. **HS1** Why were slaves branded after they were bought?
5. **HS1** Why is the African slave trade referred to as the Triangular Trade?
6. **HS1** Outline the two types of slave sale that took place.
7. **HS1** Suggest why slaves were given new names by their owners after they were bought.
8. **HS1** Explain why it is difficult to gain accurate figures of the numbers of slaves bought and sold in the Triangular Trade.

#### 4.3 Exercise 2: Apply your understanding

1. **HS3** Describe the attitude towards slavery of the plantation owner in **SOURCE 1**.
2. **HS3** Sketch the map in **SOURCE 3** and then add labels to identify what the ships would have been carrying on each leg of the Triangular Trade.
3. **HS3** Explain what **SOURCE 4** suggests about the way slaves were regarded by the slave traders.
4. **HS3** Use the chart in **SOURCE 6** to answer the following questions.
   (a) What was the first country on this chart to engage in the slave trade?
   (b) What country was the last to abolish the slave trade?
   (c) Which country practised the slave trade for the longest time? Suggest a reason for this.
   (d) For how many years did England practise the slave trade?
   (e) What values and limitations does historical information presented in a graph have compared with the other sources in this subtopic?
5. **HS3** Use **SOURCES 4, 5, 7** and **8** to write a summary paragraph of the experience of a slave from living in freedom to being sold at a slave market. Refer to specific aspects of the sources as you go.
6. **HS5** Specify and explain the causes of the Triangular Trade, indicating clearly why people from Africa were transported across the Atlantic Ocean.
7. **HS5** Outline the unintended effect of using Native American people as labour.

Try these questions in learnON for instant, corrective feedback. Go to www.jacplus.com.au.

# 4.4 Slavery and the cotton trade

## 4.4.1 'King Cotton'

The Industrial Revolution improved the lives of millions of people around the world. Mass-produced goods became more accessible and cheaper to buy. But while life was made easier for some, for many others the changes meant only a life of back-breaking labour.

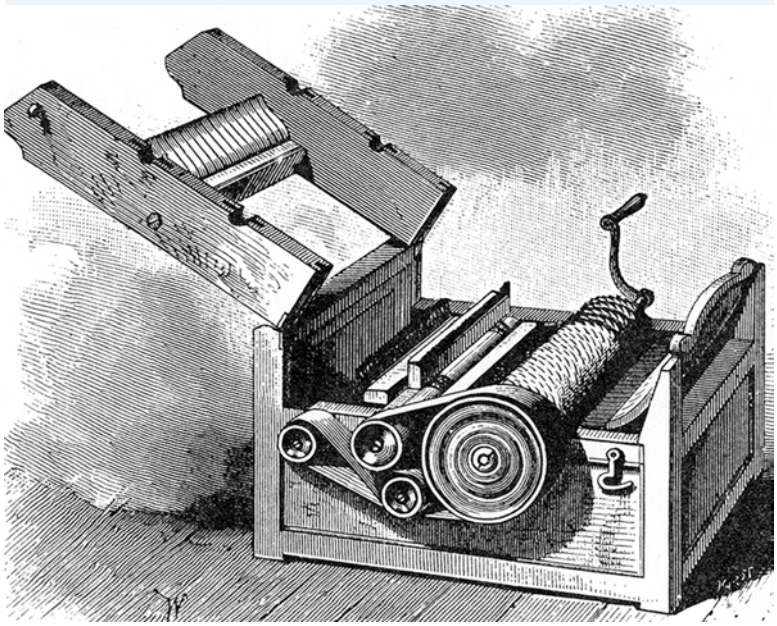
The Industrial Revolution resulted in a massive boost to the textile industry in Britain. As mechanisation increased, the need for raw materials grew. Textiles became Britain's largest export, and the textile mills demanded more and more cotton. Until the early 1800s Britain's cotton came mainly from India, but India was now unable to keep up with the demand. So Britain turned to the southern states of the United States, where cotton was a growing industry.

The long, hot summers and rich soils of the South were ideal for cotton production, but the work in the cotton fields was brutal. After the cotton was picked, slaves had to separate the seeds from the cotton fibre.

This was very labour intensive: a slave working from dawn until dusk would be able to process about half a kilogram of cotton. In 1793 an inventor named Eli Whitney invented a machine that removed the seeds automatically (see **SOURCE 1**). With the cotton engine, or 'cotton gin' as it was called, a slave could seed more than 20 kilograms of cotton in a day — about forty times as much as before the invention.

Whitney could not have foreseen the consequences of his invention as its use became widespread in the American cotton fields. It certainly made cotton processing easier for the slaves, but this massive increase in production meant the demand for slaves also increased. Cotton quickly became the backbone of the economy in the southern United States, overtaking both tobacco and sugar. The southern states produced 75 per cent of the world's cotton. The expression 'King Cotton' was used by southern politicians to illustrate its economic importance. Between 1820 and 1860 cotton production increased seventeen-fold and the number of slaves increased by 250 per cent, despite the fact that half of all babies born to slaves died in infancy. Interestingly, only around a quarter of southern farmers actually owned slaves, but slavery was so important to the economy of the South that any opposition to it was regarded almost as treason.

**SOURCE 1** Eli Whitney's cotton gin



## 4.4.2 Life on the plantation

Of every 100 slaves taken captive in Africa, about 25 died before being put to work. Another third of those who survived long enough to reach a plantation died within two years. The survivors experienced the process called 'seasoning' during which they learned their roles and grew to fear the slave drivers. Punishment for wrongdoing was harsh. For any sign of resistance to cruel treatment or for working too slowly, slaves were lashed or made to walk a **treadwheel**. The other slaves were often forced to witness the punishments, which were supposed to be a deterrent. **SOURCE 2** recalls one instance of a slave being punished.

**SOURCE 2** Description of a flogging from C. Bull, *Slavery in the United States*, 1836

I had often seen black men whipped, and had always, when the lash was applied with great severity, heard the sufferer cry out and beg for mercy — but in this case, the pain inflicted was so intense, that Billy never uttered so much as a groan. The blood flowed from the commencement, and in a few minutes lay in small puddles at the root of the tree. I saw flakes of flesh as long as my finger. When the whole five hundred lashes had been counted the half dead body was unbound and laid in the shade of the tree upon which I sat.

Slaves' living quarters were very simple. Sometimes the plantation owner would provide basic quarters, but often the slaves would have to build their own. There was little furniture and beds were simply straw or rags on the ground. Slaves who worked as house servants usually had better quarters and food than those who worked in the fields.

**SOURCE 3** A modern artist's reconstruction of a typical cotton plantation

A Slaves often had to build their own small quarters.
B Baled cotton was transported on carts.
C Cotton was also transported on barges.
D Labour on a cotton plantation was back-breaking.
E Slave drivers oversaw work on the plantation.

## 4.4 EXERCISES

**Historical skills key: HS1** Remembering and understanding **HS2** Sequencing chronology **HS3** Using historical sources as evidence **HS4** Identifying continuity and change **HS5** Analysing cause and effect **HS6** Determining historical significance

### 4.4 Exercise 1: Check your understanding

1. **HS1** Why were the southern states of the United States an ideal place to grow cotton?
2. **HS1** What invention made removing seeds from cotton much faster?
3. **HS1** What percentage of the world's cotton did the southern states produce?
4. **HS1** Why did southern politicians coin the term 'King Cotton'?
5. **HS1** What proportion of southern farmers owned slaves?
6. **HS1** What percentage of slaves taken captive survived the 'seasoning' process?
7. **HS1** Explain why it was important for slaves to fear the slave drivers.

### 4.4 Exercise 2: Apply your understanding

1. **HS3** What effect would the punishment described in **SOURCE 2** have on slaves who witnessed it?
2. **HS3** Identify elements in **SOURCE 3** that illustrate the value of cotton at the time.
3. **HS4** Identify the changes brought to America by the cotton industry.
4. **HS5** Examine the positive and negative effects on the life of a slave after the introduction of the cotton gin.
5. **HS6** How would you respond to the statement 'The invention of the cotton gin was one of the most significant events in history'? To what extent can this statement be justified?

Try these questions in learnON for instant, corrective feedback. Go to www.jacplus.com.au.

# 4.5 The end of slavery?

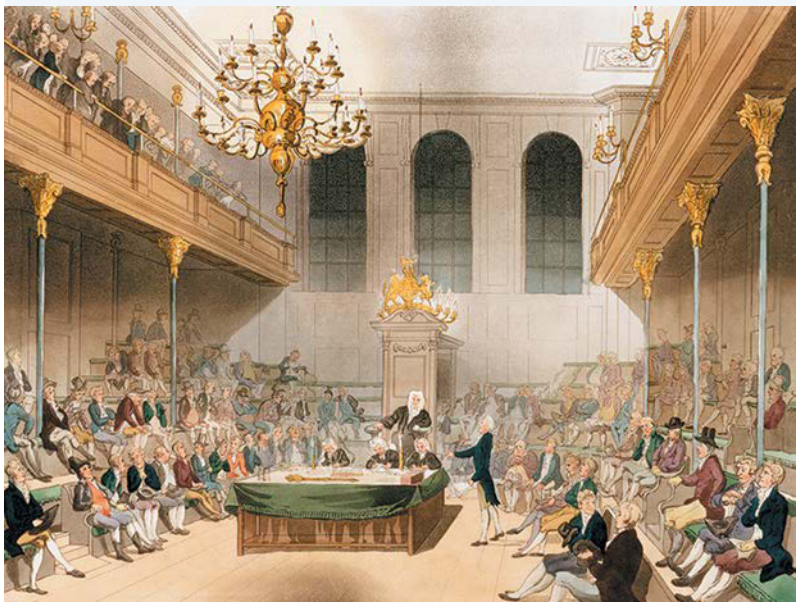
## 4.5.1 Early opposition

Many of the people who supported the institution of slavery argued it was an effective way to introduce Christianity, the values of civilisation and the virtue of hard work to those under its control. This made it difficult for opponents of slavery to have their voices heard. But over time ideas and values began to change. It was through the relentless efforts of a core of committed people that the Atlantic slave trade was eventually outlawed.

Supporters of slavery in the US argued that it was essential to the economy of the southern states. Despite its being banished in most northern states from 1787, the southern states stubbornly resisted **abolition**. Reformers spoke patiently at meeting after meeting about the terrible facts of the slave trade. They presented petitions and lobbied politicians to support their cause.

In 1772 a test case heard in England addressed the fate of a runaway slave named James Somersett. An English reformer, Granville Sharp, argued that under English law all men are free, and the Chief Justice, Lord Mansfield, agreed with him. The Mansfield Judgement declared slavery to be illegal in England and Wales. Although there was still much to be done to eliminate slavery completely, this case is considered to be an important early step on the road to abolition.

**SOURCE 1** The British Parliament debates slavery.



## 4.5.2 The movement gains momentum

Fifteen years after the Mansfield Judgement, the abolitionist Thomas Clarkson formed the Society for the Abolition of the Slave Trade. Its emblem, shown in **SOURCE 2**, was a kneeling, shackled slave with the words 'Am I not a man and a brother?' around him. Many supporters of slavery, who certainly did not think of slaves as brothers, were incensed by the suggestion. They maintained that ending slavery would bring about economic ruin. This claim was challenged by a young economist, Adam Smith, who argued that it cost more to feed and house a slave than to employ a free man to do the same work.

**SOURCE 2** The emblem of the Society for the Abolition of the Slave Trade

At about the same time as the Mansfield Judgement, a young English member of Parliament named William Wilberforce began to campaign against slavery. As a close friend of Prime Minister William Pitt, Wilberforce became a pivotal force in the abolition movement. He knew that many politicians in England still did not care about the fate of African slaves overseas, so instead he focused on the terrible conditions that British sailors endured in maintaining the trade. In 1807 the British Parliament finally passed a Bill abolishing the trading of slaves in British territories. This did not make it illegal to own slaves, only to buy new ones. It wasn't until 1833 that all slaves in the British Empire were freed.

## 4.5.3 Abolition in America

Despite abolition in Britain, the southern plantation states of the United States still clung to slavery. The plight of slaves was highlighted in 1852 with the publication of Harriet Beecher Stowe's novel *Uncle Tom's Cabin*. The stories of runaway slaves who escaped to the north with the help of the 'Underground Railroad' — a secret network of sympathisers — increased calls for abolition. One such escapee was Frederick Douglass, who became a famous orator and statesman who worked tirelessly for the abolition cause.

**SOURCE 3** A quote from Frederick Douglass, 1852

What to the slave is the 4th of July?

On 1 January 1863 President Abraham Lincoln signed the Emancipation Proclamation, declaring that all slaves in the United States were 'henceforth and forever free'. There is no doubt that it was a political as much as a moral decision. Lincoln knew that because the country was in the middle of a bitter civil war between northern and southern states, it would be almost impossible to enforce. However, it was an important step towards ending slavery, and two years later, at war's end, the Thirteenth Amendment to the US Constitution allowed 'neither slavery nor involuntary servitude' in the United States. All slaves were now free. But laws alone cannot change how people think, and life for many freed slaves remained harsh. Even today African Americans face much disadvantage.

### DID YOU KNOW?

The American Civil War was fought between 1861 and 1865 over a range of issues. Among them, the issue of slavery has become the most famous. During the war more than 150 000 freed slaves served in the Union army against the southern states that supported slavery. The most famous unit was the 54th Massachusetts Regiment, commanded by Robert Gould Shaw. The volunteer soldiers of the regiment were recruited by white abolitionists. The story of the 54th Massachusetts Regiment was the subject of the 1989 film *Glory*.

### 4.5 ACTIVITY

Choose one of the following people to conduct further research on: Frederick Douglass, John Newton, Harriet Beecher Stowe, Nat Turner, John Brown, Harriet Tubman. Evaluate their significance to the abolitionist cause using the criteria of importance, profundity, quantity, durability and relevance.

**Determining historical significance**

### 4.5 EXERCISES

**Historical skills key: HS1** Remembering and understanding **HS2** Sequencing chronology **HS3** Using historical sources as evidence **HS4** Identifying continuity and change **HS5** Analysing cause and effect **HS6** Determining historical significance

#### 4.5 Exercise 1: Check your understanding

1. **HS1** Explain the meaning of the word 'abolition'.
2. **HS1** Why did the southern states resist the abolition of slavery?
3. **HS1** What was the economic argument for abolishing slavery?
4. **HS1** What important step towards abolition was made in 1807?
5. **HS1** Why would it have been almost impossible to enforce the Emancipation Proclamation?
6. **HS1** What was the outcome of the Thirteenth Amendment?

#### 4.5 Exercise 2: Apply your understanding

1. **HS3** Look at **SOURCE 1** and suggest why it took a long time for the British Parliament to make a decision to abolish slavery.
2. **HS3** Outline the meaning of the phrase 'Am I not a man and a brother?' in **SOURCE 2**.
3. **HS6** Independence Day in the United States is celebrated on 4 July. It marks the day the Declaration of Independence from Britain was signed by the first thirteen colonies. Consider the quote in **SOURCE 3**. What did Frederick Douglass mean by 'What to the slave is the 4th of July?'
4. **HS5** Summarise the short- and long-term effects of the Mansfield Judgement on the abolition of slavery.
5. **HS5** Why do you think stories such as *Uncle Tom's Cabin* helped the abolition cause even though they may have been fictional?

Try these questions in learnON for instant, corrective feedback. Go to www.jacplus.com.au.

# 4.6 Crime and punishment

## 4.6.1 New society, old solutions

Between 1788 and 1868, around 160 000 British and Irish convicts were transported to the Australian colonies as punishment for a crime they committed. Given the nature of many of their crimes, such as pick-pocketing, petty theft and forgery, the punishment appears harsh. How had British society come to this? Why were punishments for seemingly minor crimes so severe? The answers lie partly in the nature of society at the time.

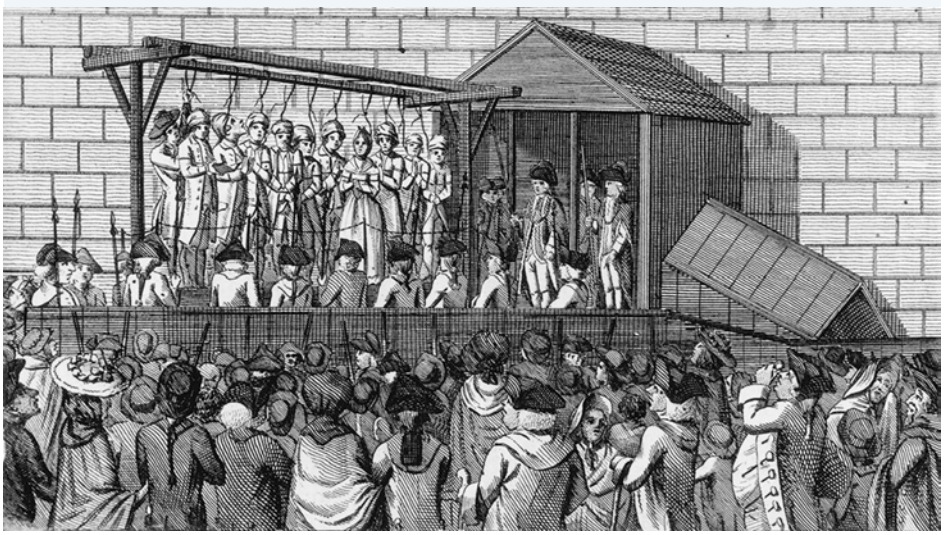
The Industrial Revolution transformed the British economic base from agriculture to industry. In a process called enclosure (see topic 2), wealthy landowners bought up small farms and fenced off common land to combine into single, large estates, in order to make production consistent and more efficient with the use of new technologies. Production was often more efficient, but the process of enclosure also resulted in poor farmers being forced from their homes and livelihoods. Similarly, in the eighteenth and nineteenth centuries in Scotland, thousands of country people were forced from their homes during the infamous Highland Clearances by landlords eager to improve the agricultural output of their land.

With more efficient and mechanised farming practices, fewer agricultural workers were needed. As employment opportunities in the rural areas of Britain declined, the towns filled with those seeking work. Even with the industrial boom, however, there were not enough jobs. Some turned to gambling or alcohol in search of escape. For the desperate, crime became a way to survive.

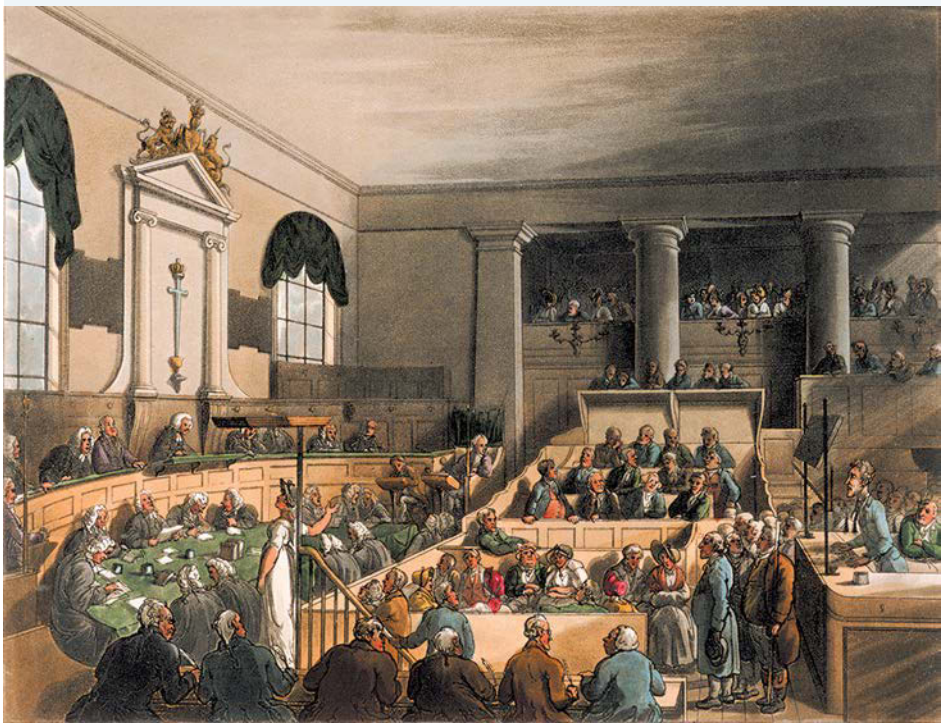
The government's response to these growing social problems was simply to make criminal punishments harsher. About two hundred different crimes drew the death penalty. Yet the threat of hanging did not have the effect the government desired. Public hangings, intended to serve as a warning, took on a carnival atmosphere (see **SOURCE 1**). Thousands of people gathered to watch, even bringing their children to the spectacle. A bulletin called *The Newgate Calendar,* subtitled 'The **Malefactors**' Bloody Register', was published each month with the names of all those executed. It soon contained biographies and stories of criminals and became a regular bestseller.

While many crimes were punishable by hanging, others carried a sentence of **transportation**. In some cases, the death penalty might be **commuted** to transportation. This meant being banished from England to serve out the sentence in one of Britain's distant colonies. In the 1700s most convicts were sent to America to work on the cotton or sugar plantations, but this was not popular with plantation owners, who found slaves more manageable. At any rate, the American Revolution of the 1770s brought this option to an end. For a while convicts were dispatched to West Africa on the ships sent out to pick up their human cargo in the Triangular Trade, but disease, starvation, desertion and mutiny took their toll on convicts and military personnel alike. The plan was a disastrous failure.

**SOURCE 1** An eighteenth-century artwork showing a public hanging at London's notorious Old Bailey prison



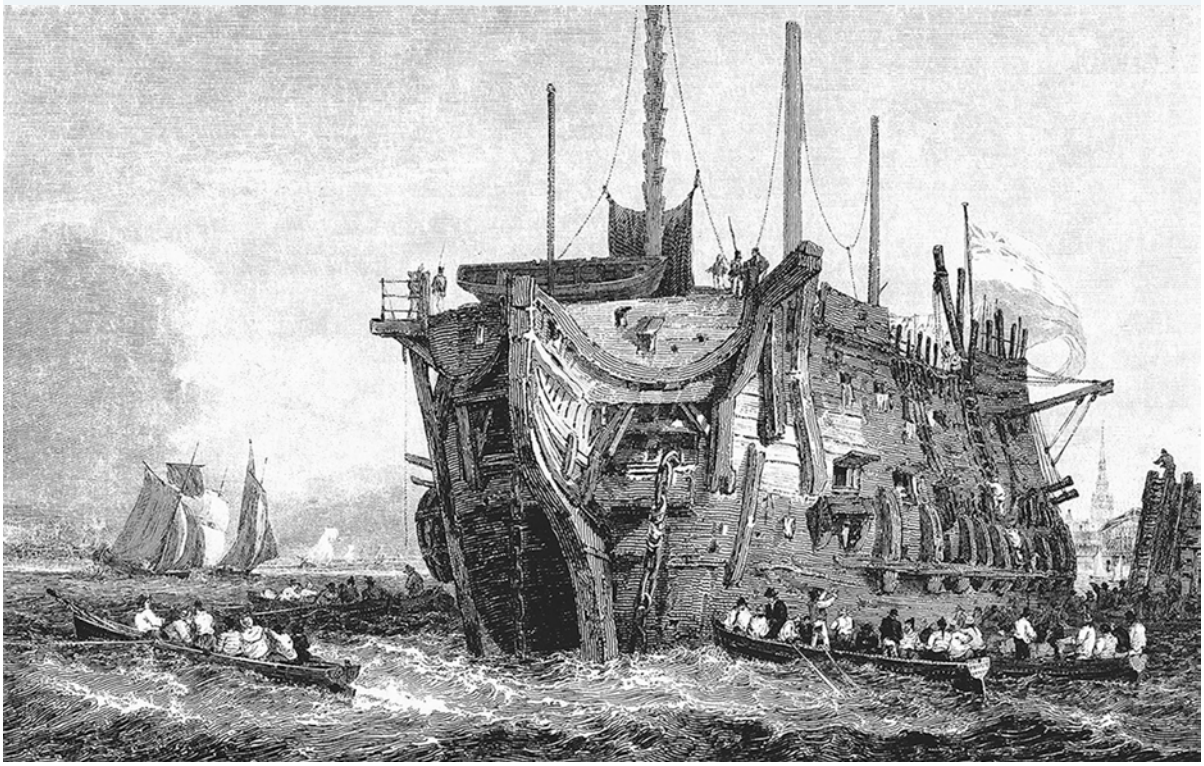
**SOURCE 2** This artwork from c. 1809 shows a trial in session at the Old Bailey courthouse in London.



## 4.6.2 What to do?

Despite harsh punishments, the numbers of people in Britain's prisons remained high and became a concern for the government. While convicts were not being transported, the hangman was kept busy and prisons were overflowing. In an attempt to address this problem, old decommissioned naval ships, of which there were plenty after the end of the war with America, were turned into floating prisons called **hulks**. As a short-term fix the hulks were a success, but they soon became cramped, stinking and rat-infested, and merely delayed the inevitable. Soon enough they too were impossibly overcrowded. The government urgently needed a long-term solution.

**SOURCE 3** A prison hulk moored in the Thames River, London. This artwork dates to c. 1826.



### DID YOU KNOW?

In eighteenth-century England about two hundred crimes were punishable by the death penalty. They included murder, pick-pocketing, poaching, highway robbery, stealing horses or sheep, and cutting down young trees. Children were often among those sentenced to death.

### 4.6 EXERCISES

**Historical skills key: HS1** Remembering and understanding **HS2** Sequencing chronology **HS3** Using historical sources as evidence **HS4** Identifying continuity and change **HS5** Analysing cause and effect **HS6** Determining historical significance

#### 4.6 Exercise 1: Check your understanding

1. **HS1** Why did so many people turn to crime in the eighteenth and nineteenth centuries?
2. **HS1** Why were punishments for crimes so harsh in eighteenth-century England?
3. **HS1** Explain why the plantation owners preferred slaves rather than convicts as workers.
4. **HS1** What made Africa an unsuitable place to send convicts?
5. **HS1** What were hulks and why were they necessary?

### 4.6 Exercise 2: Apply your understanding

1. **HS3** Describe the scene in **SOURCE 1**. Evaluate the effectiveness of the intention to make an example of those being hanged.
2. **HS3** Using **SOURCE 3** as a reference, make a list of reasons why conditions on a hulk were so unpleasant.
3. **HS4** What were the main changes in the justice system that occurred in England during the eighteenth and nineteenth centuries?
4. **HS5** Explain the short-term effects of the American Revolution on the transportation of English convicts.
5. **HS3** How valuable do you think **SOURCE 2** is for those studying this topic? Explain.

Try these questions in learnON for instant, corrective feedback. Go to www.jacplus.com.au.

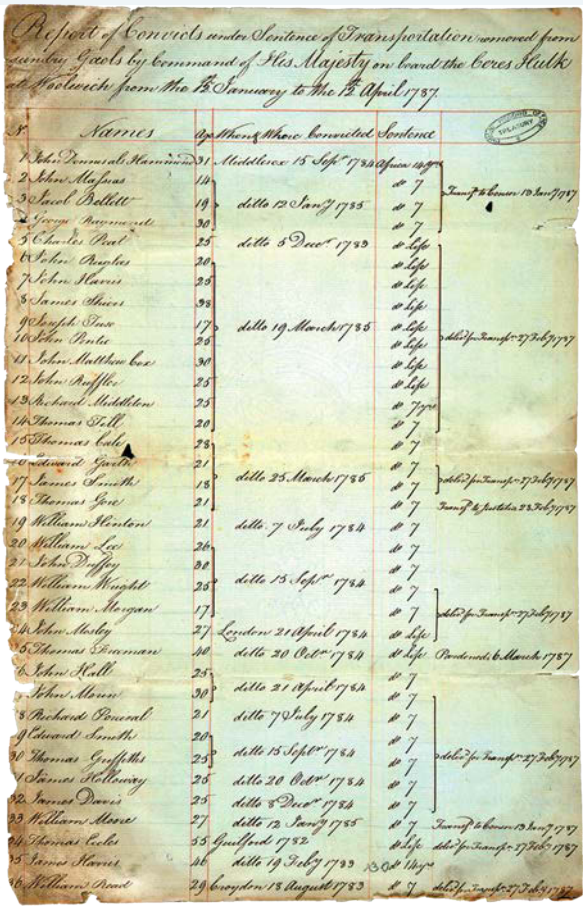
# 4.7 Transportation to Australia

## 4.7.1 A solution presents itself

In the 1770s the British government faced a major social problem. The country's prisons were overflowing and the newly independent United States refused to take any more of Britain's unwanted convicts. The hangman's noose was not proving to be an effective deterrent. New prisons were considered too expensive to build, and not many people really cared enough about the problem anyway. As the situation worsened one distant possibility began to emerge as a real option.

In 1770 Captain James Cook had sighted and charted much of the eastern coastline of Australia. But Britain, at war with France and distracted by the increasingly rebellious American colonies, was already under financial strain and did not follow up Cook's expedition. With the loss of the American colonies, however, the possibility of transportation to New South Wales began to gain support. Joseph Banks, a botanist who had sailed with Cook in 1770, enthusiastically agreed and thought that Botany Bay would be an ideal place for a settlement.

**SOURCE 1** A handwritten 'report of convicts under sentence of transportation'


Report of Convicts under Sentence of Transportation removed from
Gaols by Command of His Majesty on board the Ceres Hulk
at Woolwich from the 15 January to the 12 April 1787.

| No. | Names | Age | When & Where Committed | Sentence | |
|---|---|---|---|---|---|
| 1 | John Dennisall Hamming | 31 | Middlesex 15 Sept. 1783 | 4 years | |
| 2 | John Mapas | 18 | | to 7 | Transp.d to Gamb. 19 Jan.y 1787 |
| 3 | Jacob Bellett | 19 | ditto 12 Jan.y 1785 | to 7 | |
| 4 | George Barnwell | 30 | | to 7 | |
| 5 | Charles Peal | 25 | ditto 5 Dec.r 1783 | to Life | |
| 6 | John Douglas | 20 | | to Life | |
| 7 | John Harris | 25 | | to Life | |
| 8 | James Shiers | 38 | | to Life | |
| 9 | Joseph Dove | 17 | ditto 19 March 1785 | to Life | ditto Transp.d 27 Feb.y 1787 |
| 10 | John Perks | 26 | | to Life | |
| 11 | John Matthew Cox | 30 | | to Life | |
| 12 | John Ruffles | 25 | | to Life | |
| 13 | Richard Middleton | 25 | | to 7 yrs | |
| 14 | Thomas Tell | 20 | | to 7 | |
| 15 | Thomas Cole | 28 | | to 7 | |
| 16 | Edward Garth | 21 | | to 7 | |
| 17 | James Smith | 18 | ditto 25 March 1786 | to 7 | ditto Transp.d 27 Feb.y 1787 |
| 18 | Thomas Gee | 21 | | to 7 | Transp.d to Portsmouth 23 Feb.y 1787 |
| 19 | William Stenton | 21 | ditto 7 July 1784 | to 7 | |
| 20 | William Lee | 26 | | to 7 | |
| 21 | John Duffey | 30 | | to 7 | |
| 22 | William Wright | 28 | ditto 15 Sept.r 1784 | to 7 | |
| 23 | William Morgan | 17 | | to 7 | ditto Transp.d 27 Feb.y 1787 |
| 24 | John Mosley | 27 | London 21 April 1784 | to Life | |
| 25 | Thomas Bowman | 40 | ditto 20 Oct.r 1784 | to Life | Pardoned 6 March 1787 |
| 26 | John Hall | 25 | | to 7 | |
| | John Mason | 30 | ditto 21 April 1784 | to 7 | |
| 28 | Richard Pownal | 21 | ditto 7 July 1784 | to 7 | |
| 29 | Edward Smith | 20 | | to 7 | |
| 30 | Thomas Griffiths | 25 | ditto 15 Sept.r 1784 | to 7 | ditto Transp.d 27 Feb.y 1787 |
| 31 | James Holloway | 25 | ditto 20 Oct.r 1784 | to 7 | |
| 32 | James Davis | 25 | ditto 8 Dec.r 1784 | to 7 | |
| 33 | William Moore | 27 | ditto 12 Jan.y 1785 | to 7 | Transp.d to Gamb. 13 Jan.y 1787 |
| 34 | Thomas Coles | 55 | Guilford 1782 | to Life | ditto Transp.d 17 Feb.y 1787 |
| 35 | James Harris | 26 | ditto 19 July 1783 | 14 Oct.r 1793 | |
| 36 | William Read | 29 | Croydon 18 August 1783 | to 7 | ditto Transp.d 27 Feb.y 1787 |

In 1770 Captain James Cook had sighted and charted much of the eastern coastline of Australia. But Britain, at war with France and distracted by the increasingly rebellious American colonies, was already under financial strain and did not follow up Cook's expedition. With the loss of the American colonies, however, the possibility of transportation to New South Wales began to gain support. Joseph Banks, a botanist who had sailed with Cook in 1770, enthusiastically agreed and thought that Botany Bay would be an ideal place for a settlement.

The British soon recognised that a colony in New South Wales would serve several useful purposes. It would go some way towards compensating for the loss of the American colonies. It would provide Britain with an important military and imperial presence in the southern Pacific region. It would also be a dumping ground for convicts, whose labour could be used to help build the colony. In August 1786 the British government made the decision to establish a convict settlement in New South Wales.

Once the decision was made, the fleet had to be assembled. Captain Arthur Phillip, an experienced naval officer, was chosen to lead the fleet. It was his job to prepare the 11 ships for the 20 000-kilometre voyage. It took six months to complete the preparations and, by May 1787, the fleet had assembled at Portsmouth on the south coast of England.

The convicts walked through the town to the docks, to the dismay of many townspeople, and were rowed out to the waiting ships in small boats. The fleet left with little fanfare at three o'clock on the morning of 13 May 1787.

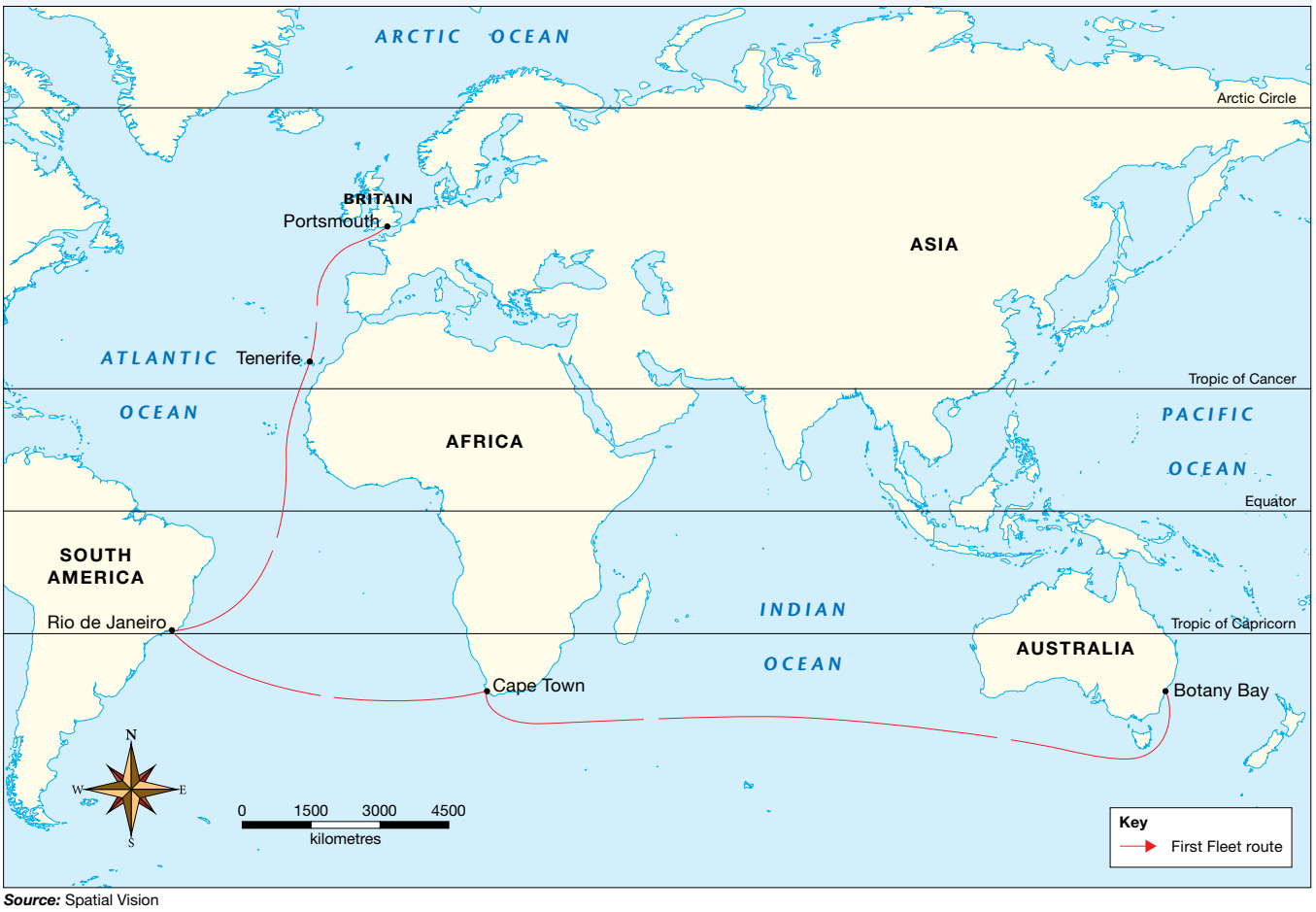
Nearly 1500 men, women and children were on board when the fleet weighed anchor. Among the officials were Captain Phillip, a judge, a doctor, a surveyor and a chaplain. The ships' crews numbered about 450. Just over 200 marines sailed with the fleet, their purpose to protect the fleet in the event of attack and to control the convicts. Twenty-seven dependants of the marines — wives and children — were also on board. Lastly, there were the convicts themselves. Numbering 759, they accounted for half the complement of the fleet. There were roughly three male convicts for every female.

**SOURCE 2** A portrait of Captain Arthur Phillip painted in 1786

## 4.7.2 Bound for Botany Bay

Today's cruise ships can sail around the world without needing to put into port, but in the eighteenth century it was a very different story. The ships of the First Fleet were small and needed to regularly resupply. The fleet made three stops on the voyage to take on food and water and tend to repairs (see **SOURCE 3**). On their final port of call, the Cape of Good Hope on the southern tip of Africa, they also secured a range of plant seeds for food crops in the new settlement.

**SOURCE 3** A map tracing the First Fleet's voyage




***Source:*** Spatial Vision

Captain Phillip knew that the long voyage across the Indian Ocean could be the most treacherous of all. It would also be the most frightening for both crew and convicts because they were sailing into largely unknown waters. Phillip decided to split the fleet so the better sailers would not have to wait for the slower ships. For nine weeks the ships were battered by the winds of the **Roaring Forties**. Livestock were thrown about and injured, and even some of the most experienced seamen were seasick. Conditions for the convicts below deck were most likely terrible. Remarkably, none of the eleven ships were lost.

With what must have been great relief, the fleet sailed into Botany Bay on 18 January 1788, but neither the bay nor the land surrounding it met their expectations. The bay was shallow and offered little protection from storms; the soil was sandy; and there was no good, easily accessible supply of fresh water. For a moment Captain Phillip must have thought that the entire voyage might end in disaster.

All was not lost, however. In 1770 Captain Cook had sailed past another bay a few kilometres to the north and had named it Port Jackson. He did not explore it but recorded that it appeared to be a good harbour. Phillip left the fleet at Botany Bay to survey Port Jackson for himself, finding it 'the finest harbour in the world'. The rest of the fleet soon transferred to Port Jackson, anchoring in the cove within it that Phillip named after Lord Sydney, Britain's Home Secretary and the man who had appointed him. The water at Sydney Cove was deep enough for ships to anchor close to the shore, and there was a good supply of fresh water. The new colony was officially proclaimed on 26 January 1788 (see **SOURCE 4**).

**SOURCE 4** Captain Arthur Phillip raising the British Union Jack at Sydney Cove. This artwork was painted in 1937.

Explore more with myWorldHistoryAtlas

Deepen and check your understanding of this topic with related case studies and auto-marked questions.
- Overview > **Movement of peoples**
- Australia and Asia > **Convict transportation to Australia**

## 4.7.3 Trials and challenges

It was an uncertain beginning for the settlement, however, for despite its obvious other advantages, the soil around Port Jackson proved as unsuitable for planting as that of Botany Bay, and the first crops withered and died. In the first two years the settlers at Sydney Cove grew desperately short of food. Rations were reduced to stretch food supplies, and a supply ship that was sent from England failed to arrive. For Captain Phillip, now the governor of New South Wales, failure, once again, seemed a real threat. Some relief came in mid 1790 with the arrival of the Second Fleet. With it came fresh supplies, but more than a quarter of the convicts on board had died on the terrible journey and most of the survivors were too weak to work.

At last, fertile soil was found and cultivated at Parramatta on the edge of the settlement, and the crops successfully grown there finally guaranteed the long-term survival of the colony. In 1792 poor health forced Governor Phillip to resign and return to England. He took with him kangaroos, dingoes, native plants and two Aboriginal men to show to the king. Phillip's firm but fair command of the colony had ensured its survival. When food was scarce he made sure that rations were distributed equitably, with no privileges for rank, thereby alleviating resentment and potential convict revolt. By the time he left in December 1792 the colony was securely established and growing. However, this is not to say that there were no challenges. Relations with the Indigenous peoples became strained at times and as the colony grew and spread the likelihood of conflict with the Aboriginal population increased. This is explored further in topic 5.

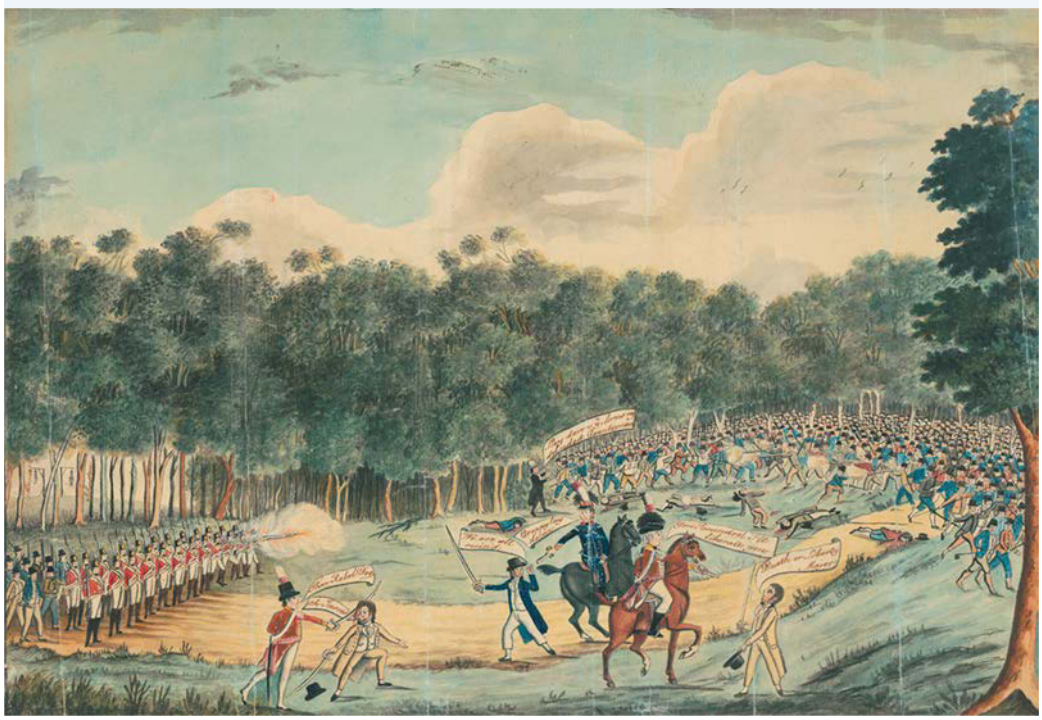
Twelve years later in 1804 the authorities in New South Wales faced the first serious challenge to their rule. Tensions that Governor Phillip had managed to avoid boiled over when a group of convicts, mainly from Ireland, began a large-scale rebellion against the British authorities in Australia. Two convicts, Phillip Cunningham and William Johnston, had an ambitious plan to lead a band of convicts against the British and create their own empire, with Cunningham as its leader. The plan was for the initial two hundred convicts from Castle Hill to meet with others at another convict settlement at Hawkesbury, bringing the group to more than one thousand. From there they would march to Parramatta and finally on to Sydney.

On the evening of 4 March 1804 the rebellion began. With cries of 'Liberty or death!', the rebels overpowered the small garrison that guarded them. They began recruiting more convicts from surrounding farms, eventually gathering a force of around 600.

However, word of the uprising had spread to Parramatta and Sydney, and a force of British soldiers marched through the night to intercept the rebels. Forced into retreat, Cunningham struggled to maintain control over the unruly, and often drunk, convicts. The British force soon caught up with them, and at a place called Vinegar Hill the soldiers attacked. Despite being armed, the rebels offered almost no resistance to the professional soldiers. The battle was over within a matter of minutes. In the aftermath nine rebels were executed and many others flogged or sent to places of secondary punishment.

The whole rebellion had lasted only three days. It was, nonetheless, the largest convict rebellion in Australian history.

**SOURCE 5** A painting by an unknown artist depicting the final battle of the uprising at Vinegar Hill



## 4.7 EXERCISES

**Historical skills key: HS1** Remembering and understanding **HS2** Sequencing chronology **HS3** Using historical sources as evidence **HS4** Identifying continuity and change **HS5** Analysing cause and effect **HS6** Determining historical significance

### 4.7 Exercise 1: Check your understanding

1. **HS1** Identify two reasons why New South Wales was a favourable choice for transportation of convicts.
2. **HS1** How many years after Captain Cook's voyage did the First Fleet arrive in Botany Bay?
3. **HS1** How long did the voyage of the First Fleet take?
4. **HS1** Outline the advantages that Port Jackson had over Botany Bay.
5. **HS1** Identify the challenges facing the early years of the settlement.
6. **HS1** How long did Arthur Phillip serve as governor of New South Wales?

### 4.7 Exercise 2: Apply your understanding

1. **HS3** Examine **SOURCE 1** carefully and answer the following questions.
   (a) What information about the convicts is provided in the report?
   (b) What other sources could help us gain a broader understanding of what happened to these convicts?
   (c) Identify the limitations of this source that might be revealed by your answer to the previous question.
2. **HS3** Examine **SOURCE 5**.
   (a) Identify and describe the location of the following figures in the painting: convict rebels; British soldiers; execution of rebels.
   (b) How accurate might this source be in presenting the events of the battle at Vinegar Hill? Explain.
3. **HS3** Is it possible to determine whether **SOURCES 4** and **5** are primary or secondary sources? If you are unsure, what other information could help you decide?
4. **HS2** Describe the major changes to the early settlement between 1788 and 1792.
5. **HS6** Discuss the significance of Arthur Phillip to the successful establishment of the settlement. You could think about why he was chosen to lead the voyage, and the type of leadership he appears to have demonstrated in the early days of the settlement.

Try these questions in learnON for instant, corrective feedback. Go to www.jacplus.com.au.

# 4.8 Convict life

## 4.8.1 Convicts turned good

The penal settlement at Sydney Cove was isolated from other European settlements and, as a result, made a unique open-air prison. Surrounded by a seemingly endless, alien and menacing wilderness, chains and walls were scarcely needed. Nonetheless, the convicts were under no illusions that they were anything other than prisoners in this new settlement.

Convicts with skills such as carpentry were put to work building the new town and those that grew around it. Many convict-built buildings still stand in Sydney today. Projects such as the Great North Road, which runs between Sydney and Newcastle, were also built using convict labour. Working conditions for most convicts were harsh, made worse by the hot, dry climate, so different to what they were used to in England.

**SOURCE 1** Mary Reibey, an ex-convict, now appears on the Australian $20 note.

Few convicts returned to England after their sentence was completed. Financial assistance from the government was unlikely, as the point of transportation in the first place was to be rid of them. The cost of the return journey was beyond the vast majority of freed convicts and so they remained in Australia. Some convicts made a good life for themselves. Mary Reibey, for example, was transported for seven years for stealing a horse. She worked as a maid in New South Wales and was allowed to marry. After serving out her sentence she became a respected and very wealthy businesswoman. Today she is featured on the Australian $20 note.

Another example of a successful convict was the architect Francis Greenway. Transported for forgery, in the colony he used his creative talents to design government buildings. Some of these buildings, such as the graceful Hyde Park Barracks (see **SOURCE 2**), can still be seen today.

**SOURCE 2** Hyde Park Barracks in Sydney. This building was designed by the convict architect Francis Greenway.

## 4.8.2 Secondary punishment

Unfortunately, for every Mary Reibey or Francis Greenway there were many others for whom the convict life was a living hell. Those judged to be unmanageable or defiant might be sent to even more isolated places of secondary punishment. The most notorious of these were on Norfolk Island and at Port Arthur in Van Diemen's Land (Tasmania).

Norfolk Island was characterised by brutal physical punishment. Lying 1700 kilometres off the coast of New South Wales, escape from this small, isolated island was practically impossible. Floggings and beatings were commonplace and convicts were worked beyond the point of exhaustion. There was no effort to reform prisoners sent to Norfolk Island — this was a place of punishment, not rehabilitation. Following a mutiny in 1834 a clergyman was sent to comfort those convicts sentenced to death. In an illustration of how terrible Norfolk Island was, the minister recorded that 'each man who heard his reprieve wept bitterly, and each man who heard of his condemnation to death went down on his knees and thanked God'. Eventually the penal settlement on Norfolk Island was closed down, partly due to the notoriety of the conditions.

Port Arthur, on the other hand, was a new type of prison. Established as a penal settlement in 1833, here psychological punishment took precedence over physical brutality. Like Norfolk Island, this was a place to send convicts who reoffended while serving their sentence. Convicts spent long periods in isolation at Port Arthur. Out of isolation, they wore hoods so that they could not recognise anyone and they in turn could not be recognised. Even the chapel building was designed so that the convicts could not see each other when they removed their hoods for worship (see **SOURCE 5**). The aim was to enforce anonymity and take away any sense of individuality. At the time this was thought to be a more effective rehabilitation technique than purely physical punishment.

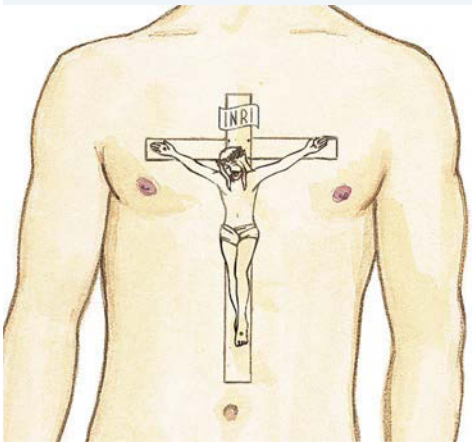
Over the 80 years from 1788 until the last convicts arrived in 1868, approximately 160 000 convicts were transported to the Australian colonies.

**SOURCE 3** Pinchgut Island in Sydney Harbour was one of the earliest sites of secondary punishment.

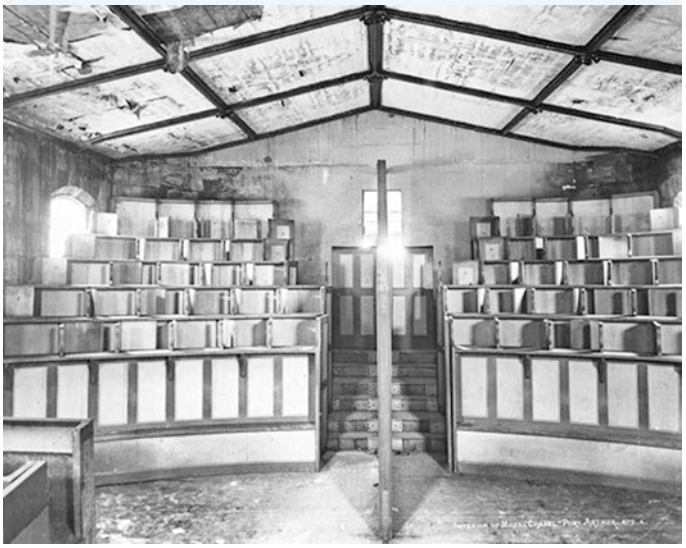
## DID YOU KNOW?

In 1828 a census was taken in New South Wales to record all inhabitants of the colony, both convict and free (the Aboriginal population was not included). It found that half the population were convicts and that former convicts made up nearly half of the free population. In 1828, then, about 75 per cent of the population of New South Wales either were, or had been, convicts!

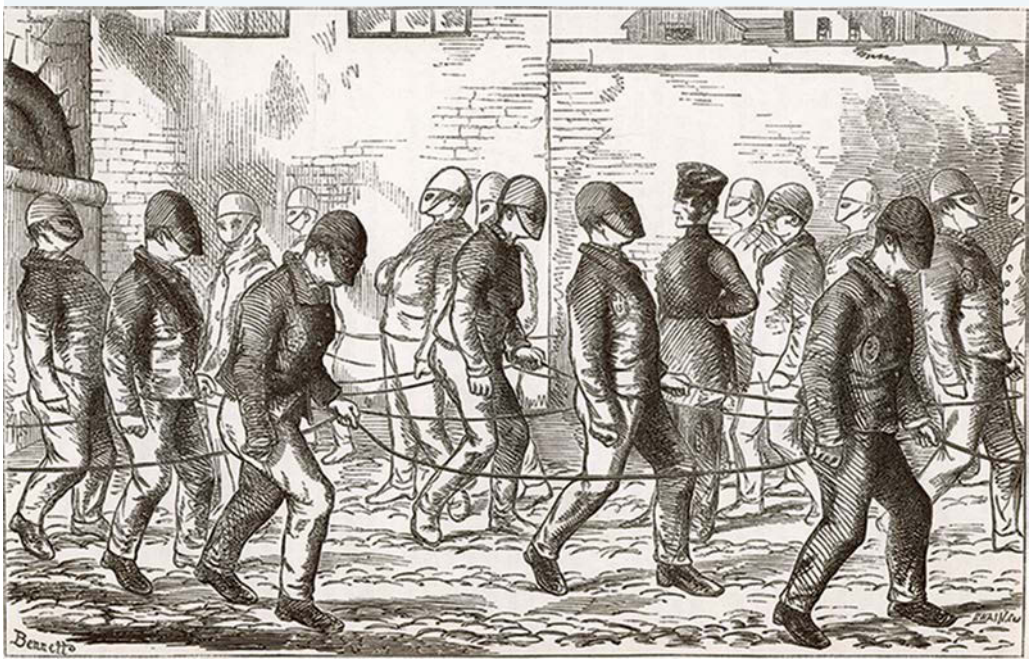
**SOURCE 4** Many convicts marked themselves with intricate or detailed tattoos, possibly in an effort to regain some degree of individuality after having been reduced to a number. Ironically, one convict who managed to escape was recaptured when a constable recognised him, not by his face, but by his distinctive tattoo.




**SOURCE 5** The chapel at Port Arthur prison. Even here the convicts would not be able to see each other from their individual booths.



**SOURCE 6** Prisoners in the exercise yard wearing hoods for anonymity. This was a depiction of Pentonville prison in London, a prison run with the same philosophy as Port Arthur. The illustration was published in 1862.



## DISCUSS

- In groups, discuss the difference between punishment and rehabilitation. Consider the attitude in England during the eighteenth and nineteenth centuries and discuss the extent to which you feel a sentence of transportation was intended purely as punishment.
- In the modern world, is it an acceptable argument that sometimes punishment of a criminal is more important than rehabilitation? In your group, share and summarise your thoughts.

**[Ethical Capability]**

## 4.8 ACTIVITY

Investigate and consider the significance of the role Mary Reibey played in the establishment of the settlement in Sydney. Do you think her image should appear on the $20 note? Write a paragraph outlining your views.

**Determining historical significance**

## 4.8 EXERCISES

**Historical skills key: HS1** Remembering and understanding **HS2** Sequencing chronology **HS3** Using historical sources as evidence **HS4** Identifying continuity and change **HS5** Analysing cause and effect **HS6** Determining historical significance

### 4.8 Exercise 1: Check your understanding

1. **HS1** What made Sydney Cove a unique open-air prison?
2. **HS1** Make a list of the sort of skills that would have been useful in the new European settlement in New South Wales.
3. **HS1** What was the key difference between the Norfolk Island and Port Arthur prisons?
4. **HS1** Why was the Norfolk Island prison closed down?
5. **HS1** Use the words provided to fill the gaps and complete the paragraph below.

| | | | |
|---|---|---|---|
| Mary Reibey | carpenter | architect | Arthur Norfolk |
| Francis Greenway | businesswoman | minister | government |
| $20 note | Pinchgut Island | Reserve Bank | $50 note |

Some freed convicts made a good lives for themselves. _____, for example, became a highly regarded _____, and designed many _____ buildings. _____ became a successful _____ whose image is now featured on the _____.

### 4.8 Exercise 2: Apply your understanding

1. **HS3** Describe the scene in **SOURCE 6**. What do you think is the purpose of the hoods the prisoners are wearing?
2. **HS3** Given the image presented in **SOURCE 6**, how reasonable is it to suggest that tattoos such as the one in **SOURCE 4** were worn to maintain some individuality? Explain your thoughts.
3. **HS3** Discuss the suggestion that for some convicts, being transported was 'the best thing that could have happened to them'. Use at least one specific example to support or challenge the statement.
4. **HS4** Describe the changes in types of secondary punishment in New South Wales over the course of the nineteenth century.
5. **HS6** How important was convict labour to the establishment of the New South Wales colony? Use examples to explain your ideas.

Try these questions in learnON for instant, corrective feedback. Go to www.jacplus.com.au.

# 4.9 Emigration to Australia

## 4.9.1 Push and pull factors

Convicts were unwilling migrants. They were sent to Australia against their will as punishment for criminal convictions. As the colonies grew, they attracted free settlers — people who made a conscious decision to start a new life in Australia. In the eighteenth century these settlers came mainly from Europe, and they came for a range of different reasons.

The decisions of migrants to travel thousands of kilometres from their homelands in Europe to Australia were based on a variety of factors. There were often good reasons for them to leave home (push factors) and there were reasons to choose Australia as a destination (pull factors). Both these forces tended to operate at the same time.

Europe in the first half of the nineteenth century was an uncertain place. Wars and revolutions had left many people in desperate straits. In Britain the Industrial Revolution had made life unbearable for some. Unemployment, rising rents and taxes, and grim conditions in factories and in overcrowded cities led many to dream of a better life across the sea. In Scotland the notorious Highland Clearances had forced many people from their land, leaving them with few options for feeding their families (see **SOURCE 2**). In Ireland in the 1840s the failure of the potato crop led to widespread starvation and despair.

**SOURCE 1** 'Here and there; or, emigration a remedy', a cartoon from the English magazine *Punch* in 1848

Until 1850 most emigrants from Europe still travelled to the United States or Canada. These countries were more settled and the voyage cost only a fraction of a ticket to Australia. For this reason, those who went to Australia often did so with government help. In order to help the colonies grow, the British government encouraged 'assisted migration' to Australia by people whose skills would be useful in the new colonies. Services such as carpentry and masonry were important to help build the towns and cities. However, assisted migrants would have no say about their place or type of employment. They had to go where they were told. 'Unassisted migrants', who paid their own way, made up about one-third of migrants

to Australia in the first half of the nineteenth century. Some of them were tradespeople who were keen to establish a business in one of the new towns. Others were from wealthy families who believed their money would go further in Australia than in Britain. Many were encouraged by the promise of government land grants and convict labour.

The level of government assistance for migration followed economic cycles. For example, during the 1830s the government decided to sell land rather than give it away to migrants free of charge. The money earned by the government was used to help fund further migration. In contrast, 1841 was a depression year for New South Wales. The price of wool had fallen and unemployment rose. Migrants were not encouraged in the 1840s. In the 1850s, however, the gold rushes resulted in massive immigration. Another depression in the 1890s brought immigration to an abrupt halt.

**SOURCE 2** This painting from 1865 depicts the expulsion of a family during the Highland Clearances in Scotland.

## 4.9.2 The voyage

For migrants travelling from England to Australia, the voyage was faster, if only slightly more comfortable, than those of the convicts. Those who could afford it paid for a private cabin, but 90 per cent of migrants had to endure steerage class. This was the cheapest passenger accommodation, typically at the stern of the ship. It was usually confined, foul-smelling and crowded, offering no privacy. Meals were simple, based around oatmeal, rice and the occasional meat stew, but migrants had to supply their own plates and cutlery. The tedious voyage could take up to four and a half months — plenty of time for migrants to wonder whether they had made the right decision!

Although steerage lacked privacy and comfort, it did create a new sense of belonging for many migrants. With nothing but time on their hands, people from many different backgrounds mingled (see **SOURCE 3**). A blacksmith from Liverpool might find himself talking to a businessman from Edinburgh or a small farmer from Kent. For many migrants this was the first time they had travelled more than a few miles from their own village. Of course, the absence of privacy in the long weeks at sea could also leave tempers frayed, and tensions sometimes boiled over.

Safe arrival in Australia did not mean the end of the migrants' worries. If they did not have jobs organised before leaving England they would have to find work, which was more of a challenge if they had arrived with their families. Employers did not want to support children who did not work. As the coastal towns grew and became crowded, migrants were sent inland to work on farms. Others moved from place to place in search of work. The Henty family, for example, emigrated to Australia in 1829 to breed sheep. They arrived first at the Swan River colony, now Perth. Finding the land poor they decided to try Van Diemen's Land, but they missed out on free land grants that the government was offering there, so they moved again to the south coast of the Port Phillip District and established a settlement at Portland. In doing so they became the first permanent European settlers in what would become the state of Victoria in 1851.

**SOURCE 3** *Emigrants at dinner*, a scene from a migrant ship of the nineteenth century

**SOURCE 4** From a letter written by James Henty, quoted in R. Broome, *The Colonial Experience*, 2009

I have almost come to the conclusion that New South Wales will do more for our family than England ever will. What can we do with ten thousand pounds among all of us? It would be idle to suppose we can live many years longer on less than two hundred pounds a year, unless indeed we chose to descend many steps in the scale of Society, having at the same time an opportunity of doing as well and perhaps considerably better in New South Wales, under British Dominion and a fine climate. Immediately we get there we shall be placed in the first Rank in Society, a circumstance which must not be overlooked.

## 4.9.3 Tyranny of distance

With family members so far away, those back in England looked forward to any news of how their loved ones were faring in the Australian colonies. Unlike today's world in which emails from around the world are received almost instantly, letters took months to reach the other side of the world. To send a letter and receive a reply could take a whole year.

During the mid-eighteenth century a range of different British publications encouraged, or at times discouraged, migration to Australia. Books promoted emigration, highlighting the potential of the colonies as a migrant destination. Despite periodic negative news of economic depression and the shadow of transportation hanging over the colonies, many in England saw the colonies as sources of opportunity, wealth and power. A less-than-perfect image of the colonies would certainly not dissuade many of those with family already in Australia from wanting to make the journey themselves.

The vast majority of migrants who came to Australia in the 1800s were from the British Isles. They brought with them what historian Richard Broome calls their 'cultural baggage', including ideas about society, religion, class and gender. As a result, British institutions and clubs were firmly established in colonial Australia. At the same time, this cultural heritage was being influenced and reshaped by the new world. That new world was being populated more and more by people born in Australia, rather than those born overseas and, while they still considered themselves British, many increasingly associated themselves with the land in which they were born.

**SOURCE 5** George Baxter's painting from the mid-nineteenth century *News from Australia* depicts a family in England receiving news from a loved one in the colonies.

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Deepen and check your understanding of this topic with related case studies and auto-marked questions.
- Overview > **Movement of peoples**
- Australia and Asia > **European migration to Australia**

## 4.9 ACTIVITIES

1. Choose either the Highland Clearances or the Irish famine to investigate and analyse its causes, as well as its short- and long-term effects on the people of the particular country and on Australia. You may choose to present your response in a graphic organiser or as a short written response. **Analysing cause and effect**
2. Think about the patterns of migration to Australia in the nineteenth century.
   (a) What challenges facing migrants arriving to Australia today are similar to those faced by people who arrived in the nineteenth century?
   (b) Are there any challenges that are different? Consider the range of nations from which migrants arrive today, the cultural differences, and so on.
   (c) What challenges might face those who are already settled in Australia when new migrants arrive?
   (d) What qualities do you think both the new migrants and the already present population would need to help maintain a thriving community? **[Intercultural Capability]**

## 4.9 EXERCISES

**Historical skills key: HS1** Remembering and understanding **HS2** Sequencing chronology **HS3** Using historical sources as evidence **HS4** Identifying continuity and change **HS5** Analysing cause and effect **HS6** Determining historical significance

### 4.9 Exercise 1: Check your understanding

1. **HS1** Who were the free settlers?
2. **HS1** Explain the difference between 'push' and 'pull' factors.
3. **HS1** Write a paragraph explaining the situation in Europe in the first half of the nineteenth century, and outlining the factors that led to migration.
4. **HS1** Suggest two reasons (pull factors) why, up until 1850, most emigrants from Europe travelled to the United States or Canada rather than Australia.
5. **HS1** What sort of people did the British government encourage to migrate? Suggest why this was the case.
6. **HS1** Outline why the level of government assistance for migrants varied throughout the nineteenth century.
7. **HS1** Summarise the advantages and disadvantages of assisted migration over unassisted migration.
8. **HS1** Describe the conditions on board a migrant ship for the average passenger.
9. **HS1** How long might it have taken to receive a reply to a letter in the Australian colonies?
10. **HS1** What is your understanding of the term 'cultural baggage'?
11. **HS1** Outline in what ways the migrants of the 1800s brought the old world into the new.

### 4.9 Exercise 2: Apply your understanding

1. **HS3** Explain how realistic you think the 'here' and 'there' scenes in **SOURCE 1** are.
2. **HS3** Comment on the reliability of **SOURCE 1** as a historical source.
3. **HS3** Evaluate the accuracy of the image in **SOURCE 3**. Does it fit with what you have learned in this subtopic about conditions aboard migrant vessels? Explain.
4. **HS3** Use **SOURCE 4** to identify:
   (a) the push factors for the Henty family
   (b) the pull factors for the Henty family.
5. **HS3** Consider the intention of the artist when painting the image in **SOURCE 5**. It was painted in the mid-nineteenth century by an English artist. Does that affect its reliability?
6. **HS3** Choose one of the migrants in **SOURCE 3**. Write a diary entry for part of your journey describing your interaction with some of the other migrants.

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# 4.10 Migration to the goldfields

## 4.10.1 The beginnings of a rush

In 1851 English gold prospector Edward Hargraves returned to Australia after searching for gold in California. He noticed that in parts of Australia the land was similar to areas where gold was discovered in California, and he was convinced that gold could be found in those areas too. That same year he was proved right. His discovery marked a turning point in Australia's history.

Hargraves discovered gold in New South Wales in April 1851, but because news then took some months to travel overseas, for the first year or so the diggings were worked exclusively by local diggers or those from other Australian colonies. As news of the discovery spread around the colonies, people seemed to go crazy with excitement. In an attempt to stem the flow of people rushing to New South Wales, the Victorian government offered a reward for the discovery of gold close to Melbourne. Within a few months the reward was claimed and the hysteria only grew. Husbands left their families, shepherds their flocks. Ships were stranded in port when their crews deserted en masse for the diggings. Teachers, labourers, lawyers, even government officials and policemen made a dash for the goldfields.

From the start, the early goldfields were characterised by a sense of **egalitarianism**. The class system that dominated England had no place there. It was clear from the beginning that on the goldfields luck played a more important role than money or social position. Everyone had an equal chance of success if they worked hard. This levelling effect challenged the traditional social structure from which the diggers had sprung. Some people were alarmed, fearing social collapse with the lower classes challenging the

traditional hierarchy. Many historians trace the Australian idea of the 'fair go' back to the goldfields. In **SOURCE 1**, a miner from Poland, Seweryn Korzelinski, describes the multicultural scene.

**SOURCE 1** Polish miner Seweryn Korzelinski describes the egalitarianism on the goldfields.

This society comprises men from all parts of the world, all countries and religions — all mixed into one society, all dressed similarly, all forced to forget their previous habits, learnings, customs, manners and occupations. Their outward appearance does not signify their previous importance, worth or mental attainments. A colonel pulls up the earth for a sailor, a lawyer wields not a pen but a spade; a priest lends a match to a Negro's pipe; a doctor rests on the same heap of earth with a Chinaman; a man of letters carries a bag of earth. Many a one would not, a short while before, bother to look at a fellow with whom he now works. Here we are all joined by a common designation: digger. Only various shades of skin colour and speech denote nationality and origin, but it is impossible to guess previous station in life or background.

Yet while the diggers may have abandoned some of their customs and cultures, their prejudices often remained. **SOURCE 2** describes what happened when Korzelinski inquired about a fellow digger's test mineshaft.

**SOURCE 2** Korzelinski describes an encounter with an English miner.

The report I received was very encouraging so I went on digging. During a break a compatriot of mine passing by stopped for a chat. My English neighbour was listening in and came up to me later asking in what language I was conversing. 'My native Polish' I replied. My neighbour explained with a great deal of embarrassment that his test hadn't shown any trace of gold and that he had misled me because he thought I was a German.

## 4.10.2 Word spreads

Soon after news of the gold rushes reached England, in January 1852, the towns of Ballarat and Bendigo became better known than Melbourne or Adelaide. A new rush of migration followed as Britons of all classes decided to try their luck. The result was a population explosion in Australia that the colonies were unable to cope with. In the two years following the discovery of gold more people arrived in Australia than all the convicts who had been transported in the previous 64 years. In just one week of October 1852 nearly 8000 people arrived in Melbourne. In four months during 1853, at a time when the population of the city was only 23 000, 50 000 migrants landed at Melbourne's docks.

**SOURCE 3** Population growth of New South Wales and Victoria throughout the gold rush period

| Year | New South Wales | Victoria |
|---|---|---|
| 1840 | 110 000 | 10 291 |
| 1850 | 189 341 | 76 162 |
| 1860 | 348 546 | 538 234 |

***Source:*** From R. Broome, *The Colonial Experience*, 2009

Melbourne was unable to absorb the sea of new arrivals and a massive city of tents called 'Canvastown' was set up on the banks of the Yarra River to try to accommodate them. It was a smelly, dirty place where outbreaks of disease were common. The extracts in **SOURCE 4** give an impression of Melbourne during the height of the migration rush. As more people arrived in Victoria the crime rate increased, a problem made worse by the fact that 80 per cent of Melbourne's police had themselves taken off to the goldfields.

**SOURCE 4** Two extracts from letters written to newspapers in 1852

| Extract A | Extract B |
|---|---|
| One of the most striking peculiarities here to a new arrival is the immense encampments that surround Melbourne. The vast number of tents that stud the open ground in every direction conveys a clear idea of that enormous emigration to Victoria, which requires the erection of canvas suburbs, where the hordes of adventurers may find a temporary shelter on landing, ... before starting to the great storehouses of Mount Alexander and Ballarat. | People are flocking in from all countries now, and there is not accommodation for a tenth of them. Some have to sleep in sheds who never knew anything but a feather-bed in England. We have had very heavy rains lately; several people have been drowned on their way to and from the diggings in attempting to swim the creeks, as the Government does not think of putting any bridges where required; indeed, the people are beginning to murmur against the abominable way in which our government is carried out. |

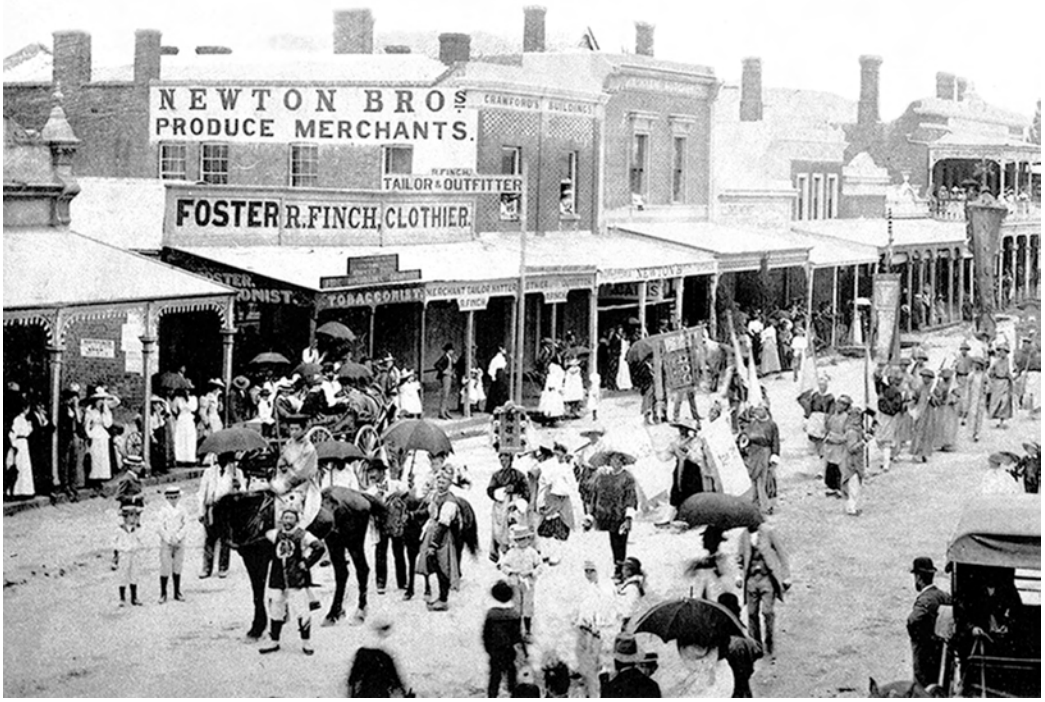
**SOURCE 5** *Prospecting*, sketched by S.T. Gill (England 1818–Australia 1880) in 1839, lithograph, printed in colour, from multiple stones, from *The Australian Sketchbook*, Melbourne: Hamel & Ferguson, 1865.

## 4.10.3 New Gold Mountain

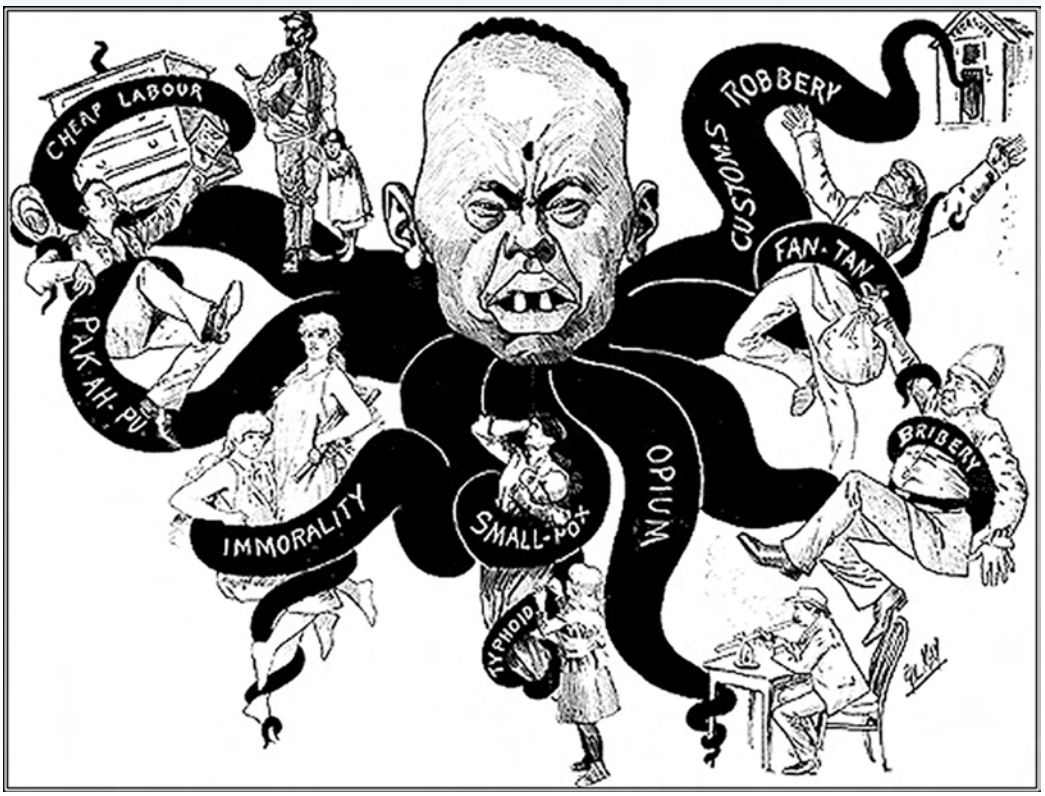
In 1853 large numbers of Chinese men arrived on the goldfields. They would eventually account for one in every five miners. Those who came straight from the Californian gold rushes referred to the Victorian goldfields as 'New Gold Mountain'. Others came directly from China, fleeing war and famine, and seeking a chance to strike it rich, like all the other diggers. Culturally they stood out on the goldfields and as a result were subject to racial violence. The Australian and British diggers resented the Chinese both for their difference and because they generally worked harder than other miners. They worked claims that had been abandoned yet still managed to extract enough gold to make a living. The Chinese on the goldfields were almost exclusively men, and the other miners chose to believe they would 'steal' their women. Tensions boiled over into violence on a number of occasions, firstly in Bendigo in 1854 but most infamously at Lambing Flat in New South Wales, where a series of anti-Chinese riots in 1860–61 saw thousands of miners drive the Chinese from the diggings. To control Chinese immigration, the Victorian government

introduced a ten-pound arrival tax to be paid by all Chinese migrants at their Victorian port of entry. To avoid this tax, the Chinese arrived at Adelaide or Sydney and travelled overland to the diggings.

**SOURCE 6** Chinese migrants in Beechworth, Victoria, during the gold rushes




**SOURCE 7** 'The Mongolian Octopus': an infamous propaganda image published in the Sydney-based *The Bulletin Magazine* on 21 August 1886



In New South Wales, the Chinese Immigration Restriction and Regulation Act was passed in 1861 and the numbers of Chinese in the colony were closely controlled. Both Queensland and Western Australia introduced similar legislation within a decade. What became the White Australia Policy (the immigration policy that restricted the arrival of non-white migrants in the first half of the twentieth century) had its beginnings on the goldfields. It is an interesting contradiction to consider. The goldfields on the one hand saw the origins of Australia's multicultural population. The opportunity that was offered to people from other countries was recognised then as it is now, and people arrived to make a better life. However, just like today, some of those people struggled in the face of intolerance and racism.

### 4.10 ACTIVITY

Research when the University of Melbourne, Old Treasury Building and Grand Hotel were built or founded. What impact do you think the gold rushes had on the creation of these buildings and institutions?

**Identifying continuity and change**

### 4.10 EXERCISES

**Historical skills key: HS1** Remembering and understanding **HS2** Sequencing chronology **HS3** Using historical sources as evidence **HS4** Identifying continuity and change **HS5** Analysing cause and effect **HS6** Determining historical significance

#### 4.10 Exercise 1: Check your understanding

1. **HS1** Why were goldfields initially only populated by local diggers?
2. **HS1** What was 'Canvastown'?
3. **HS1** What proportion of Melbourne's police left for the goldfields in the early years of the gold rushes?
4. **HS1** Why were the Chinese the target of racial abuse?
5. **HS1** Why did some Chinese migrants disembark at Adelaide and walk from there to the goldfields?

#### 4.10 Exercise 2: Apply your understanding

1. **HS3** Using quotes from **SOURCE 1**, describe the sense of egalitarianism on the goldfields.
2. **HS2** Plot the information in **SOURCE 3** in a graph and describe the population growth in Victoria and New South Wales during this period.
3. **HS3** Use quotes from the extracts in **SOURCE 4** to describe what was happening to the city of Melbourne.
4. **HS3** To what extent does the image in **SOURCE 5** support the idea of the goldfields as egalitarian?
5. **HS3** How reliable is **SOURCE 7** as a historical source? When thinking about your response you should consider the following.
   (a) When and by whom was the source created? This will help to give you a sense of the context and to think about what was happening at the time.
   (b) Why was the image created? What was its purpose? Was it to inform, persuade, or perhaps intimidate?
   (c) Does it appear accurate as a representation? If not, explain how it could still be useful to a historian.
6. **HS3** Using quotes from each source, compare and contrast the sense of egalitarianism in **SOURCES 1** and **2**.
7. **HS3 SOURCES 1** and **2** originate from the same person. Given their similarities and differences, analyse whether this affects their reliability.
8. **HS3** Using the sources in this subtopic:
   (a) find evidence that supports the statement that the goldfields were 'a place of egalitarianism'
   (b) find evidence that supports the statement that the goldfields were 'a place of racial intolerance'
   (c) explain how this illustrates the importance of using a variety of sources when looking for evidence to support a claim.
9. **HS4** Describe the changes that occurred in the city of Melbourne due to the gold rushes.

Try these questions in learnON for instant, corrective feedback. Go to www.jacplus.com.au.

# 4.11 SkillBuilder: Analysing cause and effect

online only

## Analysing cause and effect in emigration to Australia

Specific events make up only a small part of the study of history. To really begin to understand any event, it is vital to be able to analyse the factors that led to it, and the way in which the event might bring about change afterwards. These are the causes and effects.

### Select your learnON format to access:

- an explanation of the skill (Tell me)
- a step-by-step process to develop the skill, with an example (Show me)
- an activity to allow you to practise the skill (Let me do it)
- questions to consolidate your understanding of the skill.

# 4.12 Thinking Big research project: A migrant's letter home

online only

## SCENARIO

It is the mid-nineteenth century and you have emigrated from Great Britain to Australia. You, like all migrants, have faced a number of challenges, but now you have established yourself and feel ready to write to your family back home to tell them about your experiences.

### Select your learnON format to access:

- the full project scenario
- details of the project task
- resources to guide your project work
- an assessment rubric.

### on Resources

**ProjectsPLUS** Thinking Big research project: A migrant's letter home (pro-0183)

# 4.13 Review

online only

## 4.13.1 Key knowledge summary

Use this dot point summary to review the content covered in this topic.

## 4.13.2 Reflection

Reflect on your learning using the activities and resources provided.

### on Resources

**eWorkbook** Reflection (doc-31701)
Crossword (doc-31702)

**Interactivity** Movement of peoples (1750–1914) crossword (int-7638)

## KEY TERMS

**abolition** the end of legal acceptance of slavery
**commute** to change a penalty to one less severe
**egalitarianism** equality of all people
**hulk** the body of an old ship that serves as a prison rather than a sailing vessel
**intercontinental** involving or occurring between two or more continents
**malefactor** a person who does bad or illegal things
**New Spain** Spanish territories in the New World, including much of North America
**Roaring Forties** strong winds of the southern ocean that blow in an easterly direction. Called the 'Roaring Forties' because they are found around the latitude of 40 degrees south of the equator.
**transportation** a sentence of banishment from England for certain crimes, to be served in an overseas colony
**treadwheel** a punishment device, also called the 'everlasting staircase', comprising a large, iron-framed, hollow cylinder with wooden steps. As the device rotated slaves were forced to keep stepping forward.

# 4.11 SkillBuilder: Analysing cause and effect

## 4.11.1 Tell me

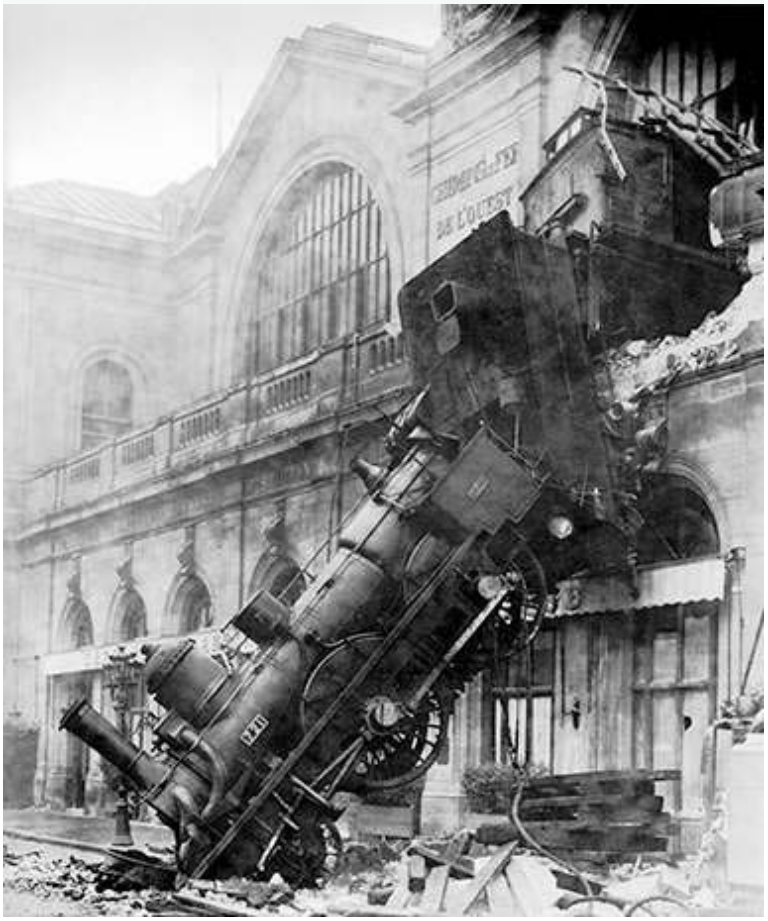
### What is 'cause and effect'?

Specific 'events' make up only a small part of the study of history. To really begin to understand any event, it is vital to be able to analyse the factors that led to it, and the way in which the event might bring about change afterwards. These are the causes and effects.

### Why is it important to analyse cause and effect?

Analysing cause and effect helps us evaluate the importance of different events within historical periods and build our understanding of the past. We can then make more confident historical claims in our conclusions.

**SOURCE 1** Train derailment at Montparnasse station in Paris, 1895. While what happened seems clear, its causes and subsequent effects are less obvious.



## 4.11.2 Show me

There are many ways to go about analysing cause and effect when studying history, but they all share one common factor: they encourage you to think carefully about a topic so that you can reach conclusions that can be supported with historical knowledge and evidence.

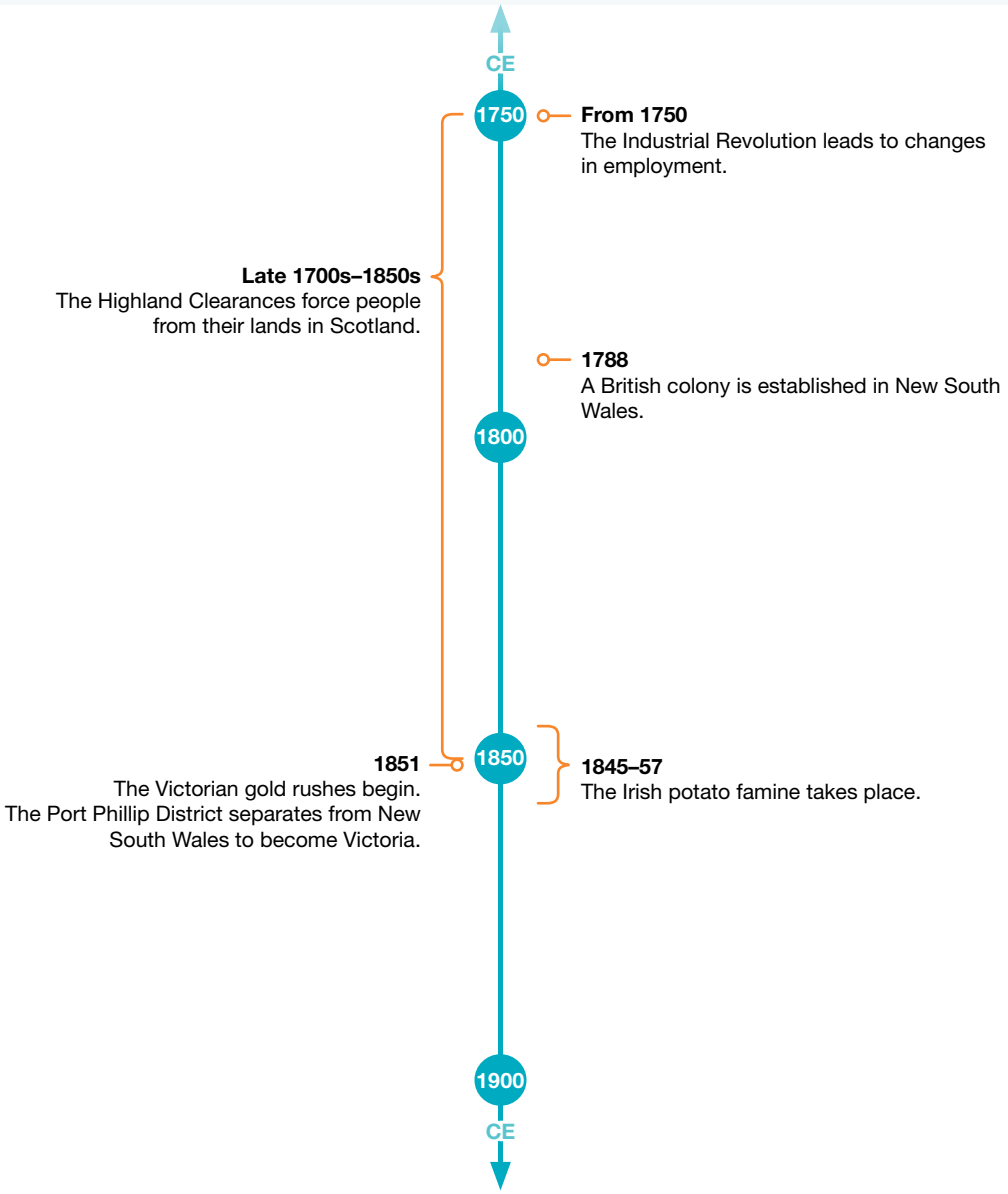
To analyse cause and effect, start by asking the straightforward question: 'Why did this event occur?' You will probably find that such a simple question is actually not that easy to answer. Remember, the causes are not always obvious.

Consider the following topic of migration from Britain to Australia as an example.

*Migration to Australia from Britain occurred for a number of reasons including the impact of the Industrial Revolution, the Highland Clearances, and changes in employment opportunities and patterns.*

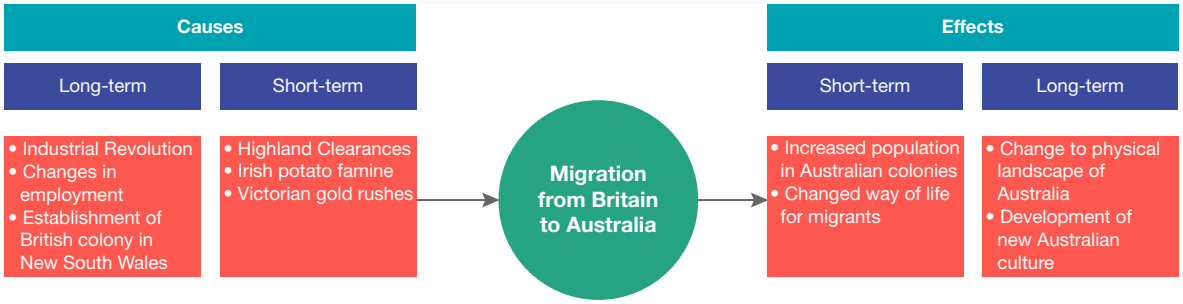
When you have identified some causes, place them on a basic timeline so that you can begin to see which could be considered long-term and which could be short-term causes. At this point, you should think about some of the short-term and long-term effects. You may not know exactly what they are because they might go beyond the time period you are studying, but it is useful to think about what changes might be brought about due to the event you are studying. To assess your own ideas, ask yourself the question, 'If one of the causes on the timeline was removed, would the key event still have occurred the same way?' If removing one item changes the way you think the event would have occurred, then you have probably identified a key cause.

**SOURCE 2** Timeline of migration from Britain to Australia




Then, arrange your ideas in a graphic organiser like **SOURCE 3**.

**SOURCE 3** An effective way to identify and analyse cause and consequences



Once you have constructed your timeline and graphic organiser, you should ask yourself the following questions about the effects of your key event (sample answers provided):

- What changed because of the key event? Were the changes positive or negative?
  - Change to demographics in Australia — more free settlers rather than only convicts
  - Demographic changes in Britain — large sections of the population left
  - Growth of cities and colonies in Australia
  - Development of Australian identity — influenced by this wave of migration
- How many people were affected by the event?
  - Tens of thousands affected directly — e.g. those who migrated
  - Hundreds of thousands affected indirectly — e.g. family who remained in Britain
  - Tens of thousands of Indigenous people affected
- How long-lasting were the changes? Were they permanent or did the situation return to its original state?
  - The changes were permanent. The British colonies in Australia continued to grow and Australia as it was before European migration would change completely.
- If one of the causes on the timeline was removed, would the key event still have occurred the same way?
  - One example is the Irish potato famine — had it not occurred, the number of Irish migrants coming to Australia could have been much lower — the event would not have occurred in the same way. This would suggest that the potato famine in Ireland was a key factor in the movement of people.

## 4.11.3 Let me do it

Complete the following activities to practise this skill.

### 4.11 ACTIVITIES

1. Practise analysing causes and effects by working through the questions and tasks outlined in the Show me section, using 'the abolition of slavery' as your key event.
   You could consider the role of individuals as well as specific events when thinking about the causes, but you might need to do some further research to finalise the effects. The questions you ask would be similar but you would need to ask yourself: Had that individual been removed, how might the events have been different? Would change have taken longer to occur, or would it have happened more quickly? This will help reveal the importance of the individual in the events you are studying.
2. Compare your graphic organiser with others in the class. Have you identified the same or similar factors? If not, explain your thoughts to each other and decide if you need to update or adapt your own work.
3. Once you are confident that your work is complete, use it to write an extended response to the following question: 'To what extent did the actions of individual people result in the abolition of slavery?'
   In answering, you should consider both the actions of individuals and other factors that resulted in the abolition of slavery. Decide which you feel was the more important factor.

# 4.12 Thinking Big research project: A migrant's letter home

## Scenario

It is the mid nineteenth century and you have emigrated from Great Britain to Australia. You, like all migrants, have faced a number of challenges, but now you have established yourself and feel ready to write to your family back home to tell them about your experiences.

**SOURCE 1** This digger's hut on the goldfields would have been quite comfortable compared to some of the other options for accommodation. Perhaps this will form part of your letter home.

## Task

Write a letter to your family, informing them of your experiences since leaving home. You will need to:

- choose the location from which you emigrated – was it England, Ireland, or Scotland?
- create an identity for your migrant self. Are you a labourer who has left Scotland to settle in western Victoria, or perhaps an Irish migrant trying your luck on the goldfields?
- decide the audience for whom the letter is being written – it will be for family members, but will it be written for parents or siblings, or both? How might this influence the tone of the letter?

The information in this topic will be a starting point for your research. Have a look through the subtopics and decide what you will tell your family about.

Your letter should include the following details:

- why you decided to emigrate
- the voyage to Australia, including the people you may have encountered
- the location in which you have settled – did you move around different places before finding somewhere to settle? If so, why?
- the work you are doing
- people you have encountered in Australia (perhaps convicts, or other migrants arriving to go to the goldfields).

All of the detail you provide should be based on accurate historical information.

**SOURCE 2** This image shows a family suffering during the Irish Potato Famine. It might help you bring together some ideas for your letter home from Australia.

## Process

- Open the ProjectsPLUS application in the Resources for this topic. Click on the **Start new project** button to enter the project due date and set up members in your project group if you wish to work collaboratively. You will write your letter individually, but you may work in groups during the research phase, to enable information sharing and to help grow your ideas through collaborative discussion. Save your settings and the project will be launched.
- Navigate to the **Research forum**, where you will find starter topics loaded to guide your research. You can add further topics to the Research forum if you wish.
- Revisit the content in subtopics 4.9 and 4.10 to identify aspects that you would like to incorporate into your letter. Use the sources to specify the historical information that you will include. You could

mention: conditions in England, Ireland, or Scotland; the voyage across the sea; population growth in the colonies; the change in lifestyle that you may have experienced after your arrival.
- Supplement your knowledge by conducting further research using the library or the internet. You should seek out appropriate text sources, as well as visual sources such as drawings and maps. Remember to record details of your sources so you can create a bibliography to submit with your letter.
- Add your research notes and source details to the relevant topic pages in the Research forum. When you have completed your research, you can print out the **Research report** in the Research forum to easily view all the information you have gathered, if you wish.
- When you are ready to bring your ideas together, write your letter home. It should be around 500–600 words in length and should accurately and engagingly convey your experiences to your family members.
- Compile your bibliography. Remember to check your spelling, grammar and punctuation in all your work. When you are happy with your work, submit the letter and bibliography to your teacher for assessment.

**SOURCE 3** George Baxter's painting from the mid nineteenth century *News from Australia* depicts a family in England receiving news from a loved one in the colonies.

## Resources

**ProjectsPLUS** Thinking Big research project: A migrant's letter home (pro-0183)

# 4.13 Review

## 4.13.1 Key knowledge summary

### 4.2 Examining the evidence

- The period 1750–1900 provides a wide range of sources for historians studying the movement of people at that time.
- The sea lanes were the super-highways of the day.
- Ships had detailed logs of their journeys as well as generally accurate manifests of all their passengers and crew.
- As rates of literacy increased, more and more people kept journals and diaries recording their experiences.
- The development of photography provided a completely new way of recording events and subsequently a new type of historical source for us to investigate.

### 4.3 Overview of slavery

- Slavery in one form or another has existed for thousands of years.
- As Europeans established colonies in the Americas, the Native American population was enslaved and put to work.
- The slave trade spread in the sixteenth and seventeenth centuries to become an intercontinental trade with the transportation of slaves from Africa.
- Slaves were put to work on the British plantations of sugar, cotton and tobacco.
- For 200 years slavery was seen as an integral part of the North American economy.

### 4.4 Slavery and the cotton trade

- The slave trade in North America continued long after the United States gained independence from Great Britain in 1776.
- It is particularly associated with the cotton industry in the southern states.
- Only around one quarter of southern farmers actually owned slaves.
- Conditions for slaves on the cotton fields were generally tough, with harsh punishments for any wrongdoing.

### 4.5 The end of slavery?

- Slavery was defended by some as a way to introduce Christianity and civilisation to otherwise 'backward' people.
- Others saw it as an essential part of a nation's economy.
- Some people, known as 'reformers', called passionately for its abolition.
- In England, the Mansfield Judgement of 1772 declared slavery to be illegal in England and Wales.
- While not a complete abolition, the judgement was an important step on the way to abolishing slavery elsewhere.
- In the United States stories like those of Harriet Beecher Stowe's *Uncle Tom's Cabin* highlighted the plight of slaves and drew increased calls for abolition.
- In 1863 President Abraham Lincoln signed the Emancipation Proclamation, officially freeing the slaves in the United States.
- Life for many, if not most, freed slaves remained harsh for many years to come.

### 4.6 Crime and punishment

- The Industrial Revolution had a significant impact on Great Britain.
- As new industries replaced existing ones, many people could not adapt quickly enough and found themselves without work or land.
- Increased unemployment led to increases in crime.
- Harsher punishments for petty crimes did little to deter would-be criminals.
- During the eighteenth century prisons grew overcrowded.

- After the United States gained independence from Great Britain, transporting criminals to the plantations for labour was no longer an option.
- The British government needed to find a long-term solution.

### 4.7 Transportation to Australia

- England's overcrowded prisons presented the British government with a serious challenge.
- The United States, now independent, no longer accepted convicts and new prisons were expensive to build.
- The solution was found in the land that Captain James Cook had explored in 1770, now to be called 'New South Wales'.
- A fleet of eleven ships sailed from England in 1787 and, after a voyage of nearly nine months, established a European colony at Sydney Cove, New South Wales, in January 1788.
- The first years presented challenges to ensure the colony's survival but by the end of the eighteenth century the colony was well established.

### 4.8 Convict life

- Convicts who were skilled labourers sometimes used those skills in building the new colony.
- Convicts who reoffended while serving their sentence were sent to places of 'secondary punishment'.
- The most famous was Norfolk Island, known for its brutal physical punishment.
- Port Arthur was equally notorious for its psychological cruelty.
- Over the 80-year period in which convicts were sent to the Australian colonies, approximately 160 000 were transported.

### 4.9 Emigration to Australia

- Push and pull factors are the factors that influence people's decision to migrate.
- Push factors are the reasons why people would want or need to leave a particular place (e.g. war, famine, or lack of employment).
- Pull factors are the reasons why people might choose a particular destination (e.g. opportunity, climate, or pre-arranged employment).
- To help establish the Australian colonies, the British government often encouraged emigration.
- Those who accepted would be helped financially to make the journey in return for working in pre-arranged employment.
- Others, like the Henty family, funded their own journey, which gave them more freedom to choose their location and employment, but less security in knowing what lay ahead for them in Australia.

### 4.10 Migration to the goldfields

- After gold was discovered in New South Wales and Victoria in 1851, migration to Australia increased rapidly.
- Victoria's population grew from a little over 10 000 in 1840 to more than half a million only 20 years later.
- The gold rushes were not limited to people of British or European origin.
- From 1853 a large number of migrants from China arrived on the goldfields.
- The vastly different cultures meant that tension often occurred between the Chinese and European diggers.
- The Victorian government tried to limit Chinese immigration by introducing an 'arrival tax' to be paid before disembarking from a ship in Victoria.

A timeline of key events relating to movement of peoples, 1750–1914

**CE**

**1740**

**1742** The first blast furnaces are used in England.

**1760**

**1769** James Watt invents the steam engine.

**1770** Captain Cook first sights the east coast of Australia.

**1780**

**1788** The First Fleet arrives in Botany Bay.

**1789** The French Revolution begins.

**1793** Eli Whitney invents the cotton gin.

**1800**

**1807** The British Parliament passes a Bill abolishing the trading of slaves in their territories.

**1820**

**1840**

**1847** Freed American slaves found the Republic of Liberia in West Africa.

**1845–57** A potato blight in Ireland creates widespread famine.

**1851** The Victorian gold rush begins.

**1860**

**1861** The American Civil War begins.

**1863** Abraham Lincoln issues the Emancipation Proclamation.

**1865** The American Civil War ends.

**1880**

**1900**

**1901** Australia celebrates Federation.

**1914** World War I begins.

**1920**

**CE**

## 4.13.2 Reflection

Complete the following to reflect on your learning.

### 4.13 ACTIVITIES

Revisit the inquiry question posed in the Overview:

**From slaves, to convicts, to migrants, in what ways did people move around the world in the past?**

1. Now that you have completed this topic, what is your view on the question? Discuss with a partner. Has your learning in this topic changed your view? If so, how?
2. Write a paragraph in response to the inquiry question, outlining your views.

### on Resources

**eWorkbook** Reflection (doc-31701)
Crossword (doc-31702)

**Interactivity** Movement of peoples (1750–1914) crossword (int-7638)

### KEY TERMS

**abolition** the end of legal acceptance of slavery
**commute** to change a penalty to one less severe
**egalitarianism** equality of all people
**hulk** the body of an old ship that serves as a prison rather than a sailing vessel
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**New Spain** Spanish territories in the New World, including much of North America
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**transportation** a sentence of banishment from England for certain crimes, to be served in an overseas colony
**treadwheel** a punishment device, also called the 'everlasting staircase', comprising a large, iron-framed, hollow cylinder with wooden steps. As the device rotated slaves were forced to keep stepping forward.

# 5 Australia (1750–1918): Colonisation and conflict

## 5.1 Overview

What happened when a civilisation attempted to colonise a country that was already inhabited?

### 5.1.1 Links with our times

On 29 May 2015 a Sydney Swans footballer, Adam Goodes, performed an Aboriginal war dance after kicking a goal. Goodes explained his dance by saying, 'It's Aboriginal Round. I'm proud to be Aboriginal and to represent.' While Goodes' actions were an important expression of his identity as an Aboriginal man, the dance sparked controversy.

In subsequent matches, opposition supporters booed Goodes, showing that racism was still a feature of Australian society. Many Australians joined the 'I stand with Adam' campaign in support of Goodes and in defense of his pride in his Aboriginal heritage. Nevertheless, the issue continued to raise some important questions about relations between Australians. These questions are not new.

### Resources

**eWorkbook** Customisable worksheets for this topic

**Video eLesson** Colonisation and conflict: Australia (1750–1918) (eles-2395)

### LEARNING SEQUENCE


**5.1** Overview
**5.2** Examining the evidence
**5.3** Two civilisations meet
**5.4** Resistance
**5.5** Tragedy in Van Diemen's Land
**5.6** 1835: Conquest — the great land rush to Port Phillip
**5.7** Violence on the frontier
**5.8** Reserves, missions and responses
**5.9** A long, forgotten war
**5.10** The Torres Strait Islanders
**5.11** A celestial presence: the Chinese in Australia
**5.12** **SkillBuilder:** Determining historical significance online only
**5.13** The ideal of 'White Australia'
**5.14** **Thinking Big research project:** Colonisation and conflict exhibition online only
**5.15** **Review** online only


To access a pre-test and starter questions and receive immediate, **corrective feedback** and **sample responses** to every question, select your learnON format at www.jacplus.com.au.

## A timeline of contact and conflict to 1901

BCE

**68 000**
Aboriginal people arrive in Australia (current estimates).

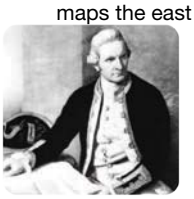
**13 000**
Land bridges between mainland Australia and Tasmania are flooded.

BCE

CE

**1606**
Dutchman Willem Janszoon makes the first documented European landing on the Australian coast.

**1770**
After more than 50 European ships make contact with the Australian mainland, James Cook maps the east coast and claims it for Britain.



**1788**
The British colony of New South Wales is established.

**1790–1802**
Pemulwuy leads Aboriginal resistance in the Sydney area.

**1804**
Aboriginal Tasmanians are killed at Risdon Cove.

**1816**
Macquarie sends the military to crush resistance by the Darug people.

**1814**
Governor Macquarie organises the first annual Aboriginal conference at Parramatta, near Sydney.

**1824**
The 'Black War' begins in Tasmania. Aboriginal resistance is crushed on the Bathurst Plains in New South Wales.

**1835**
Businessmen from Tasmania establish an illegal camp at the northern end of Port Phillip Bay.

**1838**
The Myall Creek massacre takes place in New South Wales.

**1837**
A report of the British Parliament criticises Australian colonial policies towards Aboriginal peoples.

**1851**
Gold is discovered in the newly named Colony of Victoria.

**1855**
Victorian government introduces heavier taxation for Chinese migrants.

**1867–68**
An Aboriginal cricket team tours England.

**1881**
Victoria and New South Wales restrict Chinese immigration.

**1884**
The Kalkadoon people make their last stand in Queensland.

**1901**
The Commonwealth Parliament passes the Immigration Restriction Act.

CE

# 5.2 Examining the evidence

## 5.2.1 How do we know about race relations in colonial Australia?

In this topic you will study the consequences of contact between Aboriginal peoples and Europeans in Australia up to the early twentieth century. Some consequences were intended and others unintended. In both cases, they were usually disastrous for Australia's Aboriginal peoples. Non-European immigrants also suffered discrimination during this period. Most of the hostility was directed against the Chinese who came to work on the goldfields from the 1850s, but there was also strong prejudice against Pacific Islanders who were brought over to work on Queensland's sugar plantations.

### Written sources

Most of our written sources for these events, including official reports, diaries, letters and newspaper articles, derive from the colonisers. This means that for many events we have heard only one side of the story. We have to be wary of bias in such sources. However, it is important to remember that even the most biased sources can be useful because of what they might tell us about the attitudes of the people who created them.

We also need to be aware of gaps in our evidence. When settlers were killed by Aboriginal people, such killings were recorded and usually punished by white authorities. Most killings of Aboriginal people by settlers went unrecorded and unpunished, or were recorded in ways that distorted the truth.

We should not assume that all Europeans saw these events in the same way. Among those who came to Australia in the late eighteenth and nineteenth centuries there were people who recognised the injustice suffered by Aboriginal peoples and other non-Europeans and who were angered by it.

**SOURCE 1** A letter from Arthur Phillip, the first governor of New South Wales, to the Marquis of Lansdowne in England, 3 July 1788

My Lord
... the few extracts from my journal, is all the information I am able to give your Lordship, at present, of the Natives; who never come to us & with whom I have never been able to remain but a very short time ...
It has been my determination from the time I landed, never to fire on the Natives, but in a case of absolute necessity, & I have been so fortunate as to have avoided it hitherto ... They do not in my opinion want [lack] personal Courage, they very readily place a confidence & are, I believe, strictly honest amongst themselves ...

**SOURCE 2** From *Captain John Hunter's Journal* (1793), in which he described contacts in the new settlement's first week. Hunter was the second governor of New South Wales.

In the different opportunities I have had of getting a little acquainted with the natives, who reside in and about this port, I ... think that it will be no very difficult matter ... to conciliate their friendship and confidence ... whenever we have laid aside our arms, and have made signs of friendship, they have always advanced unarmed ... I am inclined to think, that by residing some time amongst them, or near them, they will soon discover that we are not their enemies; a light they no doubt considered us in on our first arrival.

### Oral history

For some events we have records that were handed down by word of mouth through generations of Aboriginal people. These records tell of loss of land, massacres and other injustices. In many cases there is other evidence to support such records.

### Visual records

Because Aboriginal art was mainly concerned with spiritual beliefs, we have few Aboriginal artworks that record contacts and conflict with Europeans. The fate of Aboriginal peoples did not interest most European

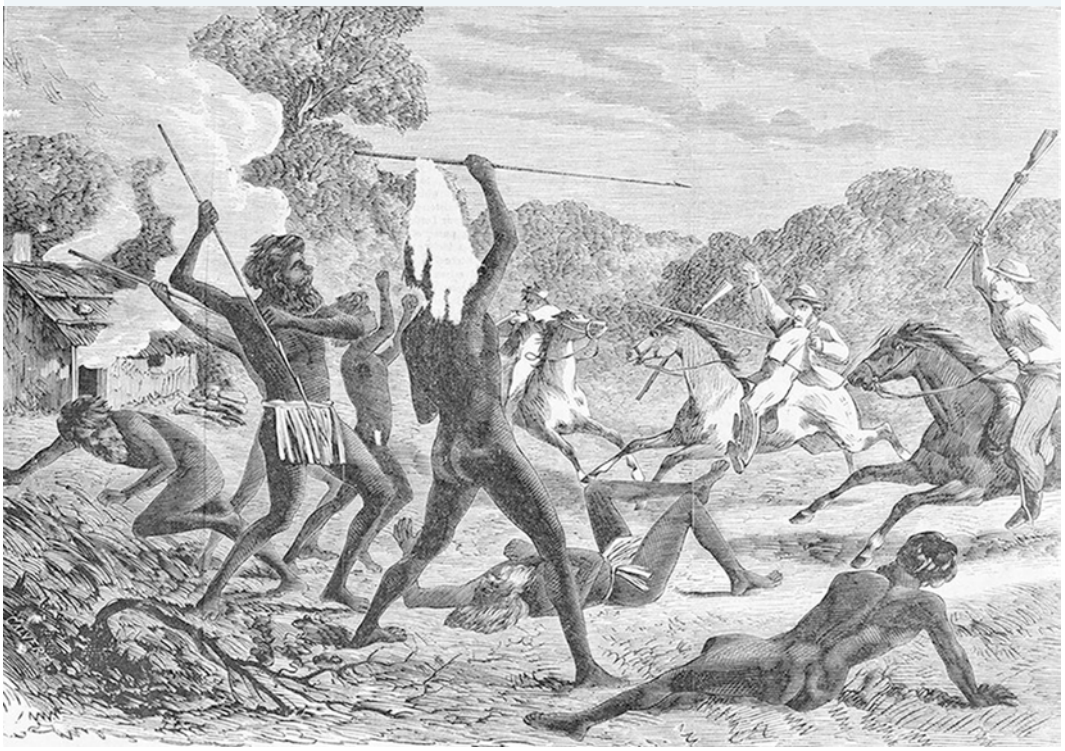
artists. However, some paintings and drawings by European artists do provide useful evidence. From the mid-nineteenth century we also have photographic evidence.

**SOURCE 3** *The annual meeting of the native tribes at Parramatta, New South Wales, the Governor meeting them*, a watercolour painting by Augustus Earle, c. 1826. From 1814, under Governor Macquarie, Aboriginal people were invited to annual feasts and conferences at Parramatta, near Sydney. Hundreds of Aboriginal people attended the gatherings, which continued into the 1830s.

**SOURCE 4** *The Persecuting White Men*, a lithograph thought to have been made by George Hamilton between 1848 and 1858

**SOURCE 5** A *scene in South Australia* by Alexander Schramm (1813–1864)

**SOURCE 6** *Australian Aborigines — War*. The image was published in *The Illustrated Melbourne Post* on 27 May 1867. The caption alongside it read, 'Fortunately, outrages of this kind are now almost unknown.'



**SOURCE 7** *Collins Street, town of Melbourne, New South Wales 1839* by William Knight

## 5.2 ACTIVITY

In small groups, compare and contrast **SOURCES 1–7**, using the following questions as a guide.

**a.** Identify what the sources suggest about the relationships between the Europeans and Aboriginal peoples.
**b.** How might you explain the variety of relationships they show?
**c.** How useful is each source in helping us understand the relationships between Europeans and Aboriginal Australians? Choose two or three sources and explain their strengths and limitations. Discuss what makes a source valuable.
**d.** Explain what the sources indicate about the consequences of the European presence for Australia's Aboriginal peoples. Identify one intended and one unintended consequence. Combine your answers in a class discussion.

**Using historical sources as evidence**

## 5.2 EXERCISES

**Historical skills key: HS1** Remembering and understanding **HS2** Sequencing chronology **HS3** Using historical sources as evidence **HS4** Identifying continuity and change **HS5** Analysing cause and effect **HS6** Determining historical significance

### 5.2 Exercise 1: Check your understanding

1. **HS1** What are three forms of written evidence that provide information about colonial Australia?
2. **HS1** Which groups of people suffered discrimination during the colonial period?
3. **HS1** Why, in many instances, do we only have one side of the story of Australian colonisation?
4. **HS1** Explain the concept of 'oral history'.
5. **HS1** What types of visual records do we have from the colonial period?

### 5.2 Exercise 2: Apply your understanding

1. **HS3 SOURCE 1** is an extract from a letter Governor Phillip wrote less than six months after he arrived in Australia.
   (a) What does Phillip write about the way he intends to treat Aboriginal people?
   (b) What impressions had he formed of Aboriginal people?
2. **HS3** In **SOURCE 2** what does Captain Hunter say about the Aboriginal people he had encountered?
3. **HS3** What hope does Hunter express in **SOURCE 2** for the future for European relations with Aboriginal peoples?
4. **HS3** What does the scene shown in **SOURCE 3** suggest about relations between the Europeans and Aboriginal peoples?
5. **HS3** Examine **SOURCES 1, 2** and **3**. What do the sources suggest about the official British policies towards Australia's Aboriginal peoples?
6. **HS3** Describe the scenes in **SOURCES 4** and **6**. Explain what these sources suggest about the reasons for the violence.
7. **HS3** Describe the scene in **SOURCE 5**. Identify elements of the image that indicate friendly relations between Europeans and Aboriginal peoples.
8. **HS3 SOURCE 7** is a famous image of Melbourne in 1839, only four years after the Europeans' arrival in what is now Victoria. What does this image suggest about the relations between Europeans and Aboriginal peoples?

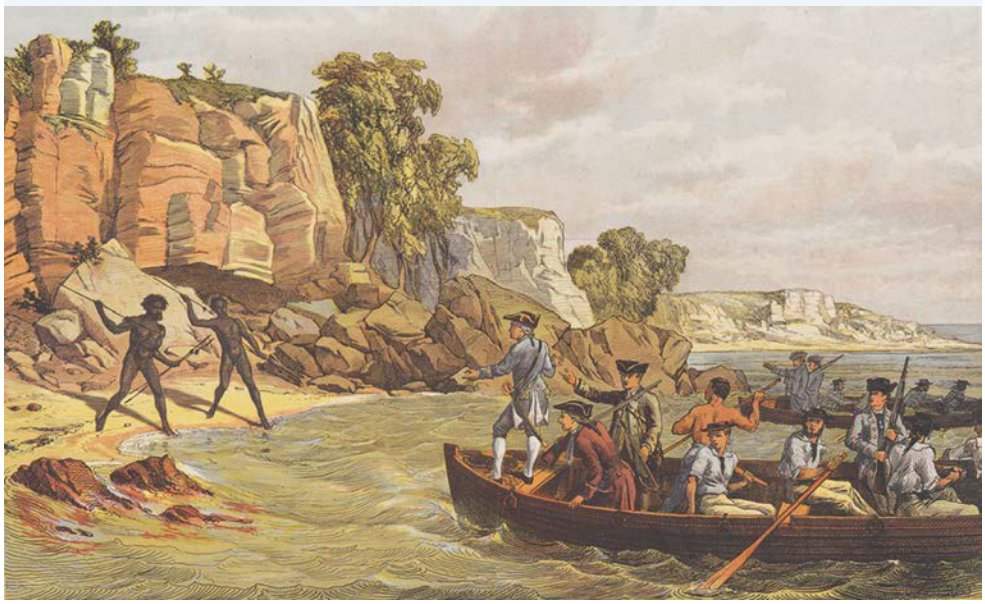
Try these questions in learnON for instant, corrective feedback. Go to www.jacplus.com.au.

# 5.3 Two civilisations meet

## 5.3.1 The Europeans arrive

For tens of thousands of years before British colonisation, Aboriginal Australians lived undisturbed in a range of different landscapes and climates. The seeds of conflict were sown soon after the first colonists arrived because the British authorities had no understanding of the relationships between Aboriginal peoples and their land. Instead, the British imposed their own understanding of land use and ideas of ownership.

**SOURCE 1** A colonial artist's depiction of the response of the Aboriginal people of Botany Bay to the arrival of Captain James Cook in 1770. This colour lithograph was made in 1872.

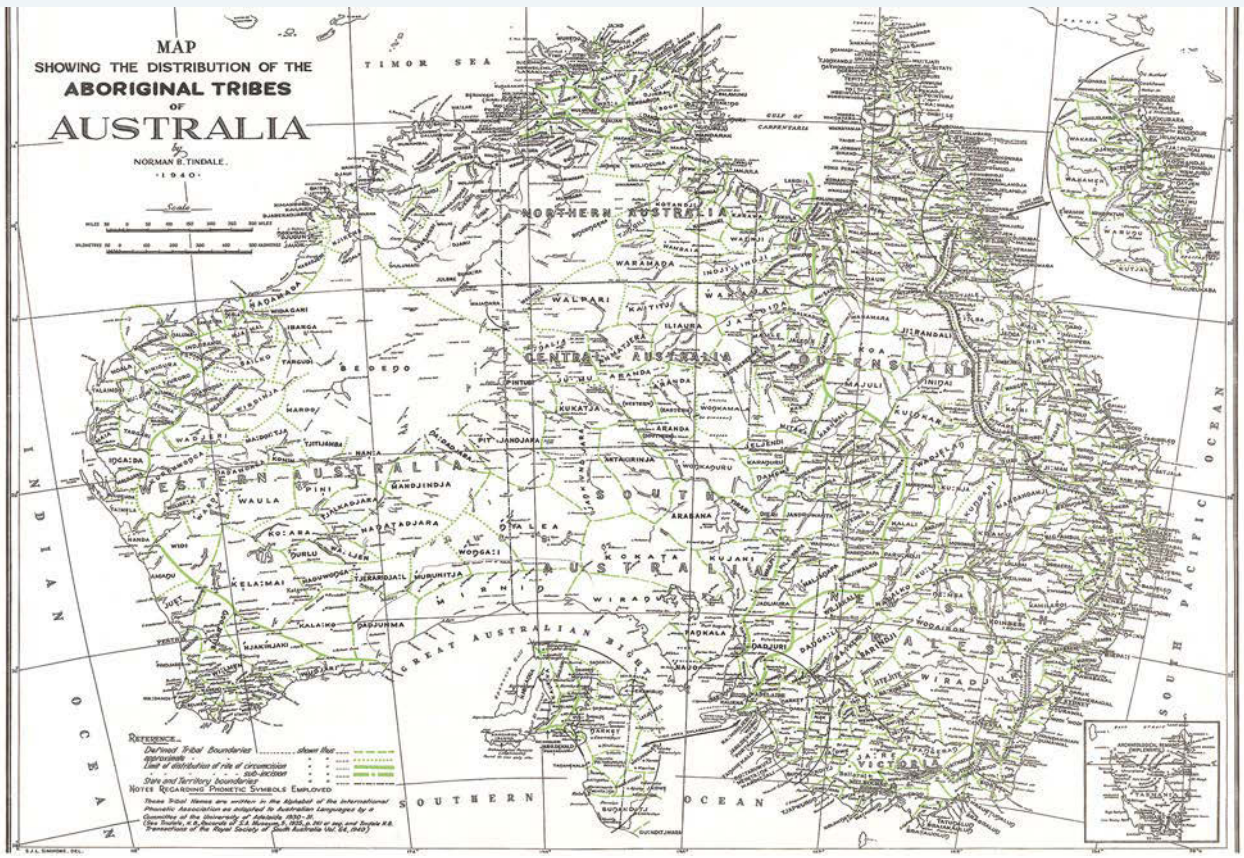


Some Aboriginal Australians had contact with people from overseas from at least the start of the seventeenth century. Macassans (from Indonesia) had often visited Australia's northern coast and some Torres Strait Islands for fishing and trade. Also, some Dutch and English explorers made landings in Australia in the seventeenth and eighteenth centuries. The last was Captain James Cook, who charted the east coast in 1770. Cook named the country New South Wales and claimed it for the English king, George III.

**SOURCE 2** From Captain James Cook's journal of his first expedition (1770)

They may appear to some to be the most wretched people on earth, but in reality they are far happier than we Europeans ... [The] earth and sea ... furnish them with all the things necessary for Life ... [They] live in a fine Climate and enjoy a very wholesome Air, so that they have very little need of Clothing ... [They] ... set no Value upon anything we gave them ... this in my opinion argues that they think themselves provided with all the necessarys of Life.

**SOURCE 3** Aboriginal groups across Australia in 1940




***Source*:** *Map Showing the Distribution of the Aboriginal Tribes of Australia*, Norman B. Tindale, 1940. Users of this map should be aware that certain words, terms or descriptions may be culturally sensitive and may be considered inappropriate today, but may have reflected the creator's attitude or the period in which they were written. Borders and terminology used may be contested in contemporary contexts.

## DISCUSS

What does the **SOURCE 3** map tell us about the Aboriginal peoples' ownership of land? If there were clear boundaries and territories among Aboriginal peoples, how might they have reacted to the European presence? Discuss this issue in class. **[Intercultural Capability]**

## 5.3.2 Occupation begins

The First Fleet from England to colonise Australia is believed to have carried nearly 1500 men, women and children, most of whom were **convicts**. Its commander, Captain Arthur Phillip, was to be the first British governor of New South Wales. He explored Port Jackson (Sydney Harbour) and founded the first British settlement there on 26 January 1788.

Eight days earlier the Cadigal Aboriginal people had seen the British fleet at Botany Bay. They had also witnessed the arrival of two French ships commanded by La Perouse. The French fired upon an Aboriginal community in February but sailed away on 10 March. The local people could not have known that the arrival of these strange Europeans would eventually lead to the end of their sole ownership of a continent that they had enjoyed for at least 60 000 years.

### 'Respecting Natives'

New South Wales was founded as a **penal colony**. Some historians think that it was just a dumping ground for Britain's unwanted convicts, some consider it a strategy to exploit the continent's resources, while others think that it was a second chance for those who had broken the law. Regardless of the possible reasons, there was no doubt that the early colonial governors had wide powers, similar to those of someone controlling a prison. Their orders from Britain were to cultivate friendly relations with Aboriginal people and to offer them the protection of British law. In 1807 the third Governor of New South Wales, P.G. King, wrote a memo for his successor titled 'Respecting Natives'. In this advice he stated that he had been unwilling to force the Aboriginal people to work because he regarded them as the 'real Proprietors [owners] of the Soil'. However, Governor King had also given the settlers permission to 'fire on any natives they see'. The Europeans' fear of Australia's Aboriginal peoples, as well as their desire to possess the land, often became more important than their intentions of respect.

### A wasteland?

Aboriginal lifestyles varied widely, as did the ways in which different Aboriginal language groups managed the land. In his recent book *The Biggest Estate on Earth: How Aborigines Made Australia*, historian Bill Gammage describes how Aboriginal people did much more than just wander as nomads: 'They travelled to known resources, and made them not merely sustainable, but abundant, convenient and predictable.'

However, the colonists did not acknowledge this management of the land or the variations in lifestyles, even when they became aware that Aboriginal peoples had a strong attachment to the land and a clear sense of ownership.

The British saw only that the land was not used in a European way; that is, it was not productively 'farmed' as they saw it. So they described Australia as a *wasteland*, an important concept in British law that described unoccupied or unproductive land that could be taken without asking for permission. This understanding would be expressed late in the nineteenth century as *terra nullius*, a Latin term for 'nobody's land' that would be used frequently in the legal and political debates about land rights in modern Australia.

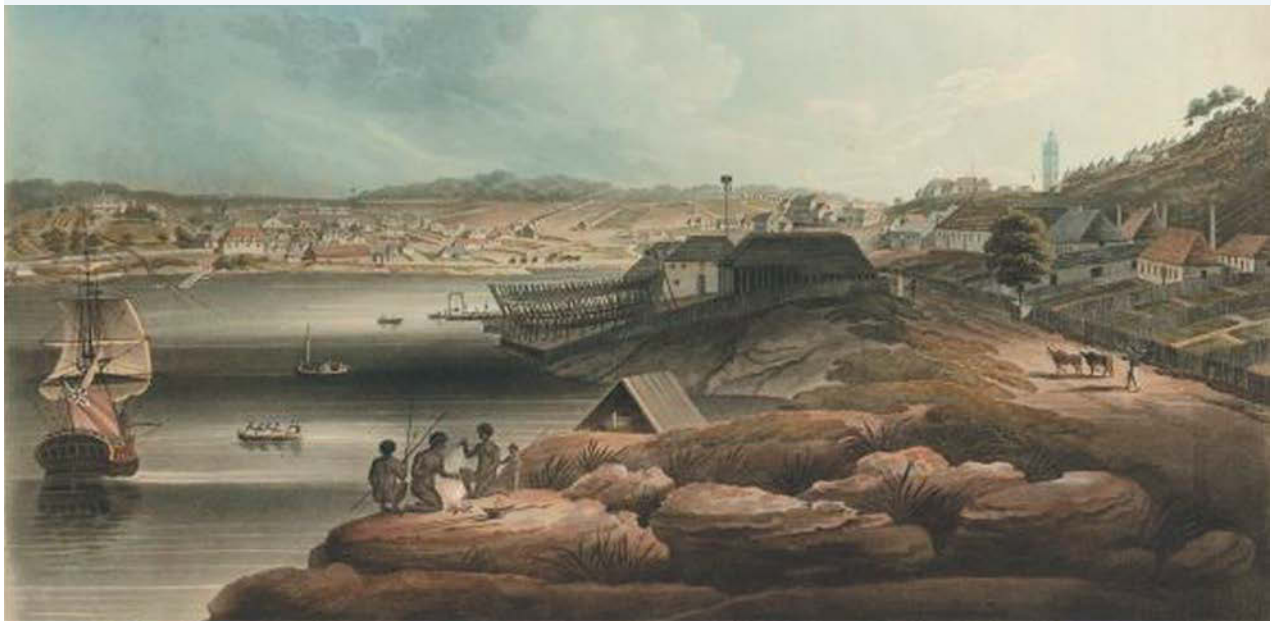
As far as the colonists were concerned, they needed food for farming and they desired the wealth that could be produced by grazing sheep for wool. Both activities required the taking of Aboriginal land. They justified this by arguing that they were 'making wasteland productive'. There was often little consideration or understanding that this was taking away not only access to sacred sites but also the food and water sources from Aboriginal communities, many of whom were reduced to starvation.

## 5.3.3 Culture clash

Before long the people of the main language groups around Sydney — the Darug, Kuringgai and Dharawal people — saw the new arrivals clearing land, fencing waterholes and hunting grounds, fishing without permission and trampling around sacred sites. They were breaking laws that Aboriginal people had lived by for thousands of years. They were clearly invaders, not visitors, and were acting as if they had a right to occupy the land without negotiating with the rightful owners.

For their part, the Europeans had a range of reactions to Aboriginal people. In line with the ideas of the time, the more educated Europeans tended to see Aboriginal people as 'noble savages', primitive people who lived in harmony with the natural world (see **SOURCE 4**). However, most of the new arrivals were uneducated convicts and soldiers who probably feared the people whose land they had entered. These Europeans could not understand Aboriginal **kinship** systems or why they did not behave like Europeans and build towns, churches and farms.

**SOURCE 4** *A View of Sydney Cove, New South Wales*, engraved by Francis Jukes in 1804



**SOURCE 5** *First Government House, Sydney*, a watercolour painted by John Eyre around 1807

The British did not consider the fact that different parts of the country belonged to different language groups. They assumed that Aboriginal people could simply move on to another area when their land was taken. Later, when they finally did gain some understanding of such matters, they continued to take land regardless.

## 5.3.4 Early encounters

In May 1788 two convicts were killed by Aboriginal people at Rushcutters Bay, and there were several other clashes. At first Governor Phillip was willing to blame the convicts rather than the Aboriginal people for the violence.

**SOURCE 6** From David Collins, *An Account of the English Colony of New South Wales*. The event described occurred in March 1788.

Several convicts came in from the woods; one in particular dangerously wounded with a spear ... these people denied giving any provocation to the natives; it was, however, difficult to believe them; they well know the consequences that would attend any acts of violence on their part ... any act of cruelty to the natives being contrary to his Majesty's ... intentions.

**SOURCE 7** From a report of events in January 1800 by Governor John Hunter

Two native boys have lately been most barbarously murdered by several of the settlers at the Hawkesbury River, not withstanding orders on this subject have been repeatedly given pointing out in what circumstances only they were warranted in punishing with such severity.

Phillip wanted to develop contacts between cultures. When Aboriginal people continued to avoid the settlement, he resorted to kidnapping them in the hope that these individuals could be influenced to encourage their people to accept British ways. Arabanoo was the first to be captured, but within six months he died of smallpox. In November 1789 Bennelong and Colebee were captured. Colebee escaped but Bennelong was later sent to England. Tragically, on his return to the colony in 1795 he was unable to fit into either Aboriginal or European society. He died in 1813.

**DID YOU KNOW?**

Unlike Europeans, Aboriginal people had no resistance to smallpox, a disease that arrived with the colonists. In April 1789 smallpox began to kill many Aboriginal people around Sydney. As the people retreated from the disease it spread inland. Probably half the Aboriginal population of the Sydney area was wiped out by this epidemic by 1790.

### Rising tensions

In the first few decades of the colony, tensions grew on both sides. Aboriginal people were shot at when they crossed European farmland to hunt and gather food. But these farms had been established by taking Aboriginal land. In retaliation, Aboriginal warriors attacked European settlers and convicts. More and more Europeans arrived and ever more Aboriginal people died of smallpox and other introduced diseases, including whooping cough and influenza.

**SOURCE 8** From the *Sydney Gazette*, 25 June 1814

The mountain natives have lately become troublesome to the occupiers of remote grounds. Mr. Cox's people at Mulgoa have been several times attacked within the last month and compelled to defend themselves with their muskets, which the assailants seemed less in dread of than could possibly have been expected. On Sunday last, Mr. Campbell's servants at 'Shancomore' were attacked by nearly 400.

**SOURCE 9** In this extract from his journal of 10 April 1816, Governor Lachlan Macquarie gave his reasons for sending expeditions to crush Aboriginal resistance in that year.

I therefore, tho' very unwillingly, felt myself compelled from a ... sense of public duty ... to inflict terrible ... punishment upon them without further loss of time; as they might construe any further forbearance or lenity [leniency] on the part of this Government [as] fear or cowardice.

## 5.3.5 A landscape and society transformed

Whenever British settlers arrived in the territory of an Aboriginal community, the traditional custodians not only had to deal with the presence of the new people but also the changes that occurred. Introduced animals, plants, weeds and diseases devastated the land and its people.

Aboriginal people had lived in isolation for tens of thousands of years and had no immunity to the diseases that had developed in Europe and Africa. The first major epidemic around Sydney was smallpox in 1789 and the first colonists estimated that around half of Sydney's Aboriginal population died. There is also evidence that the disease travelled into Aboriginal communities that had not even had contact with the Europeans. Captain David Collins observed in 1803 that some of the Aboriginal people he met in Port Phillip Bay near Sorrento had scars similar to those caused by smallpox, despite the fact that those men had not seen Europeans before.

It was not only smallpox that was deadly. A range of other European diseases also caused thousands of deaths over the next hundred years: influenza, tuberculosis, typhoid, measles and even leprosy posed a fatal danger to Aboriginal communities. As populations were decreasing, sexually transmitted infections also affected the communities' abilities to reproduce. In some parts of Australia, Aboriginal populations decreased by as much as 80 per cent; two-thirds of these deaths were due to European diseases.

The land itself was also changed dramatically. Within 100 years of the arrival of the First Fleet, more than 100 million sheep were eating their way across Australia, consuming native herbs and grasses, displacing traditional Aboriginal food sources (such as kangaroo) and almost completely eradicating the yam daisy (murrnong), one of the most nutritious and plentiful foods before European occupation. The hard hooves of sheep and cattle compacted the soil while other introduced animals (such as rabbits) also created problems, driving some native animals to extinction.

Aboriginal communities had occupied the continent of Australia for thousands of generations and had carefully managed its resources, looking after the land and ensuring the survival of their own society and customs. Their negotiation with British settlers, and especially their ability to resist the imposition of European society, was severely weakened by these dramatic changes to the land and the impact of disease on their communities.

### 5.3 ACTIVITIES

1. As you work your way through this topic, annotate a blank map of Australia with the places mentioned and events that occurred there. **Remembering and understanding**
2. Working with a partner, find other examples of colonial art that depict Aboriginal peoples. Try the works of Augustus Earle, William Bradley, Joseph Lycett, John Eyre, Benjamin Duterrau or S.T. Gill.
   (a) Using specific examples from these works of art, comment on whether colonial artists had a negative or sympathetic view of Aboriginal people.
   (b) Do these works of art have a value in helping us to understand the past? Support your answer with examples. **Using historical sources as evidence**
3. Working in a small group, find more images of Cook's landing at Botany Bay in 1770 and compare them to **SOURCES 1** and **2**. For each of your images, consider:
   (a) What does it suggest about the landing?
   (b) How does it portray Cook?
   (c) What does it say about Australia's Aboriginal peoples? **Determining historical significance**

4. Many formal gatherings start with an 'Acknowledgement of Country'. Write your own 'Acknowledgement of Country' and write a letter to your school principal explaining why it could be used at the next school assembly. **[Intercultural Capability]**

## 5.3 EXERCISES

**Historical skills key: HS1** Remembering and understanding **HS2** Sequencing chronology **HS3** Using historical sources as evidence **HS4** Identifying continuity and change **HS5** Analysing cause and effect **HS6** Determining historical significance

### 5.3 Exercise 1: Check your understanding

1. **HS1** Use the words provided in the following table to complete the paragraph below explaining why Europeans and Aboriginal people clashed over the land.

| | | | |
|---|---|---|---|
| understanding | first | use | imposed |
| British | seeds | ownership | relationship |
| conflict | ideas | own | land |

The _____ of _____ were sown soon after the _____ colonists arrived because the _____ authorities had no _____ of the _____ between Aboriginal people and their _____. Instead, the British _____ their _____ understanding of land _____ and _____ of _____.

2. **HS1** Name two other groups of people with whom Aboriginal Australians had contact prior to the arrival of the British.
3. **HS1** What were Governor King's attitudes to local Aboriginal people?
4. **HS1** Explain what the British understood by the term *wasteland*.
5. **HS6** Why was the idea of the Australian continent as a *wasteland*, or *terra nullius*, so significant for the British colonists and Australia's Aboriginal peoples?
6. **HS1** What different ideas about Aboriginal Australians did educated and uneducated Europeans hold?
7. **HS1** What might the local Aboriginal peoples have thought about the actions of the Europeans after their arrival at Sydney Cove?

### 5.3 Exercise 2: Apply your understanding

1. **HS3** Study **SOURCE 1**. What does it suggest about Cook's landing at Botany Bay?
2. **HS3** Describe Cook's reactions to Aboriginal people in **SOURCE 2**.
3. **HS3** What does the **SOURCE 3** map tell us about the Aboriginal peoples of Australia?
4. **HS3** Examine **SOURCES 4** and **5**.
   (a) What do the sources tell us about the changes that Europeans made to the country of Aboriginal peoples?
   (b) What do the sources suggest about the differences between European and Aboriginal peoples and their ways of living?
   (c) What do these images reveal about relations between the two groups?
5. **HS3** Using **SOURCES 6–9** as your evidence:
   (a) Describe the range of attitudes of colonial authorities toward Aboriginal peoples.
   (b) Explain what the sources suggest about the changing nature of the relations between Aboriginal peoples and the colonists. Make sure you note the date of each source.
6. **HS4** List the changes caused by the Europeans to Aboriginal society and the landscape.
7. **HS5** Describe how the Aboriginal peoples' traditional food sources were affected by the arrival of the Europeans.

Try these questions in learnON for instant, corrective feedback. Go to www.jacplus.com.au.

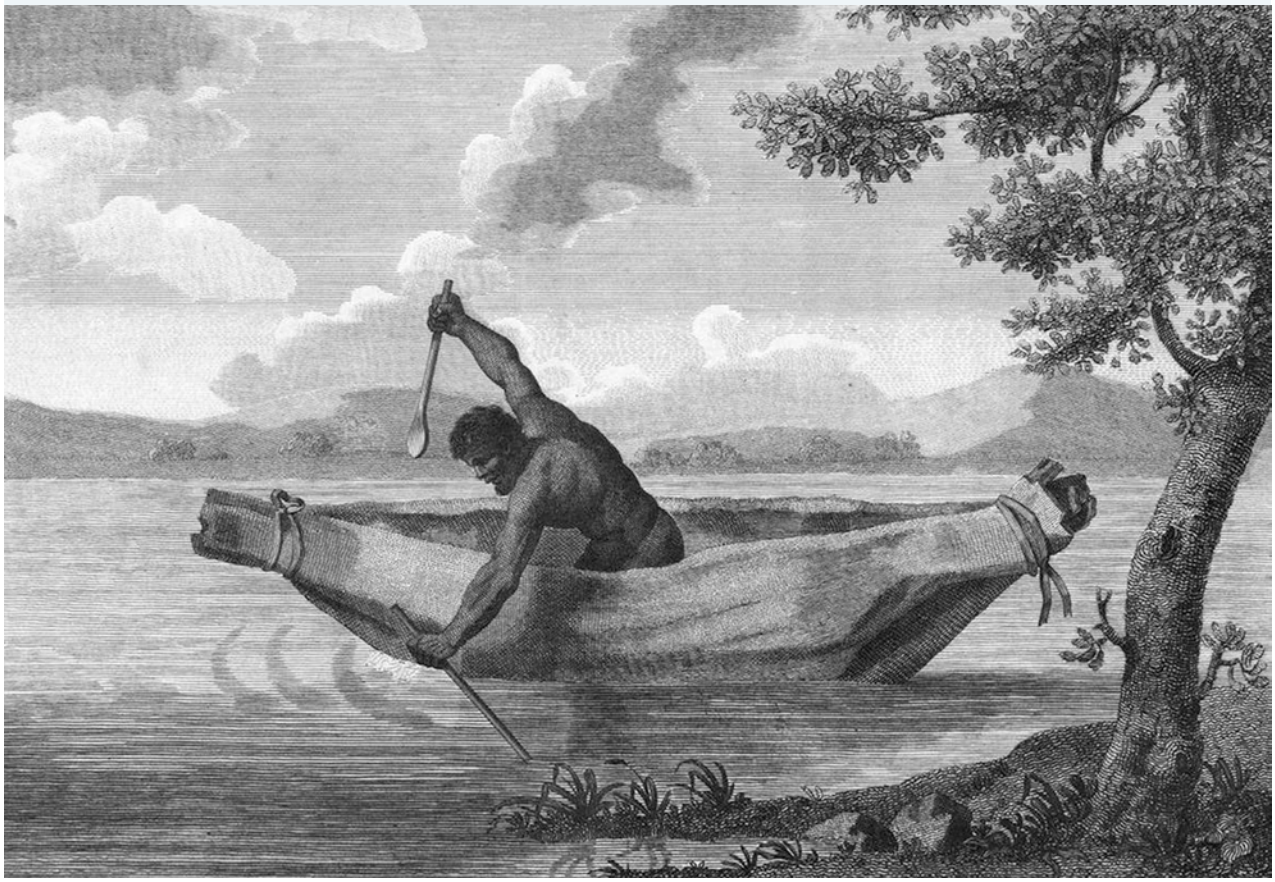
# 5.4 Resistance

## 5.4.1 Pemulwuy

Many stories about the conflict between European colonists and Aboriginal people suggest that it was very one-sided. However, although Aboriginal people may not have had the guns of the Europeans, or often their manpower, they did not lack courage or skill. Their bush skills, for example, could not be matched by the Europeans and in many instances the resistance of Aboriginal peoples caused the Europeans great fear and anxiety. Here are the stories of two Aboriginal men who fought back.

The Bidjigal warrior Pemulwuy, sometimes called the Rainbow Warrior, belonged to the Eora language group (the coastal area in Sydney). Between 1790 and 1802, he led many attacks against colonial farms and settlements, some of which were highly organised, large-scale guerrilla operations. These raids were probably motivated by hunger or as 'payback' for atrocities committed by Europeans. He and his men fought fiercely in a battle in 1797 near the newly settled town of Parramatta. Seriously wounded, Pemulwuy was put in leg irons and taken to hospital for treatment. He escaped the following month. Many of his people believed that firearms would not kill him.

**SOURCE 1** *Pimbloy: Native of New Holland in a canoe of that country*, a print from an engraving by S.J. Neele. The man in the picture is believed to be Pemulwuy. Despite being continually sought by soldiers, Pemulwuy kept eluding them. He survived repeated wounds. In one attack, he was hit by seven bullets. Some Aboriginal people believed he escaped by turning himself into a bird.



Governor King became increasingly frustrated by Pemulwuy. He offered rewards, including a free pardon, to any convict who would bring him his head. That happened in 1802; Pemulwuy was murdered. His decapitated head was sent to England to be studied by scientists. They had heard a lot about the native Australians but had never seen one. Although glad he was dead, Governor King had a grudging respect for

Pemulwuy. He said of him: 'Altho' a terrible pest to the colony, he was a brave and independent character and an active, daring leader of his people.'

**DID YOU KNOW?**

Until recently, the remains of many Aboriginal Australians were still held in several British museums, causing great distress to Aboriginal communities who believe the souls of their ancestors cannot rest until their bodies are returned. In recent years, some British museums have commenced the process of returning such remains to their communities.

## 5.4.2 Yagan

Yagan was a member of the Nyungar language group of south-western Western Australia. This tall man (described as being over 1.8 metres in height) was both feared and admired by the British colonists.

At first, the Nyungar lived in harmony with the Europeans, who had established a colony on the Swan River in 1829. However, arguments soon arose over land and resources. The British mistook the Nyungar tradition of burning the land as an act of aggression. In 1831 a Nyungar was shot while taking potatoes from a settler's garden. The settler saw it as theft; the Nyungar would have seen it as taking the land's resources, to which he was entitled. Yagan sought revenge for this killing. After more battles, a reward was offered for his head.

**SOURCE 2** This statue of Yagan was erected on Herrison Island in the Swan River.

When Yagan was finally captured, a European named Robert Lyon fought hard to spare his life. He admired Yagan's courage and wished to study him. Yagan was exiled to a small rocky island but escaped after six weeks. The colonists were angry about this; as punishment, they killed Yagan's father and brother, and increased the reward on Yagan's head.

For 12 months Yagan managed to avoid capture, continuing to fight for his people. Then, in July 1833, he approached two shepherds he knew, asking for flour. When his back was turned, one of them, William Keats, shot him. A reward was given for the killing of Yagan, but the editorial of *The Perth Gazette* described it as a 'wild and treacherous act': 'We are not vindicating [forgiving] the outlaw, but, we maintain it is revolting to hear this lauded [praised] as a meritorious [good] deed.'

Yagan's head was sent to England in 1835. The hair was combed, and black and red cockatoo feathers were tied around Yagan's head as decoration. It was exhibited in Liverpool until 1964, when it was buried in Everton Cemetery. In 1997, almost 165 years after being sent to England, Yagan's head was returned to Australia for a proper burial.

**SOURCE 3** The head of Yagan, painted by Robert Havell

### DID YOU KNOW?

Until about the 1970s Australian school textbooks did not mention Aboriginal resistance leaders, such as Pemulwuy and Yagan. In fact, some school texts ignored Aboriginal history almost entirely.

## 5.4 EXERCISES

**Historical skills key: HS1** Remembering and understanding **HS2** Sequencing chronology **HS3** Using historical sources as evidence **HS4** Identifying continuity and change **HS5** Analysing cause and effect **HS6** Determining historical significance

### 5.4 Exercise 1: Check your understanding

1. **HS1** Use the words provided in the following table to complete the paragraph below about Aboriginal–European conflict.

| | | | |
|---|---|---|---|
| not | Aboriginal | courage | manpower |
| matched | fear | resistance | one-sided |
| conflict | guns | European | bush |

Many stories about the _____ between _____ colonists and _____ peoples suggest that it was very _____. However, although Aboriginal people may _____ have had the _____ of the Europeans, or often their _____, they did not lack _____ or skill. Their _____ skills, for example, could not be _____ by the Europeans and in many instances the _____ of Aboriginal peoples caused the Europeans great _____ and anxiety.

2. **HS6** Explain why both British and Aboriginal people might have considered Pemulwuy to be a heroic leader.
3. **HS5** What might have motivated Pemulwuy to engage in violence against the Europeans?
4. **HS1** Why was Yagan both feared and admired?
5. **HS5** What might have motivated Yagan to engage in violence against the Europeans?

## 5.4 Exercise 2: Apply your understanding

1. **HS3** What do **SOURCES 1, 2** and **3** suggest about the respect these men generated?
2. **HS5** What do the examples of Pemulwuy and Yagan suggest about the possible causes of violence on the Australian frontier?
3. **HS6** Look at **SOURCE 4**. The photograph was taken on 3 March 2005 in the North Head Sydney Harbour National Park.
   (a) How do you think the Aboriginal people in the photograph might be feeling?
   (b) Why were Aboriginal remains, such as these and Yagan's and Pemulwuy's heads, not given a proper burial in the first place? Why might museums be interested in wanting to continue to display such remains?
   (c) Explain why this event is important.

**SOURCE 4** Ceremony to bury the returned remains of a number of Aboriginal people

4. **HS6** Use the list of adjectives below to complete the following tasks.

| | | | |
|---|---|---|---|
| troublesome | insubordinate | wild | brave |
| violent | fearless | savage | rebellious |
| bold | clever | uncontrollable | courageous |
| irritating | noble | intelligent | motivating |

   (a) Select the adjectives you think most European colonists in the early nineteenth century might have used to describe people like Pemulwuy and Yagan.
   (b) Select the adjectives most Aboriginal people might have used to describe people like Pemulwuy and Yagan.
   (c) Write two paragraphs about one of these Aboriginal men from each point of view. Build your adjective word choices into what you write.
5. **HS6** Explain whether you think there is any value in recognising the lives of people like Pemulwuy and Yagan with monuments or statues.

Try these questions in learnON for instant, corrective feedback. Go to www.jacplus.com.au.

# 5.5 Tragedy in Van Diemen's Land

## 5.5.1 A people destroyed

In 1816 Aboriginal resistance around Sydney was crushed by military expeditions sent by Governor Macquarie. By this time British settlements had already been founded beyond the Sydney area. In 1803 and 1804 the settlements of Hobart Town and Port Dalrymple (later Launceston) were established in Van Diemen's Land, which became a separate colony in 1825.

There is no reliable evidence of how many Aboriginal people lived in Tasmania before colonisation. The most common estimate is between 4000 and 7000 people. But by 1832 there were just 203 survivors and by 1856, when Van Diemen's Land was renamed Tasmania, there were even fewer. Some historians regard what happened there as genocide (the deliberate wiping out of a race). So complete was the destruction of Tasmania's Aboriginal communities that today's surviving Aboriginal Tasmanians are mostly the descendants of Aboriginal women who were kidnapped and enslaved by white sealers. How could almost an entire population disappear in such a short time?

Hundreds of Aboriginal Tasmanians were killed in 1803, when they attempted to stop soldiers and convicts building huts near the present site of Hobart. Over the next few years, gangs of escaped convicts raided Aboriginal camps, killing men and kidnapping women. There were killings and kidnappings by lawless kangaroo hunters, sealers and whalers. European diseases also took a heavy toll. Another problem for the first Tasmanians was that whites slaughtered the native animals that were their main source of food. There were reports of shepherds being speared and attacks on settlers' huts. Settlers often shot any Aboriginal people who came near their dwellings.

### War in the 1820s

Official government policy was to treat Aboriginal Tasmanians with friendship but, by the 1820s, there was a state of war in eastern Tasmania. In 1828 Governor Arthur ordered Aboriginal people out of all settled districts. In 1830 more than 2000 soldiers, convicts and settlers were formed into lines for a drive to capture all the Aboriginal people in the area of conflict or drive them through the narrow strip of land that forms Eaglehawk Neck and into the Tasman Peninsula, where they could be kept away from the settlers. Despite the scale of this operation, only two Aboriginal people were captured.

**DID YOU KNOW?**

In 1823–24 Musquito, an Aboriginal man from the Sydney area, led a group from the Oyster Bay region. In a wave of attacks, his fighters killed several settlers and convicts before Musquito was captured, tried and executed in February 1825.

### Two historians' perspectives

Keith Windschuttle and Henry Reynolds are two Australian historians who disagree about the fate of the Aboriginal people of Tasmania. Following are brief extracts of their views.

**SOURCE 1** From Windschuttle, Keith (2002) *The Fabrication of Aboriginal History, Volume One: Van Diemen's Land 1803–1847*, Macleay Press, pp. 130, 351, 362, 364, 371, 386

The Aborigines were never starving or even seriously deprived of traditional food ... How many Aborigines died violently at the hands of colonists in Van Diemen's Land? ... Over the entire period from 1803 to 1831, they [Aborigines killed by colonists] average just four deaths a year ... far fewer than the colonists who died at Aboriginal hands ...

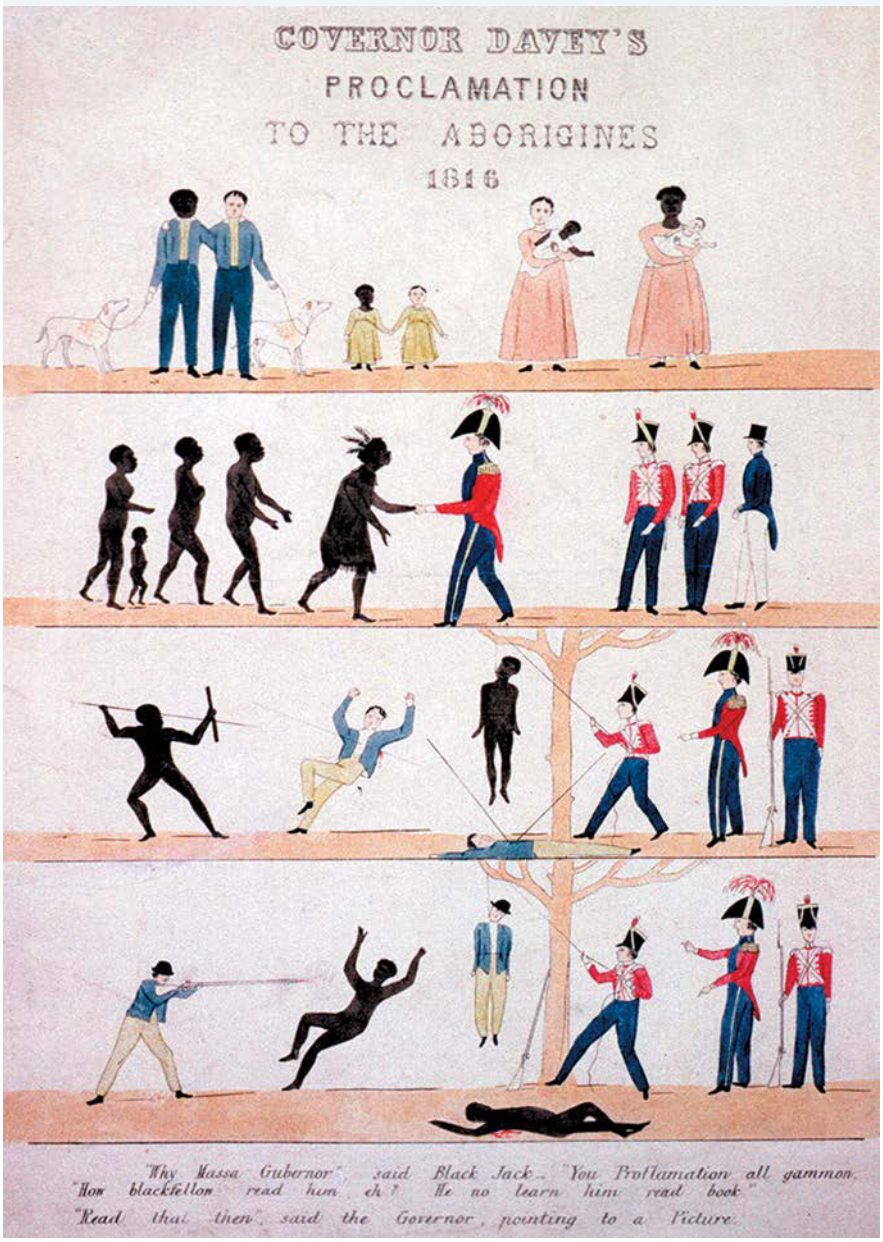
The orthodox story is that Aboriginal society was devastated by the arrival of the British colonizers ... [We] should regard the total pre-colonial Aboriginal population of Tasmania as less than 2000 ... Hence it was not surprising that when the British arrived, this small, precarious society quickly collapsed ...

**SOURCE 2** From Reynolds, Henry 1995, *Fate of a Free People*, Penguin, pp. 4, 81–2, 185

How many Aborigines were killed by the settlers? We will never know with any certainty ... There is no doubt that in the earliest years of settlement from 1804 to 1824 the Europeans took more lives than the Aborigines. But in the period of the Black War — from 1824 to 1831 — the mortality rate on each side was more even: perhaps somewhere between 150 and 250 Tasmanians were killed in conflict with the Europeans after 1824 (with another 100 to 150 dying before that date), while they killed about 170 Europeans ...

It seems very likely that the mortality rate on Flinders Island was merely a continuation of a catastrophic pattern of death [from diseases] which had begun even before the first permanent settlements in 1803 and 1804 ... As Robinson traveled across Tasmania he was told by his Aboriginal companions of whole communities, which had become extinct.

**SOURCE 3** Aboriginal attacks on Europeans were numerous in 1828. As part of Governor Arthur's attempt to control the escalating violence, poster boards like this one were nailed to trees in bushland surrounding the settled districts of Tasmania.



## Exile, disease and despair

From 1829 to 1834, George Augustus Robinson, a Methodist lay preacher, working on behalf of the government, travelled among the survivors. Robinson believed that they would be wiped out if they remained in Tasmania and he convinced some of them to agree to what they believed would be a temporary move to an island off the Tasmanian coast. They were deceived. Between 1821 and the early 1840s survivors from many different language groups were moved to Flinders Island, where they were guarded and forced to wear European clothes and to attend sermons on Christianity. By 1847 most had died of disease and despair. Forty-seven survivors were resettled at Oyster Bay near Hobart but they continued to die. From 1869 Truganini was the only survivor at Oyster Bay. She died in 1876.

**SOURCE 4** From journals written by George Augustus Robinson in the 1830s

The [Aboriginal] children have witnessed the massacre of their parents and their relations carried away into captivity by these merciless invaders, their country has been taken from them and the Kangaroos, their chief subsistence, have been slaughtered wholesale for the sake of filthy lucre [money]. Can we wonder then at the hatred they bear to the white inhabitants? ... We should make atonement for the misery we have [caused] the original proprietors of this land.

**SOURCE 5** *Mount Wellington and Hobart Town from Kangaroo Point*, painted by John Glover (England 1767–Australia 1849) in 1834, oil on canvas, 76.25 × 152.4 cm. National Gallery of Australia, Canberra / Tasmanian Museum & Art Gallery, Hobart. Glover was in Hobart in 1831–32, when Robinson brought in the last of the people of the Big River and Oyster Bay regions. Just 10 days after arriving in Hobart, they were shipped to Flinders Island.

## 5.5 EXERCISES

**Historical skills key: HS1** Remembering and understanding **HS2** Sequencing chronology **HS3** Using historical sources as evidence **HS4** Identifying continuity and change **HS5** Analysing cause and effect **HS6** Determining historical significance

### 5.5 Exercise 1: Check your understanding

1. **HS1** What is the meaning of *genocide*?
2. **HS1** How many Aboriginal people are thought to have lived in Tasmania before colonisation, and to what number had this dropped by 1832?
3. **HS1** What happened to the Aboriginal people who were taken to Flinders Island?

4. **HS1** Identify the two ways that it could be said that a state of war existed in Tasmania in the 1820s.
5. **HS5** What were the consequences of the European arrival in Tasmania for Aboriginal Tasmanians?

### 5.5 Exercise 2: Apply your understanding

1. **HS3** Explain what Windschuttle says in **SOURCE 1** about the population loss of Tasmania's Aboriginal people.
2. **HS3** In **SOURCE 2**, in what ways does Reynolds provide a different point of view to Windschuttle?
3. **HS3** Suggest some reasons why historians disagree on the issue of the fate of Aboriginal peoples in Tasmania.
4. **HS3** Examine **SOURCE 3** carefully. What was the message of this poster to the people of Tasmania?
5. **HS3** Read **SOURCE 4**. For which interpretation in **SOURCES 1** and **2** could this source provide supporting evidence?
6. **HS3** **SOURCE 3** was intended to tell Aboriginal people that they had the same protection as Europeans under British law. In what ways did British law fail Tasmania's Aboriginal peoples? Explain why you think it failed.
7. **HS3** Look closely at **SOURCE 5**. It depicts the Oyster Bay and Big River people who came into Hobart to celebrate a negotiated peace. Considering all the sources in this subtopic, explain why the history of Tasmania's Aboriginal peoples is significant for all Australians.
8. **HS6** Why was the arrival of the Europeans such a disaster for Tasmania's Aboriginal peoples?

Try these questions in learnON for instant, corrective feedback. Go to www.jacplus.com.au.

# 5.6 1835: Conquest — the great land rush to Port Phillip

## 5.6.1 'Australia Felix' — the southern land of happiness

The year 1835 is not one that is celebrated, commemorated or even much discussed in Australian history. Yet this year marked a significant turning point in the European occupation of Australia. For years, the woolgrowers of Tasmania had thought about increasing their flocks and they looked across Bass Strait to the Port Phillip District (now known as Victoria), a place that had seen no permanent European colonists. It seemed open, available and free for the taking.

Businessmen seeking profit in the wool industry, and the British government's approval of this pursuit, started a rush for land unequalled in world history. Frantically competing with one another, 'squatters' raced to occupy the open grasslands of Victoria, moving supplies and stock at an amazing rate. By 1838 there were already 300 000 sheep in the district, a number that would rise to more than a million by 1841 and 5 million by 1851. Determined on expansion and profit, these men seemed to have little concern for the Aboriginal people of Port Phillip and their land. This pattern of occupation was copied across the entire continent of Australia. As trails were forged inland, squatters took more Aboriginal land. Trees were cut down to clear land for grazing and native animals were shot as pests. In some areas Aboriginal food supplies were destroyed. Many Europeans regarded the land they gained as their own and they were reluctant to allow the original owners to use it for hunting, gathering or ceremonies.

**SOURCE 1** From *1835: The Founding of Melbourne and the Conquest of Australia*, by James Boyce, published in 2011

In 1835 an illegal squatter camp was established on the banks of the Yarra River. This brazen act would shape the history of Australia as much as would the arrival of the First Fleet in 1788, because it was now that the continent was fully open to conquest ... Melbourne's birth, not Sydney's settlement, signalled the emergence of European control over Australia ... Between 1835 and 1838 alone, more land and more people were conquered than in the preceding half century. By the end of the 1840s, squatters had seized nearly twenty million hectares of the most productive and best watered Aboriginal homelands, comprising most of the grasslands in what are now Victoria, New South Wales, South Australia and southern Queensland.

**SOURCE 2** *Country NW of tableland, Aug 22*, by S.T. Gill

**SOURCE 3** In 1836 Major Thomas Mitchell travelled across Victoria and recorded his impressions in his journal, *Three expeditions into the interior of eastern Australia*. The publication of his journal in 1838 helped shape European perceptions of Australia.

June 29 – The scene was different from anything I had ever before witnessed, either in New South Wales or elsewhere. A land so inviting, and still without inhabitants! As I stood, the first European intruder on the sublime solitude of those verdant plains, as yet untouched by flocks or herds; I felt conscious of being the harbinger of mighty changes ... The land is, in short, open and available in its present state, for all the purposes of civilized man ... I named this region Australia Felix ('Happy Australia').

**SOURCE 4** *Australia Felix* by Arthur Streeton, 1907

## 5.6.2 Batman arrives

Victoria has a distinct and unique history. It was originally named the Port Phillip District by the British, but Europeans were banned from living there by the NSW governor. When John Batman arrived in 1835, he was a trespasser even in terms of British law. Individuals were not allowed to intrude on what the British government considered unoccupied land. But in 1835, a group of Tasmanian businessmen financed John Batman's exploration of Port Phillip Bay in search of suitable land for sheep farming. Batman was excited by what he found, and by the prospect of considerable wealth. Batman offered the Kulin people of central Victoria a treaty, promising an annual payment of goods (blankets, knives, tomahawks, scissors, mirrors, flour, handkerchiefs and shirts) as well as 'protection'. In return, Batman would become the owner of 234 000 hectares of land. It is the only treaty ever offered to Australia's Aboriginal peoples.

### Batman's 'treaty'

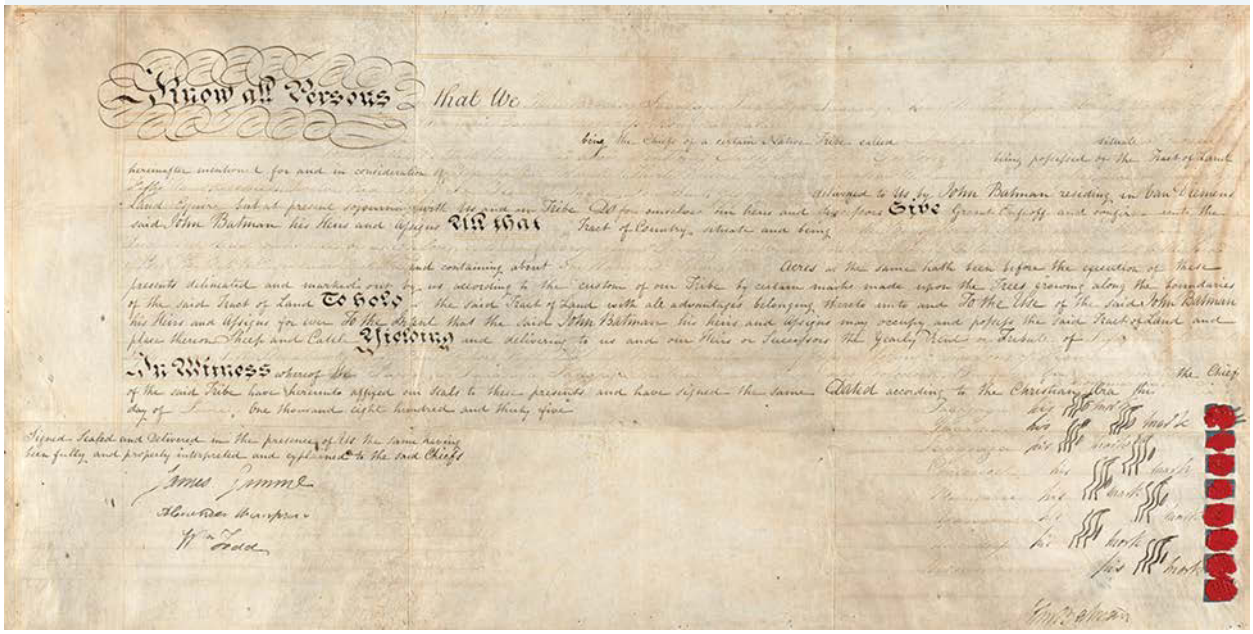
There is disagreement about the meaning of the treaty. Some consider it a trick, Batman's attempt to defraud the Kulin of their land. Others think that it was a political strategy to convince the British government that they were respectable 'settlers' willing to act fairly in their relations with Aboriginal people. As far as the Kulin were concerned, it seems that ownership of their country was never part of the agreement. It was possibly an act of hospitality, an agreement to allow Batman and his party the temporary use of the land and its resources. In this way it was also a strategic act on the part of the Kulin, representing a decision to negotiate with the white intruders rather than attempt to expel them. It would not be the only time in Victoria that Aboriginal leaders would seek to engage, manage and control their relationships with the Europeans.

**SOURCE 5** *Batman's treaty with the Aborigines at Merri Creek, 6 June 1838*, painted by John Wesley Burtt, c. 1875

**SOURCE 6** Letter from John Batman to Governor Arthur, the Lieutenant-Governor of Van Diemen's Land, 25 June 1835

I joined this tribe about twelve o' clock and staid with them until about twelve o' clock the next day, during which time I fully explained to them that the object of my visit was to purchase from them a tract of their country, that I intended to settle among them with my wife and seven daughters, and that I intended to bring to this country, sheep and cattle. I also explained my wish to protect them in every way, to employ them the same as my own natives, and also to clothe and feed them, and I also proposed to pay them an annual tribute as a compensation for the enjoyment of the land. The chiefs appeared most fully to comprehend my proposals ... I then explained to them the boundaries of the land which I wished to purchase ... and they each delivered to me a piece of the soil for the purpose of putting me in possession thereof, I understanding that it was a form by which they delivered to me the tract of land.

**SOURCE 7** Batman's treaty, often referred to as 'The Melbourne Deed'. In the bottom right-hand corner are the marks that the 'Aboriginal chiefs' allegedly made as a sign of their agreement. Similar marks appear in Batman's journal.


Know all Persons that We
To Hold
Victoria
In Witness

In the end the New South Wales Governor Sir Richard Bourke declared the treaty illegal, asserting that it was the Crown of England that owned the land. He warned that any further attempts to purchase land from the Aboriginal peoples would be pointless and that those who did so would be trespassers on Crown land. If the woolgrowers wanted land, they would have to deal with the British government.

### DISCUSS

As a class, discuss the idea that 1835 is a more important date in Australian history than 1788. Consider how important it was at the time and now. How was the history of Australia affected by this event? How many people were affected? Were the changes produced long-lasting? **[Determining Historical Significance]**

## 5.6.3 Ravaging the environment

It was not just the Aboriginal peoples of Victoria that the Europeans disregarded. As the Aboriginal people were displaced from the land, their careful management of the land went with them. Some of the settlers recognised the beauty of the land and appreciated that the Aboriginal people had shaped the landscape.

**SOURCE 8** Griffith, Charles 1845, *The Present State and Prospects of the Port Phillip District of NSW*

It is difficult when you see trees intermixed with the most graceful flowering shrubs, grouped with all the effect which a landscape gardener could desire, and growing from a green sward, entirely free from overgrowing weeds or brushwood, not to fancy that the hand of man had been engaged in combining and arranging these elements of natural beauty.

More than five million sheep and cattle ate the native grasses close to the ground and their hard hooves compacted the soil, creating dust plains in summer and muddy bogs in winter. The traditional herbs and vegetables that had sustained Aboriginal life for thousands of years simply disappeared. Water supplies were spoilt, domestic dogs and cats went bush and attacked both sheep and native animals. Soil erosion from the widespread felling of trees became widespread.

**SOURCE 9** The wife of an Italian businessman described the Yarra in the 1850s. While her real identity is unknown, Alexandre Dumas published her account in 1855 as *The Journal of Madame Giovanni*.

... these banks are merely a long series of slaughter-houses where sheep are killed; tanneries where their hides are prepared; and factories where their fat is prepared for the market. Here and there appear white mountains twenty five, thirty and forty feet high; these are the bones. These slaughter-houses, tanneries, fat, or rather tallow factories, these bones forming pyramids along the banks, give forth a pestilential odour that made me regard Port Phillip with horror ...

Not all of the damage resulted from the pursuit of profit and not all of it was intended. In many instances the original flora and fauna was destroyed as the Europeans replaced them with plants and animals of their own. Often unable to see the beauty of their new environment and homesick for the lands they had left, Europeans attempted to remake their new home. In trying to recreate what was familiar, the Europeans permanently changed the landscape that the Aboriginal peoples had made. Some of the changes were beneficial, but there was little consideration of managing a sustainable environment.

Other changes were quite deliberate and destructive. The much admired Batman's Hill, a popular park and vantage point, was levelled to make way for the new train station (now Southern Cross) and the material was used to fill the Blue Lake, a natural wetland with abundant wildlife just north of central Melbourne. Perhaps the most obvious casualty of the European arrival was the Yarra River. The waterfall that marked Melbourne's first point of settlement was blasted away and the river was soon turned into a rubbish dump.

## 5.6 ACTIVITY

Working with a partner, research the Kulin people. Prepare a summary of your findings to share with the class.

**Using historical sources as evidence**

## 5.6 EXERCISES

**Historical skills key: HS1** Remembering and understanding **HS2** Sequencing chronology **HS3** Using historical sources as evidence **HS4** Identifying continuity and change **HS5** Analysing cause and effect **HS6** Determining historical significance

### 5.6 Exercise 1: Check your understanding

1. **HS1** What does the term *Australia Felix* mean?
2. **HS1** What attracted woolgrowers to the Port Phillip District?
3. **HS2** Describe, using figures, the growth in the sheep industry from pre-1835 to 1851.
4. **HS1** Describe the deal that Batman says he made with the Kulin people.
5. **HS4** List the environmental changes that the Europeans brought to Victoria.

### 5.6 Exercise 2: Apply your understanding

1. **HS3** Examine **SOURCE 1**. What does Boyce claim is the significance of the founding of Melbourne and the year 1835?
2. **HS3** Examine **SOURCE 2**. What might the two figures in the image be thinking about the land they see?
3. **HS3** Read **SOURCE 3**. Explain why Mitchell found the land so inviting.
4. **HS3** Examine **SOURCE 5**. Identify elements in the image that convey that this meeting was friendly and mutually respectful.
5. **HS3** Choose three of the sources in this subtopic and explain how they are useful in helping us understand the relations between Europeans and Aboriginal peoples in this period.
6. **HS6** Was Batman's treaty important? Support your conclusion with evidence from the sources in this subtopic.
7. **HS5** Identify one intended and one unintended result of the settlement of Melbourne. Should we condemn the actions of the colonists? Discuss.

Try these questions in learnON for instant, corrective feedback. Go to www.jacplus.com.au.

# 5.7 Violence on the frontier

## 5.7.1 Trouble at Port Phillip

One after another, Aboriginal groups across Australia fought to save their land and often resisted the Europeans with great effect. However, by the end of the nineteenth century Europeans controlled most land that was of any use to them. In several areas this was achieved through much bloodshed.

A pattern of conflict was repeated across the continent. Some settlers tried to live peacefully alongside Aboriginal people but others killed them, drove them away or exploited them. In retaliation for rapes and other acts of violence committed against their people, Aboriginal groups speared stock and shepherds and attacked homesteads. At times soldiers and police were used to crush resistance. Colonists also organised armed bands, supposedly to punish the attackers but often killing any Aboriginal people they could find.

There is disagreement about the extent of the violence. Some historians believe that violence was one of the most common and persistent features of life in Australia for 140 years after the arrival of the First Fleet in 1788. Other historians acknowledge that violence occurred but express concern that it should not be exaggerated. However, most agree that violence between European colonists and Australia's Aboriginal peoples was widespread and represents a terrible part of Australia's history. The examples in this subtopic are just a few drawn from the many and various conflicts.

It was not long after John Batman's arrival in Port Phillip Bay in 1835 that violence occurred. In March 1836 two of Charles Swanston's shepherds were killed, as well as a number of sheep. In July one of the squatters, Charles Franks, and another shepherd were found dead on the banks of the Werribee River. Almost immediately, John Batman's brother, Henry, organised some armed men and rode west of Melbourne to punish the 'guilty' Aboriginal people. Reports of what happened vary. Henry Batman testified that he didn't see any Aboriginal people killed; others claimed from 10 deaths to complete annihilation of the entire community.

In another incident, Aboriginal people near Benalla made several attacks against the Europeans and their property in 1838, possibly motivated by the abuse of their women. In one instance they killed seven Europeans. In a second example, George Faithfull described how he had been ambushed: 'The natives rushed upon us like furies, with shouts and savage yells.' Other colonists reported that they had been forced to abandon their 'runs' or were kept in great fear by the presence of Aboriginal people.

While Melbourne was relatively peaceful, in 1840 a large group of about 300 Kulin were surrounded by soldiers and police in their camp on the south side of the Yarra. They were accused of a series of thefts. One of the leaders, Windberry, was shot dead as he defended himself. The rest were rounded up and eventually 30 were jailed for a month without trial; 10 were eventually found guilty.

**SOURCE 1** Windberry, considered to be an important leader of the Eastern Kulin, here sketched by William Thomas, a government official responsible for the protection of Aboriginal people. Thomas considered him to be a 'most splendid character'.

**DID YOU KNOW?**

At times Aboriginal resistance forced squatters to abandon their runs. However, some squatters killed entire Aboriginal communities by poisoning their waterholes or giving them poisoned flour to eat.

## 5.7.2 New South Wales — a state of conflict

In the Bathurst Plains in New South Wales in the 1820s a leader named Windradyne led resistance by the Wiradjuri people (see **SOURCE 2**). Governor Brisbane declared martial law in 1824. During that year probably two-thirds of the Wiradjuri were killed by groups of settlers and soldiers. At least a hundred were killed in a single massacre. The skulls of 45 of the victims were shipped to England.

### Major Nunn's massacre

In the early 1830s, Europeans occupied the Liverpool Plains district, west of modern-day Tamworth; the Kamilaroi people resisted the loss of their land. In 1838 the Mounted Police, led by the colony's senior military officer, Major Nunn, massacred at least a hundred of them at Vinegar Hill on the Namoi River.

**SOURCE 2** *A native chief of Bathurst*, a hand-coloured print by R. Havell & Son, 1820. The man pictured is believed to be Windradyne.

**SOURCE 3** *Mounted police and blacks*, a lithograph print by Godfrey Charles Mundy, published in London in 1852. The print depicts British troops killing Kamilaroi warriors on the Liverpool Plains in northern New South Wales in 1838. Reports of the number of Aboriginal people killed ranged from 60 to 300. None of the troopers were killed.

***Source*:** Mundy, Godfrey Charles *Mounted police and blacks* (1852) Lithograph on paper, 10.9 × 18.2 cm Australian War Memorial ART50023

### The Myall Creek massacre

The Myall Creek massacre is unusual because it marked the first, and almost the last, time that whites who murdered Aboriginal people suffered consequences under British law. This unprovoked and premeditated act is possibly one of the most shameful examples of the mistreatment of Aboriginal people in this period of frontier conflict. It is also one of the best documented.

In 1838 more than thirty women, children and elderly men of the Wirrayaraay cultural group were camped on Henry Dangar's Myall Creek Station near Inverell in northern New South Wales. They were friendly with the local whites and the young men of the group were away helping another station owner to cut bark. The station manager, William Hobbs, was also away, moving cattle to better pastures. Two assigned convicts, George Anderson and James Kilmeister, were the only Europeans left at the station on 9 June when 11 armed stockmen, also mostly assigned convicts or ex-convicts, rode up.

The armed men claimed that they were hunting Aboriginal people to punish them for frightening cattle. With Kilmeister joining them, they rounded up the defenceless Wirrayaraay, tied them together, dragged them away and murdered them. Anderson did not take part and he managed to hide one small boy and save his life.

Most of the victims were butchered with swords. The next day the killers returned to burn the bodies and remove as much evidence as possible. They probably never imagined that they might be punished. This was because they knew that, as non-Christians, any Aboriginal witnesses could not be sworn in to give evidence in court. However, in this case four things made it possible for the killers to be brought to trial. Anderson wanted to give evidence against the killers. Hobbs, the station manager, reported the murders to a magistrate. The magistrate acted properly, and New South Wales Governor Gipps wanted justice.

## The Myall Creek trials

When 11 of the Myall Creek killers were brought to trial, there was public outrage that the government should want to punish white men for killing Aboriginal people. At the first trial the accused were supported by many wealthy squatters, including a magistrate, and were found not guilty. However, seven of the men were then charged with the murder of an Aboriginal child whose remains were found at the massacre site. At a second trial the seven were found guilty and they were hanged in December 1838.

One outcome of these hangings was that others who committed massacres made sure that no witnesses lived to give evidence. Killers could still avoid justice. Major Nunn's force had massacred more people than the Myall Creek killers in the same year, but attempts to get evidence for a trial had been unsuccessful.

**SOURCE 4** The memorial stone marking the site of the Myall Creek massacre

## 5.7.3 Violent conflict in Victoria

Gippsland in Victoria was another area of frontier conflict. In July 1843 Ronald Macalister, nephew of a prominent local settler, was speared to death near Port Albert in Gippsland. Angus McMillan, an explorer and local squatter, led a party of whites to avenge his death. In a series of massacres, it is believed that possibly 100 Aboriginal people were killed at Warrigal Creek with up to another 50 at other locations nearby. All evidence was hastily buried to keep the killings a secret. McMillan later became a member of the Victorian Parliament and a statue was erected to honour him as a pioneer. A seat in the federal parliament is named after him. Two of the pastoralists have left chilling accounts of what happened there.

**SOURCE 5** Neil Black was a prominent squatter in Gippsland who was in no doubt about what was required for success. N. Black, *Journal of the first few months spent in Australia, 30 September 1839–8 May 1840*.

The best way [to procure a run] is to go outside and take up a new run, provided the conscience of the party is sufficiently seared to enable him without remorse to slaughter natives right and left. It is universally and distinctly understood that the chances are very small indeed of a person taking up a new run being able to maintain possession of his place and property without having recourse to such means ... I believe, however, that great numbers of the poor creatures have wantonly fallen victims to settlers scarcely less savage though more enlightened than themselves, and that two thirds of them does not care a single straw about taking the life of a native, provided they are not taken up by the Protectors.

**SOURCE 6** Henry Meyrick was one of a number of Scottish colonists who attempted to acquire land in Gippsland. In 1846 he wrote home to his mother. Quoted in Watson, Don 1984, *Caledonia Australis: Scottish highlanders on the frontier of Australia*, William Collins, Sydney, p. 170.

The blacks are very quiet here now, poor wretches. No wild beast of the forest was ever hunted down with such unsparing perseverance as they are. Men, women and children are shot whenever they can be met with ... I have protested against it at every station I have been in Gippsland, in the strongest language, but these things are kept very secret as the penalty would certainly be hanging.

For myself, if I caught a black actually killing my sheep, I would shoot him with as little remorse as I would a wild dog, but no consideration on earth would induce me to ride into a camp and fire on them indiscriminately, as is the custom whenever the smoke is seen. They will very shortly be extinct. It is impossible to say how many have been shot, but I am convinced that not less than 450 have been murdered altogether.

I remember the time when my blood would have run cold at the mention of these things, but now I am become so familiarised with scenes of horror from having murder made a topic of everyday conversation.

## 5.7.4 Fear and violence

Many of the accounts of the frontier suggest that Aboriginal people were helpless in the face of European occupation. This is far from the truth. **SOURCES 7** and **8** suggest that the presence of Aboriginal people created an atmosphere of fear and anxiety, and that fear was an important cause of the violence.

**SOURCE 7** John Hunter Kerr arrived as an 18-year-old from Scotland. An account of his life was published anonymously in 1876 and there is a topic on the early relations with the Aboriginal people. From Kerr, John Hunter 1996, *Glimpses of life in Victoria*, Melbourne University Press, Melbourne, p. 138.

The western districts of Victoria were the scene of many a bloody fray in the early days of the settlement; for here the Aborigines were numerous, and the white settlers, being comparatively few, lived in constant terror of their attacks. Among other sufferers was a Mr M- ... He was riding through the bush, accompanied only by his overseer, when he was met and attacked by a party of blacks, who probably owed him a grudge ... Both gentlemen were captured and killed, and a few days later the body of Mr M- was casually found, cut open and horribly mutilated ... it is not surprising that when the revolting murder was discovered it was amply avenged by the settlers, possibly on the innocent as well as the guilty.

**SOURCE 8** An article that appeared in the *Portland Mercury* in 1842

These, however, are not all the atrocities committed within a brief period of eight weeks by the 'poor blacks', (as certain philanthropic gentlemen designate this race) who possess all the worst passions of man but hardly any of his redeeming qualities. During the past four months, 3500 sheep have been destroyed, four men have been killed and two men seriously wounded. To use the graphic language of one gentleman possessing large flocks in the district: 'the country might as well be in a state of civil war, as few but the boldest of the settlers will move from their home stations.' We earnestly implore the attention of His Excellency Sir George Gipps to the fearful list of murders we have narrated. Can it be expected that any man will sullenly fold their arms and look passively on while their friends, their servants and themselves know not the hour nor the day when their peaceful homes may be turned into houses of wailing, dismay and despair. We very much fear that a cry of vengeance will shortly ring throughout the length and breadth of the land.

## How many killings?

About 2000 Europeans were killed by Aboriginal people during the colonial period. Historians estimate that at least 20 000 Aboriginal people were shot or poisoned by Europeans. There were also several Aboriginal men hanged for murders of Europeans. Massacres of Aboriginal people continued into the twentieth century. The last occurred in the 1920s in Western Australia and the Northern Territory. Both of these massacres were committed by police and in both cases the atrocities went unpunished.

**SOURCE 9** Aboriginal prisoners in chains at Heavitree Gap police camp, Alice Springs, on 23 June 1906. Charged with stealing beef, all ten men were sentenced to six months in Port Augusta jail.

## 5.7 EXERCISES

**Historical skills key: HS1** Remembering and understanding **HS2** Sequencing chronology **HS3** Using historical sources as evidence **HS4** Identifying continuity and change **HS5** Analysing cause and effect **HS6** Determining historical significance

### 5.7 Exercise 1: Check your understanding

1. **HS1** Identify the causes of violence between Europeans and Aboriginal people in Port Phillip.
2. **HS1** What was unusual about the Myall Creek massacre?
3. **HS1** Identify two outcomes of the Myall Creek trials.
4. **HS1** What event is believed to have sparked the massacre of Aboriginal peoples in Gippsland in the 1840s?
5. **HS1** How many Aboriginal people and how many Europeans are estimated to have been killed during the colonial period?

### 5.7 Exercise 2: Apply your understanding

1. **HS3** Examine the sketch of Windberry in **SOURCE 1**. What impression of Aboriginal people is expressed by this image?
2. **HS3** Study **SOURCES 5** and **6**.
   (a) What do both Black and Meyrick admit about the violence in Gippsland?
   (b) Are Black and Meyrick's attitudes to violence the same? How are they different?
3. **HS3** Using evidence from the sources in this subtopic, describe ways in which Aboriginal peoples resisted the intrusion of Europeans.
4. **HS3** Consider **SOURCES 7** and **8**. What do the sources suggest about European responses to the violence? Use examples from the sources to support your response.
5. **HS3** Using the sources in this subtopic, evaluate whether Aboriginal people were helpless victims of European violence. Provide examples from the sources to support your response.
6. **HS3** Explore European attitudes to Aboriginal peoples. Make a list of the attitudes suggested by the sources in this subtopic and evaluate whether they were positive or negative.
7. **HS5** Explain the reasons for violence on the Australian frontier.
8. **HS6** Explain whether you think the violence between Europeans and Aboriginal people should be considered a 'war'. Support your point of view with evidence from this section.

Try these questions in learnON for instant, corrective feedback. Go to www.jacplus.com.au.

# 5.8 Reserves, missions and responses

## 5.8.1 'Becoming civilised'

From 1788 the British government's policy had been to treat Australia's Aboriginal peoples with friendship and kindness. However, the central fact that the British were there to occupy what they considered to be 'empty land' made this impossible. As settlement spread after 1835, increasing concern in London for Aboriginal peoples saw a recognition in 1837 that they had a 'plain and sacred right' to the land and that, as subjects of the Queen, they should be protected by law. They should also be educated, taught Christianity and 'civilised'. There were many attempts to make Aboriginal people think, behave and work like Europeans; Aboriginal people responded to these attempts in a variety of ways.

In 1816 Governor Macquarie set aside five areas around Sydney for Aboriginal people who wished to become farmers. The offer provided government assistance for six months and some Aboriginal farmers were also provided with convict labour. Macquarie wanted to end Aboriginal resistance by encouraging them to take up British ways. Several Darug families were granted land in western Sydney in an area that came to be known as the Black Town. An Aboriginal fishing village was also set aside at Elizabeth Bay. But, much later, after Macquarie left the colony, Elizabeth Bay was given to wealthy settlers.

## Schools and missionaries

In 1814 Governor Macquarie set up an Aboriginal school at Parramatta, calling it the Native Institution. Macquarie thought that once Aboriginal people were educated, they would abandon their traditional lifestyles and stop resisting colonisation.

The Native Institution ensured Aboriginal children had elementary schooling, job training and lessons in Christianity. It had some successes, such as Maria Locke, an Aboriginal girl who won first place in the Anniversary Schools Examination in 1819, ahead of 20 other Aboriginal children and 100 white students. But generally, when students went back to their communities they found very little of what they had learned had any use or meaning for their lives. By 1833 the only remaining Aboriginal school in the colony had just four pupils.

By the 1830s Christian missionaries were taking on the role of bringing Christianity and European ways to Aboriginal people. They concentrated on converting children whom they separated from their parents on mission stations. At least one missionary resorted to kidnapping children.

**SOURCE 1** The Parramatta Native Institution Admission List: December 1814 to December 1820

| No. | Date of admission | Names | Supposed age (in 1821) | Tribe |
|---|---|---|---|---|
| 1 | 28 DEC 1814 | MARIA | 13 | RICHMOND |
| 2 | 28 DEC 1814 | KITTY | 12 | PROSPECT |
| 3 | 28 DEC 1814 | FANNY | 9 | CATTAI CREEK |
| 4 | 28 DEC 1814 | FRIDAY | 12 | PORTLAND HEAD |
| 5 | 10 JAN 1815 | BILLY | 12 | SOUTH CREEK |
| 6 | 6 JUN 1816 | NALOUR | — | — |
| 7 | 6 JUN 1816 | DOORS | — | — |
| 8 | 12 AUG 1816 | BETTY COX | 15 | HAWKESBURY |
| 9 | 12 AUG 1816 | MILBAH | 15 | COWPASTURES |
| 10 | 12 AUG 1816 | BETTY FULTON | 16 | COWPASTURES |
| 11 | 12 AUG 1816 | TOMMY | 11 | HAWKESBURY |
| 12 | 12 AUG 1816 | PETER | — | — |
| 13 | 12 AUG 1816 | PENDERGRASS | — | — |
| 14 | 23 AUG 1816 | AMY | 8 | BOTANY BAY |
| 15 | 23 AUG 1816 | NANCY | 10 | BOTANY BAY |
| 16 | 23 AUG 1816 | CHARLOTTE | — | — |
| 17 | 9 SEP 1816 | JOHN | 6 | CATTAI CREEK |
| 18 | 28 DEC 1816 | DAVIS | — | — |

*(continued)*

**SOURCE 1** The Parramatta Native Institution Admission List: December 1814 to December 1820 *(continued)*

| No. | Date of admission | Names | Supposed age (in 1821) | Tribe |
|---|---|---|---|---|
| 19 | 28 DEC 1816 | DICKY | 9 | — |
| 20 | 28 DEC 1816 | JUDITH | 13 | MULGOA |
| 21 | 1 JAN 1818 | JENNY MULGAWAY | 7 | MULGOA |
| 22 | 1 JAN 1818 | JOE MARLOW | — | PROSPECT |
| 23 | 17 JUL 1818 | NEDDY | 6 | PROSPECT |
| 24 | 25 SEP 1818 | WALLIS | 10 | NEWCASTLE |
| 25 | 15 JAN 1819 | JEMMY | 4 | NEWCASTLE |
| 26 | 1 MAR 1819 | HENRY | 4 | KISSING POINT |
| 27 | 20 DEC 1819 | MARIA (MARGARET) | 11 | — |
| 28 | 20 DEC 1819 | NANNY | — | — |
| 29 | 20 DEC 1819 | SUKEY | — | — |
| 30 | 30 MAY 1820 | JOSEPH | 3 | — |
| 31 | 30 MAY 1820 | BILLY GEORGE | — | — |
| 32 | 6 JUN 1820 | POLLY | 16 | — |
| 33 | 28 DEC 1820 | MARTHA | 10 | — |
| 34 | 28 DEC 1820 | PEGGY | 8 | — |
| 35 | 28 DEC 1820 | CHARLOTTE | 10 | — |
| 36 | 28 DEC 1820 | CAROLINE | 7 | — |
| 37 | 28 DEC 1820 | ANNA | 1 | — |

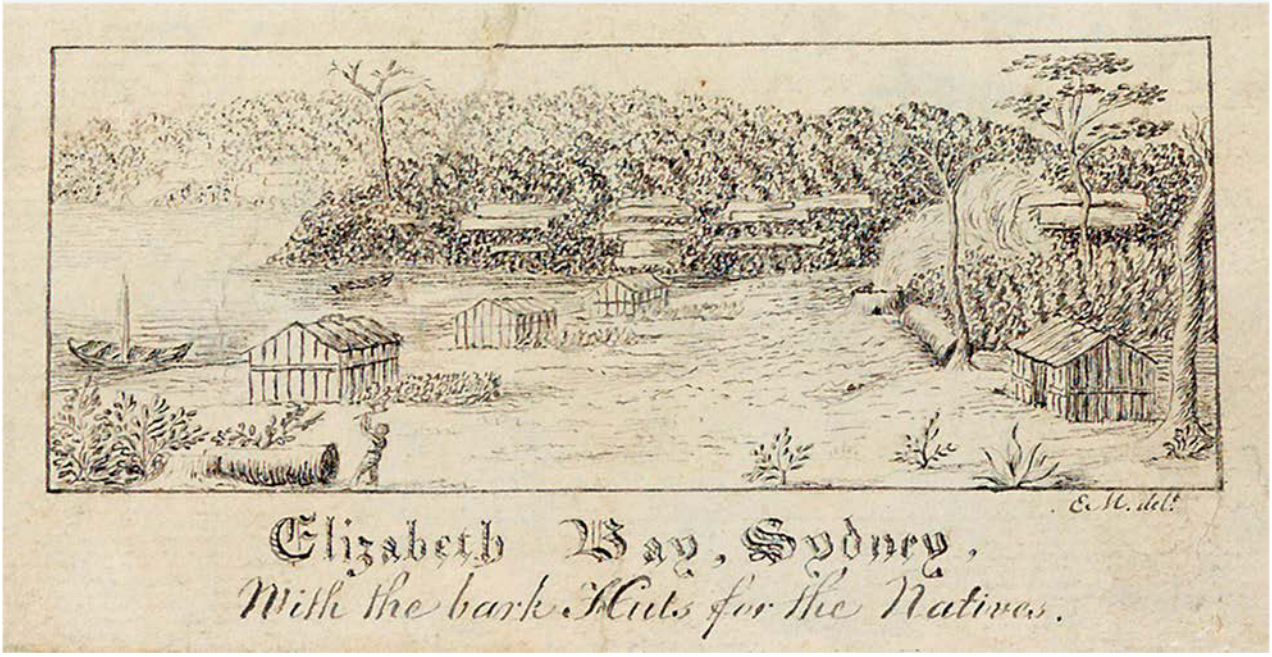
**SOURCE 2** From Governor Macquarie's report to Lord Bathurst, Secretary for Colonies in the British government, 1822

I deemed it an act of justice, as well as humanity, to make at least an attempt to ameliorate [improve] their condition, and to endeavour [try] to civilise them.

**SOURCE 3** From *Two Years in New South Wales*, by Peter Cunningham, published in 1827

You must absolutely secure the young, wean them from parental influence, and infuse [fill] them with new ideas and opinions ... We had an institution here, in Governor Macquarie's time, where the native children were educated, and turned out of it at the age of puberty good readers and writers; but ... their native instincts and ideas still remaining paramount [strongest], they took to their old ideas again as soon as freed ...

**SOURCE 4** A sketch of Elizabeth Bay, Sydney, by Edward Mason, 1853, showing bark huts for the local Aboriginal people




## 5.8.2 Cultural resistance, negotiation and adaptation

### The Native Police Forces

By the middle of the nineteenth century Aboriginal populations across much of Australia had been greatly reduced through violence and disease. The survivors despaired at the loss of their land and their traditional ways as they were forced to become dependent on white society.

Some young Aboriginal men found a place in this changing world by joining the Native Police Forces that were established in Port Phillip in 1842, New South Wales in 1848 and Queensland in 1859. In Queensland especially, Aboriginal troopers were used to kill people from other Aboriginal groups, and they played a brutal role in the defeat of resistance. However, they did not necessarily join the Native Police to protect settlers' property and uphold the law. In Victoria they evaded pursuing their own language groups, though they did commit atrocities against communities outside their traditional boundaries. Many joined because it gave them guns, uniforms, money and, above all, horses. Access to status and authority was understandably attractive to young Aboriginal males.

**SOURCE 5** William Strutt's portrait of Munight, a member of Victoria's Native Police

**SOURCE 6** *Black troopers escorting prisoner from Ballarat to Melbourne, 1851*, by William Strutt

## 5.8.3 The Port Phillip protectorate

In the 1830s the British government was increasingly concerned about the treatment of Aboriginal people, especially in the Port Phillip District. A protectorate system was set up. Four Protectors were appointed to investigate crimes committed by settlers against Aboriginal people, but in this they had little success. In each Protectorate, land was set aside for a station where people of the surrounding Aboriginal groups were encouraged to stay. Those who accepted the offer did so for a variety of complex reasons.

### Some people of Port Phillip you should know

Not all Aboriginal people used violence in their resistance to the European presence, and many Europeans sought to engage Aboriginal people in a number of ways. The historian Richard Broome has written extensively about these responses in his book *Aboriginal Victorians.* The following examples show how individuals moved in and out of white society as it suited them, choosing to live and work in a manner that met their immediate needs while still keeping their own cultural preferences. Some appeared to adopt white society as their own, but the real situation was often more complex.

**SOURCE 7** From *Aboriginal Victorians* by historian Richard Broome, 2005, p. 113

'Across the colony by the 1850's, Aboriginal people dressed like, worked like, ate like and, in some cases, acted like European rural workers ... Yet they were not the same, remaining staunchly Aboriginal in their identity and core culture.'

Here are some examples of these complex responses as Victoria's Aboriginal peoples negotiated their new world.

## Billibellary

Billibellary was a *ngurungaeta* (headman), who was one of the signatories on Batman's treaty. He was also known as Jika Jika and was the chief of the Wurundjeri-willam clan, who owned the land north of the Yarra from Melbourne to Lancefield. He was the most respected elder of the Melbourne region. His clan was one of five like-minded landowning groups, forming loosely as Woiwurrung people. About 1500–2000 in number, they intermarried within a loose confederation of four other similar groups from central Victoria, all calling themselves Kulin.

As a close friend of William Thomas (Protector of Aborigines), Billibellary reported the despair that Aboriginal people felt at the loss of their land: 'Blackfellows all about say that no good have them Pickaninnys now, no country for blackfellows like long time ago.' Billibellary is remembered as a man of peace who sent his own children to the Europeans' schools and joined the Native Police Forces along with several other clan heads, increasing their own power and authority. He was a tall athletic man who tried to find a way forward without violence. He died from a respiratory disease on 10 July 1846, leaving his friend Thomas to grieve the loss of this 'valuable councillor'.

**SOURCE 8** A portrait of Charles Never by William Strutt. Charles's original name was Murrumwiller and he was probably from the Murray district.

## Charles Never

Charles attended a school for Aboriginal children at Merri Creek, initiated by the Baptists of Melbourne in 1845, and remained there while the school was in operation until 1848. He soon made a plan to enter white society in its upper ranks, perfecting his spoken English and the manners of a gentleman: 'I like to be a gentleman. Black gentleman as good as white.'

**SOURCE 9** When Charles announced his intention to write to the Queen, asking for a piece of land and 400 pounds to build a house on it, the wife of the schoolmaster told him it would not be appropriate. He replied:

> You say one time the Queen a good woman. And yet she send white man out here, take black fellar's land, and drive them away, and shoot them, and build plenty house and garden on my land; and when I say, I ask her to give me back a piece of my land and money to build a house, you say she think I not know better. This land, my land first of all. 400 pounds not much to the Queen, and she take plenty land from me.

## Thomas Bungeelene

Thomas was one of the other students at the Merri Creek Aboriginal School.

The historian Richard Broome writes: 'The journey into the European world often left Aboriginal people disoriented and disappointed.' Tommy was a troublesome student at first, but soon got used to lessons, church and singing hymns. He was baptised on 1 January 1852 and even got to shake Governor Hotham's hand when he arrived in Melbourne in June 1854. He finished his education in Fitzroy before becoming a messenger for the Department of Lands. He eventually became a map tracer for the Department of Mines, and worked within white society. He sometimes denied his Aboriginality, even to the point of washing his hands frequently to make them whiter, claiming that his parents were white. He died from gastric fever in January 1865. His last words were to request a reading from Psalm 23: 'The LORD is my shepherd, I shall not want ... surely goodness and mercy shall follow me all the days of my life.'

### Simon Wonga

Simon Wonga was born near Healesville in the 1820s. He was the son of Billibellary. When Wonga was in his mid teens, he severely injured his foot while he was hunting and was cared for by Assistant Protector of Aborigines William Thomas. Wonga soon befriended Thomas and his son. Wonga shared much of his understanding of traditional culture, language and beliefs with Thomas. He also learnt from Thomas how European society worked — information that would help him to develop into the skilled and respected negotiator he became in later life.

By 1851 Wonga had become *ngurungaeta* or headman of the Wurundjeri people. He used his knowledge and friends in the European community to support his people when they were treated unfairly. He tried to regain the land settlers had taken. In 1859, he took a small group of Taungurong men from the Goulburn River to see William Thomas, acting as their interpreter and mediator. In a letter to Redmond Barry, Thomas quotes Wonga: 'I bring my friends Goulburn Blacks, they want a block of land in their country where they may sit down plant corn potatoes etc. etc., and work like white man.'

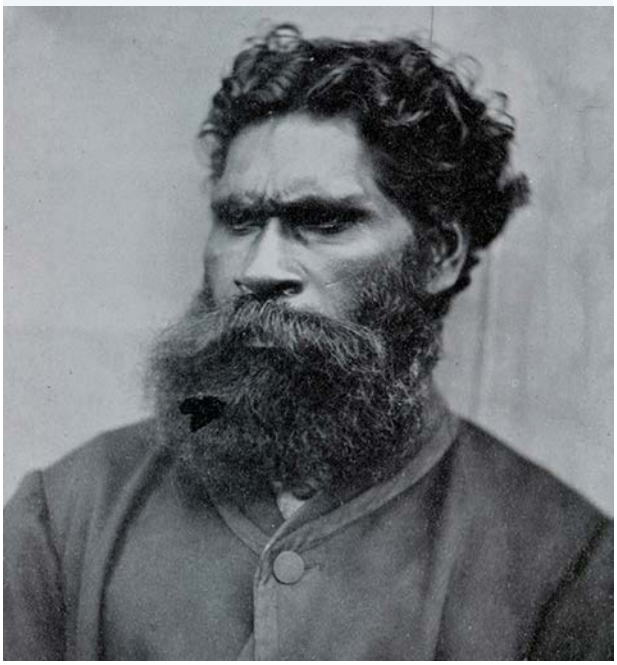
After this meeting, a deputation was sent to the Commissioner of the Land and Survey Office, where they met with officials and secured a portion of land for the Taungurong. A precedent had been set, and in 1860, Wonga returned to Thomas to ask for a piece of land for his own Wurundjeri people. The land he asked for later became the Coranderrk Aboriginal Mission. Wonga died there in 1875.

### William Barak

William Barak was born into the Wurundjeri clan of the Woiwurrung people in 1823, in the area now known as Croydon, in Melbourne. Originally named Beruk Barak, he adopted the name William after joining the Native Police as a 19-year-old. Barak was a natural leader: his father was a clan head and his uncle was Billibellary.

Barak emerged as a politically smart leader, skilled mediator and spokesperson for his people. In partnership with his cousin Simon Wonga, Barak worked to establish and protect Coranderrk. He became a prominent figure in the struggle for Aboriginal rights and justice. When Wonga died in 1875, Barak succeeded him as clan leader. While at Coranderrk, Barak recorded Koorie culture through storytelling and art, and invited white settlers and dignitaries to visit the reserve. Skilled in the arts of diplomacy and friendship, over time he gained growing respect and fame within his own culture, in settler society and even abroad. In 1886 he petitioned the Victorian government for better rights and land on behalf of the residents, stating: 'We Blacks of Aboriginal Blood, wish to have now freedom for all our life time.'

**SOURCE 10** A photograph of William Barak, taken around 1868, Museum Victoria



## 5.8.4 Coranderrk

One of the most successful schemes to turn Aboriginal people into farmers was the Coranderrk Reserve, set up near Healesville in Victoria in 1863. The Kulin people who moved to Coranderrk cleared and fenced the land and, by the 1870s, they were successfully growing hops, raising cattle and running a dairy. Despite this, the law did not recognise the people as the owners of this land. When the Board for the Protection of

Aborigines attempted to close Coranderrk in 1874, its Kulin residents marched in protest to the Victorian Parliament. Their action saved Coranderrk, but only for a time. From 1886, under the Victorian Aborigines Act, many people of mixed descent were forced to leave the reserves. This cut Coranderrk's workforce to a level that was too low to run the farms. Finally, in 1924, Coranderrk was closed.

**SOURCE 11** The Kulin people at Coranderrk grew and sold arrowroot, hops and vegetables. As well as tending their fields, they earned money working on nearby properties.

**SOURCE 12** From the *Report of the House of Commons, Select Committee on Aboriginal Tribes (British Settlements), 1837*

[The] native inhabitants of any land have an **incontrovertible** right to their own soil; a plain and sacred right. Europeans have entered their borders uninvited, and, when there, have not only acted as if they were undoubted lords of the soil, but have punished the natives as aggressors if they have [tried] to live in their own country.

## 'All the rights of British subjects'?

South Australia's governor, John Hindmarsh, proclaimed that Aboriginal people of South Australia had all the rights of British subjects. Despite such intentions, Aboriginal land was sold without consent just as it had been in other colonies, and only small areas were set aside as reserves. It was hardly surprising that conflict soon developed, with killings on both sides. Because they were not Christians, Aboriginal people had not been allowed to give evidence in colonial courts. To give them more protection under the law, in 1843 the British government allowed the courts to accept Aboriginal evidence. As a result, in 1846 a European was hanged for the murder of a South Australian Aboriginal man. Despite this, squatters continued to use violence to drive Aboriginal people off the land.

**SOURCE 13** *45 Natives driven to the Police Court by the Police for Trespassing*, a watercolour/drawing by W.A. Cawthorne, 1845

## 5.8 ACTIVITIES

1. Research the community of Coranderrk. Considering both Aboriginal and European points of view, in what ways might it be considered a success? In what ways might it be considered a failure? Discuss with your class. **Determining historical significance**
2. Find out more about some of the Aboriginal individuals mentioned in this section, such as Barak, Wonga, Bungeelene, or the Europeans, such as Angus McMillan, Henry Meyrick, William Strutt. What does your research tell you about what has been left out of this subtopic? What do you think should be added to improve the usefulness of this text as a historical source? **Determining historical significance**

## 5.8 EXERCISES

**Historical skills key: HS1** Remembering and understanding **HS2** Sequencing chronology **HS3** Using historical sources as evidence **HS4** Identifying continuity and change **HS5** Analysing cause and effect **HS6** Determining historical significance

### 5.8 Exercise 1: Check your understanding

1. **HS1** In 1837, authorities in London recognised that the Aboriginal people had a 'plain and sacred right' to the land and that, as subjects of the Queen, they should be protected by law. What else did they think should occur?
2. **HS1** Why did Governor Macquarie establish the Native Institution in Parramatta?
3. **HS1** Identify the reasons Aboriginal males might have joined the Native Police.
4. **HS1** Identify the ways that Billibellary responded to the presence of the Europeans.
5. **HS1** How did Charles Never show that he wanted to join white society?
6. **HS1** In what ways did Thomas Bungeelene adopt European ways of life?
7. **HS1** Identify the ways that Simon Wonga adapted to white society while still retaining his Aboriginality.
8. **HS1** Identify what William Barak did for his people.
9. **HS1** Describe the purpose of a protectorate.
10. **HS1** In what ways did British authorities attempt to improve the lives of Aboriginal peoples?

### 5.8 Exercise 2: Apply your understanding

1. **HS3** Examine **SOURCE 1**. How many children were admitted to the Parramatta Native Institution each year? What sort of names were they given?
2. **HS3** What do **SOURCES 2** and **3** suggest about the attitudes of Macquarie and Cunningham and their understanding of Aboriginal people?
3. **HS3** What does **SOURCE 3** indicate about Aboriginal responses to attempts to 'civilise' them?
4. **HS3** Using **SOURCES 1–4**, explain whether the Europeans' attempts to change Aboriginal people were successful.
5. **HS3** Based on **SOURCES 5** and **6**, what do you think the artist, William Strutt, thought about the Native Police?
6. **HS3** What does **SOURCE 10** suggest about Barak's character?
7. **HS5** In what ways did Europeans cause a decline of Aboriginal civilisation?
8. **HS6** Explain what you think is important for students to know about relations on the frontier in colonial times.

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# 5.9 A long, forgotten war

## 5.9.1 Violence in Western Australia and the Northern Territory

In the 1880s most people in Australia lived in cities and were increasingly proud of their civilisation and progress. With surges in population and booming economies, there was abundant optimism and widespread prosperity. There was talk about the states uniting to form a federation, artists and writers began to explore and celebrate what it meant to be 'Australian', and with the celebration of the centenary in Sydney, people looked back with great satisfaction on 100 years of pioneering achievement. When the London journalist George Augustus Sala described Melbourne as 'marvellous' in 1885, the people of the city felt justifiably proud. The title of his article for London's *Daily Telegraph*, 'The Land of the Golden Fleece', seemed to summarise Australia.

Outside the cities, life in Australia was very different. 1885 also marks probably the most violent year on the Australian frontier. In the remote parts of South Australia, across the Kimberley district in the west and throughout the northern reaches of Queensland and the Territory, the same pattern of occupation, Aboriginal resistance and terrible European reprisal was repeated. But in this decade, modern weaponry, bush-bred horses and efficient Native Police, coupled with a general acceptance of the inevitability and necessity of the violence, produced a dreadful toll.

The exact numbers of those killed in the 1880s will never be known, but it is reasonable to assume that at least 2000 Aboriginal people died in armed conflict with the settlers, though it was probably more. The number of violent settler deaths is also hard to estimate and included not only Europeans but also Chinese miners, Pacific Island labourers and other Aboriginal people who had chosen to work with the settlers. The documented figure is 158 in Queensland during the 1880s, but it is also likely to be higher. In 1885 alone there were 25 violent settler deaths on the Queensland frontier.

### The Kimberley

The Kimberley was explored by Alexander Forrest in 1879, but European occupation was relatively slow until 1885, when gold was discovered at Halls Creek and cattlemen arrived from the eastern states with herds looking for pasture. Competing for resources in rough, isolated country, Aboriginal people robbed tents and attacked travellers. This sparked fear and attacks by the Europeans. One leader of the Bunuba language group, Jandamarra, caused widespread panic when he defected from the police force, captured guns and planned a military defence of his country. He led several attacks over three years before being shot dead at Tunnel Creek on 1 April 1897. So many Aboriginal people were killed in the Kimberley district

between 1881 and around 1905 that Aboriginal people of the region called that period the 'Killing Times'. The last Kimberley massacre took place in 1927, when police murdered at least 20 Aboriginal people and possibly many more.

**SOURCE 1** From Pedersen, Howard (2007) transcript, *First Australians*, SBS television series, Episode 5

In 1888, the Western Australian Government responded to the incidents of resistance right throughout the Kimberley by putting ... a whole network of police stations, to try and quell this growing Aboriginal opposition to European settlement. By the early 1890s a quarter of the whole Western Australian police force is based in the Kimberley, where there's only one per cent of the European settlement population.

**SOURCE 2** While official police action was responsible for much of the violence in the Kimberley at this time, it was individual settlers who also typically engaged in the killing. The historian Henry Reynolds, who has studied relationships on the frontier for much of his life, made this point about how settlers were able to engage in this violence and maintain a clear conscience in his book *Forgotten War*, p. 214:

Many more punitive expeditions were likely mounted than were ever reported ... The prominent pioneer pastoralist Aeneas Gunn observed that it was a breach of northern etiquette to ask a man whether he had shot a blackfellow or not. He also expressed the view common amongst his contemporaries that they were not primarily responsible for the widespread violence on the frontier, writing that 'There are few, if any, of the Northern pioneers who would not prefer to live at peace with the natives. But the hostilities are, in the majority of instances, forced upon them.'

**DID YOU KNOW?**

A royal commission in Western Australia found in 1905 that it had been the practice for the past 30 years to keep Aboriginal prisoners in heavy neck chains for the entire length of their sentences. It also found that Aboriginal women on cattle and sheep stations were often captured by white stockmen, raped and used as slave labour.

### A notorious incident in the Territory

In 1884, four well-respected copper miners were attacked and killed in the far north-west of the Northern Territory, inciting outrage from the settler community. The *Northern Territory Times* asserted that Aboriginal people were 'murderers and robbers by nature, and nothing but the most severe punishment will have any lasting effect on them'. Private parties rode off in search of vengeance, with one group cornering a group of Aboriginal people in a lagoon. The official report stated that 20 or 30 Aboriginal men were killed; others indicated that it was possibly more than 150 men, women and children. What makes this example even more remarkable is that those who killed the miners were already known and later arrested and convicted. Henry Reynolds makes the point that the slow process of the law was not enough to pacify the settlers' rage and desire for vengeance.

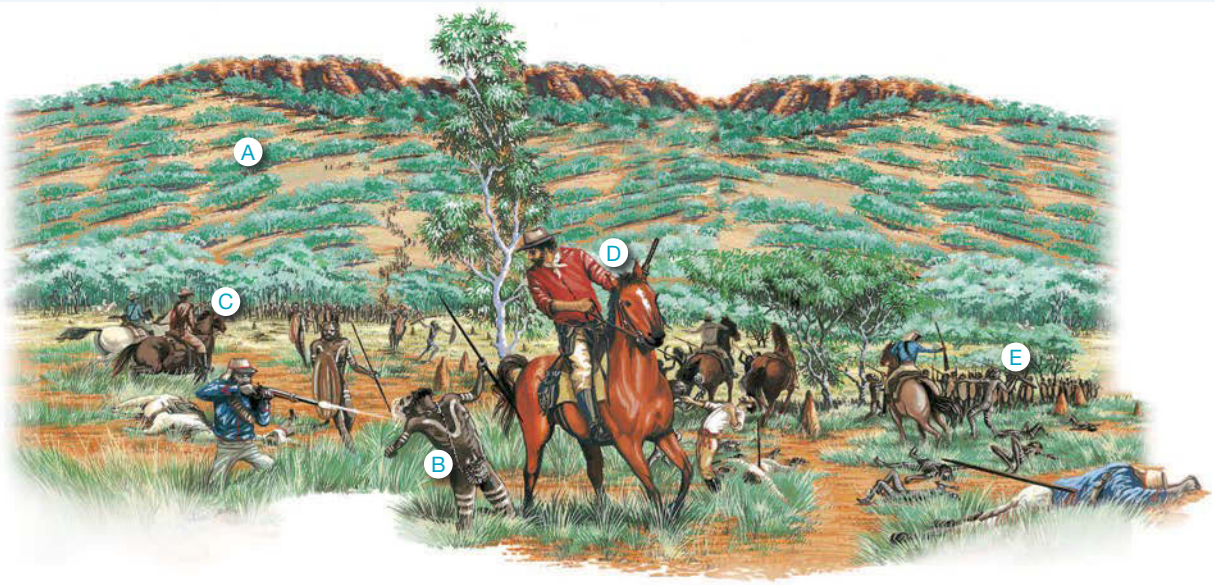
## 5.9.2 Violence in Queensland

Colonisation of Queensland began in 1825 and it became a separate colony in 1859. Between the 1860s and the 1890s, detachments of Queensland Native Police led by white officers made several brutal attacks on Aboriginal camps, killing indiscriminately. Where they could, Aboriginal people fought back. The largest battle occurred in 1884.

From the 1860s squatters had begun to occupy land between Cloncurry and Camooweal in western Queensland. This was the land of the Kalkadoon people, who waged a guerrilla war of resistance for 13 years. At Battle Mountain in 1884 around 600 Kalkadoon warriors made their last stand against

200 armed whites and Native Police. The Kalkadoons fought bravely but spears, stones and boomerangs were no match for repeating rifles and revolvers. Almost 85 per cent of the Kalkadoons were killed.

**SOURCE 3** The defeat of the Kalkadoons




- **A** Battle Mountain lies about 80 kilometres north-west of Mount Isa. The country is rocky and hilly. Boulders, giant termite mounds and tufts of porcupine grass pepper the landscape.
- **B** Warriors prepared for battle by painting three stripes around their upper arms and legs and a boomerang shape on their chest. The leader wore a thick string around his neck, tied to another around his waist, and a white feather-down headdress.
- **C** Each detachment in the native police force comprised about six native troopers headed by a European officer.
- **D** The landowners were often heavily armed, carrying both .45 Colts and carbines. Native troopers carried carbines but were not trusted to carry revolvers.
- **E** The Kalkadoon warriors were described as 'the elite of the Aboriginal warriors' and as 'tall, muscular men of magnificent physique and endurance, many of whom towered over their European opponents'.

## 5.9.3 Exploitation and protection policies

After the Australian colonies gained self-government from 1856, the new colonial parliaments showed much less concern for Aboriginal people than had the British government. An enormous amount of 'Crown land' was now held by squatters in the form of **pastoral leases**. On many of these leases, squatters exploited Aboriginal people as cheap labour.

Rather than protect the rights of Aboriginal people to use their land, the colonial governments preferred to force them onto reserves. From the late nineteenth century Protection policies were introduced in most of the colonies (or, from 1901, states). Under these policies, many Aboriginal people were controlled by reserve or mission administrators. Protection policies were based on the belief that Aboriginal people were dying out and that all that could be done for them was to prevent unnecessary suffering. From as early as the 1880s some Aboriginal children were taken from their families under these policies.

Gradually, colonial and state governments passed laws that gave them legal rights to remove or separate Aboriginal children from their families without having to show good reason in court. Such laws operated in Queensland from 1897, in Western Australia from 1905, in South Australia and the Northern Territory from 1911 and in New South Wales from 1915. As early as 1910, Inspector Thomas Clode, a South Australian police officer who was given the position of Sub-Protector of Aborigines, described such policies as 'nothing short of kidnapping'. Children taken away under these laws were deprived of ties with their families, communities, cultures and languages, and many also suffered abuse and exploitation.

**SOURCE 4** From *The Queenslander*, 23 May 1885. *The Queenslander* was the leading weekly Queensland newspaper in the 1880s. It ran a courageous campaign for more humane policies towards Aboriginal people.

On all stations ... in this western portion of Queensland a certain number of ... [Aborigines are] employed ... The vast majority receive no **remuneration**, save **tucker** and clothes. They are ... talked of as my, or our niggers, and are not free to depart when they like ... Cases have occurred where blacks belonging to both sexes have been followed, brought back and punished for running away from their nominal employers.

## DID YOU KNOW?

In 1848 the British Secretary of State, Earl Grey, informed the Governor of New South Wales that Aboriginal people must keep the right to use their land for traditional purposes. In 1996 the High Court of Australia found that the rights referred to by Earl Grey still existed. This was the famous Wik judgment, a landmark decision on Aboriginal land rights.

**SOURCE 5** From a dispatch of Earl Grey, British Secretary of State, to Governor Fitzroy in 1848

These [squatters'] leases are not intended to deprive the natives of their former right to hunt over these Districts, or to wander over them in search of subsistence [food and other needs] ... except over land actually cultivated or fenced in for that purpose.

An inquiry into the forcible removal of the children of Aboriginal and Torres Strait Islander peoples was conducted in the 1990s. The *Bringing Them Home* report acknowledged the hardships Aboriginal peoples endured and the sacrifices they made. It also recognised the strength and struggles of the thousands of people who were affected by these policies. By 2001 all state and territory governments had apologised to the Stolen Generations. However, it was the federal government's apology in 2008, delivered by then Prime Minister Kevin Rudd, that was considered to be the most significant.

**SOURCE 6** Prime Minister Kevin Rudd, 13 February 2008

We apologise for the laws and policies of successive Parliaments and governments that have inflicted profound grief, suffering and loss on these our fellow Australians. We apologise especially for the removal of Aboriginal and Torres Strait Islander children from their families, their communities and their country.

## Aboriginal voting rights

How did Aboriginal people fare as Australia's colonies gained democratic rights? All adult white men gained the right to vote for the lower house of parliament in New South Wales, Victoria and South Australia during the 1850s. After campaigns for equal rights, adult white women also gained voting rights between the 1890s and the first decade of the twentieth century. Federation took place on 1 January 1901. It marked the creation of a nation from the six British colonies in Australia (see topic 6).

In the first federal elections in 1901, South Australian Aboriginal men and women could vote, Aboriginal men of New South Wales, Victoria and Tasmania could vote, but not the Aboriginal people of Queensland and Western Australia. The Franchise **Bill** was proposed to extend voting rights at federal elections to women and Aboriginal people in all states. However, most elected members of the Federal Parliament opposed Aboriginal voting rights. They extended the right to vote at federal elections to all women but not to Aboriginal Australians. Instead, many Aboriginal people who had voted in the first federal election had that right taken away from them during the following two decades.

## DISCUSS

Discuss in small groups how important it is to work towards reconciliation with Aboriginal Australians. What suggestions would you make to improve race relations in Australia? Record some of the ideas as the discussion proceeds. **[Intercultural Capability]**

## 5.9 ACTIVITIES

1. Research why Aboriginal people were denied voting rights in the new Commonwealth of Australia. When did they eventually gain the vote? **Analysing cause and effect**
2. Working with a partner, suggest some reasons why the history of the Australian frontier was not taught to most Australians until recently. See if you can find out why this has changed. Make a list of suggestions to teachers about how to teach Australian history. **Analysing cause and effect**
3. Research the experiences of Aboriginal children who were taken from their families. Discuss with your teacher how you might conduct this research and how to structure your report. Consider background information, circumstances of removal, the life led after removal, the chances of ever finding family, cultural and geographic dislocation, long-term consequences for families. **Determining historical significance**

## 5.9 EXERCISES

**Historical skills key: HS1** Remembering and understanding **HS2** Sequencing chronology **HS3** Using historical sources as evidence **HS4** Identifying continuity and change **HS5** Analysing cause and effect **HS6** Determining historical significance

### 5.9 Exercise 1: Check your understanding

1. **HS1** What were the factors that made frontier violence more disastrous for Aboriginal people in the 1880s?
2. **HS1** What made Jandamarra more dangerous than other Aboriginal leaders?
3. **HS1** Describe the conflict at Battle Mountain in your own words.
4. **HS1** What did colonial governments prefer to do with Aboriginal people?
5. **HS5** Explain why Aboriginal children were taken from their families. Describe the impacts of this policy.
6. **HS1** Describe what happened to Aboriginal voting rights around the turn of the century.

### 5.9 Exercise 2: Apply your understanding

1. **HS3** Examine **SOURCE 1**. What does this suggest about the nature of frontier violence in the Kimberley?
2. **HS3** Explain what point Reynolds makes in **SOURCE 2** about settler attitudes to the law.
3. **HS3** With reference to the sources in this subtopic, what are the problems of establishing the truth of what happened on the frontier?
4. **HS4** Describe the ways in which frontier conflict in northern Australia was similar to and different from conflict in other parts of Australia earlier in the century.
5. **HS6** Identify three significant things that students should know about frontier conflict in Australia towards the end of the nineteenth century. Explain why you have chosen each point.

Try these questions in learnON for instant, corrective feedback. Go to www.jacplus.com.au.

# 5.10 The Torres Strait Islanders

## 5.10.1 Early contact

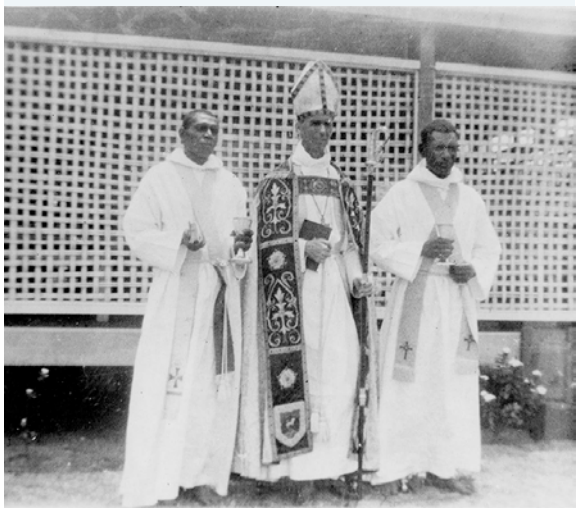
The Torres Strait Islands are the hundreds of islands, many tiny, scattered between the tip of Cape York, in Queensland, and Papua New Guinea. Many have been inhabited for thousands of years. No two islands are identical, each having its own landscape and history.

The Torres Strait Islanders are a separate people in origin, history and way of life. Today they live in 18 permanent communities on 17 islands, though they still frequent their traditionally owned islands for fishing, gardening and recreation. The Torres Strait Islanders (hereafter called Islanders) traded with Aboriginal people of Cape York and the people of Papua New Guinea before the Europeans arrived. There were five distinct cultural groups and each nation had its own name. Because they were gardeners and fearless defenders of their territories, Islanders were well regarded by European visitors.

Initial European contact was made in 1606 when the Spanish navigator Luis Vaez de Torres sailed through what is now called the Torres Strait.

After 1770, when Captain Cook proclaimed part of Australia's eastern coast as Crown land, many British ships favoured Torres Strait as a passage to the Pacific. While the first European settlement was established on Albany Island in 1863, a 'pearl rush' in 1870 brought thousands of people from all over the world. A year later the London Missionary Society brought Christianity to Darnley Island and the Islanders' lives were transformed. The first Christian service was performed on 1 July 1871, and that day is still celebrated as 'The Coming of the Light.' Missionary teachers incorporated traditional ritual and belief but ended the practice of reciprocal killing and the trading in human heads. They also imposed a new language, Torres Strait Creole (currently called 'Ailan Tok'), which was embraced as a shared language by the Islanders. Islanders also accepted Christianity as a fulfilment of their existing religious beliefs rather than the imposition of a new one.

**SOURCE 1** Priests Joseph Lui Snr. and Poey Passi at their graduation ceremony on Moa Island, 1925. The merging of pre-colonial beliefs and traditional Christianity is an important part of Islander culture.



**SOURCE 2** Pearling was an important industry for the Islanders in both cultural and economic terms. Islanders were exploited as cheap labour, but this enabled them to contribute to their own community.

## 5.10.2 Discrimination and control

Between 1872 and 1879 the government of Queensland progressively claimed the Torres Strait Islands in the name of the Crown. Initially, the Islanders enjoyed more independence under European control than did mainland Aboriginal people. This was mainly because the then Queensland Government Controller, John Douglas, would not allow Islanders to be classified as Aboriginal people under the *Queensland Aborigines Protection Act 1897*.

An extraordinarily tolerant and enlightened man, Douglas exerted his authority with minimal disruption to the Islanders' lives. He created a system of island councils, responsible for maintaining law and order, essential services and schools. Douglas' death in 1904 made the Islanders more vulnerable to outside control by the Queensland government, placing them 'under the dog Act' as they put it. Soon Islanders' lives were restricted by a curfew and pass system, their wages were controlled by the Protector, they had to ask permission to withdraw money and children were expected to go to government primary schools before either going to work on the boats (for boys) or doing domestic work (for girls).

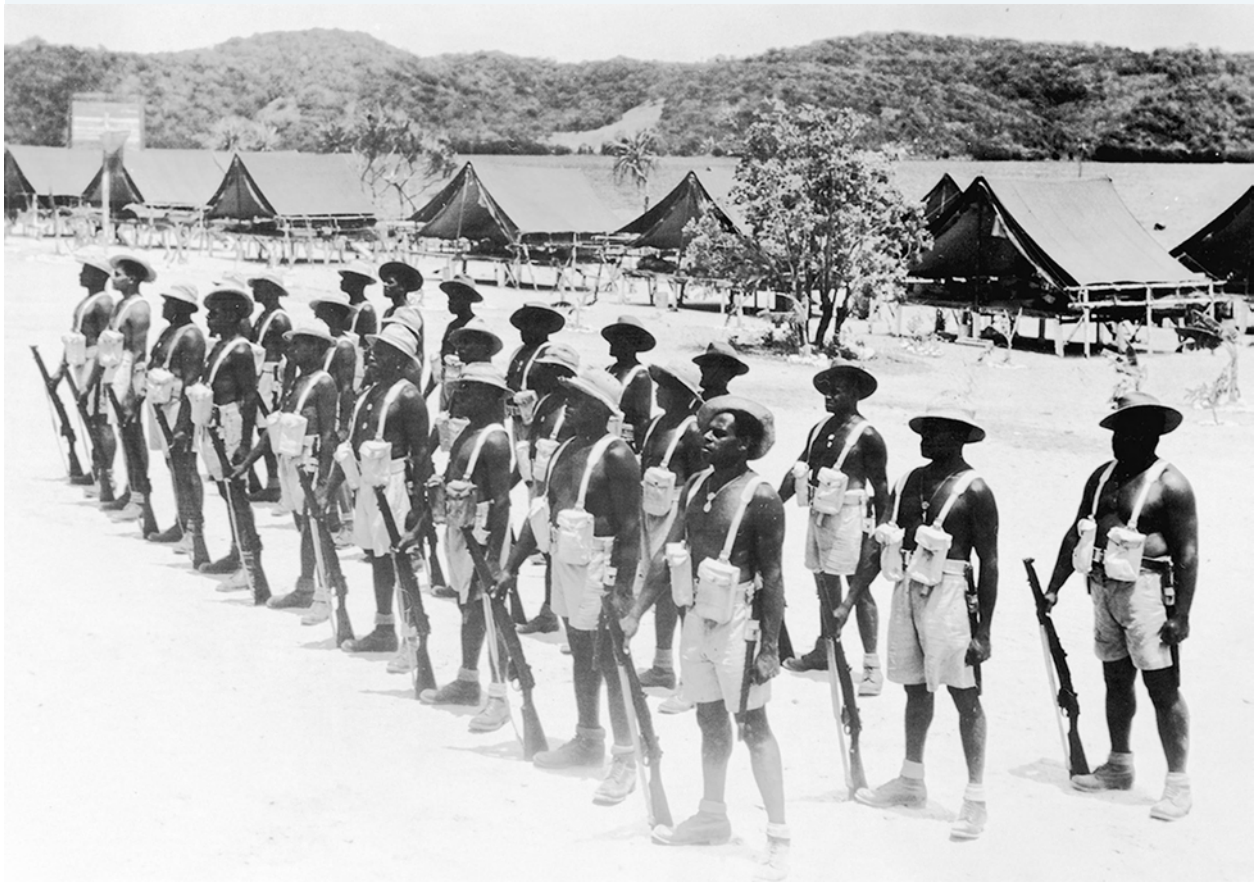
Islanders also became subject to the same racial discrimination that operated thoughout Queensland. Schools, swimming baths, theatres and even dances were racially segregated and Islanders were not allowed to enter hotels. Marriage, sexual relations and friendships between races brought official disapproval. While the Catholic school on Thursday Island defied the rules of segregation, the 'white' state school admitted Europeans, Japanese and Chinese, and the 'coloured' school took everyone else.

Frustrated by the loss of ability to run their own affairs, Islanders working on Queensland government–owned boats staged a strike in 1936. It lasted nine months; the outcome was that Island Councils were allowed to have more substantial input into the management of their boats and other affairs.

The Islanders also benefited in 1939 when the Queensland government passed the Torres Strait Islanders Act, for the first time legally recognising the Islanders as a separate people.

Many Islanders also served in the Australian armed forces during the Second World War. They were initially paid only one-third of the wage of the Europeans. They went on strike in 1943 and again in 1944 to demand the end to discrimination. The government doubled their wages, eventually. Over 800 Islanders served in the armed forces. After the war, many Islanders who served in the armed forces still faced discrimination and exclusion.

**SOURCE 3** Thursday Island, 1945. A squad of the Torres Strait Light Infantry Battalion train in their company lines, 1945.



***Source:*** Australian War Memorial 119169

### 5.10 ACTIVITY

With a partner, research the traditional lifestyles of Torres Strait Islanders and their history. Prepare a brief presentation of your findings. **Identifying continuity and change**

### 5.10 EXERCISES

**Historical skills key: HS1** Remembering and understanding **HS2** Sequencing chronology **HS3** Using historical sources as evidence **HS4** Identifying continuity and change **HS5** Analysing cause and effect **HS6** Determining historical significance

#### 5.10 Exercise 1: Check your understanding

1. **HS1** Describe the main characteristics of the Torres Strait Islands and their people.
2. **HS1** What is celebrated by Torres Strait Islanders as 'The Coming of the Light'?
3. **HS1** What changes did the Europeans bring to the Islands?
4. **HS1** What controls did the Queensland government impose on Torres Strait Islanders?
5. **HS1** Explain how Islanders negotiated with the government and identify the outcomes.

#### 5.10 Exercise 2: Apply your understanding

1. **HS3** What do the sources in this subtopic suggest about the changes the Europeans brought to Islander society?
2. **HS4** Do you think the changes that the Europeans brought to Islander society were positive or negative?
3. **HS3** What do the sources in this subtopic suggest about Islander responses to change?
4. **HS6** Explain why John Douglas' contribution is important to the history of the Torres Strait Islands.
5. **HS3** Using **SOURCES 1, 2** and **3** as your evidence, write half a page explaining how Islander culture survived despite the massive change that came with European control.

Try these questions in learnON for instant, corrective feedback. Go to www.jacplus.com.au.

# 5.11 A celestial presence: the Chinese in Australia

## 5.11.1 Chinese arrive on the goldfields

Mak Sai Ying (also known as John Shying), who arrived to Australia in 1818, was the first recorded Chinese immigrant to Australia. After a decade of farming, Ying was listed as the publican of The Lion, a hotel in Parramatta, possibly signifying his social and economic success. Material advancement was a powerful motive for most migrants to Australia and this is also true for the Chinese. However, immigration from China was very limited in the first half of the nineteenth century. The labour shortage in Victoria in the 1840s brought 1700 convicts but it also encouraged squatters to engage small bands of Chinese workers as shepherds on four-year contracts. Paid only half the wages of local shepherds, the Chinese were initially welcomed into Victoria. However, once gold was discovered in 1851 and large numbers of Chinese appeared on the goldfields, in direct competition with Europeans, prejudice and discrimination became common.

The Victorian gold rushes produced a second transformation of the society that had been established at Port Phillip in 1835. The traditional hunter-gatherer society of up to 60 000 Aboriginal people had been displaced by a prosperous pastoral economy of 77 000 Europeans and over 6 million sheep by 1851. Only 10 years later, the population was a staggering 540 000, Melbourne was a large and renowned city surrounded by other successful inland towns, and people had come from around the world to find their fortune. Many of these people came from China.

Like most other miners, the Chinese came for material wealth and security. Ninety per cent of the Chinese came from the Guangdong province in southern China, an area that had experienced war, rising rents and land shortages, so like the European migrants, there were many who had much to gain from making a living in Victoria.

Although miners came from around the world, the Chinese were a distinctive national group, different in language, religion, culture, dress and appearance. They also travelled together in large groups and were virtually all male. The Chinese were also very determined men who worked hard and were set on returning to China with their wealth. All of these factors were used as excuses for hatred and discrimination by some of the Europeans, though it was possibly the Melbourne newspapers and their articles about 'an invasion from China' that stirred a lot of the hostility. There were other complaints against them: many Chinese worked on Sundays, some smoked opium (which was legal at the time but morally frowned upon) and gambling was popular. They seemed to be a strange and threatening presence.

**SOURCE 1** Lum Khen Yang in 'The Wesleyan Chronicle, 1 Feb 1859' quoted in *Colonial casualties: Chinese in early Victoria*

Our money and property were plundered, we had not the means of purchasing a morsel to put into our mouths and there appeared no way by which we could extricate ourselves from poverty ... We happily heard intelligence regarding a new gold-field in an English colony. We were told that men from all parts of the world were congregated there ... that the people were peaceably disposed, and that the country abounded in everything. The idea of going to such a country was delightful ... I then made an effort to get as much money as would pay my passage to this productive country.

**SOURCE 2** *Flemington, Melbourne*, by S.E. Brees, painted around 1856. Long columns of Chinese men travelling to the goldfields aroused fear and hostility amongst European miners.

**SOURCE 3** The description of the Chinese miners by the Polish digger Seweryn Korzelinski

Small in stature, with small eyes and long plaits of hair, made even longer by a piece of string with a tassel tied at the end of it. They are very funny to watch when they walk overland, for they usually travel in large groups of a hundred or so, one behind the other in a long line like wild geese. They don't walk normally but take short steps and appear to be running very slowly. Each one carries a long pole over his shoulder with baskets of victuals hanging at both ends.

## 5.11.2 Conflict on the goldfields

Alarmed at the increasing numbers of Chinese migrants, the Victorian government passed the first of a number of racial discrimination laws in 1855, imposing an extra tax on every Chinese person landing in Victoria. Undeterred, ships began landing at Robe in South Australia. Long streams of Chinese miners then trekked from South Australia to the goldfields in Victoria. Conflicts soon arose as European miners drove Chinese miners from productive claims and the Chinese fought back. The government stepped in to organise Chinese Protectorates (similar to the Aboriginal Protectorates), with separate living areas, elected representatives, interpreters and access to legal rights. There was a great deal of official prejudice expressed against the Chinese.

### DID YOU KNOW?

The worst anti-Chinese riots were at Buckland River in Victoria, in 1857, and in 1861 at Lambing Flat, the site of the present-day town of Young in New South Wales. In 1881 New South Wales and Victoria passed laws stating that any ship coming to Australia could carry only one Chinese passenger for every 100 tons of cargo.

**SOURCE 4** The description of the Chinese immigrants by the *Report of the Victorian Goldfields Commission of Enquiry*, 1855

Their generally filthy habits are repulsive to the Christian population. The question of ... such large numbers of a pagan and inferior race is a very serious one.

Three years later John Fawkner, one of the founders of Melbourne, demanded that the government act to stop 'the Gold Fields of Australia Felix from becoming the property of the Emperor of China' and that they represented 'great social evils, immorality and crime ... bringing about results highly detrimental to the habits of the rising generation'.

Some groups of miners went beyond words. As the numbers of Chinese swelled to over 25 000 by 1857, a serious anti-Chinese riot erupted at Buckland River, when 30 to 40 miners pushed the Chinese from their claims, robbed them and then burned their tents. Four Chinese miners drowned in the freezing Buckland River. A similar riot occurred in New South Wales at Lambing Flat, near the town of Young, in 1861.

**SOURCE 5** The Roll Up banner around which a mob of about 1000 men rallied and attacked Chinese miners at Lambing Flat in June 1861. The banner is now on display in the museum at Young.

**SOURCE 6** From the *Sydney Morning Herald*, 20 July 1861

... the crowd of rioters took the road to Lambing Flat ... every Chinese resident in the township on whom hands could be laid was attacked and maltreated ... Unarmed, defenceless, and unresisting Chinese were struck down in the most brutal manner by bludgeons ... and by pick handles ... every article of property they had endeavoured to take with them was plundered.

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Deepen and check your understanding of this topic with related case studies and auto-marked questions.
- Australia and Asia > **Chinese Diaspora**

## 5.11.3 Contested history

There are many aspects of studying history that lead to debate and argument. Students need to be aware that sources and accounts all present particular perspectives that need to be interrogated by looking at other sources. This is also true in this topic. In many history books the riots, resentment and hostility directed towards the Chinese has created an image of Chinese passivity and helplessness. This may not be the case. The following sources suggest that many Chinese immigrants, in spite of the conditions under which they lived and worked, went on to become successful members of the community.

**SOURCE 7** The website www.egold.net.au emphasises the diverse experiences of Chinese people and their contribution to Victoria.

The Chinese, who at one stage during the late 1850s accounted for one in ten Victorians, settled in the key goldfields centres of Bendigo, Ballarat and Castlemaine. They brought with them their distinctive way of life and specialised mining techniques. Some encountered hostility and racist attitudes but as a group the Chinese were renowned for their industry.

Although best known for their role in the goldmining industry, they were involved in many other pursuits on the goldfields. Many worked as herbalists, merchants and restaurateurs. Others played an important role in the development of the region by working as market gardeners and continued to do so well into the twentieth century.

Lee Heng Jacjung was one individual who made a life for himself in Victoria. He arrived in Australia from California and settled on the Fryers Creek diggings, where he acted as an official interpreter. He married and settled near Mount Alexander, and became a valued member of his community. Similarly, James Acoy was an interpreter and prominent businessman in Castlemaine, which had one of the biggest goldfield Chinese communities. In 1855 he married a 17-year-old German girl and built a house in Castlemaine; together the couple had 10 children. While imprisoned for corruption in 1869, he had many supporters across the community who believed his conviction was unjust.

**SOURCE 8** From R.W. Dale, *Impressions of Australia*, published in 1889

... the **virtues** of the Chinaman, rather than his **vices**, provoke the popular resentment against him. His ... industry, his patience, his powers of endurance ... make him a very formidable person.

**SOURCE 9** The Chinese also conducted a sustained series of protests and petitions against unfair taxation from 1855 to 1861, in some cases winning concessions from the government. The following appeared in Natives of China residing in Victoria petition, 4 August 1857; Chinese Resident in Castlemaine petition, 18 August 1857.

Nearly all of us left our native land at the solicitation of Europeans, to seek abroad that prosperity which we could not find at home, on the assurance that we should receive the protection of your laws so long as we remained obedient to them; and that we should be governed in that spirit of equity which we have been accustomed to associate with the English name; but that, since our arrival, we have been subjected to a series of insults and oppressions from the ignorant, the cruel, and the malicious, though we are not conscious of having merited such injustice ... Every nation is allowed to come into this colony – why not the Chinese? At first the government was very good to our petitioners but now it is going to be different.

## 5.11 ACTIVITIES

1. Find your own evidence of relations between Europeans and Chinese at this time in Australia's history. Include both written and visual sources. Compare your findings with the evidence from the sources in this subtopic. What overall picture do you get of the relationship between the Europeans and Chinese during this period? **Using historical sources as evidence**
2. Explore the idea of Chinese helplessness. Research the ways Chinese people resisted the taxation imposed by the government. In what ways did they respond to European aggression on the goldfields? **Analysing cause and effect**
3. Research the contribution of the Chinese community in Victoria up to 1901. **Determining historical significance**
4. Find out what role the Chinese community played in the celebrations of Federation in 1901. How does your research alter your understanding of this subtopic? **Determining historical significance**

## 5.11 EXERCISES

**Historical skills key: HS1** Remembering and understanding **HS2** Sequencing chronology **HS3** Using historical sources as evidence **HS4** Identifying continuity and change **HS5** Analysing cause and effect **HS6** Determining historical significance

### 5.11 Exercise 1: Check your understanding

1. **HS1** Identify two important reasons why Chinese people came to Australia in this period.
2. **HS1** List the reasons why Europeans resented the Chinese.
3. **HS1** Identify the actions the Victorian government took to manage the Chinese presence in Victoria.
4. **HS1** How did the European miners act toward the Chinese?
5. **HS6** What is significant about the lives of Lee Heng Jacjung and James Acoy in Australia?

### 5.11 Exercise 2: Apply your understanding

1. **HS3** Examine **SOURCE 1**. How does Lum Khen Yang feel about coming to Australia?
2. **HS3** Examine **SOURCE 3**. How does Korzelinski feel about the Chinese?
3. **HS3** Examine **SOURCES 1, 2** and **3**. Do any of the three sources suggest a threatening presence? Explain your answer.
4. **HS3** List the various occupations that Chinese people had other than goldmining, as detailed in **SOURCE 7**.
5. **HS3** In **SOURCE 9**, identify the complaints the Chinese are making.
6. **HS3** Examine all the sources in this subtopic. Create two lists of evidence, one identifying poor relations between European and Chinese miners and one identifying mutual acceptance. Which list is stronger? Explain your answer.
7. **HS6** Evaluate whether the Chinese miners suffered significant and persistent hostility on the goldfields. In what ways were they treated differently by the government and by other miners? How many people were affected?

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# 5.12 SkillBuilder: Determining historical significance

online only

### Evaluating significance: the Chinese on the goldfields

One way of developing a deeper understanding of the past is to think about the significance of particular events, individuals, groups or ideas. This is not an easy thing to do. Measuring the importance of any aspect of history requires making a judgement about what was important at the time or what is still important today. There are various criteria we can use to evaluate the historical significance of any event, individual, group or idea.

**Select your learnON format to access:**

- an explanation of the skill (Tell me)
- a step-by-step process to develop the skill, with an example (Show me)
- an activity to allow you to practise the skill (Let me do it)
- questions to consolidate your understanding of the skill.

# 5.13 The ideal of 'White Australia'

## 5.13.1 Defending Australia — the crimson thread of kinship

Towards the end of the nineteenth century many Australians believed that Australia would benefit from having a population composed of a single race, mainly people of British origin. The idea of 'White Australia' was openly discussed and supported by all political parties. White Australia is one of the most controversial topics in Australian history. Most think of this idea as a shameful and regrettable part of our history. There are also historians who, looking at the full extent of the historical circumstances, note that it was an expression of a desire to protect workers' wages and conditions and create a society that was united and harmonious, misguided though the policy may have been. While both may be true at the same time, it is certainly worth examining the ways in which Australians thought and the efforts they made to create a new society, 'free from the ills of the old world'. It was clear that politicians at the time sought to create a 'better Britain', while still maintaining a close relationship with Britain.

After the gold rush, colonial governments encouraged and assisted a smaller but steady stream of British migrants to come to Australia. This helped to preserve what was referred to as the 'crimson thread of kinship', the close cultural and sentimental ties between Britain and Australia. These familial bonds were important but Australians also looked to Britain for security and defence.

**SOURCE 1** Edmund Barton speaking in support of sending troops to aid Britain in the Sudan, reported in the *Sydney Morning Herald*, 21 February 1885. Barton was later to be Australia's first prime minister.

... I want to know whether we want to consider ourselves English or not? ... If her quarrels are not to be ours, when are our quarrels to be hers? [Cheers.] When the time of trouble comes and we do not stand shoulder to shoulder with our fellow subjects of Great Britain can we expect them to do so for us? ... we will rally round the old flag, and we will recollect that the cause of the Empire is our own. [Cheers.]

### Defence fears

Most white Australians felt isolated and fearful of invasion. Believing that Australia could rely on the British Navy for protection, they clung to Britain and to the empire. Colonial governments and population were alarmed when France **annexed** New Caledonia in 1853. From the 1860s to the 1880s sensational stories of possible Russian invasion appeared in the colonial press. In 1883 Queensland hoped to stop German expansion in the south-west Pacific by annexing New Guinea. Britain opposed this move because of Queensland's dreadful record in dealing with native peoples. But in 1884 Britain took possession of eastern New Guinea shortly before Germany seized northern New Guinea.

### Fighting the empire's wars

Each Australian colony developed its own defence forces, but Australians also generally believed that if they fought for Britain, then Britain would come to Australia's aid if need be. Australians took part in the wars of the British Empire during the Sudan Campaign in North Africa in 1885. When New South Wales sent 734 troops to this conflict, many people saw it as a chance to prove loyalty to Britain. Much the same reasoning saw Australian colonial forces involved in Britain's wars in South Africa and China at the end of the century.

**SOURCE 2** *The departure of the Australian contingent for the Sudan*, painted by Arthur Collingridge in 1885. It has been estimated that two-thirds of Sydney's population gathered to farewell the Sudan Contingent.

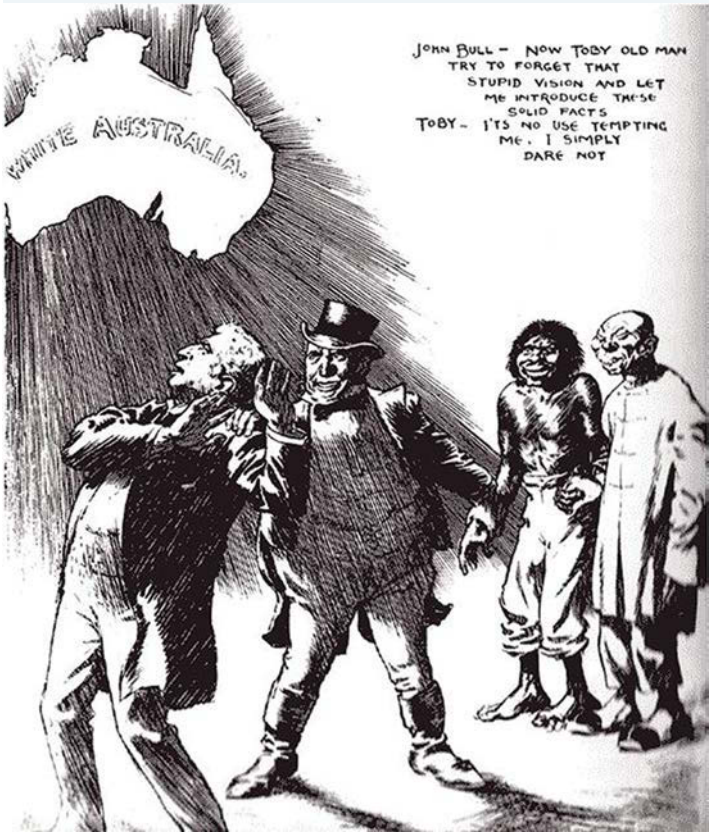
***Source:*** AWM ART16593

## 5.13.2 'Purifying' Australia

Many Australians thought of Britain as the 'mother country', even though they had never been there. However, this did not mean that they agreed with all of the policies of the empire. The White Australia policy brought about conflict with the British government and its multiracial empire. Britain favoured a much freer movement of goods and people, something that was completely opposed to the restrictive racial policies of the Australian states. Increasingly, colonial governments became determined to exclude non-European migrants. In 1888 the colonial leaders united in an appeal to Britain to stop Chinese immigration to Australia.

After Australia federated in 1901, the new federal government was concerned that a racial policy would be disallowed by Britain. It got around Britain's opposition by introducing a 'dictation test' for migrants, making it appear that migrants would be selected on education level rather than race. Migrants who failed to write down 50 words exactly as dictated to them by an official could be refused entry to Australia.

**SOURCE 3** 'John Bull' pressures the Australian Prime Minister Edmund Barton to accept non-white migrants. 'John Bull' represents England.




## Pacific Islanders in Queensland

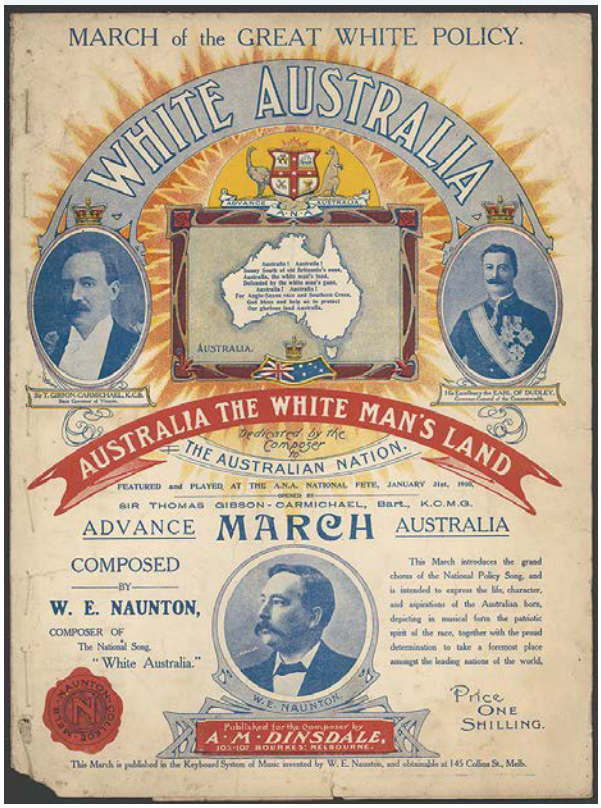
Between 1863 and 1904 about 50 000 Pacific Islanders came to northern Australia to work on sugar plantations, one of colonial Queensland's most important industries. In the early years many Islanders were tricked or kidnapped from their homes, in a process called 'blackbirding', which was strictly illegal and amounted to little more than slavery. Estimates vary, but about 10 to 15 per cent of Islanders were captured in this way. Most came from the island of Vanuatu (then called the New Hebrides) or the Solomon Islands, but all were referred to as 'Kanakas'. As the labour trade became more established, many of the mostly male Islanders were drawn by the promise of European goods and a freer lifestyle. However, in Queensland they were ruthlessly exploited by plantation owners as cheap labour, and they suffered poor living conditions and an incredibly high death rate from European diseases. About 30 per cent of the Islanders who came to Australia died from disease. After federation, it was the Australian government's desire to return all Islanders to their homes, though by 1904 many had been in Australia for many years, had Australian-born children and knew little of their homelands. In the end thousands were deported, though many were allowed to stay on humanitarian grounds. Those who were allowed to remain in Australia were refused the right to work and were treated like second-class citizens. Nevertheless, by 1938 there were 1100 descendants of South Sea Islanders still working in the Queensland sugar industry.

**SOURCE 4** A group of male and female Pacific Islander farm workers on a sugar plantation at Cairns in 1890 (State Library of Queensland)

## 5.13.3 Promoting White Australia

It is hard to believe that such open racism was not only accepted but also promoted in Australian society. This fact begins to make more sense if we look more closely at national and international politics of the time, when many national groups around the world defined themselves by race and similar laws were passed in many other nations. The following sources illustrate some of the thinking at this time and the variety of ways it was expressed.

**SOURCE 5** A poster advertising the playing of a 'National Policy Song'. Some of the words are printed inside the map and include, 'Sunny South of old Britannia's sons, Australia the white man's land, Defended by the white man's guns, Australia! Australia!'




**SOURCE 6** Australians were able to support the White Australia policy by buying goods produced by white workers, such as the pineapples shown here. This gave everyone the chance to support higher wages for white workers.

**SOURCE 7** The White Australia policy was also an expression of fear of Australia's incapacity to defend a vast coastline. This fear was put in dramatic form in the play shown in this advertisement.

## DISCUSS

What would a nation consisting of one race have looked like in comparison to our own multicultural nation of today? Use the sources in this subtopic to develop some ideas, find out what other countries thought of the White Australia policy throughout the twentieth century, then share your findings and ideas in a class discussion.

**[Using Historical Sources as Evidence]**

## 5.13 ACTIVITY

With a partner, identify three attitudes to race that have been expressed in this subtopic. Explain whether you think these attitudes are still present in Australian society today. Support your answer with some current examples and try to explain why attitudes may have changed or remained the same. Share your views with the class.

**Identifying continuity and change**

## 5.13 EXERCISES

**Historical skills key: HS1** Remembering and understanding **HS2** Sequencing chronology **HS3** Using historical sources as evidence **HS4** Identifying continuity and change **HS5** Analysing cause and effect **HS6** Determining historical significance

### 5.13 Exercise 1: Check your understanding

1. **HS1** What is the meaning of the expression 'crimson thread of kinship'? Explain why it is important.
2. **HS1** Name the European powers that took over the following Pacific regions in the late nineteenth century: New Caledonia; eastern New Guinea; northern New Guinea.
3. **HS1** How did Australians feel about fighting for the British Empire?
4. **HS1** What was the 'dictation test' and why was it introduced?
5. **HS1** Describe the ways that Islanders were 'recruited' to work in Queensland.
6. **HS1** What was the Islanders' death rate from disease?

### 5.13 Exercise 2: Apply your understanding

1. **HS3** Consider **SOURCES 5–7**. Which of these sources expresses a political concern? Which are concerned with the economy? Which sources express a social concern?
2. **HS3** Identify the hopes and fears that are expressed in each of **SOURCES 5, 6** and **7**.
3. **HS3** Based on the sources in this subtopic, explain whether you think Australia was an optimistic or pessimistic country in the nineteenth and early twentieth centuries. Refer to at least five sources in your answer.
4. **HS3** Examine **SOURCES 5–7** again. How reliable are these sources in helping us gain an understanding of Australians' attitudes to other races?
5. **HS6** Was the desire for a White Australia simply a product of blind hatred towards other races, or was it a product of other social issues it attempted to redress? Outline your views on this issue.

Try these questions in learnON for instant, corrective feedback. Go to www.jacplus.com.au.

# 5.14 Thinking Big research project: Colonisation and conflict exhibition

online only

## SCENARIO

As a museum curator you will be responsible for creating an exhibition dedicated to the record of colonisation and contact in Australia from 1750 to 1918. You will need to select artefacts that can provide museum patrons with a glimpse of 1750 Australia as it was for the First Australians, and that convey the story of the events and experiences that unfolded from that point.

### Select your learnON format to access:

- the full project scenario
- details of the project task
- resources to guide your project work
- an assessment rubric.

### on Resources

**ProjectsPLUS** Thinking Big research project: Colonisation and conflict exhibition (pro-0184)

# 5.15 Review

online only

### 5.15.1 Key knowledge summary

Use this dot point summary to review the content covered in this topic.

### 5.15.2 Reflection

Reflect on your learning using the activities and resources provided.

### on Resources

**eWorkbook** Reflection (doc-31703)
Crossword (doc-31704)

**Interactivity** Australia (1750–1918): Colonisation and conflict crossword (int-7639)

## KEY TERMS

**annex** to take possession of a territory
**Bill** a proposal to change the law by Act of Parliament
**convict** a person imprisoned for a crime
**incontrovertible** certain, undeniable
**kinship** relationships between members of an extended family
**pastoral lease** land that is leased for the purpose of grazing sheep or cattle
**penal colony** a settlement for convicts
**remuneration** pay or reward such as wages
**tucker** traditional Australian slang term for food
**vices** immoral habits
**virtues** admirable moral qualities, goodness

# 5.12 SkillBuilder: Determining historical significance

## 5.12.1 Tell me

One way of developing a deeper understanding of the past is to think about the significance of particular events, individuals, groups or ideas. This is not an easy thing to do. Measuring the importance of any aspect of history requires making a judgement about what was important at the time or what is still important today. There are several criteria we can use to evaluate the historical significance of any event, individual, group or idea:

- **Was it remarkable?** Was it different or new? Did people comment on it at the time? Was it important for them?
- **Has it been remembered?** Have others written or spoken about it since? What has been emphasised? What aspects may have been left out?
- **Did it result in change?** What were the consequences, either in the short term or the long term? Were these consequences important or profound? How many people were affected? In what ways were their lives changed? For how long were the consequences felt?
- **What does it reveal?** What does it tell us about the time and its people? What does it tell us about those who have written about it? What does it tell us about ourselves? How does it compare with other aspects of the same period?
- **How is it relevant?** Is it important for us today? Does this aspect of the past resonate with our own experiences? Does it help explain the present in some way or help us in guiding our future?

When thinking about an aspect of the past we do not need to apply all of the questions to everything. However, we can try them out and see how they might apply. It is also important to know that people disagree about what is important or significant about the past. It's one of the things that makes history an interesting subject to study.

## 5.12.2 Show me

### The Chinese on the goldfields: helpless victims of racism?

In subtopic 5.11 we explored the Chinese presence on the goldfields, the hostility and prejudice they faced and how they reacted to such racism. We can understand the complex nature of this issue a little more if we look at the historical significance of the Chinese presence.

### Was the Chinese presence remarkable?

There is no doubt that the Chinese were a large and visible group on the Victorian goldfields.

- The numbers of Chinese in Victoria increased significantly from a few thousand in 1854 to nearly 30 000 later in the decade, when the Chinese accounted for one in every ten Victorians.
- More than 12 000 Chinese arrived in Australia in 1856; most headed for Victoria.
- More importantly, on certain goldfields they were very prominent; in December 1857 the Chinese made up 27 per cent of the adult male population at Bendigo.
- By 1861 there were nearly 40 000 Chinese in Australia, making up 3.3 per cent of the entire Australian population.

It is also clear that the Chinese were a distinct national group who were different in language, dress, customs and religion from the majority of the European miners. They suffered prejudice and hostility. The image in **SOURCE 1** expresses this fear and intolerance.

### Has it been remembered?

Despite the fact that Chinese miners were hardworking and peaceful, some European miners resented their different appearance and customs and were anxious about their competition in finding gold. Rumours, fear and intolerance, as well as declining income for miners, led to a series of riots and protests.

**SOURCE 1** *Melbourne Punch Almanack*, January 1857. Rare Books Collection, State Library of Victoria

A Flood of Celestial Light pouring in upon the Diggings.

The image in **SOURCE 2** is from the National Museum of Australia. It emphasises the violence of the European responses and the apparent helplessness of the Chinese.

**SOURCE 2** The Australian goldfields were dangerous places for the Chinese. Here, Chinese miners are fleeing from European rioters who are attacking them with spades and picks.

There are several textbooks and websites that contain violent images and descriptions similar to those in **SOURCE 2**, and it would be worthwhile to compare them. How many emphasise violence and hostility? Do they include other sorts of interactions? It is certainly true that the violence has been well remembered in our history and this makes it worthy of further study.

## Did it result in change?

Anti-Chinese feeling on the goldfields resulted in two racist laws in Victoria that discriminated against the Chinese.

*An Act to Make Provision for Certain Immigrants* was passed in 1855. This imposed limitations on the numbers of Chinese people each ship could carry to Victoria, and a £10 fee for every Chinese person to pay on arrival.

To avoid paying the tax, ships began unloading people in South Australia. As a response, the Victorian government then proposed another law '*to control the flood of Chinese immigration setting in to this Colony and effectually prevent the Gold Fields of Australia Felix from becoming the property of the Emperor of China and the Mongolian and Tartar Hordes of Asia*'.

This law initially proposed a £1 per month 'residence tax', in addition to another £1 per year 'protection fee' as well as the £1 per year 'miner's right' that all miners paid. In addition, the residence licence could only be paid if they proved that they had paid the initial £10 poll tax. To make matters worse, any person could arrest any Chinese person without a residence licence at any time.

This resulted in *An Act to Regulate the Residence of the Chinese Population of Victoria* in 1857. Chinese protests against the Bill brought some concessions. The residence tax was reduced to £1 every two months and the imprisonment clause was dropped, but the law still remained as a significant and unfair law against a targeted race.

## Going further: working like a historian

One of the longer-term changes worth considering would be whether these laws contributed to the development of other restrictive and racist laws in Australia, especially the White Australia policy of the next century.

## What does it reveal?

There are several things suggested by the sources above. Firstly, the Chinese presence sparked racially based fear and anxiety amongst the Europeans. This resulted in violence on the goldfields as well as government action to regulate the numbers of migrants from China and control their movements in Victoria.

However, the Chinese community protested very strongly against these laws and managed to win concessions. It would also be worth considering other sources that suggest other forms of relations on the goldfields.

There are other possible implications that you could discuss, such as the obvious possibility that friendly relationships existed and that many Europeans accepted the Chinese presence. The ideas of prejudice, racism and intolerance are still relevant today. Consider this question: can we learn anything from our study of this topic that might influence our own ideas and values?

## 5.12.3 Let me do it

Complete the following activities to practise this skill.

### 5.12 ACTIVITIES

### The Chinese on the goldfields: helpless victims of racism?

**Step 1**

Examine the following sources and identify what each tells us about the Chinese presence in Australia. For each source, answer the questions below.

- Does the source suggest that the Chinese were passive victims of European racism?
- Does the source indicate that Europeans were consistently hostile?
- Does the source show the Chinese as a distinctively different group, keeping to themselves?
- What does the source suggest about the place of the Chinese community in Victoria during the gold rushes?
- What does the source say about European and Chinese relations?

You may wish to organise your findings into a table with a column for each source and a row for each question, or you might devise a graphic organiser.

**SOURCE 3** *Portrait of a Chinese Gentleman*, courtesy of Dennis O'Hoy Golden Dragon Museum Showing Face Exhibition

**SOURCE 4** Lovejoy, V., *The Things that Unite: Inquests into Chinese deaths on the Bendigo Goldfields 1854–65*, http://prov.vic.gov.au/publications/provenance/provenance2007/things-that-unite

... the things that united these first-generation gold seekers were greater than the things that divided them. The Chinese worked alongside Europeans and in similar ways on the Bendigo field. They used the same tools, experienced the same dangers, the same frustrations and the same successes. Their lives and aspirations were not so very different. Whether they were English, German, American, Maori or Chinese, all miners dreamed of making their fortunes, all were migrants living in a harsh environment far from their homelands, and all relied on networks of friends and family to support them.

There is no doubt that the Chinese preferred to live and work together, as did different groups of Europeans, and that working relationships across the groups were as uncommon as personal relationships. Yet the inquest records reveal a shared humanity that saw Europeans readily respond to Chinese in distress, whether by accident, illness or poverty. In emphasising the prejudice against the Chinese, it is easy to lose sight of these everyday individual connections that tell a different story.

**SOURCE 5** John Alloo's Chinese restaurant, Main Road, Ballarat, 1853 by S.T. Gill

**SOURCE 6** Kyi, Anna, 'The most determined and sustained diggers' resistance campaign'. This article argues that the Chinese community in Victoria was successful in fighting against government legislation and excessive taxation and that many Europeans on the goldfields supported them. http://prov.vic.gov.au/publications/provenance/provenance2009/diggers-resistance-campaign

Besides demonstrating that the Chinese were capable of and willing to adopt Western forms of constitutional protest, the petitions are also examples of Chinese agency, evidence that the Chinese chose not to be passive victims. They provide valuable insights into the grounds upon which the Chinese defended their rights, and themselves, as well as understandings of the impact that anti-Chinese legislation was having on their lives ... the Victorian Government repeatedly amended anti-Chinese legislation and eventually removed these laws in response to Chinese evasion of taxes.

**SOURCE 7** The first Melbourne Chinese Australian Rules Football Team in 1899, St Vincent's Hospital Charity Game. Photograph: Newspapers Collection, State Library of Victoria

**Step 2**

Compare your conclusions from these five sources with the information and the sources from the Show me section.

You may wish to add the sources in the Show me section to your table.

Explain in what way these new sources give different points of view.

**Step 3**

Go back to our original question. Based on all of the sources and information in this section, what conclusions can you draw about the historical significance of this aspect of Victoria's history? In what ways do the sources provide different ways of looking at the consequences of the Chinese presence in Australia at this time?

**Step 4**

Ask yourself the following questions again. You should come up with more complex answers than the ones suggested in the Show me section.

- **Was it remarkable?** Was it different or new? Did people comment on it at the time? Was it important for them?
- **Has it been remembered?** Have others written or spoken about it since? What has been emphasised? What aspects may have been left out?
- **Did it result in change?** What were the consequences, either in the short term or long term? Were these consequences important or profound? How many people were affected? In what ways were their lives changed? For how long were the consequences felt?
- **What does it reveal?** What does it tell us about the time and its people? What does it tell us about those who have written about it? What does it tell us about ourselves? How does it compare with other aspects of the same period?
- **How is it relevant?** Is it important for us today? Does this aspect of the past resonate with our own experiences? Does it help explain the present in some way or help us in guiding our future?

# 5.14 Thinking Big research project: Colonisation and conflict exhibition

## Scenario

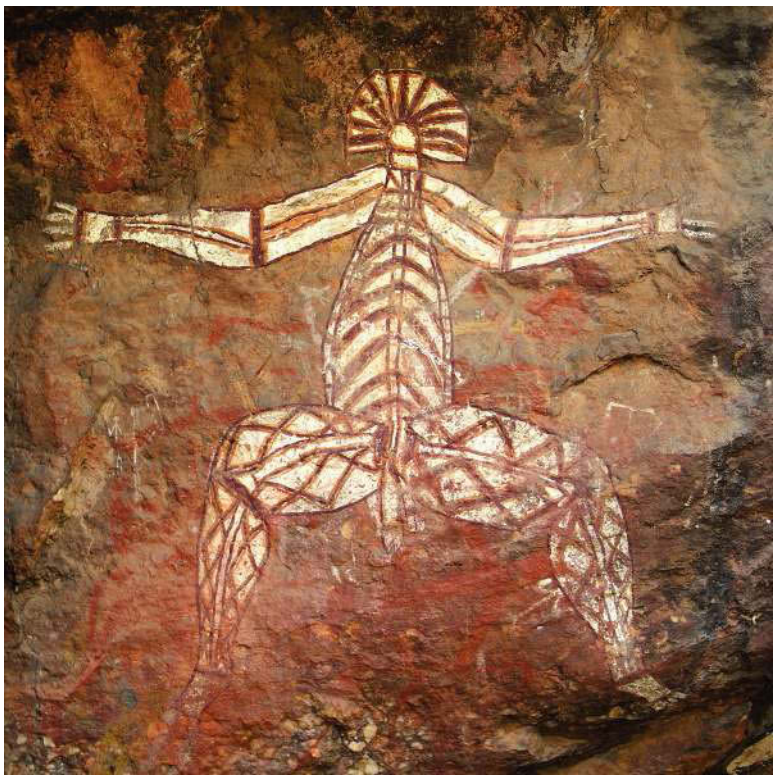
The need to keep a permanent record of our history of colonisation and conflict is of importance to both Aboriginal and non-Aboriginal Australians. Understanding our shared past and heritage is the key to true reconciliation. The history of colonisation and conflict is many stories, viewed through many eyes. It is a history of survival and loss, celebration and shame, wisdom and ignorance, courage and humour. It is not a history that can be told in a conventional chronological manner, because it is not about a series of events or the achievements of powerful people. It is a record of culture, the connections between country and people, and the consequences of dispossession and colonisation.

## Task

Your task is to take on the role of a museum curator. A curator is responsible for the assembly, cataloguing, management and display of a cultural, artistic and historical exhibit in a gallery or museum. Your job will be to curate an exhibition that is a record of colonisation and contact in Australia from 1750 to 1918.

Your museum record begins in 1750, before the meeting of the two vastly different civilisations. You will need to consider how you will gather the evidence of Australia's cultural history before European settlement. Archaeologists have evidence that Australia has been home to Aboriginal people for at least 60 000 years. The history and beliefs of these people were not written onto clay tablets or scrolls of papyrus. The archaeological record is incomplete, but it has been gathered from occupation sites such as camps, quarries, shell middens and fish traps, burial areas, and ceremonial and sacred sites. The National Museum of Australia preserves and displays collections of artefacts representing the culture and history of

Aboriginal Australia from pre-European settlement. As curator, your task will be to select the artefacts that can provide museum patrons with a glimpse of 1750 Australia as it was for the First Australians.



You will also need to carefully consider the sources of evidence you will use to tell the story of the first contacts between Aboriginal and non-Aboriginal peoples, and the colonisation and conflict that followed. You have already learned from studying this topic that nearly all the primary sources documenting these events have been produced by the colonisers. You have also been made aware of the gaps in the evidence because many shameful events went unrecorded and unpunished.

The history of colonisation and conflict in Australia is made up of many stories. Official reports, diaries, letters and newspaper articles provide valuable insights into attitudes and events of the time. Visual records, such as European artwork from the eighteenth to mid nineteenth century and photographic evidence from the mid nineteenth century onwards, are also valuable sources of evidence. The rich history of Australia from an Aboriginal perspective is often best expressed and understood through the spoken narratives that have been passed on through the generations. Oral accounts are a powerful tradition in Aboriginal communities, with three forms: history, legend and myth. The Museum of Victoria has established a record-keeping system dedicated to preserving the Aboriginal oral memory.

The careful selection of objects and oral accounts can bring the story of the past to life in a way that words on a page often fail to do. They can present history in a fresh way and from a different perspective, providing physical evidence of the colonisation and conflict that shaped modern Australia.

## Process

- Begin by forming small groups to plan, share research and discuss concepts to develop a clear understanding of Australia's history of colonisation and conflict between 1750 and 1918.
- Open the ProjectsPLUS application in the Resources for this topic. Click on the **Start new project** button to enter the project due date and set up your project group to allow you to work collaboratively. Save your settings and the project will be launched.
- Each group member should select a period, location or theme to research as their focus area of the museum collection.
- Navigate to the **Research forum**, where you will find starter topics loaded to guide your research. You can add further topics to the research forum if you wish. This is where the creation of your museum exhibition begins.
- Start your research by revisiting the content in this topic. Pay attention to the subtopic headings, as they will provide a useful research guide and be helpful in organising your chosen museum exhibition sources. You can begin with pre-European culture and then move on to the arrival of the colonisers, the conquest of the land and subsequent Aboriginal resistance, war and dispossession.

- Locate other sources of information and images to add depth to your knowledge of this topic. You can find a great wealth of archival and primary source archaeological material by accessing online collections such as those held by the National Library of Australia, the National Museum of Australia, and the State Library of Victoria. The weblinks in the ProjectsPLUS **Media centre** will get you started.
- To create a unified museum collection, you will need to view, share and comment on other group members' research and source selections. Be sure to keep clear records of all your resource details and locations.
- Decide what headings you will use to organise your chosen objects and accounts, how they will be grouped and what you are hoping to communicate through your display of archaeological and historical material. Remember the importance of the narrative, or explanation, that you will write to accompany each exhibit in your collection. The words you use to describe and explain should provide a context for your chosen objects and stimulate interest and understanding of our history of colonisation and conflict.
- When you have gathered all your exhibit elements, as a group devise a short introductory speech to explain your goal as a team of curators in putting this exhibition together.
- Present your introductory speech and completed museum exhibition to other groups in your class. Be sure to highlight objects that you consider to be of particular importance in communicating the story of colonisation and conflict.

## Resources

**ProjectsPLUS** Thinking Big research project: Colonisation and conflict exhibition (pro-0184)

# 5.15 Review

## 5.15.1 Key knowledge summary

### 5.2 Examining the evidence

- Colonisers have produced most of the written sources, which means the European perspective of race relations is the one that dominates.
- One of the challenges for historians is to discover the many Aboriginal perspectives that might exist but are more difficult to find.
- An alternative is to look again at the records that do exist and try to understand what they suggest about what Aboriginal people might have thought or valued.
- This is still one of the areas of Australian history open to further research and understanding.

### 5.3 Two civilisations meet

- The First Fleet arrived in 1788, with Governor Phillip intent on taking possession of the east coast of Australia, in the mistaken belief that it was available and free for the taking.
- Phillip planned to give the Aboriginal peoples the 'gift' of European civilisation, but the newly arrived Europeans were ignorant of Aboriginal society, its values and customs.
- Almost immediately there was resistance and conflict; however, it was the impact of European diseases that caused the worst death toll.
- Violent resistance from Aboriginal peoples was punished severely by troops and police. The frontier became a place of fear and anxiety.

### 5.4 Resistance

- Individual Aboriginal leaders emerged to defend their country.
- Pemulwuy and Yagan are two of these celebrated and respected warriors, though there were many more.
- As European settlements grew, resistance was crushed and Aboriginal communities faced starvation and dispossession.
- Often what remained of Aboriginal communities moved towards the towns to exist on the towns' charity.

### 5.5 Tragedy in Van Diemen's Land

- Tasmania was the scene of perhaps the most sustained conflict in the 1820s. Leaders of both sides waged war for six years.
- The colonial government drove Aborigines away from settled areas and Aborigines terrorised settlers on their isolated homesteads, spearing their stock and robbing their houses.
- Settlers and police hunted Aboriginal groups before George Augustus Robinson negotiated a peace that involved moving many of the Tasmanian Aborigines to Flinders Island.
- There has been disagreement among historians about the extent of the war and the numbers of casualties on each side.

### 5.6 1835: Conquest — the great land rush to Port Phillip

- In 1835 a group of Tasmanian businessmen, looking to expand their wealth and property, explored the northern area of Port Phillip Bay and founded an illegal settlement.
- One of them, John Batman, negotiated a treaty with some of the leaders of the Kulin nation in exchange for a 'purchase' of land.
- The NSW governor Richard Bourke declared the treaty invalid and asserted that all land belonged to the Crown.
- Anyone looking to buy land would have to negotiate with the government.
- However, the governor did approve the occupation of Port Phillip, which he named Melbourne. This set off a massive land rush across Australia.

- In 1851, the area became the Colony of Victoria with a population of 77 000 people and more than five million sheep. The enormous number of sheep caused the transformation of the natural environment and the world of the Aboriginal peoples.

### 5.7 Violence on the frontier

- As Europeans occupied more and more land, driving their flocks and herds across Australia, they encountered widespread violent resistance from Aboriginal peoples defending their traditional lands.
- This resistance was usually met with massive reprisal from either police and troops or groups of individual colonists.
- Significant and documented massacres occurred at Waterloo Creek and Myall Creek in New South Wales, and Warrigal Creek in Victoria. Much of the violence was unrecorded.

### 5.8 Reserves, missions and responses

- Colonial governments often attempted to 'protect' Aboriginal peoples and 'civilise' them.
- Schools, missions and reserves were established, but with little understanding of Aboriginal peoples, insufficient resources and an attitude of the superiority of British culture, they were often unsuccessful.
- Many younger Aboriginal males were drawn to the power, status and authority offered by the Native Police Forces.
- Responses to European society varied amongst Aboriginal peoples.
- Some willingly entered the European world; others negotiated their way through both worlds.

### 5.9 A long, forgotten war

- While most people in Australia lived in the major cities, towards the end of the nineteenth century the frontier war between Europeans and Aboriginal peoples continued in the northern half of Australia.
- The 1880s were possibly the most violent decade, as modern weapons and an acceptance of the violence produced a terrible toll.
- Across the Kimberley, in northern Queensland and in the Northern Territory there were many conflicts.
- Colonial governments attempted to force Aboriginal people onto reserves and began removing children from their families, arguing that Aboriginal society was dying out and that they needed to be taught European culture to secure their future.
- After federation in 1901, Aboriginal peoples' right to vote was taken away from them during the following two decades.

### 5.10 The Torres Strait Islanders

- European society and economy spread across the Torres Strait Islands.
- Soon after a pearl rush in 1870, the London Missionary Society followed, introducing Christianity to the Torres Strait Islanders.
- Islanders adapted Christianity to incorporate local ritual and belief and saw it as a fulfilment of existing religious beliefs.
- After the Queensland government claimed ownership of the islands in 1879, it set out to regulate and control the lives of the Islanders.
- This made them subject to the same discrimination and prejudice that had been imposed on Queensland's Aboriginal peoples.

### 5.11 A celestial presence: the Chinese in Australia

- Soon after gold was discovered in Victoria in 1851, thousands of Chinese migrants arrived to join in the pursuit for riches.
- As a large, distinctive national group, the Chinese faced discrimination and prejudice.
- The Victorian government imposed extra taxes and sought to regulate the lives of the Chinese migrants through a protectorate system.
- Significant race riots directed at the Chinese occurred at Buckland River in 1857 and at Lambing Flat in 1861.
- Many Chinese also suffered a great deal on a personal level. Regardless, many remained after the gold rushes to become important members of their communities.

## 5.13 The ideal of ‘White Australia’

- In the late nineteenth century, there was continued discussion of what it meant to be Australian.
- The idea of a ‘White Australia’ became commonly accepted. It was based on traditional pride in being British, but also on the fear of the rush of migrants from Asia.
- Australians enthusiastically supported Britain in various empire wars.
- There was also concern about non-European elements of Australian society, particularly the presence of Pacific Islanders in northern Queensland.
- As Australia became a nation at Federation in 1901, one of the priorities became the removal of non-white people from Australian society.

## A timeline of contact and conflict to 1901

BCE

68 000

**68 000**
Aboriginal people arrive in Australia (current estimates).

13 000

**13 000**
Land bridges between mainland Australia and Tasmania are flooded.

BCE

CE

**1606**
Dutchman Willem Janszoon makes the first documented European landing on the Australian coast.

1770

**1770**
After more than 50 European ships make contact with the Australian mainland, James Cook maps the east coast and claims it for Britain.

1780

1790

**1788**
The British colony of New South Wales is established.

**1790–1802**
Pemulwuy leads Aboriginal resistance in the Sydney area.

1800

**1804**
Aboriginal Tasmanians are killed at Risdon Cove.

1810

**1816**
Macquarie sends the military to crush resistance by the Darug people.

**1814**
Governor Macquarie organises the first annual Aboriginal conference at Parramatta, near Sydney.

1820

**1824**
The 'Black War' begins in Tasmania. Aboriginal resistance is crushed on the Bathurst Plains in New South Wales.

1830

**1835**
Businessmen from Tasmania establish an illegal camp at the northern end of Port Phillip Bay.

**1838**
The Myall Creek massacre takes place in New South Wales.

1840

**1837**
A report of the British Parliament criticises Australian colonial policies towards Aboriginal peoples.

1850

**1851**
Gold is discovered in the newly named Colony of Victoria.

**1855**
Victorian government introduces heavier taxation for Chinese migrants.

1860

1870

**1867–68**
An Aboriginal cricket team tours England.

1880

**1881**
Victoria and New South Wales restrict Chinese immigration.

**1884**
The Kalkadoon people make their last stand in Queensland.

1890

1900

**1901**
The Commonwealth Parliament passes the Immigration Restriction Act.

CE

## 5.15.2 Reflection

Complete the following to reflect on your learning.

### 5.15 ACTIVITIES

Revisit the inquiry question posed in the Overview:

**What happened when a civilisation attempted to colonise a country that was already inhabited?**

1. Now that you have completed this topic, what is your view on the question? Discuss with a partner. Has your learning in this topic changed your view? If so, how?
2. Write a paragraph in response to the inquiry question, outlining your views.

### on Resources

**eWorkbook** Reflection (doc-31703)
Crossword (doc-31704)

**Interactivity** Australia (1750–1918): Colonisation and conflict crossword (int-7639)

### KEY TERMS

**annex** to take possession of a territory
**Bill** a proposal to change the law by Act of Parliament
**convict** a person imprisoned for a crime
**incontrovertible** certain, undeniable
**kinship** relationships between members of an extended family
**pastoral lease** land that is leased for the purpose of grazing sheep or cattle
**penal colony** a settlement for convicts
**remuneration** pay or reward such as wages
**tucker** traditional Australian slang term for food
**vices** immoral habits
**virtues** admirable moral qualities, goodness

# 6 Australia (1750–1918): From colonies to nationhood

## 6.1 Overview

Bushrangers, gold diggers and federation. How did a far-flung convict colony become a thriving nation?

### 6.1.1 Links with our times

Since 1901 our laws have been made by Australian Commonwealth and state parliaments, but our head of state is the British monarch. To understand this constitutional monarchy and its somewhat overlapping government systems, you need to know how the six British colonies that existed prior to federation united and what kind of nation they wanted to create.

Looking at Australia in the late 1800s helps us to understand our society today. This period saw the growth of a strong labour movement, the emergence of political parties, women's struggle for political rights, and a growing sense of national identity and development of 'Australian values'. Today, there is ongoing debate about what constitutes these 'Australian values' and just what it means to be Australian in our ever-evolving society.

**on Resources**

**eWorkbook** Customisable worksheets for this topic

**Video eLesson** From colonies to nationhood: Australia (1750–1918) (eles-2396)

**LEARNING SEQUENCE**


**6.1** Overview
**6.2** Examining the evidence
**6.3** Towards democracy: Eureka and political rights
**6.4** Whose Australia? Free selectors vs squatters
**6.5** An Australian legend
**6.6** Marvellous Melbourne: a city giant
**6.7** Working in cities and towns
**6.8** Trade unions and political parties
**6.9** Nationalism and Australian identity
**6.10** **SkillBuilder:** Analysing cartoons online only
**6.11** Voting rights for women
**6.12** Federation
**6.13** The early Commonwealth
**6.14** **Thinking Big research project:** The Federation Game online only
**6.15** **Review** online only


To access a pre-test and starter questions and receive immediate, **corrective feedback** and **sample responses** to every question, select your learnON format at www.jacplus.com.au.

## A timeline of Australia, 1851–1913

CE

**1851**
Gold is discovered in Victoria, sparking one of the world's great gold rushes.

1850

**1854**
Thirty diggers are killed at the Eureka Stockade.

**1856**
The principle of 'one man, one vote' is instituted in the parliaments of Victoria, New South Wales and South Australia.

**1860–61**
The first free selection Acts are passed in Victoria and New South Wales.

1860

1870

**1877**
An Australian cricket team defeats the English team by 45 runs in the first test match to be played internationally, giving rise to test cricket.

**1880**
The bushranger Ned Kelly is hanged in Melbourne.

1880

**1883**
Premiers agree to the setting up of a federal council to work out a federal constitution.

**1891**
The Federal Convention in Sydney proposes a constitution. Joseph Cook and other Labor members of Parliament are elected in New South Wales.

1890

**1890**
The Great Strikes of the 1890s begin and continue to 1894.

**1892**
Gold is discovered at Coolgardie in Western Australia.

**1894**
South Australia leads the way in granting women's voting rights.

**1898**
The First Constitution Bill Referendum is held.

1900

**1899**
Australian colonies send troops to the Boer War.

**1901**
Commonwealth inauguration marks the birth of the nation.
The Commonwealth Parliament opens in Melbourne and passes the *Immigration Restriction Act 1901*.

**1907**
The basic wage is established.

1910

**1913**
The foundation stone of Canberra, the new national capital, is laid.

1920

CE

# 6.2 Examining the evidence

## 6.2.1 How do we know about late colonial and early twentieth-century Australia?

In this topic we will investigate living and working conditions in Australia in the late nineteenth and early twentieth centuries. We will also explore the ideas, events and conditions that led to the creation of the Australian nation, and the main characteristics of the nation before the outbreak of World War I in 1914.

### Official sources

Just before the gold rush of the 1850s, each of the Australian colonies got a responsible government. This meant they had parliaments that were accountable to the electors. From 1901 Australia has had a national parliament, whose official name is the Commonwealth Parliament, along with the six state parliaments that replaced the colonial parliaments. The records of debates held and laws passed in these parliaments tell us a lot about the issues that concerned Australians in that period.

### Mass media and personal records

In the late nineteenth and early twentieth centuries there were many more newspapers than there are today, even though we now have a much bigger population. This was because newspapers and magazines were the only form of mass media before the invention of radio, television and the internet. Libraries in Australia hold many issues of these old newspapers and some of them can now be read online. We can also learn a lot about this age through letters and diaries. Memoirs of people who lived at that time still exist.

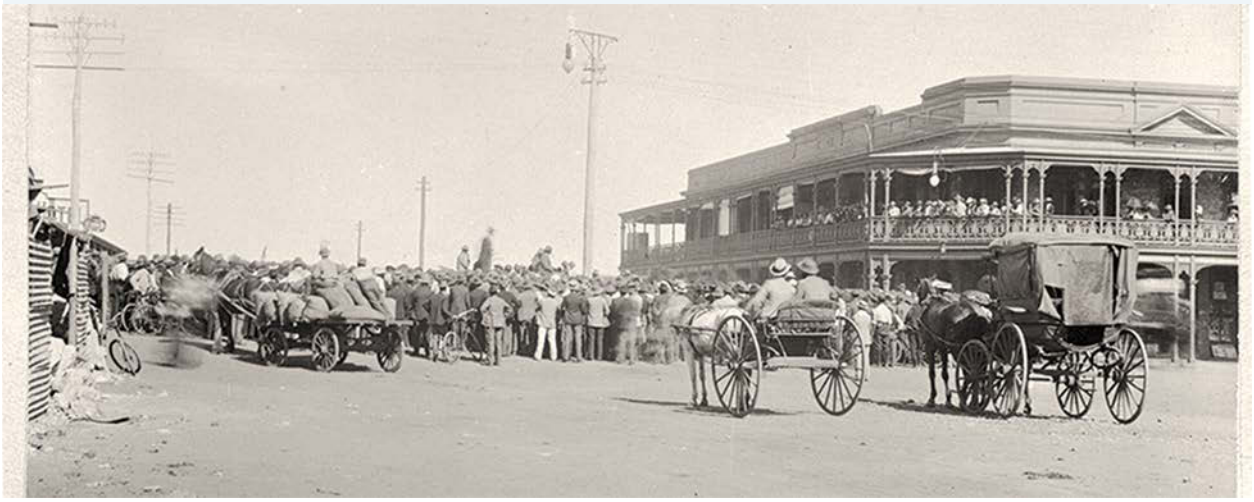
### Visual sources

There are many visual sources for this age. Artists have left a valuable record in their paintings and drawings. Cartoons and sketches were widely used in newspapers and magazines. Cartoons especially say a lot about popular attitudes and opinions.

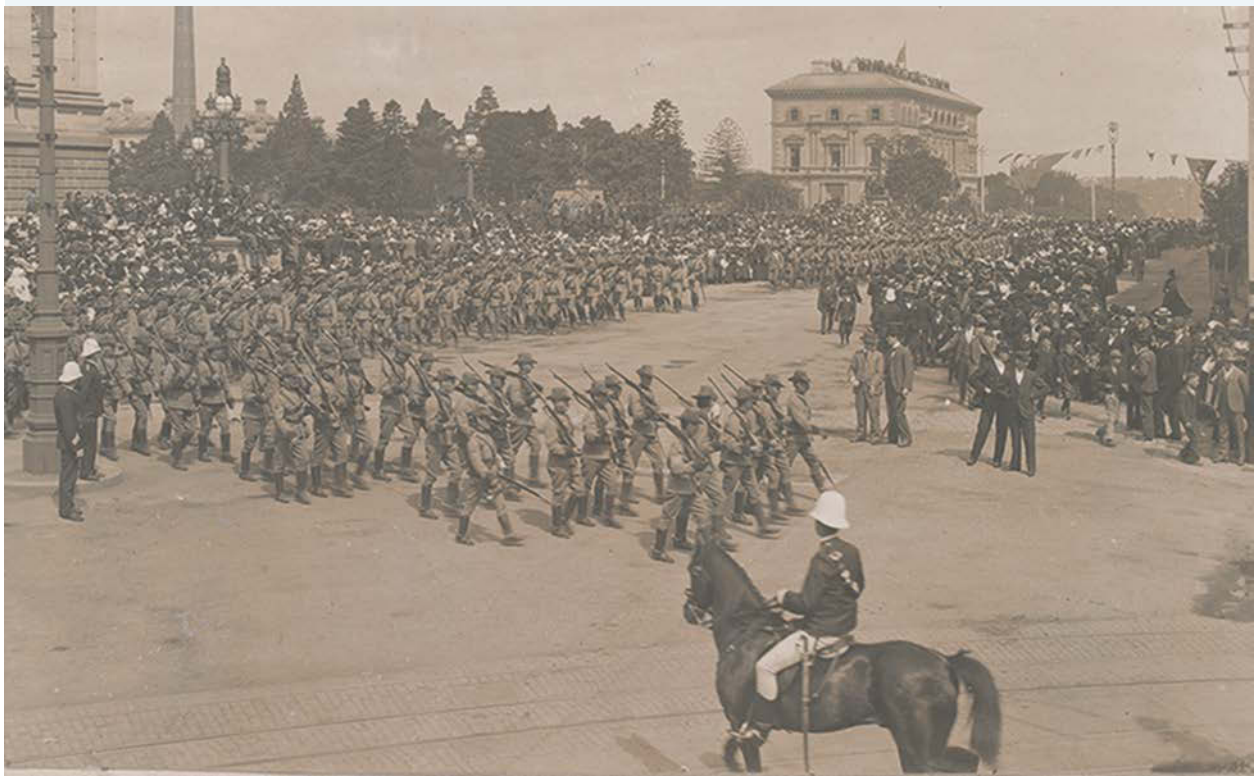
**SOURCE 1** A family in front of their house at Walloon, near Ipswich in Queensland, in 1885

This was the first period of history for which we have photographic evidence. The first photographs in Australia were taken in 1841. They were called daguerrotypes. The images were printed on a silvered plate, and only still objects could be photographed because this method of taking pictures needed an exposure time of 20 minutes in full sun. From the 1850s a new method called wet plate photography gradually replaced daguerrotypes. Wet plate photography did not need such long exposure times and enabled copies to be made from the originals. Taking pictures became even simpler with the development of dry plate photography from the late 1870s. Throughout the latter half of the nineteenth century, photographers were capturing images of gold rush scenes, colonial towns, buildings, ships, trains, parades, protest demonstrations, and people at work and play.

**SOURCE 2** A protest meeting of alluvial miners in Kalgoorlie, Western Australia, on 12 March 1898



**SOURCE 3** Soldiers of the Victorian Scottish Regiment No. 22 parading through Melbourne in 1899 on their way to the Boer War in South Africa



## 6.2 EXERCISES

**Historical skills key: HS1** Remembering and understanding **HS2** Sequencing chronology **HS3** Using historical sources as evidence **HS4** Identifying continuity and change **HS5** Analysing cause and effect **HS6** Determining historical significance

### 6.2 Exercise 1: Check your understanding

1. **HS1** What is meant by *responsible government*?
2. **HS1** Why are the records of debates and laws passed in parliament useful to historians?
3. **HS1** What was the mass media of the late nineteenth century?
4. **HS1** What do cartoons reveal about the past?
5. **HS1** What records has dry plate photography left us?

### 6.2 Exercise 2: Apply your understanding

1. **HS3** Identify what **SOURCE 1** suggests about Australian families, their housing and their clothing.
2. **HS3** Identify what **SOURCE 2** indicates about the miners' protest at Kalgoorlie.
3. **HS3** Explain what **SOURCE 3** suggests about Australians' attitudes to sending troops overseas to fight for the British Empire.
4. **HS3** Using all three sources in this subtopic, write a paragraph about Australian life and the values of average Australians during this time. Use specific examples from all three images.
5. **HS3** With reference to the sources in this subtopic, write a paragraph explaining the importance of photography to the development of social history, as an alternative to political or economic history.

Try these questions in learnON for instant, corrective feedback. Go to www.jacplus.com.au.

# 6.3 Towards democracy: Eureka and political rights

## 6.3.1 A golden avalanche

The Eureka rebellion of 1854 is often seen as a milestone in the struggle for democratic rights and a more equal society. It was partly a conflict over what kind of society Australia should be and what rights each individual should have in the society. The rebellion took place during the gold rushes of the 1850s. The gold rushes marked a turning point in Australia's history, prompting a massive scramble of people from overseas to the Australian goldfields. The population trebled in the first decade of the rushes and wealth from gold raised living standards. These developments also accelerated the demands for more democratic rights and influenced the political life of the colonies for the next 50 years. Australia came to be seen as a land of opportunity, but the rushes also had other consequences, including political protests, environmental damage and social upheaval. These consequences had the greatest impact in Victoria.

### A quiet provincial town

After the first Europeans established a camp on the Yarra River in 1835, Melbourne experienced rapid expansion, growing to a substantial provincial town with a population of 23 000 by 1850. As the port for the pastoral industry, Melbourne was an essential link to the outside world. Robert Hoddle's grid plan for the streets of Melbourne had been well established, and small suburban villages ringed the city. Rates of pay were good for labourers, clubs for the wealthy were founded, and the main churches were built (although only one in eight people attended regularly). This is in contrast to the many hotels (one hotel for every 33 adult males), providing ample amounts of spirits that worried the more 'sober' residents. The presence of large numbers of ex-convicts and an alarming crime rate also concerned some Melburnians, though perhaps the filth in the streets and the irregular water supply were greater problems. Overall, most residents of Melbourne in 1851 enjoyed a settled, simple and relatively secure life and they marvelled at the progress they had achieved. Little did they suspect the upheaval they were about to experience.

**SOURCE 1** *Melbourne from the south bank of the Yarra, 1840*, painted by Eleanor (Nellie) McGlinn, c. 1875, oil on canvas

## Early chaos

The discovery of gold near Ballarat in July 1851 created great excitement in all of the Australian colonies. By the end of the year, 20 000 diggers were hard at work on the fields. In some suburbs of Melbourne there was hardly a man left. In 1852 the flow continued from other colonies (half the male population from Tasmania and South Australia had migrated) and a further 33 000 had arrived from the United Kingdom by the end of the year. Between 1852 and 1854, Melbourne received an average of 259 migrants every day; by the end of 1854, migrants from these years made up 86 per cent of Victoria's population of 284 000.

**SOURCE 2** The discovery of gold sparked huge increases in Victoria's population.

Such a population increase caused a crisis, as the Victorian government struggled to provide essential housing and services. The government established a tent city in South Melbourne to help with accommodation, but it was an unhealthy, crowded place. Women and children camped on the wharves while their husbands tried their luck on the diggings. Pubs and theatres were full of noisy successful diggers as they spent their newfound wealth on entertainment, enormous amounts of alcohol and lavish weddings. Because gold-digging favoured those used to hard labour, it seemed to many that society was turned on its head as the uneducated flaunted their success and gave little respect to their 'superiors'.

**SOURCE 3** *Diary of a Working Clergyman in Australia and Tasmania kept during the years* 1850–1853 by Reverend J.D. Mereweather

This colony was the most desirable of all which the Crown possesses. How changed now! No more tranquillity and good fellowship between the grades of society. All is confusion, selfishness, license and subversion of all respect for worth, talent and education. Brawn and muscle are now the aristocracy, and insolently bear their newly assumed honours. In fact, we have here the French Revolution without the guillotine. When I arrived in Melbourne, I found the street full of dirty, disorderly mob of people, many of them tipsy, who seemed to take delight in setting the laws of decent behaviour at defiance.

**SOURCE 4** *Canvas Town, South Melbourne about 1852*. Melbourne is in the background.

## 6.3.2 Educated and ambitious

The great majority of gold rush immigrants were British and Irish, like the convicts and migrants who had come to Australia before the 1850s. But the new migrants also included people from many other countries, including the Chinese who you learned about in topic 5. The British, Irish and European gold rush migrants included many who had been involved in movements for workers' rights and political reform in their own countries. Despite some concerns about changes to society, they brought many positives. Some gold migrants were more educated and more skilled than the rest of the colonial workforce and consequently they had higher expectations of their rights and responsibilities in this new society. However, not all migrants were happy with what they found in Victoria. Many were unsuccessful. The gold rush experience was diverse and uneven.

**SOURCE 5** A visitor's description of what was happening on the goldfields by the mid 1850s, from W. Howitt, *Land, Labour and Gold or Two Years in Victoria*, published in 1855

... hundreds have already gone back [from the diggings] again, cursing those who sent such one-sided statements of the goldfields ...

### Growing discontent

Life on the goldfields was hard, and for every digger who found riches there were many more whose backbreaking work yielded very little. From 1851 the New South Wales and Victorian governments passed laws to make anyone digging for gold buy a licence for 30 **shillings** a month. This fee had to be paid in advance and gave a digger the right to work only a small area. Many diggers did not buy licences because they could not afford them, so the gold commissioners sent troopers to catch them.

### Licence hunts and protests

Diggers caught without licences were fined and had their huts and equipment destroyed. Some were sent to jail. Following angry protests, in 1853 New South Wales reduced the fee to 10 shillings a month. Victoria reduced it to one pound (20 shillings), but this was still too high because diggers' incomes were getting smaller as less surface gold was found. At Ballarat in Victoria miners had to dig to a depth of more than 30 metres. This required greater expense and kept miners in the same place for longer, making tax collection easier to police. Miners disliked not only paying the licence fee but also the fact that it taxed both successful and unsuccessful diggers at the same rate. When caught without a licence respectable miners were often treated like criminals and they resented the harsh manner of many of the police. When Victoria's governor, Lieutenant-Governor Sir Charles Hotham, ordered licence hunts twice a week in September 1854, digger anger in Ballarat became explosive.

**on** Resources

**Digital doc** Map of the main goldfields of Australia's south-east (doc-31705)

## 6.3.3 The gathering storm

Even an unrelated incident could have provoked a riot. On 6 October 1854 a digger was bashed to death at the Eureka Hotel in Ballarat. When charges against the hotel's owner, James Bentley, were dropped, many miners concluded that this was because Bentley had done favours for the police. On 17 October around 4000 furious diggers protested against 'police corruption'. They rioted and burned the hotel to the ground. It seemed that the Ballarat diggers and the local police were on a collision course.

### The Ballarat Reform League

On 11 November, at a further protest meeting at Bakery Hill, the diggers formed the Ballarat Reform League. Their demands included:

- abolition of licence fees
- **parliamentary representation** through voting rights for adult men
- payment for members of parliament
- abolition of property requirements for members of parliament.

These last two demands were made so men who were not rich could afford to serve in parliament.

Digger resentment increased further when news came that on 27 November Governor Hotham had refused to release the men arrested over the hotel burning and instead had ordered more troops to be sent to Ballarat. By 30 November Bentley was no longer the issue, but feelings were running high when Commissioner Rede ordered another licence hunt.

On 30 November, 12 000 diggers gathered at Eureka, where many burned their licences in protest. They appointed an Irishman, Peter Lalor, as their leader. They created a new flag, the 'Eureka Flag', with stars on a white cross against a blue background, and swore a solemn oath to stand together. They built a **stockade** at Eureka and began collecting weapons.

**SOURCE 6** *Swearing allegiance to the 'Southern Cross'* by C.A. Doudiet

**SOURCE 7** Raffaello Carboni, a digger's leader, describes events on 30 November 1854.

What's up? A licence hunt ... What's to be done? Peter Lalor was on the stump, his rifle in his hand, calling on volunteers to 'fall in' into ranks as fast as they rushed to Bakery-hill, from all quarters with arms in their hands, just fetched from their tents. I went up to Lalor, and the moment he saw me, he took me by the hand saying, I want you, Signore: tell those gentlemen, pointing to old acquaintances of ours, who were foreigners; that, if they cannot provide themselves with fire-arms, let them each procure a piece of steel, five or six inches long, attached to a pole, and that will pierce the tyrants' hearts ...

The 'SOUTHERN CROSS' was hoisted up the flag-staff ... There is no flag in Europe half so beautiful as the 'Southern Cross' of the Ballarat miners ...

Some five hundred armed diggers advanced ... the captains of each division making the military salute to Lalor, who ... exclaimed in a firm measured tone: — 'WE SWEAR BY THE SOUTHERN CROSS TO STAND TRULY BY EACH OTHER, AND FIGHT TO DEFEND OUR RIGHTS AND LIBERTIES.'

## 6.3.4 The battle at the Eureka Stockade

Before dawn on 3 December there were just 150 diggers in the Eureka Stockade when a force of 270 well-armed soldiers and police attacked. The fierce battle lasted only 20 minutes and the diggers were defeated. At least 27 diggers and six troopers were killed, though recent estimates are as high as 60 diggers, including one woman who was killed while she was pleading for the life of her husband.

### DID YOU KNOW?

In *The Eureka Stockade*, first published in 1855, Raffaello Carboni, an Italian revolutionary, provided a first-hand account of the Eureka rebellion. As a fluent speaker of English, Italian, French, Spanish and German, Carboni became such a prominent leader of the diggers that he was tried for treason after the rebellion was crushed.

**SOURCE 8** Anger and resentment finally exploded on 3 December 1854 in an unexpected dawn attack by troopers on the diggers barricaded in the Eureka Stockade.

- **A** At the 30 November meeting, all present swore allegiance to the Southern Cross flag. Holding a rifle in one hand, and pointing towards the flag with his other, Peter Lalor said: 'We swear by the Southern Cross to stand truly by each other and fight to defend our rights and liberties.' His men removed their hats and replied 'Amen'.
- **B** Hundreds of angry miners gathered at the stockade after the meeting of 30 November. But the resistance was not well coordinated — by the evening of Saturday 2 December, only about 150 men remained. Even these men might have left had the troops not attacked.
- **C** The Eureka Stockade was built by diggers as a fortification against trooper attack.
- **D** About 27 diggers were killed in the dawn raid, and 30 wounded. Only six troopers were killed. The troopers were heavily armed with guns and bayonets; the diggers had only limited weapons.
- **E** Diggers on the Ballarat goldfields included Germans, Americans, Italians and Canadians, as well as people from England, Ireland and France. The involvement of non-English diggers in this struggle was resented by some.
- **F** Peter Lalor and another ringleader, George Black, escaped after the attack.

### The outcome of Eureka

The diggers lost the battle at Eureka but they achieved many of their aims. Juries did not convict the 13 ringleaders who were tried for treason, finding instead that they had acted in self-defence. In 1855 the gold licence was replaced by a 'miner's right' costing just one pound a year and giving its holder the right to vote. Peter Lalor eventually became a member of the Victorian Parliament; his grandson, Joseph Lalor, was killed at the landing at Gallipoli on 25 April 1915, fighting for the British Empire.

The enquiry into the goldfields also recommended changes favourable to the miners' demands. Moves were made to restrict Chinese immigration with extra taxation, half of the goldfields police were sacked and regulation of goldmining was left to mining wardens and locally elected courts of mines. Over time many have debated the significance of the Eureka Stockade. In 1897 the US author Mark Twain called it 'the finest thing in Australasian history'.

## 6.3.5 Melbourne: 'the wonder of the world'

By the end of the 1850s the wealth produced by the feverish work of thousands of miners had transformed the city of Melbourne. Some observers compared Melbourne with London or Paris, one claimed that the city had a 'superior radiance' to San Francisco, while another declared Melbourne was 'the overtopping wonder of the world'. Grand extravagant buildings, fashionable suburbs and a busy, 'go-ahead' atmosphere gave the impression that Melbourne was destined to be one of the great cities of the world. The population had increased to 127 000 and businesses and manufacturing had grown to meet the local demand. The presence of different European groups gave Melbourne a cosmopolitan feel. A free public library, a university, a museum, several theatres and an extensive parliament house, along with a new water supply from Yan Yean, showed that Melbourne was a leader of culture as well as business in Australia.

Victoria was also transformed. Its population of nearly 540 000 was spread throughout the state. The gold rush migrants were generally young, energetic and determined to make the most of their new lives on the other side of the world. Large towns like Geelong, Ballarat, Bendigo and Castlemaine had permanent populations and a variety of businesses, clubs and institutions. Bendigo and Ballarat would be Australia's largest inland towns for nearly a century. Local councils sought to build permanent communities with high standards of living, flourishing cultural lives and attractive facilities. Nevertheless, this development had a number of consequences. The Aboriginal communities continued to suffer as much of the population headed inland. Some work opportunities as paid pastoral workers arose for Aboriginal people, and many of them continued to gather around Melbourne. Mining was also destructive of the environment; whole forests were cut down, streams and creeks were clogged and polluted, and clay heaps that were piled high around the goldfields made the landscape look like the surface of the moon.

**SOURCE 9** Recognised as one of the most significant nineteenth-century buildings in Australia, the Old Treasury Building at the top of Collins Street was built between 1857 and 1862 and is testament to Melbourne's cultural boom during that time.

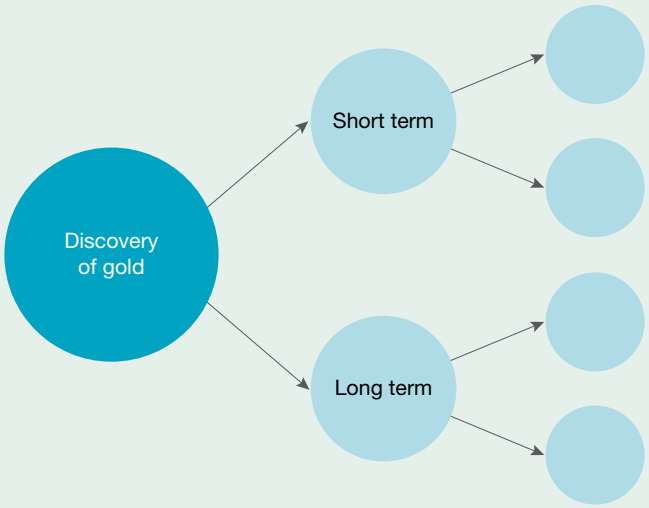
**SOURCE 10** Deserted diggings, Spring Creek

## 6.3 ACTIVITIES

1. What did other people think about the changes brought by the gold rushes? Using the internet, see if you can find some written and visual sources that provide evidence of the impact of the gold rushes on Melbourne and Victoria. Write a brief comment for each source that identifies what it reveals about changes at this time and comment on whether the source is useful or reliable in helping us understand the period. Some ideas for places to start your search:
   - Museum Victoria
   - SBS
   - State Library of Victoria

   **Using historical sources as evidence**
2. Draw up a 'consequences chart' like the one shown to set out the changes brought by the gold rushes. Write 'Discovery of gold' in the large circle, then 'significant' and 'minor' in the next two. Then set out the various changes in the next group of circles. Draw up as many as you like or even change the headings. You could use 'short term' and 'long term' or 'intentional' and 'unintentional' instead of 'significant' and 'minor'. After listing as many consequences as you can, consider whether there were any aspects of Victorian society after the discovery of gold that were similar to the society that had been established before the gold rushes.

   **Identifying continuity and change**




3. Evaluate the importance of the Eureka Stockade in Australian history. Find out what other people have said about it, how it has featured in films and articles and how it has been commemorated. Then give your own opinion on whether Australian schoolchildren should learn about Eureka.

**Determining historical significance**

## 6.3 EXERCISES

**Historical skills key: HS1** Remembering and understanding **HS2** Sequencing chronology **HS3** Using historical sources as evidence **HS4** Identifying continuity and change **HS5** Analysing cause and effect **HS6** Determining historical significance

### 6.3 Exercise 1: Check your understanding

1. **HS1** Why might the residents of Melbourne have been proud of their achievements by 1851?
2. **HS1** Make a list of the population figures given in this subtopic for Victoria and Melbourne.
3. **HS1** Identify the ways that the gold migrants were different to the rest of the colonial workforce in Victoria.
4. **HS1** Explain why the miners disliked the gold licence system.
5. **HS1** What made Ballarat different to other goldfields?
6. **HS1** What were the demands of the Ballarat Reform League?
7. **HS1** Identify the two immediate factors that spurred the miners to erect a stockade.
8. **HS1** Who started the attack on the Eureka Stockade on 3 December 1854?
9. **HS1** How many people were killed or wounded?
10. **HS1** Identify the consequences of the Eureka Stockade. Who do you think were the victors? Explain your answer.
11. **HS1** What were the longer term consequences of the gold rushes? Make a list, dividing them into positive and negative.

### 6.3 Exercise 2: Apply your understanding

1. **HS3** What impression of Melbourne does **SOURCE 1** create? Identify the specific elements of the image that lead to this impression.
2. **HS3** Examine **SOURCE 4**. What problems might newly arrived migrants experience in this environment?
3. **HS3** Using **SOURCES 1** and **4**, explain how Melbourne had changed by 1852.
4. **HS3** Identify the concerns about changes to society expressed in **SOURCE 3**. Do you think the source is a reliable or accurate representation of the changes brought by gold? Discuss this question in class. Think about who produced it and what his purpose might have been.
5. **HS3** What do **SOURCES 6** and **7** suggest about the character of the miners and their demands?
6. **HS3** Describe the Treasury Building as it is shown in **SOURCE 9**. What does this building suggest about the consequences of the gold rush? What does **SOURCE 10** suggest?

7. **HS3** How useful are photographs as historical evidence? Consider how well **SOURCES 9** and **10** represent Australian life and values. What other evidence might you need to improve your understanding of life in Australia in the nineteenth century?

Try these questions in learnON for instant, corrective feedback. Go to www.jacplus.com.au.

# 6.4 Whose Australia? Free selectors vs squatters

## 6.4.1 Conflict over land

After the clash between the diggers and the Victorian authorities at the Eureka Stockade, the next conflict between social classes in colonial Australia was over land. It was a conflict with roots that went back to earlier times when wealthy free settlers (squatters) had been granted big parcels of land and convict labour to work it, while poor immigrants and ex-convicts received small land grants on which most were unable to make a living. By the time of the gold rushes, squatters controlled most of the land and used it for **grazing**.

The gold rushes hugely increased the colonial population. As alluvial gold ran out, thousands of people, including ex-diggers, demanded that wealthy squatters be made to give up some of the land they leased. This would free up land so other people could become small farmers. Although laws were made for this purpose in each colony, Australia did not become a land of small farmers.

### Free selection

Many ordinary people hated the inequalities that existed between rich and poor in Britain and Europe. Australia seemed to offer them the chance to gain independence as small farmers. In the 1850s a popular movement developed calling for 'free selection'. The first free selection Act was passed in the Victorian Parliament in 1860. In New South Wales free selection Acts were passed in 1861 and similar laws were made in the other colonies.

The ambitions of ordinary people to own land were expressed in a popular song of the time by Charles Thatcher, who was well known on the Victorian goldfields.

**SOURCE 1** Charles Thatcher, *The Colonial Minstrel*

Hurrah for Australia the golden,
Where men of all nations now toil,
To none will we e'er be beholden
Whilst we've strength to turn up the soil;

There's no poverty here to distress us,
'Tis the country of true liberty,
No proud lords can ever oppress us,
For here we're untrammelled and free.

Then hurrah for Australia etc ...

Oh, government hear our petition,
Find work for the strong willing hand,
Our dearest and greatest ambition
Is to settle and cultivate land:
Australia's thousands are crying
For a home in the vast wilderness,
Whilst millions of acres are lying
In their primitive uselessness.

Then hurrah for Australia etc ...

Upset squatterdom's domination,
Give every poor man a home,
Encourage our great population,
And like wanderers no more we'll roam.

These free selection laws allowed anyone to select land whether or not it was leased by a squatter. For example, in New South Wales a person could select from 40 to 320 acres (16 to 129 hectares) of land and buy it on time payment at one pound an acre. Free selectors could occupy the land they had selected after paying a quarter of its price, and they could lease three times as much land adjoining their selections. The only land they could not select was land on which squatters had made improvements.

**SOURCE 2** *Free selectors pegging out*, an engraving by Samuel Calvert, c. 1873

**SOURCE 3** *Selector's hut, Gippsland*, an albumen silver photograph by Nicholas Caire, c. 1886, National Gallery of Australia, Canberra

## 6.4.2 Results of the free selection Acts

In each Australian colony, squatters gained more from these laws than did the people whom the laws were designed to assist. Why did this happen? The squatters found many ways of defeating the aims of the laws. One method was called **peacocking**, which made the rest of the area useless to selectors. Another method was to use **dummies** who later sold land they selected back to the squatters.

**SOURCE 4** From John Sadleir, *Recollections of a Victorian Police Officer*, George Robertson & Company, Melbourne, 1913, pp. 114–15

It was also in the early 'sixties that the quiet of Hamilton was disturbed ... The first Duffy Land Act, providing for free selection of Crown Lands, had just come into force, and the momentous question of parceling out the fertile lands of the Western District had to be faced. It was an anxious time for the existing occupiers — the squatters ... There was another crowd, too, but of persons quite unknown in the neighbourhood, and who appeared to be acting under some sort of leadership ... It seemed ... as if the strangers held possession, and the squatters were shut out while being stripped of all they possessed.

But there were wheels within wheels ... Communication passed between the squatters and the leaders of the strange crowd ... with the result that the squatters continued in undisturbed possession of their holdings, while not a single stranger was known to settle in the district at this time ... The first Duffy Land Act was a failure.

The result was that Australia did not become a land of small independent farmers. Large landowners continued to control most of the country. Many selectors who stayed on the land lived in poverty. In many places soils were too poor, rainfall too unreliable and the selections too small. Women often had to run these small properties while the men went away for much of the year to work for squatters as drovers or shearers.

**SOURCE 5** *The Free Selector's daughter*, an etching by Lionel Lindsay, 1935, National Gallery of Australia, Canberra
© National Library of Australia

### 6.4 EXERCISES

**Historical skills key: HS1** Remembering and understanding **HS2** Sequencing chronology **HS3** Using historical sources as evidence **HS4** Identifying continuity and change **HS5** Analysing cause and effect **HS6** Determining historical significance

#### 6.4 Exercise 1: Check your understanding

1. **HS1** Explain why there was a popular demand for land during the 1850s and 1860s.
2. **HS1** What was the aim of the selection Acts?
3. **HS1** What was 'peacocking'?
4. **HS1** Who or what were 'dummies'?
5. **HS1** Why did the selection Acts fail?

#### 6.4 Exercise 2: Apply your understanding

1. **HS3** According to Thatcher's song in **SOURCE 1**, what will be the benefits of free selection?
2. **HS3** Study **SOURCE 2**.
   (a) What are these men doing?
   (b) Why is it possible they might not be genuine free selectors?
3. **HS3** What do **SOURCES 3** and **4** suggest about the behaviour of squatters in response to the selection Acts?
4. **HS3** Identify what **SOURCES 3** and **5** show about the hardships faced by free selectors.
5. **HS4** Explain whether the selection Acts brought significant change to Australian society.
6. **HS6** Identify what the free settlers vs squatters issue suggests about Australian society at this time. Consider how selectors might have felt about the strategies employed by the squatters.

Try these questions in learnON for instant, corrective feedback. Go to www.jacplus.com.au.

# 6.5 An Australian legend

## 6.5.1 The Kelly legend

A nation under the British Crown was not the dream of everyone who came to Australia during the nineteenth century. Ireland was Britain's oldest colony and about one-third of all convicts sent to Australia were Irish. Many had been transported for small crimes they committed just to survive the grinding poverty in which they lived. Others had been sentenced for rebelling against British rule. Many free Irish immigrants were also fleeing poverty, especially during the terrible famine of the 1840s. Such people made up large numbers of the free selectors of north-eastern Victoria, and many of them sympathised with Australia's most famous outlaw bushranger during what came to be called the 'Kelly outbreak'.

Australians complimenting someone's courage used to say that person was 'as game as Ned Kelly'. Kelly has been the subject of a play, a ballet, songs, poems and novels. Artist Sydney Nolan portrayed the Kelly legend in a series of paintings. Both Mick Jagger and Heath Ledger played his part in movies. Why did an outlaw win such a place in Australian folklore? The historian Geoffrey Serle declared that Kelly represented 'the last protest of the mighty bush'. Kelly has also been compared to Robin Hood. Recently a Melbourne journalist, Martin Flanagan, wrote that Kelly was 'like a bushfire on the horizon casting its red glow into the night'. Whatever you think about Kelly there is no doubt that many people think he is an important figure in our history.

**SOURCE 1** A portrait of Ned Kelly taken the day before he was hanged

## Early years

Edward 'Ned' Kelly (born 1855) was the first son of John Kelly, an ex-convict from Ireland, and Ellen Kelly, whose family, the Quinns, had come from Ireland as poor assisted migrants. Ned grew up in north-eastern Victoria in a time of conflict between struggling selectors and squatters. The selectors viewed corrupt police as the squatters' allies. In 1865 John Kelly was jailed for possessing a stolen cowhide. When he died in 1866, the family moved to a small selection near Greta, where they lived in poverty.

In 1869 and 1870 Ned faced three charges of robbery; all were dismissed through lack of evidence. But in late 1870, aged just 15, he received six months' hard labour in Beechworth jail for assault and three years for horse stealing. Three years after his release, Ned joined his stepfather in horse and cattle stealing. In 1878, arrest warrants were issued for Ned and his youngest brother, Dan.

## The turning point

On 5 April 1878 Constable Alexander Fitzpatrick visited the Kelly house. According to Fitzpatrick, he arrested Dan, but Ellen Kelly assaulted him with a shovel and Ned fired a shot at him. Ned's version of events was very different (see **SOURCE 2**). Warrants were issued for the arrest of Ned and Dan for attempted murder. Ellen was sentenced to three years in prison, and this enraged Ned and Dan. They hid out in the Wombat Ranges but offered to give themselves up in exchange for their mother's freedom.

Police parties were sent out to hunt for the Kellys. Constables Scanlan, Lonigan and McIntyre and Sergeant Kennedy arrived at Stringybark Creek in the Wombat Ranges in October 1878. When Ned attempted to capture and disarm them, three police were killed. Only McIntyre escaped alive.

## Outlaws

The Kellys were declared outlaws who could be shot on sight. In December the gang, now consisting of Ned, Dan and their friends Steve Hart and Joe Byrne, robbed a bank at Euroa without firing a shot. In February 1879 they raided Jerilderie, locking the police in their own cell and robbing the hotel and bank. During these operations the gang entertained their prisoners and Ned spent much time telling people how injustice had caused him to become an outlaw.

**SOURCE 2** Part of an 8300-word statement (known as the *Jerilderie Letter*) handed over by Ned Kelly during the hold-up at Jerilderie in 1879

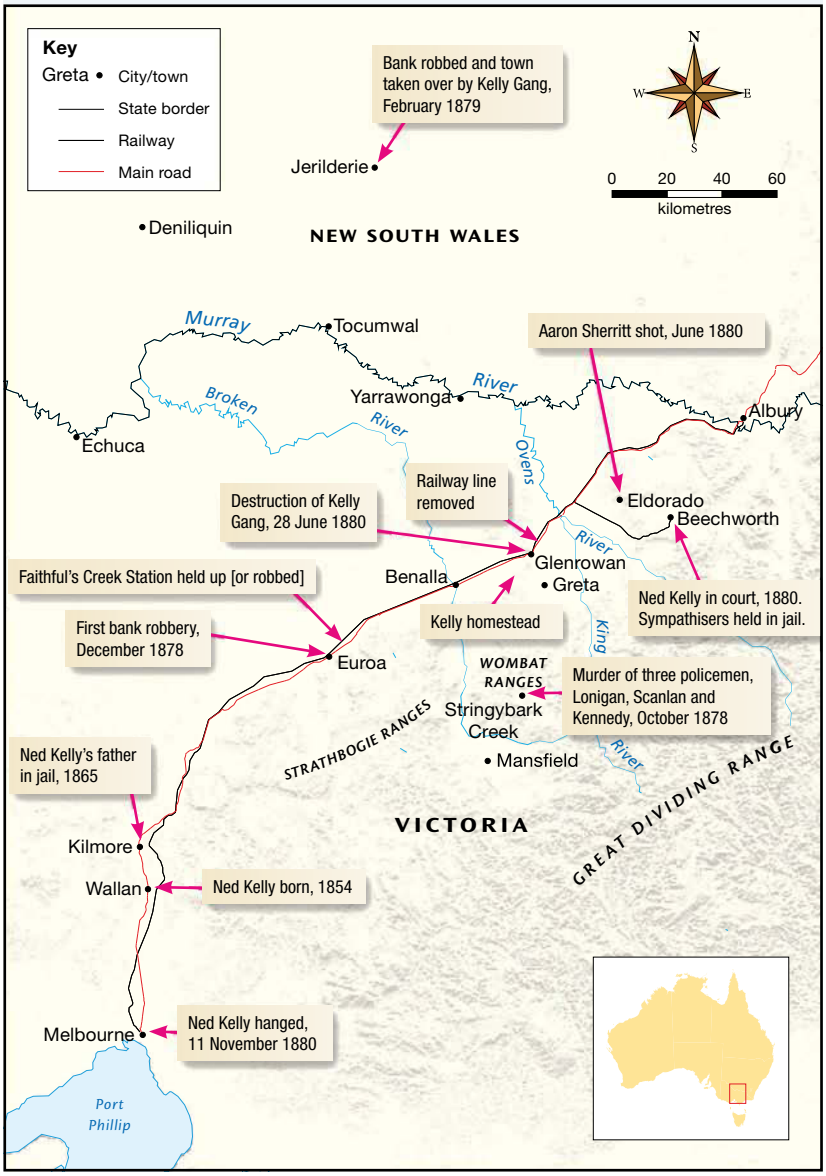
... there was never such a thing as justice in the English laws but any amount of injustice to be had ...
If a poor man happened to leave his horse or a ... calf outside his paddocks they would be **impounded**.
I have known over 60 head of horses impounded in one day ... all belonging to poor farmers ...
The trooper [Fitzpatrick] pulled out his revolver and said he would blow her [Ellen Kelly's] brains out if she interfered in the arrest [of Dan Kelly] ... The trooper ... invented some scheme to say that he got shot which any man can see is false ... the Police got credit and praise for arresting the mother of 12 children one an infant on her breast ... I heard nothing of this ... I being over 400 miles from Greta when I heard I was outlawed ...

... they must remember those men [Kennedy, Scanlan, Lonigan and McIntyre] came into the bush with the intention of scattering pieces of me and my brother all over the bush and yet they know ... I have been wronged ...

I am a widow's son outlawed and my orders must be obeyed.

Edward Kelly

**SOURCE 3** Kelly country




***Source:*** Spatial Vision

## 6.5.2 The final showdown

Police imprisoned many Kelly sympathisers and announced that they would be barred from obtaining selections. The result was increased support for the outlaws. From June 1880, the gang made suits of armour from ploughs and supplied firearms to their supporters. They planned to lure the police to travel by train from their headquarters at Benalla to Beechworth. This would take them through Glenrowan, where there were many Kelly sympathisers. The plan was to derail the train, capture the police and demand Ellen's freedom in exchange for theirs.

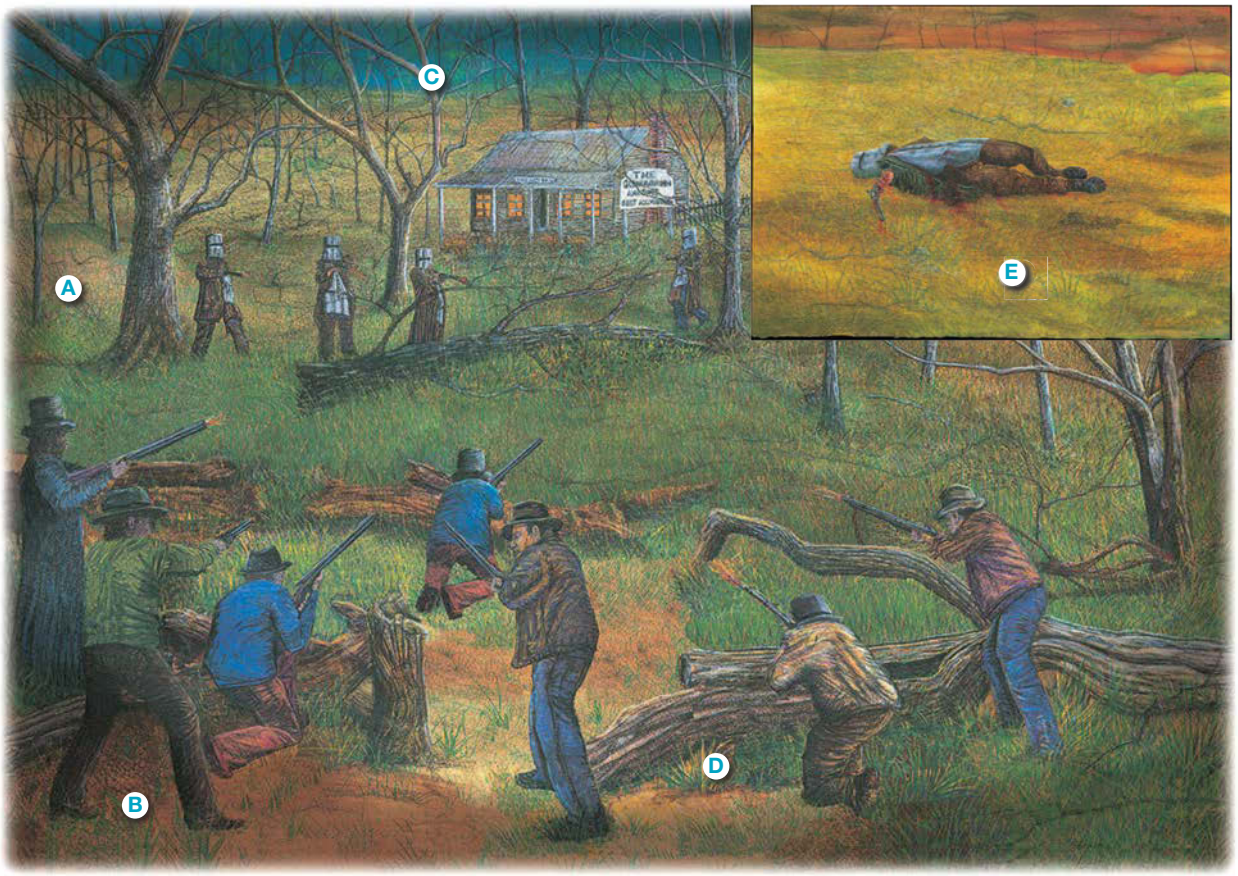
On the evening of Saturday, 26 June, to set the police on the track to Beechworth, Joe Byrne shot and killed his old friend Aaron Sherritt, a police informer. Meanwhile Ned and Steve forced railway workers

to remove a section of track almost 800 metres north of Glenrowan railway station. Joined by Dan and Joe, they took over the Glenrowan Inn and waited for the train.

Ned made two fatal mistakes. When Thomas Curnow, a schoolteacher, asked permission to take his sick wife home, Ned agreed. Shortly after two o'clock on Monday morning Curnow stopped the train that was carrying ten police and several Aboriginal trackers. Ned had also assumed that the police would not suspect an attempt to derail the train. But some distance ahead of the engine pulling the police carriages there was another engine. Had it been derailed, the second engine would have stopped safely. The gang could have retreated into the hills. Instead they chose to stay and fight (see **SOURCE 4**).

With Ned's capture, the police allowed civilians to leave the hotel. Left inside were Dan, Steve and a badly injured Martin Cherry, who died later of his wounds. Shooting continued until 3 pm, when police set fire to the hotel. Dan and Steve chose to commit suicide rather than be taken alive.

**SOURCE 4** The siege at Glenrowan




A Glenrowan railway station was about 100 metres in front of the hotel. The train was meant to be derailed 800 metres up the line.

B Around 3 am, the outlaws, in heavy armour, first exchanged shots with the police at the railway station. Ned and Joe were wounded.

C The gang fell back to the hotel. During the 12-hour siege, 35 men, women and children lay on the hotel floor as police bullets crashed through the thin walls.

D Police fired on the hotel and the railway station. They were reinforced thoughout the night. Their fire killed a 13-year-old boy, and other people were wounded, including some who tried to flee. At 5 am, Joe Byrne was fatally wounded.

E Ned collapsed from loss of blood as he walked, firing, through police lines. Determined to save Dan and Steve, he staggered back through the heavy dawn mist and a continuous hail of bullets, firing at the police. He was captured after being brought down by a shotgun blast to his unprotected legs.

### Trial and execution

Ned's trial for the murder of Constable Lonigan commenced in Melbourne on 28 October. He was found guilty and sentenced to death by Justice Redmond Barry. No sympathisers had joined the fight at Glenrowan, but more than 30 000 people signed a petition to save Ned from hanging and thousands attended a protest the night before his execution. At 25 years of age, as he stood on the gallows at 10 am on 11 November 1880, Ned's last words are reported to have been 'Ah well, I suppose it has come to this.'

**DID YOU KNOW?**

Following Ned Kelly's execution, fearing fresh outbreaks among Kelly sympathisers, police reinforced stations throughout north-eastern Victoria. A royal commission investigated police handling of the Kelly outbreak. It resulted in several officers being dismissed or reduced in rank.

## 6.5 EXERCISES

**Historical skills key: HS1** Remembering and understanding **HS2** Sequencing chronology **HS3** Using historical sources as evidence **HS4** Identifying continuity and change **HS5** Analysing cause and effect **HS6** Determining historical significance

### 6.5 Exercise 1: Check your understanding

1. **HS1** Explain why there were so many Irish people in Australia.
2. **HS1** What did selectors think of the police?
3. **HS1** Identify how Ned Kelly had been in trouble with the law before April 1878.
4. **HS1** What did it mean to be called an outlaw?
5. **HS1** What went wrong with Kelly's plan at Glenrowan?

### 6.5 Exercise 2: Apply your understanding

1. **HS3** Explain what **SOURCE 1** suggests about Kelly's character.
2. **HS3** What does Ned say about Fitzpatrick's visit to his home in **SOURCE 2**?
3. **HS3** Using **SOURCE 2**, identify Kelly's attitudes to poor selectors, police and wealthy squatters. Explain why Kelly would have been popular amongst the rural poor of Victoria.
4. **HS5** What were the causes of the Kelly outbreak? Organise them into categories of short or long term, intended or unintended, significant or minor.
5. **HS6** Is the life and death of Ned Kelly an important part of Australia's history? Consider why Kelly's life is remarkable and why so many people have been drawn to this story.

Try these questions in learnON for instant, corrective feedback. Go to www.jacplus.com.au.

# 6.6 Marvellous Melbourne: a city giant

## 6.6.1 Showing off: modern and grand buildings

In the major cities of the Australian colonies a world was emerging that was very different from the world of selectors, squatters and country towns. After the gold rushes of the 1850s much of Victoria's population gradually drifted towards Melbourne. By 1881 Melbourne's population had grown to 268 000. The prosperity of the city drew more people from country Victoria and overseas, and Melbourne's population pushed to nearly 500 000 by 1891, when 41 per cent of Victorians lived in the city and its suburbs. The growth of Melbourne was often held up as a wonderful example of progress and prosperity. When the English journalist George Augustus Sala described Melbourne as 'marvellous' in 1885 it seemed that the city had reached its destiny as the greatest city of Australia.

By the 1880s Melbourne's skyline featured elegantly decorated domes and spires. Many major buildings, as well as private homes in Melbourne's affluent suburbs, were extravagantly fashioned with wrought-iron lacework that symbolised the city's wealth. Even today, Melbourne has more decorative wrought iron than any other city in the world.

**SOURCE 1** A sketch of Melbourne in 1880. Despite its solid appearance here, much of the city would be rebuilt in the 1880s as the population continued to grow and new technology enabled taller buildings.

The invention of the hydraulic lift enabled buildings to rise above the usual four or five storeys; only New York and Chicago had buildings as high as Melbourne's. In 1887, 11 kilometres of pipes carried pressurised water around Melbourne to power hydraulic lifts. Melbourne was the fourth city in the world to have such a system.

Perhaps one of the greatest examples of the wealth and prosperity of Melbourne was the Royal Exhibition Building. This building was completed in 1880 and hosted the Melbourne International Exhibition in that year, where exhibits and inventions from all over the world were displayed. The exhibition ran for eight months and attracted more than a million people.

**SOURCE 2** The Royal Exhibition Building

**SOURCE 3** The Federal Coffee Palace, Collins Street. Seven storeys high with an ornate domed tower, this was a 'temperance hotel' that provided accommodation but did not sell alcohol. It was a grand building and a huge advertisement for the value of sober living; it was demolished in 1973.

## 6.6.2 Showing off: busy, fashionable and sophisticated

The richness of the city was also displayed in the affluence of individual citizens and their tastes in clothing and entertainment. Retailing precincts were established around Swanston and Elizabeth streets. Fashionable residents became famous for parading their attire in a social promenade called 'doing the block' around Collins Street. Wealthier Melbourne ladies had access to the silks and satins of Europe while the men donned immaculate suits. Other parts of the city catered for specific businesses and professions. Legal practices were located around the main courts at the west end of Bourke Street while doctors went to the 'Paris' end of Collins Street. Wharves and merchants stood by the river. Many of these precincts still stand today. To bring everyone to the city, Melbourne also built a cable tram network and an extensive railway system to the growing suburbs. In addition to these established patterns of work and life there were major annual events like the Melbourne Cup at which Melburnians could show off their status and style. Some images of Melbourne at the time are shown in **SOURCES 4, 5** and **6**.

**SOURCE 4** *Allegro con brio: Bourke Street West*, by Tom Roberts, painted around 1886. The Italian phrase in the title is a musical direction meaning 'quickly, with brilliance' and the painting was intended to capture the energy and excitement of 'Marvellous Melbourne'.

**SOURCE 5** *Doing the block, Great Collins St*, painted by S.T. Gill, 1880. The novelist Fergus Hume compared this scene to social life in London: even the dogs are socialising.

## DID YOU KNOW?

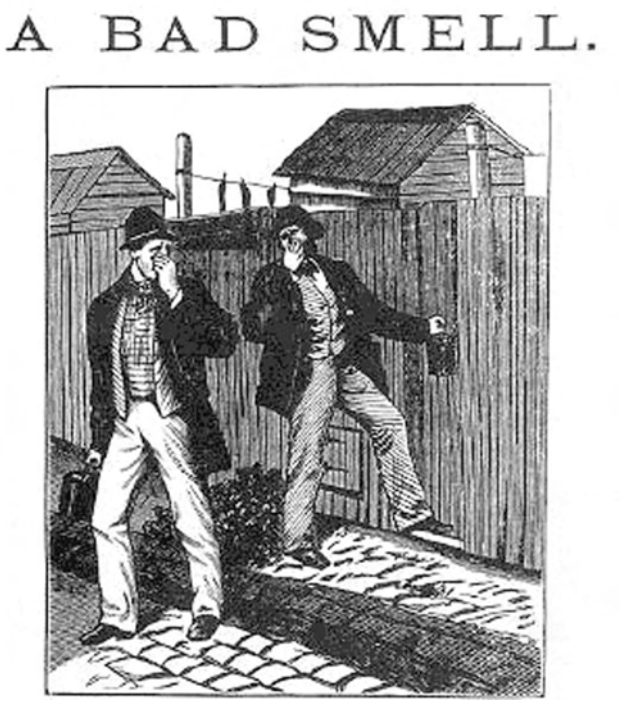
One of Melbourne's premier sporting events, the Melbourne Cup, was first held in 1861. Today the Melbourne Cup Carnival is enjoyed as much for its party atmosphere as for the race itself. Visitors from interstate and around the world flock to Flemington to 'have a flutter', picnic on the lawn and parade their outfits, both fashionable and outrageous. Nothing much has changed since 1888, when over 100 000 people spread out their food and beverages underneath the gum trees to watch the race.

**SOURCE 6** An artist's impression of the Melbourne Cup, 1888

## 6.6.3 A darker side to the city

As you may have realised, not everything about life in Melbourne was wonderful. Gangs of young men, called larrikins, roamed the streets. Prostitution and crime also flourished and they, too, had their own areas of the city. For many working-class men and women life was still a struggle of low pay and hard manual labour, hand-me-down clothes and cramped living conditions. There were also some serious health and hygiene issues. By the 1880s overcrowded inner-city housing in areas like Little Lonsdale Street and some low-lying suburbs like Collingwood and Richmond experienced outbreaks of diseases like typhoid, tuberculosis and diphtheria. The death rate amongst babies and young children was higher than London's for most of the 1880s. Household and human waste were often dumped in the Yarra River; overflowing **cesspits** and open sewers in city streets caused one Sydney writer to name the city 'Marvellous Smellbourne' because of the city's overwhelming odour of human excrement. It wasn't until 1897 that the city finally had an operating and efficient sewer system.

**SOURCE 7** 'A Bad Smell', *Australian Health Society*, 1880. Two workmen are forced to hold their noses in disgust at the smell of the laneways outside their homes.



### 6.6 ACTIVITIES

1. What do you think would make a city 'marvellous' to live in? Make a list of your top six qualities of a marvellous city and compare it with a classmate's. Discuss with your class. Can you agree on what a marvellous city might be like? **[Critical and Creative Thinking Capability]**
2. Compile a scrapbook of other sources and accounts about Melbourne in the 1880s and comment on their value in helping understand life in Melbourne. **Using historical sources as evidence**
3. Research the lives of the poorer people of Melbourne in the 1880s. Draw up a graphic organiser to represent different features of the lives of Melbourne's poor. **Using historical sources as evidence**

### 6.6 EXERCISES

**Historical skills key: HS1** Remembering and understanding **HS2** Sequencing chronology **HS3** Using historical sources as evidence **HS4** Identifying continuity and change **HS5** Analysing cause and effect **HS6** Determining historical significance

#### 6.6 Exercise 1: Check your understanding

1. **HS1** What was Melbourne's approximate population in 1891?
2. **HS1** What percentage of Victoria's population lived in Melbourne and its suburbs in 1891?
3. **HS1** Why did Melbourne's population continue to grow in the 1800s?
4. **HS1** In what ways did the people of Melbourne display their success and prosperity?
5. **HS1** What problems did Melbourne's residents face in the 1880s?
6. **HS1** Explain why Melbourne was jokingly called 'Smellbourne'.

#### 6.6 Exercise 2: Apply your understanding

1. **HS3** Examine **SOURCES 1–3**. What evidence is there that Melbourne was modern and prosperous in the 1880s?
2. **HS3** How do **SOURCES 4–6** provide evidence of Melbourne's progress and prosperity? List specific elements of each source as evidence.
3. **HS3** How reliable do you think the sources in this subtopic are as evidence of Melbourne's progress? Explain the limitations of each source.
4. **HS3** Examine **SOURCE 7**. How does this source contradict the idea of Marvellous Mebourne depicted in **SOURCES 1–6**?
5. **HS4** Create a table that lists the differences and similarities of life in Melbourne now compared to the 1880s. Rank them in order of importance and compare your table with those of other members of your class.
6. **HS6** Does 1880s Melbourne deserve to be known as a city of progress and prosperity? Explain your view.
7. **HS6** As historians, what can we learn from studying Melbourne in the 1880s?

Try these questions in learnON for instant, corrective feedback. Go to www.jacplus.com.au.

# 6.7 Working in cities and towns

## 6.7.1 An unequal society

After the 1850s many people who had tried their luck on the goldfields drifted to towns and cities to look for work. As a result, commerce, industry and investment grew, and the public service sector expanded. Developments in transport, technology and communication also contributed to changing work patterns.

Many nineteenth-century factories, mills and shops in the colonies were little more than 'sweatshops'. Dressed in heavy, multi-layered clothing (then the fashion), workers of both sexes sometimes worked 10 to 16 hours per day, six days a week, in temperatures that could reach the high 30s. Many had to walk long distances to get home.

Employers had all the power, sometimes refusing to implement government directions to improve conditions. Employees were often afraid to object or to report employers for non-compliance, for fear of losing their jobs. Neither did they enjoy the entitlements workers enjoy today, such as sick leave. Most could expect to work until they were 65. It was not much of a life for many people in the working class.

Even children worked under these harsh conditions, sometimes 50 to 60 hours per week. Because they were smaller, they could often do tasks adults could not. In addition, employers had to pay them only a fraction of an adult wage. In 1911, 46 169 children between the ages of 10 and 14 were in the workforce.

## Social divisions

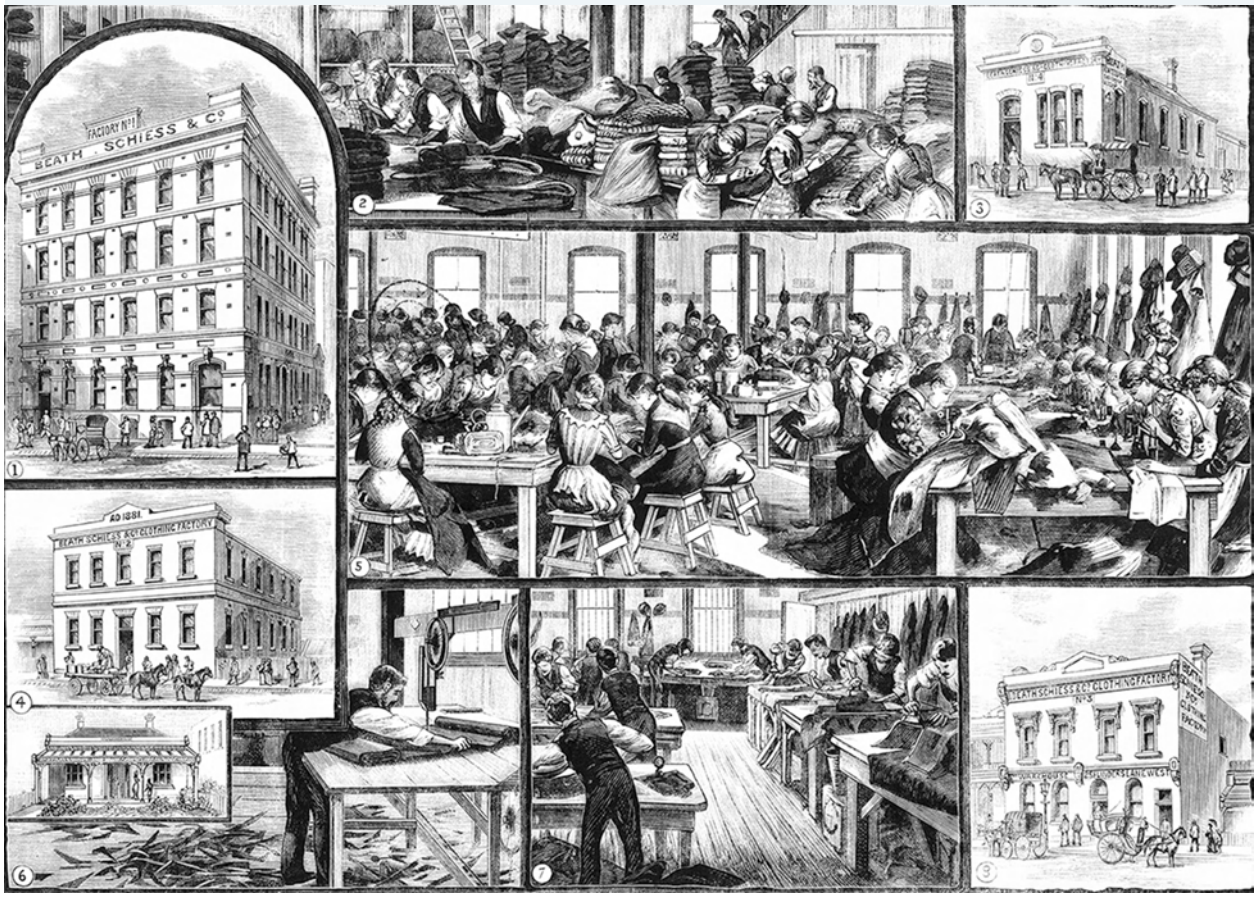
By the 1880s, apart from wealthy landowners and pastoralists, bankers and merchants were among the highest earners in the colonies. They established businesses close to the wharves to take advantage of the growing import and investment sectors. These businesses provided employment for accountants, clerks and shopkeepers.

Professionals such as doctors and lawyers also earned high wages. Most came from wealthy families and had been educated at private schools and universities in the colonies and overseas.

High-wage earners tended to build spacious homes in leafy suburbs away from the grime and pollution of the inner-city areas. Domestic servants were employed to maintain these homes and the wealthy families who lived there.

Until the 1880s most domestic servants were poor Irish immigrant girls working to help support their families. Many men and women preferred factory work, though, because it often paid better and it gave workers some independence. This preference led to a shortage of domestic workers in the 1880s. As the shortage grew, domestic workers were able to push for higher wages, more free time and better working conditions.

**SOURCE 1** An 1882 wood engraving depicting scenes at Beath, Schiess & Co's Victorian clothing factories



## 6.7.2 New technologies

By the 1880s new technologies meant the growth of new types of jobs. The expansion of manufacturing resulted in an increase in the number of engineers, who helped to develop machinery for factories. In many trades (for example, boot making), mechanised processes replaced manual labour.

**SOURCE 2** Inside the workshop of John Faul, Ironmonger at Bendigo in 1890

The typewriter created new office jobs. Up to the 1880s, typists were mainly men, although the number of female typists increased after this. New methods of copying and **bookkeeping** were also changing officework.

**Telegraph** and telephone services became more common in the 1880s. The number of telegraph stations in the central business district of Melbourne doubled between 1880 and 1890. By 1890, there were almost 2000 telephone subscribers. New forms of communication required workers to develop new skills.

One of the most influential developments in the late nineteenth century was electricity. For some, however, electric lights just meant longer working hours.

**SOURCE 3** Most servant girls endured demanding, and often harsh, working conditions. *'"Missus" — From Sarah Jane's point of view' in* The Bulletin, *23 June 1883*

She is wanted at 6 am, or before, and keeps busy all day till bed time at 10 or 11 pm. 'No followers allowed', not even a brother or sister, lest they should eat or drink something, or take something home. The poor girl cannot sit with the 'family' — she is 'only a servant', and therefore has only the kitchen to sit in if she has any leisure. If there are any grown-up sons, she is liable to instant dismissal if one of them is seen speaking to her, and the daughters order her about as if she were a convict.

### 6.7 ACTIVITY

Locate some other sources and accounts of working conditions in Australian cities in the 1880s and 1890s. Do they support or contest the impression created by **SOURCES 1–3**? **Using historical sources as evidence**

## 6.7 EXERCISES

**Historical skills key: HS1** Remembering and understanding **HS2** Sequencing chronology **HS3** Using historical sources as evidence **HS4** Identifying continuity and change **HS5** Analysing cause and effect **HS6** Determining historical significance

### 6.7 Exercise 1: Check your understanding

1. **HS1** What social change occurred after the 1850s?
2. **HS1** How hard were workers' lives in the nineteenth century? Explain.
3. **HS1** Apart from landowners and pastoralists, who else were among the highest earning classes?
4. **HS1** Why was factory work often preferred over domestic service?
5. **HS1** What new technologies were introduced in the late nineteenth century?

### 6.7 Exercise 2: Apply your understanding

1. **HS3** Examine **SOURCE 1**. Describe what the engraving tells us about factory work for men and women. Use as many of the panels in the image as you can.
2. **HS3** Using **SOURCES 1** and **2**, explain what made workers' lives difficult.
3. **HS3** Read **SOURCE 3**. According to the writer, why is domestic service difficult work? Try to give several reasons in your own words.
4. **HS5** Why would workers accept poor pay and conditions? Based on what you have learned in this subtopic, explain your point of view.
5. **HS5** What impact on the workplace did the development of new technologies have?

Try these questions in learnON for instant, corrective feedback. Go to www.jacplus.com.au.

# 6.8 Trade unions and political parties

## 6.8.1 Australian trade unions develop

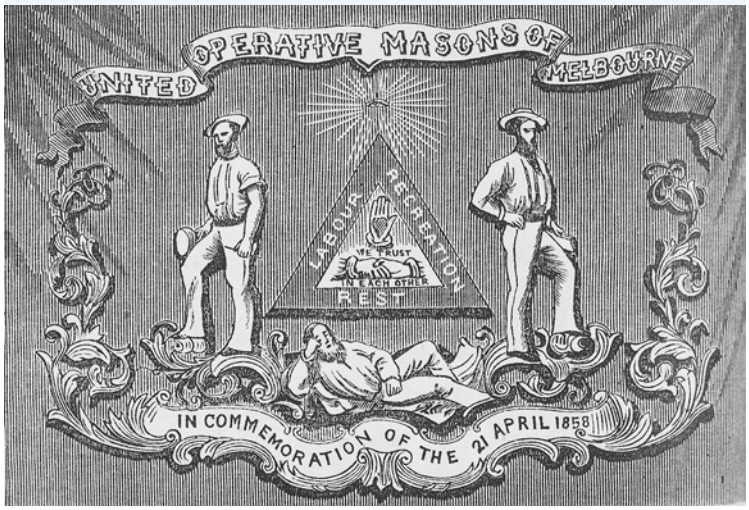
Many people in nations across the world promote the idea that there are characteristics that make their people distinctive. In the late nineteenth century many Australians seemed to accept that the most important part of the Australian identity — the most typical Australian characteristic — was 'mateship', which was demonstrated by ordinary people standing by each other in the struggle to overcome tough conditions and injustice, particularly in rural areas. For those who thought this way, the development of trade unionism was a continuation of a tradition that went back to early convict days and was part of the 'pioneering spirit' of Australia's white history. It also seemed to be reinforced by the rebels at Eureka and Ned Kelly.

Trade unionism has been a very important influence on Australian life. Trade unions are formed by employees within an occupation or industry to bargain with employers for improved wages and conditions. They also try to ensure that any previously gained social improvements are kept. Australia inherited its trade union traditions from Britain, and for much of the twentieth century Australia had one of the highest levels of trade union membership in the world.

The first Australian trade unions were formed in the 1840s. They were temporarily disrupted by the gold rushes but were soon reorganised. By the 1850s many trade unions had been formed, strengthened by the ambitions of many gold rush migrants. This growth brought about the establishment of the Melbourne Trades Hall Committee, a central organisation of **affiliated unions**. Its first meeting in 1859 was held in Lygon Street in Melbourne at the site where the Victorian Trades Hall Council building now stands.

One of the first great victories of the Australian union movement was the winning of the eight-hour workday on 21 April 1856 by the Stonemasons Union. The eight-hour day was confined to the building trades and not extended to most workers until the next century but it continued to be celebrated with an annual procession. It was well attended. In 1879 the Victorian government declared it a public holiday and in 1934 it was renamed 'Labour Day'.

**SOURCE 1** A banner for the United Operative Masons of Melbourne, commemorating this union's achievement of the eight-hour working day




## 6.8.2 Tactics and policies

Unions used strikes and pickets to win their objectives. The first full-scale union picket was staged during the Bootmakers' Union strike in 1884. Unions also held strikes to protest against businesses employing Chinese workers, who were paid at much lower rates than Europeans. At its first meeting, in Sydney in 1879, the Inter-Colonial Trade Union Congress (later the **Australian Council of Trade Unions** or **ACTU**) unanimously opposed Chinese immigration.

**SOURCE 2** Trade unionists with their banner in Broken Hill, NSW, around 1911

### Exploitation of women

Women were exploited even more than men. They experienced harsh working conditions, long hours and lower rates of pay. The first colonial women's trade union was the Melbourne Tailoresses' Union. Founded in 1882, it campaigned against wage cuts for already poorly paid female workers in the clothing industry. Its campaign led to a parliamentary inquiry into **sweated labour**, and the establishment of boards to ensure that standards were in place for wages, working hours and conditions.

### Factions and political parties

Workers could have improved their conditions by electing representatives to fight for their rights in the colonial parliaments. At first, however, factions and pressure groups dominated colonial politics. The main groups were the protectionists and the free traders. Both represented the interests of businesspeople. The issue of free trade versus protection of local industries (by charging duties on imports) deeply divided the colonies. In New South Wales there was strong support for free trade while Victoria supported protection.

Political parties began to emerge in the late 1880s as the protectionists and free traders became more organised. The most significant step in the development of political parties, however, was the birth of the labour parties. Since its inception, the Australian Labor Party (ALP) has had links with the trade union movement. Formed in 1891, it is the oldest political party in Australia, and one of the oldest labour parties in the world.

## 6.8.3 The great strikes of the 1890s

Trade unions achieved many of their goals up until the end of the 1880s. However, when a severe economic depression began in 1890, employer organisations fought back. Employers said they were fighting for 'freedom of contract'— the right to hire workers who were not union members and to pay them less than the wages that had been won by the unions.

The result was a series of great strikes between 1890 and 1894. The 1890 maritime strike affected all the eastern colonies and involved wharf labourers, seamen, ships' officers, transport workers and shearers. The 1891 shearers' strike saw armed clashes between shearers on the one hand and strike-breakers, the army and police on the other at Barcaldine in Queensland. The strike ended after four months; thirteen of its leaders were arrested and sentenced to three years of hard labour. These strikes were followed by the Broken Hill miners' strike in 1892 and a further strike of shearers and other bush workers in 1893–94.

**SOURCE 4** This news report describes what happened when unionists attempted to stop strike-breakers working at Port Adelaide during the 1890 maritime strike. It was published in *The Advertiser* (Adelaide), 29 October 1890.

About 6 a. m. a large body of unionists had assembled on the wharfs, but nothing serious occurred until about 8 o'clock, when some non-unionists were returning from work along Maclaren wharf and proceeding to the labour bureau for breakfast. They were surrounded by a body of unionists, who commenced to hoot, jeer, and illtreat them. One of the men being rather roughly handled drew a revolver, which he pointed at the unionists, but happily did not fire. The police arriving on the spot arrested three of the unionists and took the weapon away from the non-unionist, but the owner [of the revolver] was not apprehended ...

**SOURCE 5** Townsville Mounted Infantry in Hughenden, Queensland, during the 1891 shearers' strike

**SOURCE 3** A portrait of shearers as 'unionist prisoners'. This photograph was taken at Barcaldine, Queensland, in November 1893 to mark the gaoling of 13 shearer union leaders.

**SOURCE 6** Wives of unionist miners attacking strike-breakers with sticks and broom handles during the reopening of the Broken Hill mines in 1892

### Electing workers' representatives

The strikes failed because the employers were able to find strike-breakers to carry out much of the work and could use the law against the strikers. The failure of the strikes, the support the employers had from governments and the gaoling of union leaders made unionists realise they needed new tactics. They decided to get workers' representatives into parliament to change the laws. Labour parties were set up in each colony. Unionists believed that labour party candidates elected to parliament would defend the interests of the workers who put them there.

## 6.8.4 Forming the ALP

Australia's first labour government — indeed the first labour government in the world — was elected in Queensland in 1899. It lasted only seven days. A **minority government** had been formed, with Anderson Dawson as the state's first labour premier. It ended a week later when motions enabling it to continue to govern were defeated.

In their formative years, the colonial labour parties were influenced by the trade unions, but were not restricted to only trade union interests. The parties also wanted the support of farmers, small business and non-union employees, including 'white collar workers'. The influence of the trade unions on policy, however, remained high.

The Australian Labour Party entered federal politics at federation, following the first Commonwealth elections in 1901. It comprised 16 members who had been elected to the first sitting of the House of Representatives and eight Senators. It was not until 1908 that the spelling of the party's name was changed to 'Labor'. The American English spelling recognised that many of the ideas of the US 'labor' movement were dominant internationally and influenced the early tactics of the ALP.

### DISCUSS

Are the interests of employers and employees today similar to those of the 1890s? Should workers be able to go on strike for better pay and conditions? **[Ethical Capability]**

### 6.8 EXERCISES

**Historical skills key: HS1** Remembering and understanding **HS2** Sequencing chronology **HS3** Using historical sources as evidence **HS4** Identifying continuity and change **HS5** Analysing cause and effect **HS6** Determining historical significance

#### 6.8 Exercise 1: Check your understanding

1. **HS1** Why are trade unions formed?
2. **HS1** Identify the economic reason that unions opposed Chinese immigration.
3. **HS1** Whose interests did free traders and protectionists represent?
4. **HS1** How did employers try to lower wages in the 1890s? Explain why they might have done this.
5. **HS5** Identify the results of the strikes of the 1890s. Explain why they failed.
6. **HS6** Identify three significant things about the formation of the ALP and its early history.

#### 6.8 Exercise 2: Apply your understanding

1. **HS3** Examine **SOURCE 1**. Identify the labels on the three sides of the central triangle.
2. **HS3** Explain what **SOURCE 1** suggests about the importance of the eight-hour working day.
3. **HS3** Describe the appearance of the unionists in **SOURCE 2**. Why might they be dressed this way?
4. **HS3** The slogan on the banner in **SOURCE 2** reads, 'To assist but not to injure'. Explain why the union might have chosen this slogan.
5. **HS3** What does **SOURCE 3** suggest about the attitudes of the shearers in the photograph? Explain why you think this photo was taken.
6. **HS3** Identify from **SOURCE 4** why unionists felt the government was on the side of the employers.

7. **HS3** Compare **SOURCES 5** and **6**. Explain how they present very different views of the conflicts between workers and employers in the 1890s.
8. **HS5** Identify the causes of the strikes of the 1890s and rank them in order of importance.
9. **HS5** Did the results of the strikes of the 1890s represent a step forward for Australian workers? Explain.
10. **HS6** Evaluate the importance of the formation of the ALP and explain whether you think the ALP still supports Australian workers.

Try these questions in learnON for instant, corrective feedback. Go to www.jacplus.com.au.

# 6.9 Nationalism and Australian identity

## 6.9.1 Radical and nationalist

Ideas of national identity and national types became popular in Europe, Canada and the United States in the 1800s, shaping and reshaping maps, alliances and culture.

By the late nineteenth century two very different kinds of nationalism existed in Australia. A majority of Australians were what historians have called 'imperial loyalists'. They thought of themselves as Australian Britons and felt deep loyalty to Britain and the British Empire. A different kind of sentiment was felt by Australians whom historians have called 'radical nationalists'. These people believed that Australia should be independent from Britain and should create a society that was fairer and more **egalitarian** than Britain's.

Radical nationalists saw the typical Australian as a bush worker, like the gold rush diggers and the unionist shearers and drovers. He was seen as independent, opposed to class distinctions and English snobbishness, and loyal to his mates. Women usually had very little part in this image. Many Australian short stories, poems and artworks of the 1880s and 1890s depict such 'typical Australians'.

**SOURCE 1** Extract from Banjo Paterson's 1889 poem *Clancy of the Overflow*.
This section provides a rather romantic image of droving in contrast to the 'foulness' of city life.

In my wild erratic fancy visions come to me of Clancy
Gone a-droving 'down the Cooper' where the Western drovers go;
As the stock are slowly stringing, Clancy rides behind them singing,
For the drover's life has pleasures that the townsfolk never know.
And the bush hath friends to meet him, and their kindly voices greet him
In the murmur of the breezes and the river on its bars,
And he sees the vision splendid of the sunlit plains extended,
And at night the wond'rous glory of the everlasting stars.
I am sitting in my dingy little office, where a stingy
Ray of sunlight struggles feebly down between the houses tall,
And the foetid air and gritty of the dusty, dirty city
Through the open window floating, spreads its foulness over all.

## 6.9.2 White and male

Racism was part of both kinds of Australian nationalism. Imperial loyalists believed that Britain had the right to rule over other races they believed were inferior to the British. Radical nationalists wanted to create a workers' paradise in Australia, but they thought this dream could be achieved only by keeping out non-Europeans, who they believed did not share their values and whose cheap labour would be used to destroy the gains won by Australian workers. They also considered non-Europeans insufficiently educated or intelligent to share in an Australian democracy.

**SOURCE 2** *The golden fleece*, painted by Tom Roberts in 1894. You can compare this image to Roberts' more famous work, *Shearing the rams*.

## Art and literature

Even before stories and poems about the bush were published, there were traditions of storytelling and singing among rural itinerant workers. These had developed from old convict ballads and Irish songs. Writers such as Andrew 'Banjo' Paterson drew on these traditions to create ballads about the bush and its heroic characters. Paterson's works include *Waltzing Matilda, Clancy of the Overflow* and *The Man from Snowy River*.

Henry Lawson (see **SOURCE 3**) also wrote about people living in the bush. His mother, Louisa, was an early Australian campaigner for women's rights, and her strong influence is seen in some of the female characters that feature in Lawson's stories. *The Drover's Wife* (see **SOURCE 4**) depicts a brave and resilient woman protecting her children while her husband is away for long periods.

**SOURCE 3** Henry Lawson

**SOURCE 4** Extract from *The Drover's Wife* by Henry Lawson

She is not a coward, but recent events have shaken her nerves. A little son of her brother-in-law was lately bitten by a snake, and died. Besides she has not heard from her husband for six months, and is anxious about him ...

... She is used to being left alone. She once lived like this for eighteen months. As a girl she built the usual castles in the air, but all her girlish hopes and aspirations have along been dead. She finds all the excitement and recreation she needs in the Young Ladies' Journal, and Heaven help her! takes a pleasure in the fashion plates ...

... One of the children died while she was here alone. She rode nineteen miles for assistance, carrying the dead child.

However, much of the art and writing of the period celebrates hard physical labour and masculine endeavour. Women were often associated with more passive, domestic roles. This is another reason why *The Drover's Wife* is such an extraordinary story.

Many of the works of art also told dramatic stories about the trials and hardships of rural living, though not all of these works portrayed this life as one of heroic struggle.

Paterson and Lawson both contributed to a literary journal called *The Bulletin*. It promoted political ideas such as **republicanism** and white superiority. Its slogan was 'Australia for Australians' until 1908, when it was changed to 'Australia for the White Man'.

**SOURCE 5** Tom Roberts' *A break away!* Painted in 1891, this picture shows a lone figure desperately trying to avert disaster as his herd of thirsty sheep rushes for the water.

**SOURCE 6** Written by Henry Lawson, published in *The Bulletin* in 1887, *A Song of the Republic* is Lawson's first published poem.

A song of the Republic
Sons of the South, awake! arise!
Sons of the South, and do.
Banish from under your bonny skies
Those old-world errors and wrongs and lies.
Making a hell in a paradise
That belongs to your sons and you.
Sons of the South, make choice between
(Sons of the South, choose true),
The Land of Morn and the Land of E'en,
The Old Dead Tree and the Young Tree Green,
The Land that belongs to the lord and the Queen,
And the Land that belongs to you.
...
Sons of the South, aroused at last!
Sons of the South are few!
But your ranks grow longer and deeper fast,
And ye shall swell to an army vast,
And free from the wrongs of the North and Past
The land that belongs to you.

## DISCUSS

Before studying this subtopic, how would you have described a typical Australian? How has learning about the development of Australian identity changed your ideas about being Australian?

**[Critical and Creative Thinking Capability]**

## 6.9 ACTIVITIES

1. Locate some other works of art, stories and poems from this period and compare how they present the Australian characters. Identify the qualities that they share as well as ones that seem different.

   **Using historical sources as evidence**
2. Locate and read Henry Lawson's poem, *The Fire at Ross Farm*. Is this poem a better expression of national character than *A Song of the Republic*? Write a paragraph outlining your view.

   **Using historical sources as evidence**

## 6.9 EXERCISES

**Historical skills key: HS1** Remembering and understanding **HS2** Sequencing chronology **HS3** Using historical sources as evidence **HS4** Identifying continuity and change **HS5** Analysing cause and effect **HS6** Determining historical significance

### 6.9 Exercise 1: Check your understanding

1. **HS1** Describe the two different types of nationalism that existed in Australia by the late nineteenth century.
2. **HS1** What are the qualities of the typical bush worker as seen in the radical, nationalist tradition?
3. **HS1** Suggest reasons why women played only a small part in the creation of the image of the 'typical Australian'.
4. **HS1** Name two writers who wrote about Australian bush characters.
5. **HS1** Explain why *The Drover's Wife* is an extraordinary story.

### 6.9 Exercise 2: Apply your understanding

1. **HS3** In **SOURCE 1**, identify the 'pleasures' of the drover's life.
2. **HS3** Describe how the work of shearing is presented in **SOURCE 2**.
3. **HS3** Identify what **SOURCE 4** suggests about the qualities of bush women.
4. **HS3** Examine **SOURCE 6**. What is the main point of Lawson's poem?
5. **HS3** Using all of the sources in this subtopic, describe the vision of national character they express. Try to include contradictory elements if you can.
6. **HS3** Examine **SOURCE 6**. Explain what Lawson might have meant by 'old-world errors and wrongs and lies' and the sort of future he predicted for Australia as a republic.
7. **HS6** Evaluate the importance of the bush worker as a representative of the Australian character. Is it possible for any one idea to express a 'national type'? Outline your view.

Try these questions in learnON for instant, corrective feedback. Go to www.jacplus.com.au.

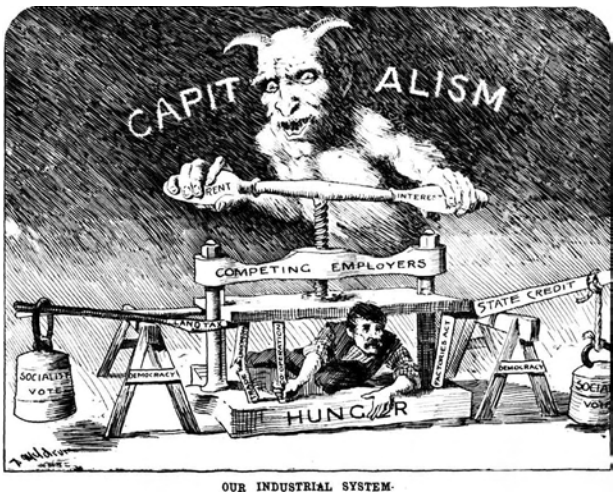
# 6.10 SkillBuilder: Analysing cartoons

online only

## Using historical sources as evidence: analysing cartoons

Historical sources help us understand the way people in the past thought and felt about their lives. The way we evaluate these sources shapes our understanding of the past.

Artworks, photographs and illustrations all give insight into the values, attitudes and beliefs of people in the past. Political cartoons can be powerful evidence of the ways that people thought and felt about their lives.



OUR INDUSTRIAL SYSTEM.

### Select your learnON format to access:

- an explanation of the skill (Tell me)
- a step-by-step process to develop the skill, with an example (Show me)
- an activity to allow you to practise the skill (Let me do it)
- questions to consolidate your understanding of the skill.

# 6.11 Voting rights for women

## 6.11.1 Women in the workforce

During the nineteenth century there was great social inequality between the sexes. Most rewarding jobs were closed to women, who usually had to give up their jobs when they married. Women were expected to devote their lives to their family, yet they had little power within marriage. Many people came to see that women's **suffrage** was needed as a first step towards overcoming such inequalities.

In the paid workforce, women were paid much less than men even for the same work. In the clothing trade, women worked up to 90 hours a week. Female domestic servants received very small wages, board and leftover food for working 14-hour days with only occasional weekends off. A skilled tradesman earned five times as much but even his wage was barely enough for rent, food and other essentials for a family.

Nevertheless, as one century closed and another dawned, women's participation in paid work began to change rapidly. By 1913 women accounted for nearly a quarter of all manufacturing employees and were enjoying better wages and more independence than those in domestic service. Administrative work, especially in using the new typewriters, became increasingly common. But pay rates continued to be low and, while a few jobs such as fruit picking would give equal pay for equal work, most women would receive only one-third of the wages of their male counterparts.

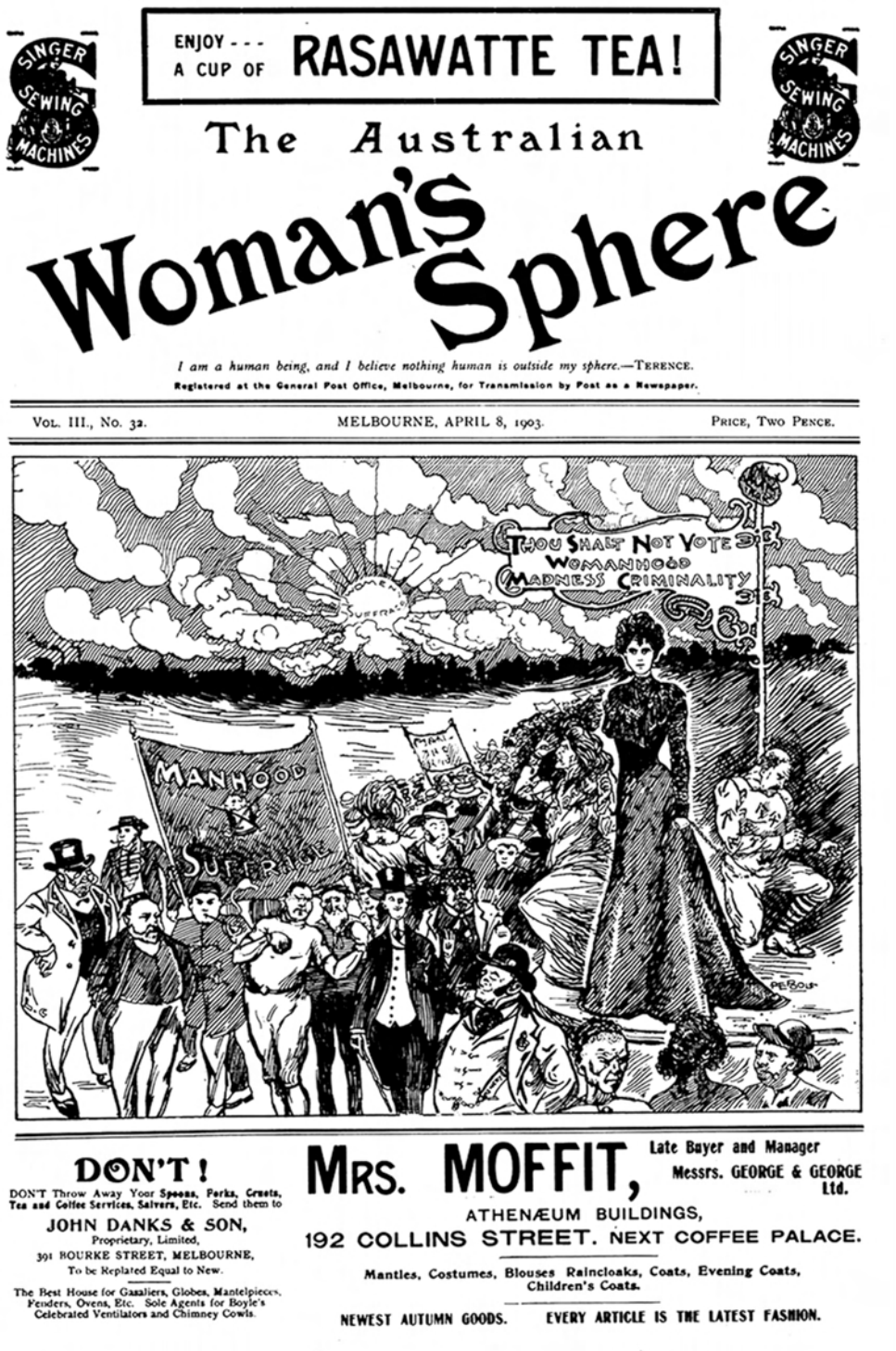
### Fighting for women's political rights

Laws on marriage, divorce, property and custody of children all favoured men. Change could come only through political action. In the late nineteenth century women formed organisations in each Australian colony to campaign for the right to vote. Many hoped that women's votes would force governments to make better laws to protect the rights of women and children.

They believed their vote would bring about improved working conditions, equal pay, better education for girls and more opportunities in the professions. Women also thought that being entitled to vote would provide them with greater power within the home, protecting vulnerable women against violent abuse, giving them property and custody rights and raising the age of consent. A number of women's groups campaigning for votes for women were also demanding restrictions on the consumption of alcohol (these

were known as 'Temperance' unions), believing a more sober society would be a safer one. The Women's Christian Temperance Union (WCTU) was one such group, and was sometimes ridiculed in the media as the 'Water, Coffee, Tea Union'.

**SOURCE 1** The front cover of *The Woman's Sphere*, 8 April 1903. A procession of men march past under the banner of manhood suffrage, a glass of beer and golf clubs. They include a boxer, men of all classes and even non-European and indigenous males. The noble Vida Goldstein, representing womanhood, is chained to the pole of 'thou shalt not vote', along with 'madness' and 'criminality'. The rising sun of 'women's suffrage' is in the background. One of the males in the foreground is a brewery owner.



Although Victorian women had been granted the right to vote in federal elections in 1902, they had to continue their campaign. State lawmakers were still the most significant level of government at this time and were responsible for the areas that concerned women the most.

In New South Wales in 1888 Louisa Lawson (the mother of Henry Lawson) founded a newspaper called *The Dawn* to make people aware of women's issues. In 1889 she founded the Dawn Club to campaign for women's suffrage. In 1891 women's suffrage societies presented the Victorian Parliament with a petition with more than 30 000 signatures supporting votes for women. Vida Goldstein was an equally important campaigner for women's rights. She was born in 1869 in Melbourne, where she worked for slum clearance, prison reform and votes for women. In 1899 she became president of the Women's Suffrage League.

In 1894 South Australian women gained the vote. New Zealand women had led the way, gaining voting rights in 1893. Women won the vote in Western Australia in 1899, federal government elections and New South Wales in 1902, Tasmania in 1903, Queensland in 1905 and Victoria in 1908.

## 6.11.2 Slow progress

Only South Australia and the Commonwealth had given women the right to stand for election to Parliament as well as to vote. The right of women to stand for election to Parliament was won in New South Wales in 1918, Western Australia in 1920, Tasmania in 1921 and Victoria in 1923. In 1921, with her election to the lower house of Western Australia, Edith Cowan became Australia's first female member of Parliament.

### Vida Goldstein fights on

Vida Goldstein (see **SOURCE 2**) ran two magazines for women's rights: *The Woman's Sphere* (1900–05) and *The Woman Voter* (1909–19). She stood for election to the Senate on five occasions without success. However, she received many votes from men and women, and her election campaigns increased awareness of the unfair way women were treated. In 1903, she was guest speaker at a women's meeting in the United States and, from 1911 to 1913, she helped the British women's suffrage movement. In Britain the vote was not extended to all adult women until 1928.

During World War I, Vida championed pacifism as well as feminism. She founded the Women's Peace Army in 1915 and was involved in a number of charitable works supporting vulnerable women. In 1919, she represented Australia at the Women's Peace Conference in Zurich. She was away from Australia for three years. Vida described herself as a democrat working for the complete equality of women with men and decent standards of living for all.

Voting rights for women were opposed by a number of male politicians who argued that women were not sufficiently educated or intelligent to vote and that their vote would be too easily influenced by their husbands, employers or unscrupulous politicians. They also expressed the idea that women who were interested in politics would neglect their families, have fewer children and that the divorce rate would go up.

**SOURCE 2** A portrait of Vida Goldstein, painted in 1944 by Phyl Waterhouse

**DID YOU KNOW?**

Vida Goldstein supported trade unions and **socialism**. During World War I, she campaigned for peace despite losing many supporters. She died in 1949. An electorate in Melbourne is now named after her.

Some newspapers and publications portrayed women who campaigned for voting rights as ugly, unmarried and aggressive, suggesting in a rather obvious way that they were not really 'feminine'. Others portrayed women as too innocent or naive to use their vote responsibly or simply ridiculed the idea.

**SOURCE 3** *Here, you man! Where's that vote you promised me?* This cartoon was published in *The Worker*, a Queensland trade union newspaper, on 17 November 1900. The woman probably represents Emma Miller, a prominent Queensland feminist of the time, while the man she is intimidating is the unsympathetic Robert Philp, the Queensland premier.

**SOURCE 4** The Queensland premier, Robert Philp, was one of the opponents of votes for women. Here he is being portrayed as a butcher of democracy, published in *The Worker*, 11 August 1900.

MARY HAD A LITTLE LAMB.

**SOURCE 5** The Victorian woman: 'We demand our votes. We will have 'em.' The Conservative Party: 'I assure you they're very unbecoming, ma'am. Just look at Miss South Australia there!'
'A question of propriety', *The Critic*, 26 August 1899

## 6.11 ACTIVITY

Find some modern sources on women's wages and political representation in Australia. Has Vida Goldstein's vision of 'complete equality of women with men' been achieved? **Identifying continuity and change**

## 6.11 EXERCISES

**Historical skills key: HS1** Remembering and understanding **HS2** Sequencing chronology **HS3** Using historical sources as evidence **HS4** Identifying continuity and change **HS5** Analysing cause and effect **HS6** Determining historical significance

### 6.11 Exercise 1: Check your understanding

1. **HS1** Outline the social inequalities that existed between the sexes during the nineteenth century.
2. **HS1** Apart from women fruit pickers, who received equal pay, what proportion of men's pay did women generally receive in the early twentieth century?
3. **HS1** Identify the reasons that women campaigned for the right to vote.
4. **HS2** Create a timeline showing in which year each of the Australian states granted women the right to vote.
5. **HS1** Identify the ways that Vida Goldstein worked to improve Australian society.
6. **HS1** Explain why some people opposed giving women the vote.

### 6.11 Exercise 2: Apply your understanding

1. **HS3** Describe the message of **SOURCE 1**. Is it convincing?
2. **HS3** Examine **SOURCES 3, 4** and **5**. Explain how the campaign for women's votes has been represented in these cartoons.
3. **HS3** Identify what **SOURCES 3, 4** and **5** reveal about attitudes at the time. Explain how each source might help us understand the debate over women's suffrage.
4. **HS3** Describe the ways in which Queensland premier, Robert Philp, is depicted in **SOURCES 3** and **4**.
5. **HS6** Outline Vida Goldstein's contribution to the female suffrage movement. How significant was her role in achieving women's right to vote in Australia? Explain your view.

Try these questions in learnON for instant, corrective feedback. Go to www.jacplus.com.au.

# 6.12 Federation

## 6.12.1 Why federate?

By 1880, the six British colonies were getting closer to merging as one nation. For the next 20 years, the issue of **federation** dominated political discussion between the colonies until, on 1 January 1901, the Commonwealth of Australia was proclaimed.

Between 1855 and 1860 all colonies except Western Australia had their own governments. They governed independently of each other. For instance, laws concerning trade and **tariffs**, postal services, railway line widths, internal telegraph systems and defence forces differed from colony to colony.

These differences caused many frustrations, especially for those conducting business. Mindful of this, politicians began debating the pros and cons of having a government for the whole country that had some common functions and laws, while allowing certain powers to remain with the colonies.

The reasons for federation are quite complex and certain factors were important at different stages of the process. Historians disagree about what was really important in moving Australia towards nationhood. Some argue the process is still going.

### National defence

By the 1880s, three security issues worried the colonial governments in Australia:

1. The French had been interested in the country from the 1770s, and had a colonial presence in New Caledonia. This was close enough to the Australian east coast for French warships to create problems if relations between Britain and France ever worsened.
2. Germany had established colonial outposts in Northern New Guinea and Samoa, posing a potential threat to colonial sea routes.
3. Russia's Pacific Fleet especially was a potential threat after the **Crimean War**. Fortifications had been built to protect many Australian ports and harbours.

A unified defence force seemed to offer advantages, though most Australians (and the governments) looked to Britain to defend Australia in time of danger.

### Immigration concerns

There was continued concern about the possibility of a large number of non-Europeans coming into the country. The experience of the gold rushes had made many wary of the Chinese. When South Sea Islanders were brought into Queensland, many colonists feared this meant they would lose jobs or have reduced wages. This unrest allowed politicians to argue for a national policy controlling immigration. Different groups promoted the idea of a white Australia for different reasons. The newly formed labour parties were particularly strong in their opposition to non-European migration, fearing that anyone willing to work for lower wages (or anyone able to be easily exploited by employers) would drive down wages for all working Australians.

## Vision of unity

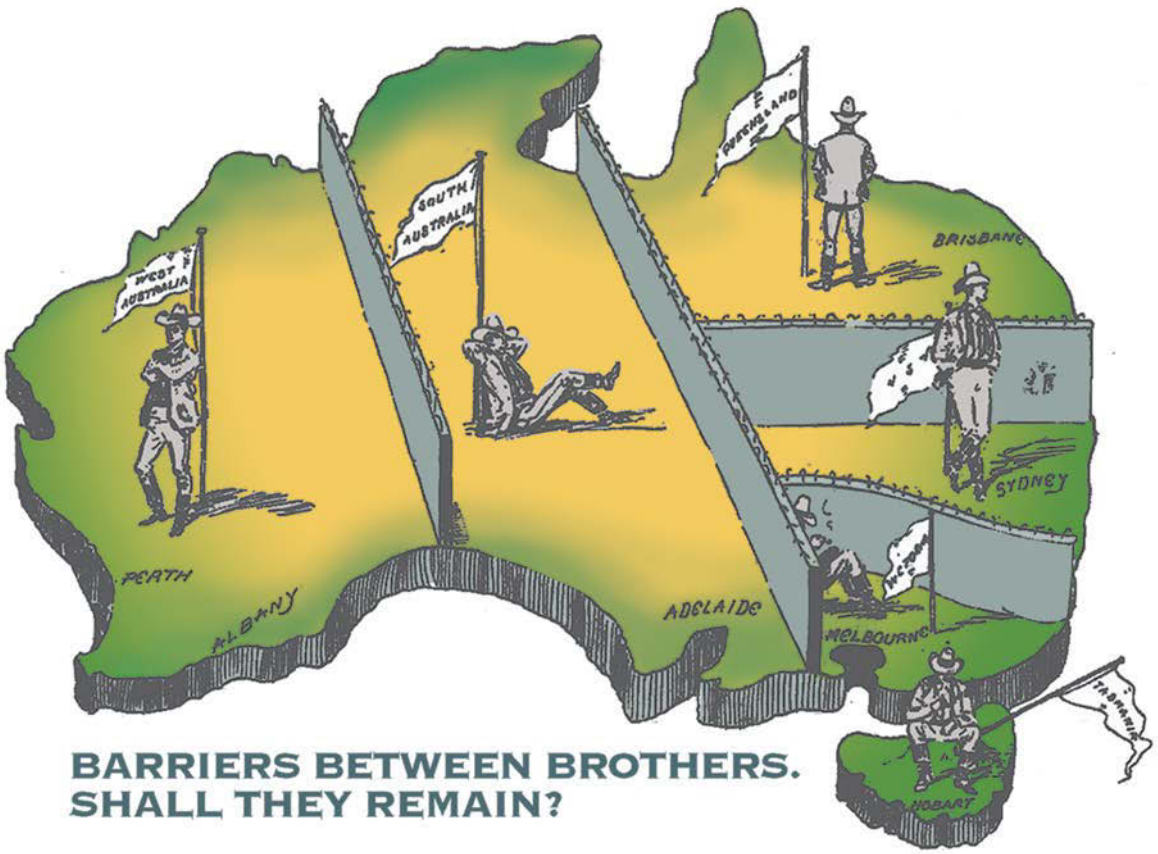
Some Australians believed that federation was a national destiny. One of the leaders of the movement was the young lawyer Alfred Deakin. It was his view that each Australian was an 'independent Australian Briton' and that federation represented 'the highest development of the possibilities of self-government.' Without unity, he argued, 'we find ourselves hampered in commerce, restricted in influence, weakened in prestige'. Another leader was the ambitious and talented Isaac Isaacs from Victoria who claimed that he looked forward to the day when he could say, because of federation, 'I am an Australian'. The impending new century promised a new age of improvement, modernity, and optimism. Australian nationhood was influenced by those ideals.

## Other benefits

There were also practical concerns, many of them offering economic benefits. The width of railway lines differed between colonies. This meant people had to change trains and goods had to be transferred from one train to another at the borders. It was also argued that a common railway gauge would be vital in any military crisis. Custom duties at state borders were also inconvenient, time consuming and costly. The 1890s depression had been particularly severe in some states (like Victoria) and many believed that a united economy would be stronger.

As the population grew, the demand for reliable, coordinated postal and telegraph services strengthened. Only a national government could guarantee this.

**SOURCE 1** This 1891 newspaper cartoon (with colour added) summed up the way many people saw the colonies at the time. The 'stone walls' were more than just custom duties, though. There were many other factors separating the colonies.



# 6.12.2 Countdown to federation

## A: Federal Council meets

**1886**

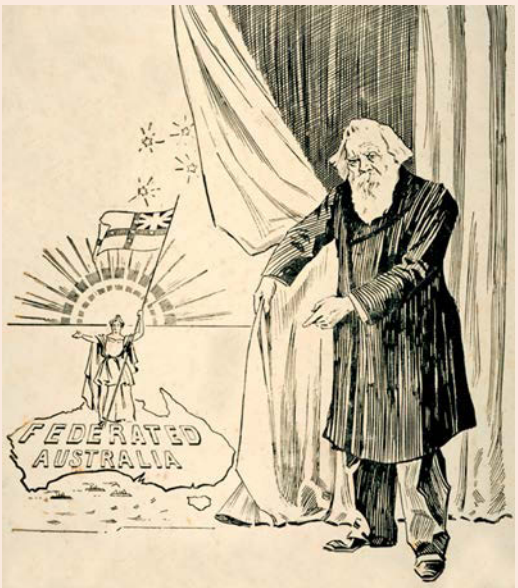
- The Federal Council of Australasia was set up, and a meeting attended by delegates from all six colonies, and from New Zealand and Fiji.
- The main purpose of the meeting was to agree to ask Britain to guarantee it would defend the colonies if they were ever threatened.

## B: Henry Parkes talks to Tenterfield locals

**1889**

- Sir Henry Parkes (1815–1896), an outspoken and controversial politician, was a prominent supporter of federation.
- He was premier of New South Wales five times.
- In August 1889, en route to Sydney from Brisbane by train, he stopped in Tenterfield. He spoke to a hall full of locals at a function, challenging them (and all colonists) to think 'national'.

' ... I do see very clearly that there may come a time and that time not very remote, when the Australian colonies may be brought more into the position of one great and united people. We should have an outline of Empire, such as we could never hope for as isolated colonies, and our place would be admitted in the rank of nations.'




## C: A national constitution drafted

**1891**

- By the 1890s, it was increasingly apparent to politicians and businessmen that colonists shared a common language and values. A national identity was emerging.
- The Australasian Convention was held, attended by leading politicians from the six colonies and from New Zealand. The purpose was to draft a national constitution.
- The draft for a constitution proposed a federal government and state governments, free trade between the colonies and a national defence force. However, due to the 1890s depression and strikes, the federation issue was put aside.

## D: The Corowa conference

**1893**

- Economic issues were the focus at this conference of politicians and businessmen.
- The issue discussed most fiercely was the import/export tariffs each colony imposed. People and goods on trains were searched at borders, as a change of train was required, to ensure no smuggling was taking place and that appropriate customs duties were paid.
- Delegate Quick from Victoria proposed that colonial governments ask their voters to elect representatives for a Federal Constitutional Convention.

## E: Federal constitutional convention

**1897–98**

- From this convention (attended by representatives from colonies chosen by the people), a draft constitution was taken back to the five colonial governments. The draft plan saw a two-house federal Parliament with an upper house of review that would represent states equally and protect rights.
- Delegates re-assembled in Sydney in September (and again in January 1898 in Melbourne) to consider amendments from the colonial parliaments. Free trade between states, and the national management of immigration and defence were key issues.
- On 16 March 1898, the convention agreed on a draft constitution to be put to the voters of all colonies. (Western Australian and Queensland parliaments were still to agree at this point.)

## F: The referendum

**April 1899 to July 1900**

- Votes were cast. After some re-votes and a delayed vote in Western Australia, the referendum was completed by July 1900. The majority of voters gave their support for a national government, the Commonwealth of Australia, to be set up in line with the terms laid out in the draft constitution. The results of the vote in each colony are shown in the following table.
- State (formerly colonial) constitutions were recognised in the proposed federal constitution; however, federal laws would overrule any state law where there was a common issue.

The referendum result:

- A majority of votes were cast for federation but only 61 per cent of those who had the right to vote took part. So, in fact, less than half the colony's voters actually voted for federation. This demonstrates that many Australians were confused or uncertain about its meaning.

**Referendum vote on the Commonwealth Bill, 1899–1900**

| Name of colony | Date | Yes | No | Total |
|---|---|---|---|---|
| New South Wales | 20.6.1899 | 107 420 | 82 741 | 190 161 |
| Victoria | 27.7.1899 | 152 653 | 9805 | 162 458 |
| Tasmania | — | 13 437 | 791 | 14 228 |
| South Australia | 29.4.1899 | 65 990 | 17 053 | 83 043 |
| Northern Territory | 6.5.1899 | | | |
| Queensland | 2.10.1899 | 38 488 | 30 996 | 69 484 |
| Western Australia | 31.7.1900 | 44 800 | 19 691 | 64 491 |
| Total | | 422 788 | 161 077 | 583 865 |

## G: Australia becomes a nation

**1900**

- A group of delegates (one notable politician from each colony) travelled to London to have the draft constitution passed by the British Parliament. The British State Secretary responsible for colonies wanted to make amendments but the delegates stood firm.
- The Australian Constitution was passed by the British Parliament, with the British monarch, Queen Victoria, giving it royal assent on 9 July 1900. It set out the rules and principles for governing Australia and outlined the powers of the federal Parliament and some powers of state parliaments.

**SOURCE 2** The badge of the Australian Federation League of New South Wales between 1898 and 1901

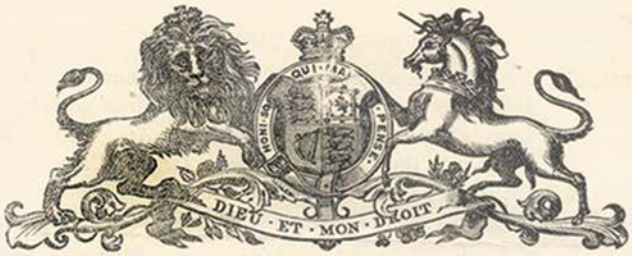
## H: Federation

**1901**

- The Governor-General, representing Queen Victoria, swore in Sir Edmund Barton and eight chosen ministers on 1 January 1901. (They would act as a caretaker government until the first national elections could be held in March 1901.)
- After this swearing in, the Commonwealth of Australia was proclaimed by Sir Edmund Barton in Centennial Park, Sydney.
- All over Australia on 1 January 1901 there were celebrations. Public buildings were decorated and special arches built over city thoroughfares. There were parties, dances and sports meetings. In the evening, the action continued with fireworks displays.
- The Commonwealth of Australia now existed. However, it was still a **British Dominion**. Australia's allegiance to the British monarch was indicated by the role of the Governor-General, who represented the monarch.

**SOURCE 3** Queen Victoria's royal assent for the creation of the Commonwealth of Australia in September 1900






# Commonwealth of Australia Gazette.

PUBLISHED BY AUTHORITY.

No. 1.] TUESDAY, 1 JANUARY. [1901.

By the QUEEN.

## A PROCLAMATION.

VICTORIA R.

WHEREAS by an Act of Parliament passed in the Sixty-third and Sixty-fourth Years of Our Reign intituled, "An Act to constitute the Commonwealth of *Australia*," it is enacted that it shall be lawful for the Queen, with the advice of the Privy Council, to declare by Proclamation, that, on and after a day therein appointed, not being later than One Year after the passing of this Act, the people of *New South Wales*, *Victoria*, *South Australia*, *Queensland*, and *Tasmania*, and also, if Her Majesty is satisfied that the people of *Western Australia* have agreed thereto, of *Western Australia*, shall be united in a Federal Commonwealth under the name of the Commonwealth of Australia.

And whereas We are satisfied that the people of *Western Australia* have agreed thereto accordingly.

We, therefore, by and with the advice of Our Privy Council, have thought fit to issue this Our Royal Proclamation, and We do hereby declare that on and after the First day of *January* One thousand nine hundred and one the people of *New South Wales*, *Victoria*, *South Australia*, *Queensland*, *Tasmania*, and *Western Australia* shall be united in a Federal Commonwealth under the name of the Commonwealth of *Australia*.

Given at Our Court at *Balmoral*, this Seventeenth day of *September*, in the Year of our Lord One thousand nine hundred, and in the Sixty-fourth Year of Our Reign.

GOD SAVE THE QUEEN!

## 6.12.3 Since 1901

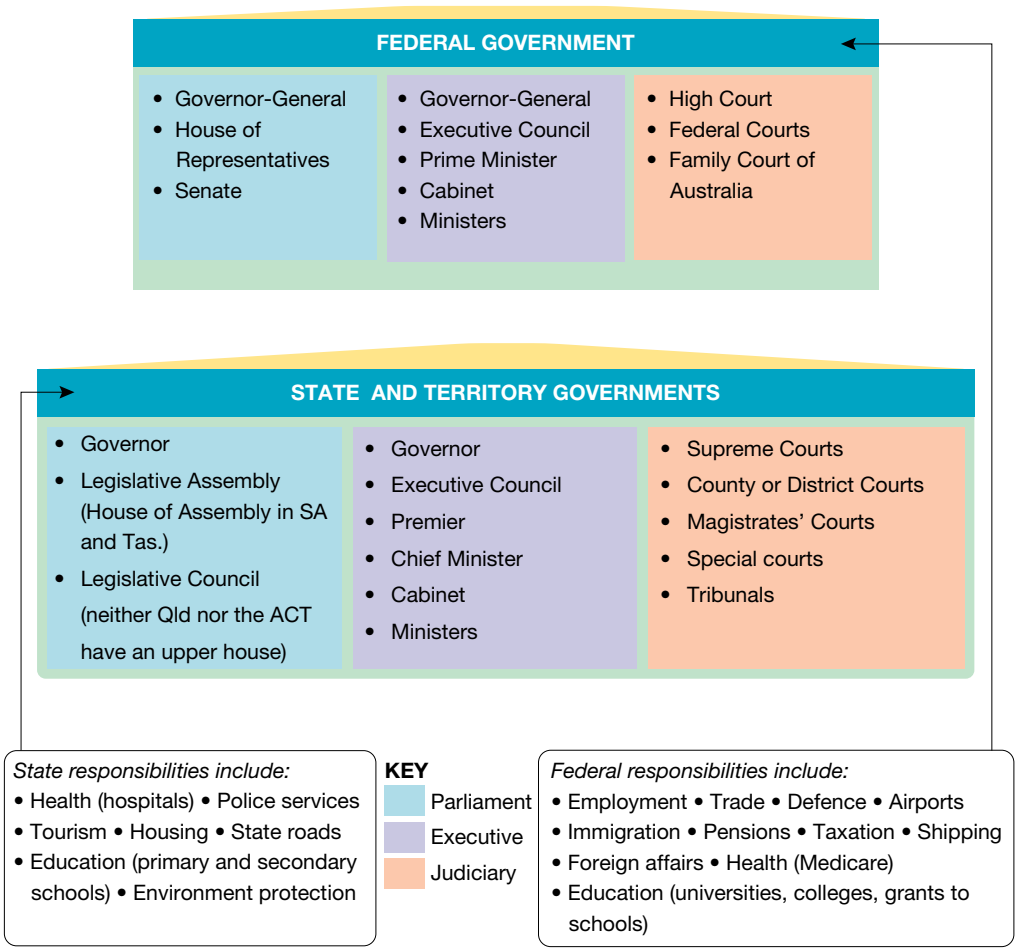
Australia ceased being a British Dominion in 1941, and the last legal ties were severed with Britain in 1986. But Australia still has the British monarch's representative, the Governor-General, giving royal assent (approval) to all federal laws.

The Australian Constitution can be changed only by a referendum and then only if the majority of voters *and* the majority of states vote for the proposed change to the Constitution.

One of the important challenges for Australians in the future is whether our country will become a republic, with possibly a new constitution, flag and bill of rights.

**SOURCE 4** The opening of the first Commonwealth Parliament at the Exhibition Building, Melbourne, 9 May 1901

**SOURCE 5** Federal government and state governments in Australia today, as described under the Constitution



### DISCUSS

What aspects of our history should we be proud of? What parts of our history should we regret? If you were the Australian prime minister, what would be your priorities for our nation?

**[Critical and Creative Thinking Capability]**

### 6.12 ACTIVITIES

1. In pairs or small groups, compile a scrapbook of sources about how Australians celebrated the achievement of federation. For each source, identify what it reveals about Australians' attitudes and values and explain why you have chosen it. Then answer the question, 'What does the celebration of federation tell us about Australia in 1901?' Use the sources in your answer. **Using historical sources as evidence**
2. Locate some other sources and accounts related to federation. How important were ideals of unity and progress? Use evidence to support your point of view. **Analysing cause and effect**

### 6.12 EXERCISES

**Historical skills key: HS1** Remembering and understanding **HS2** Sequencing chronology **HS3** Using historical sources as evidence **HS4** Identifying continuity and change **HS5** Analysing cause and effect **HS6** Determining historical significance

#### 6.12 Exercise 1: Check your understanding

1. **HS1** Make a list of the reasons for the move to federation.
2. **HS1** Explain why so few people voted in the final referendum. Why did it still pass?
3. **HS1** Who authorised the Australian Constitution?
4. **HS1** What does the Constitution actually do?
5. **HS1** Identify three important responsibilities of state governments.
6. **HS1** Identify three important responsibilities of the federal government.

#### 6.12 Exercise 2: Apply your understanding

1. **HS3** Explain whether **SOURCE 1** is supportive or critical of the federation movement.
2. **HS6** Explain the significance of Henry Parkes in the movement for federation.
3. **HS2** Create a timeline to visually represent the stages in the countdown to federation.
4. **HS6** Summarise the key concerns that led to support for federation. Which of these do you think would have held most weight at the time? Explain your view.
5. **HS6** Examine the 'Countdown to federation' and identify three of the most important events in the move towards federation. Write two or three sentences for each event that explain why you chose it.

Try these questions in learnON for instant, corrective feedback. Go to www.jacplus.com.au.

# 6.13 The early Commonwealth

## 6.13.1 Working-class living conditions

The naming of the Australian nation as a 'Commonwealth' was initially controversial. Many Australians did not understand what it really meant but the writers of the Constitution certainly did. It evoked the ideal of working for the common good. All citizens and their governments would be committed to the pursuit of a kinder, fairer and safer Australia. It would be a nation free of racial or religious conflict; it would be a nation that resolved disputes between workers and their employers fairly and justly; it would be an innovative and optimistic nation. These ideals can be seen in the actions of the early Commonwealth.

One of the highest priorities for the new nation was improving the living and working conditions of most Australians. In 1901 Australia's population of less than 4 million was mostly concentrated in New South Wales and Victoria. Thirty-six per cent of the New South Wales population lived in Sydney and forty-one per cent of Victoria's population lived in Melbourne. In working-class inner-city suburbs many people lived

in rows of cramped slums near factories. Semi-skilled and unskilled workers rarely earned enough to buy houses, so most paid rent all their lives for cramped dwellings that were overcrowded and unhealthy. In contrast, wealthier suburbs had large houses with spacious grounds. There was an equally wide disparity in living standards in the bush. People talked about Australia as a 'working man's paradise' but for many the harsh realities of their lives were a long way from the Garden of Eden.

**SOURCE 1** From Irene Moores, 'Rabbit-O, Bottle-O, Pennies from Heaven: Hugo Street, 1909', *Sydney Morning Herald*, 23 January 1982

Forty cramped terraces ranged on each side ... their balconies overhanging the absurdly narrow footpaths ... Each day began with the sloshing of the houses' sills with buckets of water. This cleansed away the sooty factory outfall ... A good meal could be made with the addition of waste vegetables — outsize cabbage leaves and such, salvaged from the markets and brought home in billy-carts ...

The shopkeepers adjusted to the sale of commodities in the smallest amounts. Deftly-folded paper cones held the [small] weightings of sugar, salt, flour, rice, sago and the quarter-pound package of tea, butter, cheese and cold meats comprising one meal at a time ...

At the end of the day a sickly street lamp lit the stage for each night's unpredictable drama. Invariably, arranged fights took place in the lanes.

Despite such inequalities, skilled workers enjoyed better pay and conditions than workers in Britain, Europe or America. Many less skilled employees worked long hours for low pay but Australia led the world in working conditions, industrial relations and social welfare.

**SOURCE 2** Slum housing in Gloucester Street, Sydney, in 1900

## 6.13.2 A safer, kinder and fairer Australia?

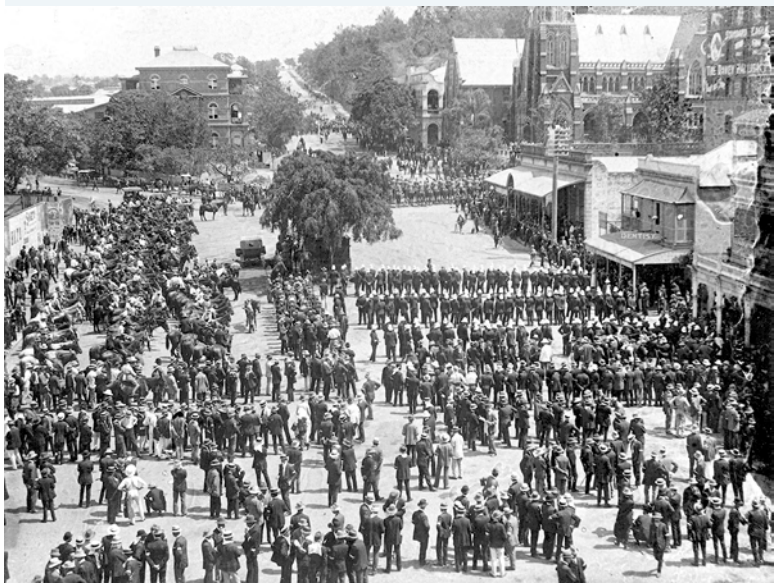
Reforms were possible because this was a time of economic growth. Australia was a big exporter of primary products such as wheat, wool and frozen meat. Manufacturing was a small part of the economy except in Victoria and New South Wales, where the factory workforce grew from 132 000 to 239 000 between 1901 and 1913. This contributed to the growth of cities. But Australian manufacturing could not compete with cheaper imported goods and depended on government tariffs for protection against foreign competition.

After federation, a series of different governments tried to bring about industrial and welfare reforms. Such reforms included:

- the creation of the Commonwealth Court of Conciliation and Arbitration in 1904 to solve disputes between workers and employers
- the establishment in 1907 of the principle of a basic wage or minimum wage, to which any male worker should be entitled (see Did you know? box). Australian wages were based on this principle for the next 60 years.
- the introduction of Commonwealth old-age and invalid pensions in 1908
- the payment of compensation for federal government employees injured at work (from 1912)
- the *Maternity Allowances Act 1912*, or 'Baby Bonus', which provided a payment roughly equal to two weeks' pay to a mother on the birth of her child to make sure she could afford proper medical attention.

Despite the reforms, workers still suffered disadvantages and there were many industrial disputes. Rising prices resulted in several big strikes. In some cases the unions won their demands, but the experiences of these years left many workers disillusioned.

**SOURCE 3** Protesting workers in Albert Square, Brisbane, during the 1912 general strike. The strike lasted 18 days. It began when the Tramways Company refused to permit workers to wear their union badges.



### DID YOU KNOW?

The idea of the basic wage came about in 1907 when Justice Higgins of the Commonwealth Court of Conciliation and Arbitration had to determine whether H.V. McKay's Sunshine Harvester Company was paying a fair wage and was therefore entitled to be protected by tariffs. Higgins decided that a fair minimum wage would provide for 'the normal needs of the average employee regarded as a human being living in a civilised community'. Higgins determined that this meant a wage of 7 shillings a day for an unskilled male worker. A skilled worker had to be paid more, while women were condemned to receive less than half the male wage for the same work.

## Political parties and reforms

The ALP was one of the main influences behind the various industrial and welfare reforms. The two non-Labor parties were the Protectionists and the Free Traders (who changed their name to Anti-Socialists in 1906). Australia's first two prime ministers, Edmund Barton and Andrew Deakin, were Protectionists. These two parties differed over the issue of free trade versus protection. Until 1908 the Protectionists supported the ALP to achieve social reforms and Labor supported the Protectionists when they wanted to increase tariffs on imported goods. Both Labor and the Protectionists linked protection of Australian manufacturing employers to protection of Australian workers.

This cooperation ended in 1909 when the Anti-Socialists combined with the Protectionists to form the Liberal Party. The new party opposed further social reform. Reforms carried out between 1910 and 1913 were the work of a federal Labor government.

**SOURCE 4** From Albert Metin, a Frenchman who visited Australia at the turn of the century

The Australian workman has become a Gentleman ... He changes out of his working clothes at the end of the day, he lodges well, he behaves like a member of decent society. If he has to go to a meeting he will be freshly shaved, neatly dressed and conscious of his appearance ... Many keen Labour men say grace at every meal ... Everyone can read and libraries are plentiful ... Cricket, football, sports of all kinds have their exponents ... I was in Melbourne and Sydney at the time of one test [cricket] series and the crowds waiting for the results were nearly as large as those waiting for the result of a federation referendum which was being decided at the same moment.

## 6.13.3 Lifestyles and leisure

There were enormous differences between the early 1900s and the way we live today. Most working-class people had little time or money for recreation, and there were few labour-saving devices for housework. The main recreation of many men was drinking in hotels. More respectable forms of entertainment included family picnics, short train and ferry trips, dancing, sing-songs around the piano and sporting events, especially cricket and football.

One recreational pursuit that became increasingly popular in the new century was going to the beach. As nineteenth-century Australians looked towards the bush and its characters for inspiration, the 'modern' citizen turned to the sand and the surf. While 'surf-bathing' was initially seen as a loutish or vulgar pastime, in the early 1900s the beach became the place where city dwellers might be endowed with life, health and vigour. In 1907 one Sydney paper described bathers at Bondi Beach as 'decidedly handsome, Roman centurions'. The beach also represented a democratic recreation, free and open to all; a kind of sandy egalitarianism.

**SOURCE 5** Surf bathing at Manly beach, Sydney, c. 1905

Some technological changes were also starting to affect Australians' lives. People with enough money could send telegrams, have gas lights in their homes, travel by steamship and even ride in motor cars. Air travel was only just beginning, with experiments conducted in 1903. The film industry was also in its infancy but the world's first feature film, *The Story of the Kelly Gang*, was made in Australia in 1906. Another popular pursuit had begun.

## 6.13.4 Federal laws and white Australia

One of the first laws passed by the federal government was the *Immigration Restriction Act 1901*. It was designed to prevent non-European migrants from coming to Australia. Under this law, anyone that the government wanted to keep out could be given a dictation test in any language. No matter how many languages an intending migrant knew, officials could always give the test in another language the person did not know. Non-Europeans continued to be admitted to Australia but the Act gave the government important powers to restrict numbers or refuse individuals.

The *Pacific Island Labourers Act* was also passed in 1901. It allowed the Commonwealth Government to **deport** Pacific Islanders. Only those who had lived in Australia since 1879 and those born in Australia were allowed to stay. About 10 000 Islanders were living in Australia in 1901. At the end of 1909 only 1654 had been granted permission to remain, though the actual number still in Australia was nearly 2500.

### Fear of Asia

Most Australians feared Asia's vast population and closeness to Australia. Australia's small numbers and isolation from its British 'motherland' fuelled these fears. World events such as the Russo-Japanese War of 1904–05 added to these fears. During this conflict Japan defeated Russia. To many white Australians this defeat of a white nation by Asians was unthinkable, even though Japan was Britain's ally. Some wondered whether Britain could be trusted, but they also felt they needed Britain's protection.

**SOURCE 6** A 1910 poster for the world's first feature film, *The Story of the Kelly Gang*

## 6.13 ACTIVITY

Using all the sources in this subtopic, examine the extent to which Australian society was changing at this time. In small groups, find several different sources or accounts from the period. Come together as a whole class and discuss your findings. Comment on whether they contest or corroborate your point of view.

**Identifying continuity and change**

## 6.13 EXERCISES

**Historical skills key: HS1** Remembering and understanding **HS2** Sequencing chronology **HS3** Using historical sources as evidence **HS4** Identifying continuity and change **HS5** Analysing cause and effect **HS6** Determining historical significance

### 6.13 Exercise 1: Check your understanding

1. **HS1** What is the meaning of the term *Commonwealth*?
2. **HS1** What made reforms possible?
3. **HS1** How was 'protection' meant to help Australian manufacturing?
4. **HS1** Explain how Australians benefited from the federal government's early reforms.
5. **HS1** Describe how leisure activities were changing for Australians in the 1900s.
6. **HS1** Identify the powers of the Immigration Restriction Act 1901 and the Pacific Island Labourers Act 1901.
7. **HS1** Explain why Japan's victory over Russia was significant for Australians.

### 6.13 Exercise 2: Apply your understanding

1. **HS3** Identify three details from **SOURCE 1** that could be used to demonstrate the hardships experienced by some Australians.
2. **HS3** Explain how **SOURCE 2** supports **SOURCE 1**.
3. **HS3** In **SOURCE 4**, identify what it is about the Australian workman that seems to surprise Albert Metin.
4. **HS3** Examine **SOURCES 5** and **6**. Identify at least one element in each source that reveals that more Australians were able to enjoy an increasing number of leisure activities in the early 1900s.
5. **HS5** Evaluate the extent to which the new Commonwealth Government was responsible for any changes to Australian society. Try to identify other factors that caused change.
6. **HS6** Was Australia really a 'working man's paradise' by 1914? Give reasons to support your point of view.

Try these questions in learnON for instant, corrective feedback. Go to www.jacplus.com.au.

# 6.14 Thinking Big research project: The Federation Game

online only

## SCENARIO

After a decade of robust campaigning and many compromises, on 1 January 1901 the six British colonies in Australia became a Federation. You will develop a game to celebrate the great achievement of federation and the birth of Australia. Your game should be designed to help you remember the key events, personalities, issues and challenges of the journey to federation.

### Select your learnON format to access:

- the full project scenario
- details of the project task
- resources to guide your project work
- an assessment rubric.

### on Resources

**ProjectsPLUS** Thinking Big research project: The Federation Game (pro-0185)

# 6.15 Review

online only

## 6.15.1 Key knowledge summary

Use this dot point summary to review the content covered in this topic.

## 6.15.2 Reflection

Reflect on your learning using the activities and resources provided.

### on Resources

**eWorkbook** Reflection (doc-31706)
Crossword (doc-31707)

**Interactivity** Australia (1750–1918): From colonies to nationhood crossword (int-7640)

## KEY TERMS

**affiliated unions** unions linked with other unions through a wider umbrella organisation
**Australian Council of Trade Unions (ACTU)** the peak union organisation in Australia
**bookkeeping** keeping records of financial accounts
**British Dominion** a self-governing territory belonging to the British Empire
**cesspits** pits into which householders with no toilets could empty their waste, which was later collected by workers known as nightmen
**Crimean War** war fought between Britain and its allies and Russia, 1853–56
**deport** to forcibly remove someone from a country
**dummies** people secretly acting for squatters, who selected land and later sold it to the squatters
**egalitarian** believing in equality
**federation** movement of colonies to form a nation
**grazing** pasture to feed cows and sheep
**impound** to confiscate
**minority government** a government that has fewer than half the seats in a lower house of parliament
**parliamentary representation** the representation of people's views and interests in parliament through elected delegates
**peacocking** buying up land around creeks and rivers to make the rest of the area useless to selectors
**republicanism** the belief that a country should be a republic (where the country has an elected or appointed head of state), not a monarchy (where the head of state is a king or queen)
**shilling** a unit of Australian currency until decimal currency was introduced. There were 12 pence to a shilling and 20 shillings to a pound.
**socialism** a political system in which the government controls the economy to ensure greater equality
**stockade** a fortified enclosure
**suffrage** the right to vote
**sweated labour** workers exploited by being made to work for long hours and with low pay
**tariff** a duty charged on imports
**telegraph** device for sending messages over long distances

# 6.10 SkillBuilder: Analysing cartoons

## 6.10.1 Tell me

Historical sources help us understand the way people in the past thought and felt about their lives. The way we evaluate these sources shapes our understanding of the past.

### Analysing cartoons as evidence

Artworks, photographs and illustrations all tell us useful things about the values, attitudes and beliefs of people in the past. Political cartoons can be powerful evidence of how people thought and felt about their lives. In the nineteenth century, most cartoons were ink drawings created for newspapers or magazines to provide humorous or critical comment on current events and issues. (Some of the best cartoons were able to both amuse and inform.) *The Bulletin* often used cartoons to promote ideas about republicanism, White Australia, the 'bush ethos', nationalism and trade unionism. Some of the strongest political cartoons appeared in trade union newspapers such as *The Sydney Worker* or the Victorian *Champion*.

### Interrogating the source

Care should be taken when analysing any historical source. You should always be prepared to ask questions about them. In relation to primary sources like political cartoons, these questions might be:

- How many people read the publications?
- What were the specific events at the time?
- How typical were these viewpoints of the period?

Remember, it is reasonable to assume that not all readers of a publication would have agreed with the opinions expressed in every image, and that there would be a range of views or perspectives on any one issue.

While cartoons can be very useful sources of evidence, it is important to recognise that they use caricatures of individuals or groups (exaggerating certain characteristics). They also make fun of political figures or draw certain types of people in heroic or critical ways. The cartoons that follow show these techniques.

### How to analyse and evaluate a historical source

#### Step 1

Scan the source for information:

- Who produced it?
- What type of source is it?
- When and where was it created?
- What subject does it discuss?
- What point of view does it put forward?
- How is this point of view conveyed? (Think about the images, text, the use of caricature or stereotypes.)
- What is its purpose and intended audience? (Who was it aimed at? What was it trying to say/what point was it making?)

This **initial analysis** is very important and is an excellent starting point for becoming familiar with the process of analysing political cartoons.

#### Going further: working like a historian

To analyse a cartoon in more detail you can look at the context, draw conclusions about the source, and think about its value as a historical source. The following steps take you through this more complex analysis.

#### Step 2

Provide some **context**. This involves looking much more closely at who produced the source, when and where it was made and why it was created.

- What was happening at that time and what are the circumstances that led to the creation of this viewpoint?
- What else do you need to find out about that time period to fully appreciate the value of the source?

### Step 3

Begin **drawing conclusions about the source**. This involves thinking about what it suggests about the people, events or issues of the time.

- What does it reveal about the period?
- Can you define the particular perspective the source is presenting?
- What are the source's strengths and weaknesses as evidence?
- Are there any ideas, images or terms that need further exploration?
- Which perspectives are not included?
- Whose views have been left out?

### Step 4

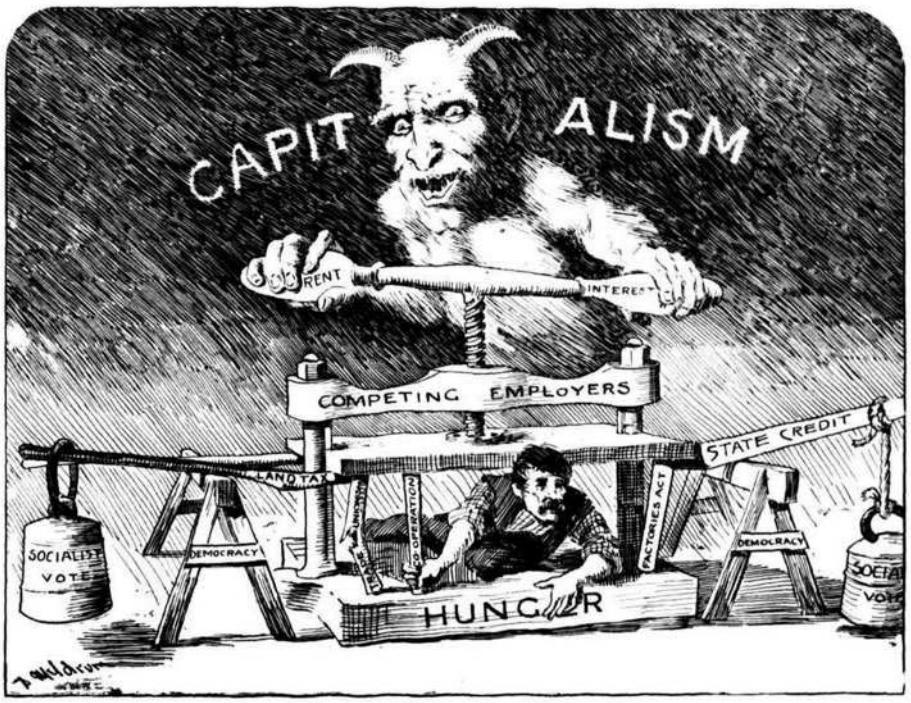
**Determine the source's value as evidence**. You could start by asking yourself how typical it might be.

- Compare the source with other material from the period, looking for areas of agreement (corroboration) or disagreement (contest). Try to establish the reasons for any similarities or differences.
- Ask yourself how you would use the source as evidence to answer a question about the period.
- What gaps in information have you found?
- What sort of further research is required?

## 6.10.2 Show me

This process is explored in relation to the **SOURCE 1** cartoon.

**SOURCE 1** Ambrose Dyson, 'Our Industrial System', *Champion*, 14 September 1895. Courtesy State Library of Victoria.




OUR INDUSTRIAL SYSTEM.

### Step 1

Find out about the past: conduct the **initial analysis**.

- *When and where was it created?*
  This was drawn by Ambrose Dyson and published in *Champion* on 14 September 1895.
- *What subject does it discuss?*
  It is concerned with relations between workers and employers.
- *What point of view does it put forward?*
  It suggests that workers are helpless victims of the strength and greed of competing employers.
- *How is this point of view conveyed? (Think about images, text, caricature or stereotypes.)*
  This is conveyed by the size of the devilish figure of 'capitalism', squeezing the worker flat to the board of 'hunger' with rents and interest rates. The worker's only protection is the weight of the 'socialist vote' and the levers of 'land tax' and 'state credit'.
- *What is its purpose and audience? (Who is it aimed at? What point is it making?)*
  Dyson is essentially saying that 'our industrial system' is unfair and unjust. The cartoon would have been published not only to gain sympathy for workers but also to inspire support for the labour movement and unionism.

### Going further: working like a historian

### Step 2

**Determine context.**

- *What was happening at that time and what are the circumstances that led to the creation of this viewpoint?*
  The publication *Champion* was a working-class socialist publication based in Melbourne. Ambrose Dyson was only 19 years old when he drew this cartoon. The power of this cartoon, however, lies in its timing: 1895. This marks the end of the period of major strikes that were a disaster for workers and unions. Working with colonial governments, employers' associations humiliated unions. Troops and police were used in confrontations with workers, non-union 'scab' labour was employed, union membership fell and after four years of economic recession more than a third of all workers in Australian cities were unemployed.
  The sense of helpless workers being crushed by capitalism is clearly expressed. The cartoon's purpose is possibly to create sympathy for workers while criticising the heartless evil of the 'industrial system' that favours the evil of 'capitalism'.

### Step 3

**Draw conclusions.**

- *Can you define the particular perspective the source is presenting?*
  This cartoon is obviously a fairly extreme, bitter image of despair, published in a radical workers' newspaper.
- *What are the source's strengths and weaknesses as evidence?*
  Its strength lies in its depiction of the helplessness and vulnerability of many workers at the time who faced hunger, unemployment and poverty. Its depiction of 'capitalism' as the devil is both a strength and a weakness: it is a strong and memorable image of the ruthless behaviour of employers during the strikes, but its weakness is that it did not reflect the fact that many employers were sympathetic to the workers they employed and did their best to keep on as many as possible.
- *Are there any ideas, images or terms that need further exploration?*
  With so many workers unemployed at the time, it is possible that such sentiments were widespread, but more research is needed to confirm this.
- *Which perspectives are not included? Whose views have been left out?*
  Positive views of the humanity of employers have been omitted; it is a pessimistic view of the place of the worker in society.

### Step 4

**Determine value.**

- *Compare the source with other material from the period, look for areas of agreement (corroboration) or disagreement (contest) and try to establish the reasons for any similarities or differences. Ask yourself how you would use the source as evidence to answer a question about the period.*

  This is obviously one example of working-class despair and pessimism after the great strikes of the 1890s and four years of a severe depression. Its value lies in its expression of the helplessness of workers and the way in which it blames the evil of capitalist employers for their hardships.
- *What gaps in information have you found?*

  We don't know if the attitudes of this cartoon were typical of the decade or limited to 1895.
- *What sort of further research is required?*

  Such an image could be tested by looking at other images of bosses and workers at the time, as well as by considering working-class wages and conditions. You could also consider images produced before the strikes, as well as those made after the formation and early success of the Australian Labor Party.

## 6.10.3 Let me do it

Complete the following activities to practise this skill.

### 6.10 ACTIVITIES

1. Using the questions in the Tell me section, and following the example from the analysis of **SOURCE 1**, complete the tasks below for **SOURCES 2** and **3**. Complete step 1, and then if you are completing a more detailed analysis continue to steps 2, 3 and 4.

   **Step 1**

   Make an initial analysis of each based on the information provided.

   Going further: working like a historian

   **Step 2**

   Context: find out what you can about who produced it, what was happening at the time and why it was created.

   **Step 3**

   Draw some conclusions about what the image suggests and whose perspective it is putting forward. What does it reveal or suggest about the period?

   **Step 4**

   Determine its value as evidence: how does it compare with the other sources, including **SOURCE 1**? What are the differences and similarities in the way it presents employers, workers and their relationships? How is it useful as evidence?
2. Based on what you have learned in this SkillBuilder, apply your skill in analysing cartoons to answer the following questions.
   (a) What do these images suggest about relations between employers and workers?
   (b) What conclusions can you draw about how workers thought of themselves?
   (c) How do these cartoons add to our understanding of the results of the strikes of the 1890s?
   (d) How might employers have felt when these cartoons were published? Do you think that cartoons like this are effective in putting forward ideas?

**SOURCE 2** Livingstone Hopkins, 'The Labour Crisis', *Bulletin*, 16 August 1890. Courtesy Monash University **Library** Rare Books. This cartoon was on the cover of the *Bulletin* in the month the strikes began. 'Capital: "See here, my man, one of us must either go back or else lie down and let the other walk over him. Now which of us shall it be?" (And that is now the question.)'

**SOURCE 3** Lionel Lindsay, 'The Forge', *Tocsin*, 21 October 1897. Courtesy State Library of Victoria. The optimism and strength of the worker has returned. Increasing union membership and the formation and success of the Labour Party has had an influence. Nevertheless, there would have been very few blacksmiths still in operation in 1897.

# 6.14 Thinking Big research project: The Federation Game

## Scenario

On 1 January 1901, the six British colonies in Australia became a federation. Edmund Barton was sworn in as the new nation's first prime minister. Australia's first Federal Parliament met on 9 May 1901 to begin the task of drafting the laws for the new nation. Federation was a victory over the many political, economic and social differences that had increasingly divided the colonies from the time of the first European settlement. Federation was finally achieved after a decade of robust campaigning, countless public meetings and many compromises.

There were many issues standing in the way of unity and nationhood. Strong loyalties to specific colonies meant that many people identified as either Tasmanians, New South Welshmen or Queenslanders rather than as Australians. In referendums held in 1898 and 1899 the public was asked to vote 'Yes' or 'No' to a proposed Australian constitution. In the 1898 referendum less than half the eligible voters bothered to even participate, showing a total lack of interest in the process of nation building. The question of free trade or 'protection' divided New South Wales and Victoria; New South Wales politicians believed Sydney should be the nation's new capital while those in Victoria thought it should be Melbourne; the other colonies believed it should be neither of those cities. Even the railway networks between Victoria and New South Wales were divided by the different gauges of the railway tracks.

Despite the many sources of opposition to federation, at the beginning of the new century Australia succeeded in becoming the only nation on Earth to occupy a whole continent. Ahead lay the great task of building a new nation, beginning with the creation of symbols to represent Australia; a flag, a coat of arms, a currency, postage stamps and a national capital.

## Task

Your task is to develop a game to celebrate the great achievement of federation and the birth of Australia. Your game should be designed to help you remember the key events, personalities, issues and challenges of the journey to federation.

You will need to decide what format you will use to create your Federation Game. You may choose a card game based on questions and answers. To help you gather design ideas, find out the rules of games such as Snap, Bingo or Concentration, and how they could be adapted to a test of federation knowledge. You could design your pack of cards to have matching pairs based on dates matching events, personalities matching faces, issues and questions matching answers. Alternatively, you may design your Federation Game using the model of a board game such as Trivial Pursuit or Snakes and Ladders. The snakes and ladders could become question card opportunities, with a correct answer sending a player up a ladder, and an incorrect response sending a player down a snake. The important thing is to create an interesting and engaging game that will test players' knowledge of the history of the federation.

## Process

- Open the ProjectsPLUS application in the Resources for this topic. Click on the **Start new project** button to enter the project due date and set up your project group with a partner to allow you to work collaboratively. Save your settings and the project will be launched.
- With your partner you will conduct your research of the factual details and develop the design of your game. Navigate to the **Research forum**, where you will find starter topics loaded to guide your research. You can add further topics to the research forum if you wish. This is where the creation of your Federation Game begins!
- Start your research by revisiting the content in this topic to ensure you are familiar with the key events, personalities and issues of this period in Australia's history.

- Locate other sources of information and images to add depth to your knowledge of this topic. Research the most significant events and obstacles to federation, and the order in which they occurred. Construct a timeline from your research so that you have a clear chronology of events, then add information about the inspirational and influential personalities who had a major role in shaping the birth of our new nation.
- Add your research notes chronologically and under headings in the relevant topic pages in the Research forum. You can view, share and comment on your partner's research findings. Be sure to enter the source details for any additional information you find online or through other sources. When you have completed your research, you can print out the **Research report** in the Research forum to easily view all the information you have gathered, if you wish.
- Research a range of game ideas to establish how you can most creatively develop an engaging and fun way of remembering federation facts and ideas. You could create your game with cardboard cards and a playing board, or you may choose to construct your game digitally. The choice is yours. Remember to create a 'How to play' instruction sheet to accompany your game.
- When complete, present your game to other members of your class. You may like to conduct a 'games day' to provide an opportunity for everyone to enjoy learning more about this pivotal period in Australia's history.

## on Resources

**ProjectsPLUS** Thinking Big research project: The Federation Game (pro-0185)

# 6.15 Review

## 6.15.1 Key knowledge summary

### 6.2 Examining the evidence

- In the late nineteenth century, newspapers were the only form of mass media; they now provide historians with valuable sources.
- Other useful sources include paintings, drawings, cartoons and sketches.
- Cartoons can reveal a lot about popular attitudes and opinions.
- Photography provides a new and different source of evidence in this period.

### 6.3 Towards democracy: Eureka and political rights

- In 1851, gold was discovered in New South Wales and Victoria.
- The Victorian gold rushes were extensive and hundreds of thousands of hopeful migrants came to Australia.
- The population in Victoria increased seven times and its economy grew significantly, transforming it into one of the most famous places in the world.
- The Victorian government imposed a heavy licence fee on every miner. It was hugely unpopular and caused immediate protest.
- There were three years of clashes over the licence fee and its collection by police, culminating in a rebellion at Ballarat.
- Miners erected a stockade at Eureka and swore allegiance to a new flag: the Southern Cross.
- After three days of tension, troops and police attacked the stockade, killing at least 27 miners. Six troops also died.
- As a result, the licence fee was abolished and replaced with a 'miner's right' and an export duty on gold.

### 6.4 Whose Australia? Free selectors vs squatters

- Selection Acts were introduced to give ordinary people access to land and independence.
- The Acts failed as squatters used their wealth and education to work around the system.
- This condemned many small landholders to lives of poverty on unproductive small plots of land.

### 6.5 An Australian legend

- The Kellys were one of the many families struggling to survive on a selection in rural Victoria.
- Ned Kelly became Australia's last and most famous outlaw, enjoying popular support.
- When Kelly killed three policemen at Stringybark Creek, he triggered a police hunt across Victoria and New South Wales that lasted nearly two years.
- A final confrontation at Glenrowan saw Kelly captured and the three other members of his gang killed, two of them teenagers.
- Kelly was sentenced to hang on 11 November 1880.

### 6.6 Marvellous Melbourne: a city giant

- Many people from rural communities drifted to major cities to improve their lives.
- Many went to Melbourne, whose growth and splendour made the city world famous.
- Sustained economic growth of the 1890s and the substantial increase in population brought significant development and business to the bustling and energetic city.
- Wealthy residents paraded their success and status on city streets and much of Melbourne was rebuilt in a grand and decorative style.
- However, petty crime, the lack of proper sewerage, and high rates of disease made city living hazardous for some.

### 6.7 Working in cities and towns

- Life was still very difficult for many ordinary city workers.
- Factories were cramped and often uncomfortable or dangerous, working hours were long, and large numbers of children were employed, for very low wages.

- There was little security for the elderly or the sick.
- Those who worked as servants of the wealthier classes were particularly vulnerable, though a shortage of domestic workers in the 1880s improved their bargaining power.
- New technologies brought some changes in working patterns at this time, with more mechanised processes and new clerical and administration jobs.
- The introduction of electricity and telephones seemed to herald a new age of living and working.

### 6.8 Trade unions and political parties

- Trade unions were an increasingly important part of the Australian economy in the nineteenth century.
- The eight-hour day was won by Melbourne's building trades in 1856 and extended to many other workers over the next 35 years.
- A severe depression in the 1890s resulted in a series of great strikes in several of Australia's major industries.
- Employers wished to hire non-union labour, to limit the unions' power.
- The unions fought to retain hard-won improvements to wages and conditions.
- The shearers' strike in Queensland in 1891 saw pastoralists try to cut wages, destroy unionism and employ cheaper, often Chinese, labour.
- Pastoralists were supported by government troops and police who stood against unionists with machine guns.
- Many unionists were arrested.
- The Australian Labour Party was formed to represent workers' interests in parliaments across Australia.

### 6.9 Nationalism and Australian identity

- With the ideas of national identity and character being discussed in Europe, Australians also became increasingly interested in the 'Australian character' and what being 'Australian' might mean.
- Popular expressions in art and literature emphasised the qualities of the bush worker, struggling heroically against the hardships of the Australian landscape.
- Henry Lawson and A.B. (Banjo) Paterson became two of the more famous writers. They had their poems and stories published in the radical magazine *The Bulletin*.
- Australian painters reinforced similar ideas in their impressions of the Australian landscape and became known as the *Heidelberg School*, named after one of their artist camps near Melbourne.
- Such an endeavour was very exclusive, however, as women, Aboriginal peoples, non-European migrants and city residents were largely ignored in these representations.

### 6.11 Voting rights for women

- There was discussion about the type of nation Australia might be, as well as how democratic Australia should be.
- Women's groups across Australia campaigned for political representation, including the right to vote and the right to stand for election.
- Their broader aims included a variety of social, economic and political reforms that would make society kinder, fairer and safer for all.
- Women won the vote in South Australia in 1894, Western Australia in 1899, federal elections and New South Wales in 1902, Tasmania in 1903, Queensland in 1905 and Victoria in 1908.

### 6.12 Federation

- The road to becoming a nation through federation was a difficult one.
- Initially it was motivated by concerns about defence and non-European immigration.
- The discussion about the shape of an Australian federation became more widespread.
- As the majority of Australia's population was now native-born, with shared language, culture and British heritage, it seemed that a unity of states was inevitable.

- Alfred Deakin and Isaac Isaacs were prominent leaders with a vision of Australia as a modern nation.
- Practical and economic benefits were also important as a result of the severe depression of the 1890s.
- After a series of conferences, conventions and referendums in every state, the Australian Constitution was written and sent to Britain for approval.
- A British Act of Parliament was passed, Queen Victoria gave her royal assent, and the Commonwealth of Australia was born.

### 6.13 The early Commonwealth

- The new Commonwealth Government set about introducing a number of important reforms to improve the lives of all Australians. These included: mechanisms to resolve industrial disputes, a minimum wage, pensions for the old, injured or sick, and a maternity allowance.
- The idea of a 'working man's paradise' was popular but there were still many who endured poor living conditions and low wages.
- Australians began to enjoy an increasing range of leisure and recreational pursuits.
- One of the first laws passed by the federal government was the *Immigration Restriction Act 1901*. It aimed to prevent non-European migrants from coming to Australia.
- A reliance on Great Britain for defence was still seen as an essential part of Australia's security.

## A timeline of Australia, 1851–1913

**1851**
Gold is discovered in Victoria, sparking one of the world's great gold rushes.

**1856**
The principle of 'one man, one vote' is instituted in the parliaments of Victoria, New South Wales and South Australia.

**1860–61**
The first free selection Acts are passed in Victoria and New South Wales.

**1880**
The bushranger Ned Kelly is hanged in Melbourne.

**1891**
The Federal Convention in Sydney proposes a constitution. Joseph Cook and other Labor members of Parliament are elected in New South Wales.

**1894**
South Australia leads the way in granting women's voting rights.

**1898**
The First Constitution Bill Referendum is held.

**1907**
The basic wage is established.

**1913**
The foundation stone of Canberra, the new national capital, is laid.

CE

1850

1860

1870

1880

1890

1900

1910

1920

CE

**1854**
Thirty diggers are killed at the Eureka Stockade.

**1877**
An Australian cricket team defeats the English team by 45 runs in the first test match to be played internationally, giving rise to test cricket.

**1883**
Premiers agree to the setting up of a federal council to work out a federal constitution.

**1890**
The Great Strikes of the 1890s begin and continue to 1894.

**1892**
Gold is discovered at Coolgardie in Western Australia.

**1899**
Australian colonies send troops to the Boer War.

**1901**
Commonwealth inauguration marks the birth of the nation.
The Commonwealth Parliament opens in Melbourne and passes the *Immigration Restriction Act 1901*.

## 6.15.2 Reflection

Complete the following to reflect on your learning.

### 6.15 ACTIVITIES

Revisit the inquiry question posed in the Overview:

**Bushrangers, gold diggers and federation. How did a far-flung convict colony become a thriving nation?**

1. Now that you have completed this topic, what is your view on the question? Discuss with a partner. Has your learning in this topic changed your view? If so, how?
2. Write a paragraph in response to the inquiry question, outlining your views.

### on Resources

**eWorkbook** Reflection (doc-31707)
Crossword (doc-31706)

**Interactivity** Australia (1750–1918): From colonies to nationhood crossword (int-7640)

### KEY TERMS

**affiliated unions** unions linked with other unions through a wider umbrella organisation
**Australian Council of Trade Unions (ACTU)** the peak union organisation in Australia
**bookkeeping** keeping records of financial accounts
**British Dominion** a self-governing territory belonging to the British Empire
**cesspits** pits into which householders with no toilets could empty their waste, which was later collected by workers known as nightmen
**Crimean War** war fought between Britain and its allies and Russia, 1853–56
**deport** to forcibly remove someone from a country
**dummies** people secretly acting for squatters, who selected land and later sold it to the squatters
**egalitarian** believing in equality
**federation** movement of colonies to form a nation
**grazing** pasture to feed cows and sheep
**impound** to confiscate
**minority government** a government that has fewer than half the seats in a lower house of parliament
**parliamentary representation** the representation of people's views and interests in parliament through elected delegates
**peacocking** buying up land around creeks and rivers to make the rest of the area useless to selectors
**republicanism** the belief that a country should be a republic (where the country has an elected or appointed head of state), not a monarchy (where the head of state is a king or queen)
**shilling** a unit of Australian currency until decimal currency was introduced. There were 12 pence to a shilling and 20 shillings to a pound.
**socialism** a political system in which the government controls the economy to ensure greater equality
**stockade** a fortified enclosure
**suffrage** the right to vote
**sweated labour** workers exploited by being made to work for long hours and with low pay
**tariff** a duty charged on imports
**telegraph** device for sending messages over long distances

# 7 China (1750–1918)

## 7.1 Overview

How did foreign influence transform China from isolated monarchy to modern republic?

### 7.1.1 Links with our times

In 2012, relations between China and Japan were strained when both countries laid claim to the Senkaku Islands, a small island group in the East China Sea. The tensions remained political and did not result in any military conflict, but it was certainly not the first time that the region had been the site of tension. The episode served as a reminder of the sometimes volatile relations that China has experienced with its regional neighbour and the often complicated dealings it has had with foreign powers for hundreds of years.

For two thousand years, up to 1911, China was a unified empire governed by successive generations of ruling dynasties. The Qing was the last imperial dynasty to rule China. When it collapsed in 1911 after a series of revolutions, more than two thousand years of imperial rule came to an end.

The period of Qing rule coincided with Europe's expansion of trade and acquisition of colonies. As the Qing dynasty attempted to restrict foreign access, conflict with foreign countries became inevitable.

**on Resources**

**eWorkbook** Customisable worksheets for this topic

**Video eLesson** China (1750–1918) (eles-2397)

**LEARNING SEQUENCE**


**7.1** Overview
**7.2** Examining the evidence
**7.3** Qing China
**7.4** Living under the emperor
**7.5** Arrival of the foreigners
**7.6** Expansion, trade, conflict
**7.7** Economic and social effects
**7.8** Resistance in China
**7.9** Continuity and change
**7.10** **SkillBuilder:** Analysing cause and effect online only
**7.11** **Thinking Big research project:** Key events visual summary online only
**7.12** **Review** online only


To access a pre-test and starter questions and receive immediate, **corrective feedback** and **sample responses** to every question, select your learnON format at www.jacplus.com.au.

A timeline of key events in China, 1750–1918

CE

1790

**1792**
Britain sends Sir George Macartney to China in an attempt to encourage diplomatic relations.

1800

1810

**Early 1800s**
Despite an import ban on opium,the British smuggle large amounts of it into China. Much of the population becomes addicted.

1820

1830

**1839**
The First Opium War begins.

1840

**1842**
The First Opium War ends with the signing of the Treaty of Nanjing.

**1847–52**
Natural disasters strike China, placing great strain on the government.

1850

**1850**
The Taiping Rebellion begins.

**1856**
The Second Opium War (Arrow War) begins.

1860

**1860**
The Second Opium War (Arrow War) ends.

**1861**
The new Empress Dowager Cixi comes to power.

**1864**
The Taiping Rebellion is finally subdued.

1870

1880

1890

**1894–5**
Sino-Japanese War

**1898**
The Hundred Days' Reform attempts to modernise China.

1900

**1899–1901**
Boxer Rebellion

**1908**
The Dowager Empress Cixi dies.

1910

**1911**
Revolutions erupt across much of China.

**1912**
Pu Yi, the last Chinese emperor, abdicates.

1920

CE

# 7.2 Examining the evidence

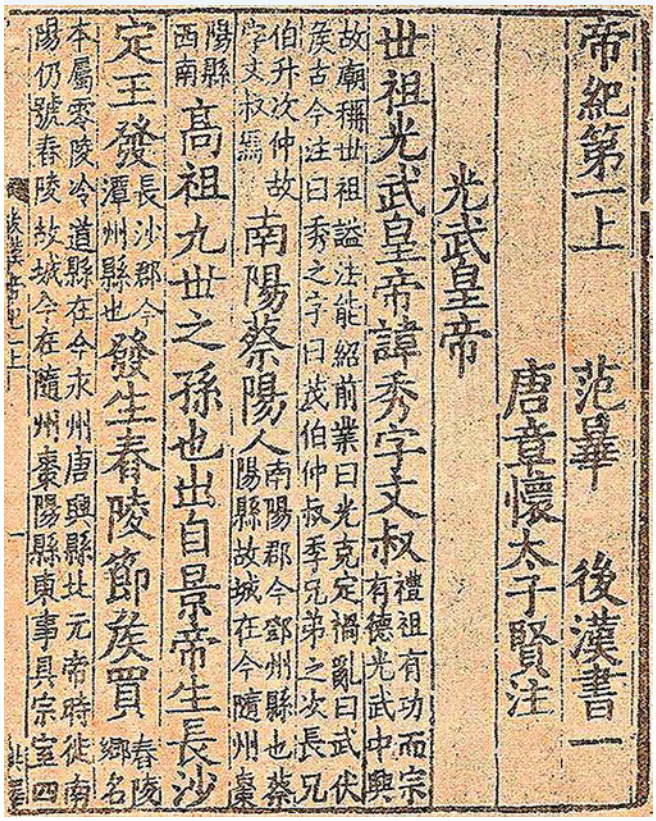
## 7.2.1 How do we know about China (1750–1918)?

After China started to open up to foreign influence, traders engaged in commercial activity with foreigners, and international diplomats negotiated treaties with other countries. As a result, this period is richly documented in both primary and secondary sources. The many written sources give us the opportunity to study many aspects of Chinese society during this vibrant age. The development of photography during the nineteenth century also provided a new medium through which to study many of the key events.

### Chinese sources

Traditional Chinese society placed great importance on the study of history, in the belief that knowledge of the past influenced present behaviour. As a result, historians of China are able to draw on a diverse range of sources. Foremost of these are the dynastic histories, written by educated scholars to record the events of preceding dynasties. Many different scholars worked on the histories, so they provide a range of perspectives of the same event. The Chinese belief in the **mandate of heaven** imposed a limitation on the dynastic histories, however. A dynasty, ruling family or lineage collapsed, it was believed, because the gods were displeased with the emperor. So the histories sometimes examined the various reasons for the downfall of the previous dynasty. This provided the current emperor with a kind of moral compass, a guide to follow to avoid the fate of earlier emperors. Despite this limitation, the dynastic histories are very valuable documents.

**SOURCE 1** This image shows a page from the *Han Dynastic History*, a classical Chinese history text completed in 111 CE.


帝紀第一上

范曄 後漢書一

唐章懷太子賢注

世祖光武皇帝諱秀字文叔

光武皇帝

故廟稱世祖謚法能紹前業曰光克定禍亂曰武伏戾古今注曰秀之字曰茂伯仲叔季兄弟之次長兄伯升次仲故字文叔焉

南陽蔡陽人南陽郡今鄧州縣也蔡陽縣故城在今隨州棗陽縣西南

高祖九世之孫也出自景帝生長沙定王發長沙郡今潭州縣也發生春陵節侯買春陵鄉名本屬零陵今道縣在今永州唐興縣北元帝時徙南陽仍號春陵故城今在隨州棗陽縣東事具宗室四

**SOURCE 2** This painting from 1742 shows a romanticised view of China that was common in Europe in the eighteenth century. Compare it with the portrayal of China in **SOURCE 3** in subtopic 7.4.

## ‘Foreign’ sources

Information about China spread to the world beyond its borders mostly by way of Western visitors, who tended to see in China a reflection of more familiar European empires. The emperor was seen as a king who ruled over a nation of loyal subjects. The writings of Jesuit missionaries such as Francis Xavier in the sixteenth century were important in influencing the attitude of foreigners towards China. But as relations between China and the West deteriorated in the nineteenth century, the portrayal of the Chinese became less favourable. The view of the emperor changed from that of a noble king to that of a power-hungry **despot**. Despite these changing views, there are still many documents from the time that are useful to historians. These include letters, diary entries and copies of the treaties that were signed.

**SOURCE 3** A picture paints a thousand words. This photograph of Canton Harbour in the mid nineteenth century is more evocative than most written descriptions could be.

## Photographs

The invention of photography in the nineteenth century provided a completely new medium through which to interpret historical events. It gives an opportunity to observe, almost unfiltered, the events being studied. The Second Opium War was one of the first wars to be recorded photographically. Much can be learned from photographs that other sources cannot reveal. Even everyday scenes take on a new dimension when seen in a photograph. A common error, however, is to assume that photographs are necessarily reliable historical sources because they show real events. It is important to keep in mind that behind every camera there is a photographer with his or her own intentions and perspectives.

**SOURCE 4** This photograph shows the aftermath of a battle in 1860 during the Second Opium War. Before photography, scenes like this could only be imagined by most people.

## 7.2 EXERCISES

**Historical skills key: HS1** Remembering and understanding **HS2** Sequencing chronology **HS3** Using historical sources as evidence **HS4** Identifying continuity and change **HS5** Analysing cause and effect **HS6** Determining historical significance

### 7.2 Exercise 1: Check your understanding

1. Why did traditional Chinese society place great importance on the study of history?
2. What were 'dynastic histories'? How could they be useful to the emperors who studied them?
3. How did Western visitors initially view Chinese culture?
4. How did the Western view of China change over time?
5. How did photography change the way history was recorded and studied?

### 7.2 Exercise 2: Apply your understanding

1. **HS3** Identify three reasons why the dynastic histories, like that shown in **SOURCE 1**, are useful to historians.
2. **HS3** Examine **SOURCE 1** and explain what the limitations are of this kind of source.
3. **HS3** Describe the attitude towards China as it appears in **SOURCE 2**.
4. **HS3** Why is it important to remember that behind every photograph there is a photographer?
5. **HS3** In what ways could photographs like those shown in **SOURCES 3** and **4** be unreliable?
6. **HS3** It is often said that photographs do not lie. Is this actually true? Discuss in groups and write a paragraph to explain your thoughts.

Try these questions in learnON for instant, corrective feedback. Go to www.jacplus.com.au.

# 7.3 Qing China

## 7.3.1 Isolation

Until the seventeenth century, China was largely unknown to the European world. There had been sporadic trade with other countries and regions, and Chinese explorers had undertaken voyages throughout the region, but outside China little was known of Chinese beliefs, cities and society. Within its borders, however, China was a diverse country with a very large population and a complex culture. One reason that China remained isolated was its geographic location (see **SOURCE 1**). To the east lay the vast Pacific Ocean; to the south lay mountain ranges and dense jungles; in the north was the desolate Gobi Desert; and to the west towered the mountains of the Tibetan Plateau — the 'roof of the world'.

**SOURCE 1** This map shows the geographical extent of the Qing Dynasty.

***Source:*** Spatial Vision

In addition, the territorial extent of the Qing dynasty's rule played an important part. Its borders stretched further than at any other time in China's history. Its vast size gave it access to a wide variety of natural resources and arable land. It did not need to look elsewhere for materials or goods because it could support its growing population on its own. Its unique location and self-sufficiency allowed Chinese culture to develop in isolation from outside pressures and influences, and also helped nurture a feeling of superiority to foreigners.

## Naming the emperor

The naming of monarchs in China can be difficult to follow because the monarchs went by several names. They had their personal name, their 'era' name, and even another name that was used after their death. Their personal name was never used after they became the monarch, and was in many cases forbidden to be used at all. The name given to the new monarch was known as the 'era name' and was intended to reflect the political situation of the time. This is why an emperor would be referred to as, for example, the 'Guangxu emperor' or simply 'Guangxu', but not 'emperor Guangxu' — the name reflects the era of their reign, not the individual. Needless to say, the chosen era name was one that would portray a positive image of the reign regardless of the actual situation. For example, later in this topic you will see reference to the 'Xianfeng emperor'. The name 'Xianfeng' means 'universal prosperity', but as you will discover, this was certainly not the case when he inherited the throne in 1850.

**SOURCE 2** This illustration shows the Kangxi emperor, the fourth emperor of the Qing dynasty. It is from a silk scroll that today hangs in the Palace Museum, Beijing.

## Confucianism

At the core of China's traditional beliefs was Confucianism. The philosopher Confucius (551–479 BCE) came from a noble but poor family. His father died when he was young and Confucius struggled to acquire an education. As he grew older he developed strong beliefs about society. He taught that the family was the basic building block of society and that it was the duty of the ruler to behave like a father to his people. He believed that each person should adopt and live by certain moral values. People should respect and obey their parents, and rulers should be chosen because of their wisdom, rather than their wealth. Confucius taught the 'five virtues': humanity, honesty, knowledge, integrity and manners. With its focus on harmonious relationships, Confucianism disdained military pursuits and war, believing they were not needed when Confucian values were in balance.

Over time, Confucian values took hold in China, supplanting Daoism as the main belief system by the second century BCE. Confucian beliefs dominated Chinese society from the second century CE and were incorporated into the way both the family and the state were run. With such a rigid philosophical system in place, rebellion or discontent seemed unimaginable, yet there were many rebellions, uprisings and dynastic changes over the centuries.

**SOURCE 3** The flag of the Qing dynasty

## 7.3.2 Government, art and economy

### Government

In traditional Chinese society the emperor ruled with the 'mandate of heaven'. This meant his rule was legitimate as long as the gods judged his actions to be in harmony with the natural order of the universe. He had to rule with fairness and wisdom or risk a loss of his mandate. Famine caused by crop failure due to flood or drought might indicate a loss of mandate, justifying the emperor's overthrow.

Helping the emperor maintain power were the Grand Council, made up of the nobility and high-ranking bureaucrats, and the six Boards of Civil Office that controlled various aspects of daily life — revenue, punishment, war, work, ceremonies and civil affairs. Holders of these offices were selected through a rigorous examination process to ensure the most talented candidates were chosen. Specific knowledge of the area they were assigned to was not always deemed to be necessary. There was no foreign office because foreigners were considered barbarians with whom contact should be restricted.

In 1644 the last imperial dynasty to rule China, the Qing (also known as the Manchu) dynasty, came to power. Under the Qing the country was divided into 18 provinces, each ruled by a governor. The provinces, in turn, were divided into districts. At district level a district magistrate governed a group of local neighbourhoods, each made up of roughly one thousand homes. It was expected that households would report local crimes, as a whole neighbourhood could be severely punished if such crimes were not reported. Similarly, an entire village could be held responsible for the lawlessness of a few. This climate of fear helped to dissuade would-be rebels.

### The artful Qing

During the reign of the Qing dynasty, art, architecture and literature became more diverse than under previous dynasties. New materials such as glass and enamel were now used in artworks, but at the same time many craftsmen turned to very old themes and shapes for their art. Painters of the time learned new techniques that Jesuits had developed in Europe during the Renaissance. The technique of perspective and the use of oil-based paints became common during the Qing dynasty.

### Economy

In 1750 China's economy was strong. There had been a period of conflict after the overthrow of the previous Ming dynasty, but as the Qing gained power over all of China, peace was restored. The era of peace, combined with the introduction of a range of new foreign food crops, allowed the population to grow. The export of silk, tea and manufactured goods to Europe gave rise to a time of general prosperity. Although trade with foreign powers was regarded with suspicion, within China people were encouraged to participate in local markets. Until the mid-nineteenth century, the Qing economy could be described as active and growing. But this was to change dramatically.

### 7.3 ACTIVITY

Using an atlas, identify and list the modern-day countries whose territories formed part of Qing China.

**Identifying continuity and change**

### 7.3 EXERCISES

**Historical skills key: HS1** Remembering and understanding **HS2** Sequencing chronology **HS3** Using historical sources as evidence **HS4** Identifying continuity and change **HS5** Analysing cause and effect **HS6** Determining historical significance

#### 7.3 Exercise 1: Check your understanding

1. **HS1** List four geographical features that influenced the isolation of China.
2. **HS1** In what way was China self-sufficient?
3. **HS1** Explain the basic idea of Confucianism in your own words.
4. **HS2** What belief system did Confucianism replace by the second century BCE?
5. **HS1** In your own words, describe the mandate of heaven.

6. **HS1** Why might a famine or flood make an emperor nervous?
7. **HS1** How did the method of punishment help the Qing government keep control over the people?

### 7.3 Exercise 2: Apply your understanding

1. **HS3** Study **SOURCE 1**. Using the scale, estimate the east–west and north–south geographic extent of Qing China.
2. **HS3** Describe the challenges that you think would face the ruler of such a vast empire.
3. **HS3** Look at **SOURCE 3**. Explain why you think a dragon was chosen for the flag of the Qing dynasty.
4. **HS4** From the information in this subtopic, what impression do you get about the nature of change in imperial China? Describe the challenges that could be faced after the arrival of people of different nations.
5. **HS1** Summarise the structure of the Qing government in a simple diagram. How does this help to indicate how much power the emperor held?

Try these questions in learnON for instant, corrective feedback. Go to www.jacplus.com.au.

# 7.4 Living under the emperor

## 7.4.1 Women in traditional China

You have already learned many things about China under the Qing dynasty. For example, it was strongly influenced by Confucianism; the emperor ruled with the 'mandate of heaven'; and the country was divided into provinces and districts. But what did this actually mean for the men, women and children who lived their lives under the emperor?

Confucianism holds that the family is the basic building block of society. Subsequently, women held a largely domestic role in traditional Chinese society and were considered inferior and **subordinate** to men. Such was the status of women in China that in popular traditional literature a female character might even say that in a previous life she was a man but had been reborn a woman to punish her for sins committed in that life. The ideal life of a woman in China was seen in terms of the 'three subordinations'; firstly to her father when growing up, secondly to her husband and lastly to her eldest son after her husband's death.

Marriage in China was less a union between a man and a woman, and more like a union between two families. Therefore, it was organised by the parents of those being married. Their domestic role meant that women were never the head of the household in China; however, a woman's important role in the house was seen as compensation for her exclusion from public affairs.

The subservient status of women in traditional Chinese society was also reflected in the practice of foot binding. Its origins remain unclear but it is thought that the practice was begun to imitate the appearance of a favourite **concubine** of a ninth-century emperor. In any case, foot binding spread from the upper classes and was widely practised across China.

**DID YOU KNOW?**

Foot binding was a painful process, generally commenced when a girl was only five or six years of age. The toes on both feet would be broken (except for the big toes) and then bound flat against the soles of the feet to make a triangular shape. The feet would be forced into small, specially shaped 'lotus shoes'. Over time, as the heel and sole were crushed together, the feet bindings would be made tighter and the shoes smaller. The process took several years to complete, and feet became permanently misshapen.

In spite of these disadvantages some women made their mark on traditional China. Among these women were scholars and poets, but also leaders. The Dowager Empress Cixi ruled China when her very young son inherited the throne in 1861. She eventually ruled on her own until 1908.

Throughout the tumultuous times of the nineteenth century, the demand for women's rights became a powerful factor for unrest. Large numbers of women fought during the Taiping Rebellion in the 1850s (see subtopic 7.6), and at the turn of the twentieth century the Boxer Rebellion (see subtopic 7.8) saw groups of women called the Red Lanterns support the cause of the Boxers. At times, the women even fought. A song from the time celebrated their involvement in the rebellion with the line 'The Red Lanterns and the Boxers are brothers and sisters in revolt; with one heart they fight the foreign officials'.

**SOURCE 1** A bride on her way to her wedding in the early twentieth century. The basket was used to obscure the bride's face in the same way that a veil is used in Western weddings. It was customary that the bride's face would not be seen until she was in her new husband's home.

**SOURCE 2** A 1911 photograph of a woman reveals the effects of years of foot binding.

## 7.4.2 Men in traditional China — the four occupations

Social organisation in imperial China was similar in some ways to Europe's feudal system. All classes were subservient to the emperor. The hierarchical class structure categorised the population into the 'four occupations'. In order of importance, these were:

*Shi* — aristocrats, philosophers and government administrators

*Nong* — farmers; considered important because they grew the food that fed the nation

*Gong* — artists and craftsmen; also valued because they produced goods essential to society

*Shang* — merchants; placed at the lowest recognised level because they did not produce anything but rather profited from others' work.

Prior to the mid-nineteenth century, the four occupations would be almost exclusively occupied by men.

**SOURCE 3** Chinese peasants of the Qing dynasty. This print dates from around 1830.

The 'four occupations' did not formally recognise many groups in society. Rather, they were an idealisation of the social hierarchy and male dominance of the day. The four occupations reflected those who ruled, those who produced, those who created, and those who traded. Some of the many occupations not included are soldiers, priests and other religious clergy, and domestic servants.

## 7.4.3 Children

In China, sons were much more highly valued by their family than daughters. This was because when they married, a son would stay in the family and contribute to its success, but a daughter would not. During times of hardship or famine, a boy's health and wellbeing would be put ahead of that of a girl. Subsequently, many more girls died during harsh times than boys.

At a young age children were schooled in the Confucian virtues of humanity, honesty, knowledge, integrity and manners. Upon reaching about five years of age, peasant boys began helping in the fields and girls began taking part in household chores. For those of higher social standing education continued, although learning was strictly in line with Confucian ideals.

**SOURCE 4** A mid-nineteenth-century photograph of a Chinese man with his children

### 7.4 EXERCISES

**Historical skills key: HS1** Remembering and understanding **HS2** Sequencing chronology **HS3** Using historical sources as evidence **HS4** Identifying continuity and change **HS5** Analysing cause and effect **HS6** Determining historical significance

#### 7.4 Exercise 1: Check your understanding

1. **HS4** How was marriage in traditional China different from how we would view it today?
2. **HS1** What were the 'three subordinations'?
3. **HS1** Why were male children preferred to female children in traditional China?
4. **HS1** Explain the impact that favouring the wellbeing of boys over girls would have on Chinese society.
5. **HS1** How did upbringing differ for peasant-class boys and those of higher social standing?

#### 7.4 Exercise 2: Apply your understanding

1. **HS3** Explain how **SOURCES 1** and **2** reflect the social standing of women in traditional China.
2. **HS3** In what way are these images limited as a historical source?
3. **HS3** Which of the 'four occupations' can you identify in **SOURCE 3**?
4. **HS3** Compare the clothes of the peasants shown in **SOURCE 3** with those of the Kangxi emperor in subtopic 7.3 **SOURCE 2**. What information does this provide about traditional Chinese society?
5. **HS3** Describe the features in **SOURCE 4** that might help to indicate the family's social class.
6. **HS3** Explain how photographs like those in **SOURCES 1**, **2** and **4** provide information to historians in a way that paintings or written sources cannot.
7. **HS4** Discuss the extent to which Confucianism encouraged change in China.
8. **HS6** Evaluate the significance of Confucianism in the everyday lives of citizens in Qing China.

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# 7.5 Arrival of the foreigners

## 7.5.1 Early contact

Foreign influence and interference, beginning in the eighteenth century, had an enduring effect on China. It played a major part in the eventual downfall of the dynastic system and helped bring about the beginning of a new era in Chinese history. It also brought great suffering to a large part of the population, especially through forced trade and the rebellions that arose against foreign influence.

The combination of China's self-sufficiency and the central role played by the rigid ideals of Confucianism generated a feeling of disdain towards foreigners. The Qing dynasty believed that China was at the centre of the world and that foreigners could offer nothing of value. The military system was structured to ensure China was protected from foreign interference. Central to this structure were the 'Banner Armies', so named because the different units were identifiable by differently coloured banners. Developed by the previous Manchu dynasty, the Banner Armies defended the empire against foreign intervention and helped the emperor crush internal rebellion.

**SOURCE 1** An archer from one of the emperor's Banner Armies

The Ming dynasty, which preceded the Qing, was equally scornful of foreigners. Until the sixteenth century the only foreigners to venture to China were merchant adventurers who followed the famous **Marco Polo**, or missionaries hoping to spread Christianity. Small in number, they were regarded as posing no threat; indeed, they were usually looked on merely as curiosities. But in 1514 an interesting convergence occurred. The Portuguese, who had discovered the sea route to the Spice Islands of the East Indies, were regularly trading in South-East Asia for the valuable spices found there. At the same time Chinese merchants were travelling south through the same region to trade silk, porcelain and other items and often used the same harbours as the Portuguese. Impressed with what they saw, and keen to establish trading ties with the Chinese, the enterprising Portuguese followed the **junks** back to China.

Initially their approaches were rebuffed, but as relations improved the Portuguese were permitted to establish a trading post south of the city of Guangzhou (Canton) that came to be known as Macao. This system of opening a limited number of ports to foreign trade became known as the Canton System. Foreigners continued to be regarded as barbarians, but the Portuguese were tolerated largely because they were prepared to pay tribute to the emperor through the giving of gifts or other valuables. The emperor saw this as an acknowledgement of their inferiority.

**SOURCE 2** A sixteenth-century Chinese junk looked similar to this.

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## 7.5.2 Increasing European influence

Once the Portuguese had established trading posts in China, other rival European powers wanted to do the same. The Spanish, Dutch and British also wanted to trade in silk, porcelain, tea and other goods, but their efforts were generally seen by the Chinese as little more than a nuisance. By the late 1700s the British had established themselves as the key foreign trader in China. Their base in India, as well as the popularity of tea in Britain, meant they had both the market and the ships needed to maintain busy trade routes.

The Chinese had traditionally severely restricted and regulated foreign trade and travel in China. The British, determined to expand operations in China, resented these rules. For example, foreign trade was restricted to the city of Guangzhou between October and May. Merchants were also forced to pay various taxes and tariffs that appeared to change without notice and often seemed excessive.

In an effort to force a diplomatic breakthrough, in 1792 the British sent an ambassador, Sir George Macartney, to Beijing (see **SOURCE 3**). The mission was ultimately unsuccessful. Initially this was explained by Macartney's insulting refusal to **kowtow** in the presence of the emperor. A broader explanation points to the incompatibility between the world views held by the British and the Chinese.

**SOURCE 3** A caricature of Lord Macartney's visit to China in 1792, published in Britain the same year. The emperor is portrayed as cunning while Macartney, it is suggested, maintains his composure.

The Chinese were an inward-looking nation, content with minimal trade, while the British were determined to expand and establish British traditions around the world. Subsequently the emperor sent a letter to England's George III in which he pointed out that China already had everything it needed and saw no value in or use for the items Britain wanted to trade (see **SOURCE 4**). The Chinese saw Macartney's failed mission as further proof of their superiority to foreigners. For the British, it merely signalled a small delay in their plans.

**SOURCE 4** From the letter Emperor Qian Long of China sent to George III in 1793

As your Ambassador can see for himself, we possess all things. I set no value on objects strange or ingenious, and have no use for your country's manufactures.

**SOURCE 5** An excerpt from Lord Macartney's journal of his mission to China

... such exquisite workmanship, and in such profusion, that our presents must shrink from the comparison and hide their diminished heads.

### 7.5 EXERCISES

**Historical skills key: HS1** Remembering and understanding **HS2** Sequencing chronology **HS3** Using historical sources as evidence **HS4** Identifying continuity and change **HS5** Analysing cause and effect **HS6** Determining historical significance

#### 7.5 Exercise 1: Check your understanding

1. **HS1** How did Confucianism influence Chinese attitudes to foreigners?
2. **HS1** What were the Banner Armies and what was their role?
3. **HS1** Describe how luck played a role in the 1514 contact between Portuguese and Chinese traders.
4. **HS1** Why were Portuguese traders tolerated by the Chinese emperor?
5. **HS1** How did Britain come to play a major trading role in China?
6. **HS1** Why did George Macartney's mission to China fail?

#### 7.5 Exercise 2: Apply your understanding

1. **HS3** Look at **SOURCE 3**. Why do you think the British artist has portrayed the Chinese emperor in this way?
2. **HS3** Compare and contrast **SOURCE 3** with the image portrayed in **SOURCE 2** in subtopic 7.2.
3. **HS3** What might explain the change in British attitudes towards China?
4. **HS3** Compare and contrast **SOURCES 4** and **5** in their attitudes towards Chinese products.
5. **HS3** Examine **SOURCES 4** and **5**. Why would a historian accept these sources as reliable?
6. **HS5** Identify and explain one intended and one unintended effect of foreign contact with China.

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# 7.6 Expansion, trade, conflict

## 7.6.1 Tension boils over in the First Opium War

When the Chinese began to trade with the British they enjoyed a 'trade surplus', meaning that the value of their exports to Britain was greater than the value of the goods being imported. Effectively this meant China was making a profit. Eager to balance the trade, the British began importing opium into China. In China opium had been a rarely used, expensive recreational and medicinal drug, but the increase in availability due to the British trade made it cheaper and more widespread.

In the early 1800s the British increased their trade and, despite an import ban on opium, they began to smuggle large amounts of it into China. Corruption was widespread and Chinese officials were easily bribed, making the trade easy. As much of the population became addicted, the illicit trade grew.

The social and economic impact of the opium trade forced the emperor to act. He appointed a politician named Lin Zexu to the role of Imperial Commissioner to deal with the illegal opium trade. Lin approached the matter with both a diplomatic and a forceful approach. He wrote an open letter to Queen Victoria in which he emotionally urged her to acknowledge the damage the opium trade was inflicting and to end it (see **SOURCE 1**).

**SOURCE 1** Lin Zexu wrote the following open letter to Queen Victoria. It was published in newspapers in China. In it he refers to the British merchants who illegally trade opium as 'barbarians' and outlines a range of reasons why the trade should cease. Queen Victoria did not see the letter until after the First Opium War had begun.

Dear Your Royal Highness Queen Victoria,

... You have traded in China for two hundred years, and as a result, your country has become wealthy. But after this long period of trade, there appear both good persons and bad. There are those who smuggle opium to seduce the Chinese people and cause the spread of the poison to all provinces. Such persons who only care to profit themselves, and disregard their harm to others, are not tolerated by Chinese law and are hated. His Majesty the Emperor, upon hearing of this, is in a towering rage. He has especially sent me to come to [Guangzhou] ... to investigate and settle this matter.

The law [in China] calls for the death penalty for people who sell opium or smoke opium. Those barbarians who through the years have been selling opium, then the deep harm they have caused, and the great profit they have made, should justify their execution according to law. Fortunately we have received a specially extended favor from His Majesty the Emperor, who considers that for those who voluntarily surrender there are still some circumstances to pardon their crime, and so for the time being he has magnanimously excused them from punishment. But as for those who again violate the opium prohibition, it is difficult for the law to pardon them repeatedly.

The wealth of China is used to profit the barbarians. That is to say, the great profit made by barbarians is all taken from the rightful share of China. By what right do they then in return use the poisonous drug to injure the Chinese people? Even though the barbarians may not necessarily intend to do us harm, but in wanting profit, they have no regard for injuring others. Let us ask, where is your conscience? I have heard that the smoking of opium is very strictly forbidden by your country; that is because the harm caused by opium is clearly understood. Since it is not permitted in your own country, then even less should you let it be passed on to harm other countries.

Is there a single article from China which has done any harm to foreign countries? Take tea, for example; the foreign countries cannot get along for a single day without them. Moreover the textiles of foreign countries cannot be woven unless they obtain Chinese silk. If China cuts off these beneficial exports, what profit can the barbarians expect to make? There is also ginger, cinnamon, and so forth, and articles for use, beginning with silk, satin, chinaware, which foreign countries want from China. On the other hand, articles coming from the outside to China can only be used as toys. We can take them or get along without them. Since they are not needed by China, what difficulty would there be if we closed our frontier and stopped the trade?

Anyone who dares again attempt to plant and manufacture opium should be severely punished. This will really be a great, benevolent government policy that will get rid of evil. For this, Heaven must support you and the spirits must bring you good fortune, prolonging your old age and extending your descendants. All will depend on this act.

Now we have set up regulations governing the Chinese people. He who sells opium shall receive the death penalty and he who smokes it also the death penalty. Now consider this: if the barbarians do not bring opium, then how can the Chinese people resell it, and how can they smoke it? The fact is that the wicked barbarians beguile the Chinese people into a death trap.

The Emperor cannot bear to execute people without having first tried to reform them by instruction. Therefore he enacts these fixed regulations. The barbarian merchants of your country, if they wish to do business for a prolonged period, are required to obey our statutes respectfully and to cut off permanently the source of opium.

May you check your wicked people before they come to China, in order to guarantee the peace of your nation, to show further the sincerity of your politeness and submissiveness, and to let the two countries enjoy together the blessings of peace! After receiving this dispatch will you immediately give us a prompt reply regarding the details and circumstances of your stopping the opium traffic.

Yours sincerely, Lin Zexu, Commissioner of the Celestial Empire (China)

Around the same time, though, when Lin arrived in Guangzhou, he quickly had hundreds of opium dealers arrested and tens of thousands of opium pipes confiscated. When he could not persuade foreign companies to hand over their opium stockpiles, he had the warehouses in Guangzhou besieged to force their compliance. When they eventually surrendered the opium, it was destroyed, further increasing tensions between China and Britain. Despite this apparent success for the Chinese, tensions with the British remained high. When a Chinese man named Lin Weixi was killed in Kowloon by a British sailor and the culprit could not be found, the Chinese demanded that someone — anyone — should be handed over to the authorities for punishment. This was not unusual in China, where the community was held responsible for its lawbreakers, but to the British it was unthinkable, and they refused. The men were tried by the British under British law and fined for unruly behaviour. Unsatisfied, Lin confronted the British with a fleet of war junks and prevented the sale of food to the British, once again effectively besieging them in the harbour until the culprits were handed over. The British again refused and shots were exchanged, signalling the start of the First Opium War.

Militarily, the Chinese were outclassed technologically by the British forces. Their ships were inferior to the British navy's, and China's soldiers were only a part-time force armed mainly with bows and arrows and knives, whereas the standing British army was made up of well-trained troops armed with modern muskets. The war ended in 1842 with the signing of the infamous Treaty of Nanjing. Under the terms of the treaty the Chinese were forced to open a number of ports to British trading ships, Hong Kong was ceded to the British (it remained a British colony until 1997), and China was forced to pay several million silver dollars to the British as compensation for the opium destroyed at the beginning of the war and for the cost of the war to the British. The treaty was the first of a number of what the Chinese called unequal treaties because the British, for their part, faced no obligations under the terms.

**SOURCE 2** A print of a naval battle during the First Opium War, at Anson's Bay, 7 January 1841. On the left is the British East India Company steam ship *Nemesis*. The longboats are also British, while the ships in the background are Chinese war junks.

## 7.6.2 More conflicts and rebellion

### The Sino-Japanese War

Importantly, it was not only European powers that were looking to expand their influence into Qing China. Later in the nineteenth century, Japan, too, had ambitions of territorial expansion. They fought with China over control of Korea in 1894 and 1895. The Meiji Restoration period after 1868 had seen Japan become an industrialised state as new technology was introduced from the West. As a result Japan extended its influence in the region and the Korean Peninsula, a longstanding area of conflict between Japan and China, was once again fought over in the Sino-Japanese War of 1894–95.

Japan was victorious and the war ended with the signing of the Treaty of Shimonoseki. The treaty gave Japan considerable rights over the area of Korea, but in addition Japan was also ceded the island of Taiwan as well as large regions of Manchuria in northern China. Almost more important than China's loss of territory was its loss of prestige. The end of the war resulted in Japan playing a more significant role as a foreign power in China and altered the political balance of power in the region. This would have further consequences during World War I.

## The Taiping Rebellion

Historians still debate whether the First Opium War was a direct cause of the Taiping Rebellion. The Qing dynasty already faced a number of problems, including internal social conflict, economic stagnation and a population growth rate that was putting a heavy strain on resources. The country also suffered a major drought in 1847 and disastrous floods in 1849 and 1852. All these problems, compounded by their humiliating defeat at the hands of the British in the First Opium War, were simply too much for the Chinese government to deal with.

The Taiping Rebellion began in 1850 and spread over most of southern China before finally being suppressed in 1864. It was led by Hong Xiuquan who, after religious visions experienced during an illness, was inspired to preach a new form of Christianity in China. The aim of the rebels was to overthrow the Qing dynasty and replace it with a new kingdom in which all land belonged to the state and women were given a more equal status with men. It is estimated that some 20 million people died over the course of the rebellion, making it one of the deadliest conflicts in human history.

While the rebellion raged, the Second Opium War broke out with Britain, this time allied with France. Also called the Arrow War, it began when Chinese authorities boarded a ship called the *Arrow* and arrested the crew under suspicion of piracy. Unable to manage the crisis of the Taiping Rebellion at the same time as this new conflict, China was forced to sign another humiliating treaty. Over the two decades of the 1840s and 1850s China signed no fewer than six separate treaties with France, Britain, Russia and the United States, each one forcing more concessions to the foreigners (see **SOURCE 4**). In an effort to protect their new gains, the British and French sided with the Qing against the Taiping rebels, supplying weapons and soldiers. Although this helped crush the rebellion, it also further cemented in the minds of many Chinese an image of Qing weakness and submission to foreign influence.

**SOURCE 3** This nineteenth-century French political cartoon shows China being carved up by foreign powers — from left to right, Britain, Germany, Russia, France and Japan. The Qing emperor is protesting in the background.

**SOURCE 4** Some of the unequal treaties imposed on China by foreign powers in the nineteenth century

| Year | Treaty of | Imposed by |
|---|---|---|
| 1842 | Nanjing | Britain |
| 1844 | Wangxia | USA |
| 1844 | Whampoa | France |
| 1858 | Tianjin | Britain, France |
| 1858 | Aigun | Russia |
| 1859 | Beijing | Britain, France |

## A new empress

In 1861 the Xianfeng emperor died. Because his five-year old son was too young to rule on his own, a group of regents (people appointed to rule in the place of the monarch if they are too young or incapacitated) was formed to take over his duties. Soon, though, the young emperor's mother, Cixi, eliminated the other members of the group and established herself as the new ruler of China — the Empress Dowager (see **SOURCE 5**). In 1889 she nominated the new Guangxu emperor to take over power when she retired from her role as dowager empress. However in reality he never ruled in his own right, and was always under Cixi's influence.

During the time of Cixi, although without her backing, there arose some hopes for reforms of the more rigid aspects of dynastic rule. The scholar Kang Yuwei planned and implemented a series of reforms with the help of the Guangxu emperor. In 1898 the 'Hundred Days' Reform' (discussed in subtopic 7.7) was intended to introduce radical decrees that would help modernise China, but the powerful and conservative Cixi, who still effectively ruled, rescinded almost all the reforms. She had the emperor arrested and many of the reformers executed. Her absolute rule was once again established over China, yet the problems she faced did not go away.

**SOURCE 5** The Empress Dowager Cixi ruled China from 1861 to 1908

**SOURCE 6** From the Guangxu emperor's Reform Decree of 1898

I shall never feel that my duty as Sovereign is fulfilled until I have raised them all [the Chinese people] to a condition of peaceful prosperity. Moreover, do not the foreign Powers surround our Empire, committing frequent acts of aggression? Unless we learn and adopt the sources of their strength, our plight cannot be remedied.

## 7.6 ACTIVITIES

1. Work in small groups to compare the position and power of China in relation to Japan, Russia and England in 1900. Compare the form of government, type of economy and relationships with other nations. You could draw up a table like the one shown to organise your initial research.

| Country | Form of government | Type of economy | Relationship with other nations |
|---|---|---|---|
| China | | | |
| Japan | | | |
| Russia | | | |
| England | | | |

When you have filled in your information into the table as a group, individually prepare a report that describes the changing nature of China's position in relation to the other countries.

**Identifying continuity and change**

2. Conduct some research into one of the 'unequal treaties'. What were some of the terms? To what extent is the term 'unequal' accurate?

**Using historical sources as evidence**

## 7.6 EXERCISES

**Historical skills key: HS1** Remembering and understanding **HS2** Sequencing chronology **HS3** Using historical sources as evidence **HS4** Identifying continuity and change **HS5** Analysing cause and effect **HS6** Determining historical significance

### 7.6 Exercise 1: Check your understanding

1. **HS1** In your own words, summarise the causes of the First Opium War.
2. **HS1** What were the terms of the Treaty of Nanjing?
3. **HS1** Why did the Chinese use the term *unequal treaties*?
4. **HS2** Draw a timeline that summarises the causes of the Taiping Rebellion. Separate them into what you would consider long-term and short-term causes.
5. **HS1** Why did the death of the Xianfeng emperor cause political instability?

### 7.6 Exercise 2: Apply your understanding

1. **HS3** Summarise the reforms that are called for in the Guangxu emperor's Reform Decree in **SOURCE 6**.
2. **HS3** Explain how **SOURCES 3** and **6** help reinforce each other's message.
3. **HS3** Outline the reasons why Lin Zexu, in **SOURCE 1**, wants the opium trade to stop.
4. **HS3** In **SOURCE 1**, Lin Zexu addresses the letter specifically to Queen Victoria. How closely connected to the trade do you think she would have been?
5. **HS3** Write a response to the letter from, or on behalf of, Queen Victoria. In it you should outline your understanding of the trade as well as your thoughts on whether or not it should, or could, be stopped.
6. **HS6** Using the information you have gathered so far in this topic, respond to the following question in an extended response: 'Why were British and Chinese world views incompatible in the eighteenth century?'
7. **HS5** Compare and contrast the causes and effects of the Opium Wars and the Taiping Rebellion.
8. **HS5** What would be your response to the statement that the rigid system of government and power in China helped lead to tension with foreign powers? Use specific evidence to support your ideas.

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# 7.7 Economic and social effects

## 7.7.1 Economic effects

The impacts of foreigners on Chinese society since their first arrival in the sixteenth century varied widely. Missionaries spread the ideas of Christianity to many parts of the land; the trade of Western goods introduced new ideas; but perhaps no foreign import had a greater social impact than the addictive drug opium.

The signing of the Treaty of Nanjing in 1842 may have ended the Opium War, but it did not end the opium trade. In fact, the trade increased because trade with the British was forced upon China — opium meant business, and business was booming. In return for the opium that the British imported to China, tea and silk were exported back to Britain. In the years from 1843 to 1855 the export of tea increased from 7000 tons to 42 000 tons. In the same period, silk exports rose from 2000 bales in 1843 to 56 000 bales in 1855.

On the surface, this may seem like a positive aspect of the trade. Certainly, tea- and silk-producing regions close to the trading ports did expand and benefit from the trade. But a closer look will reveal that these benefits were short term. As demand for these two commodities, known in economic terms as 'cash crops', increased, production shifted away from food crops and so less food was being produced. This shortage of food crops pushed prices up and so the poor, who could not trade with the foreigners, simply became poorer.

The trade in silk had a further long-term effect. China's textile industry had a very long history — as far back as 3000 BCE. It had undergone a variety of developments over the centuries, but ironically it was the high quality of local textiles that caused the industry to decline. In addition to bringing in opium, Western countries also introduced cheaper, machine-produced textiles with which to trade. This caused a decrease in the demand for locally made goods and crippled the local textile industry. Many areas in China reported an increase in crime as rising poverty took hold.

Even China's traditional trade routes were suffering. Under the Canton System, foreign goods arrived at port and were then transported through inland waterways and coastal roads. As a result, many people had come to rely on the passing traffic for their livelihoods, either by selling food or offering other services. The opening of other trading ports meant goods were now transported from one port to another by sea, so those people who relied on inland traffic for their income suffered.

**SOURCE 1** The sap of the opium poppy flower is harvested and refined to produce the drug.

## 7.7.2 Social effects

As the trade in opium continued, a drug that had been used medicinally in China for centuries soon became a drug of dependency for a large proportion of the population. As the quantity of opium coming into China increased, the product became cheaper. It was soon available not just to the wealthy but to a wide cross-section of society. At the turn of the nineteenth century, about 2500 tons of opium were being imported into China annually. By the middle of the century, that figure had increased almost tenfold to 23 000 tons. It is estimated that at the height of opium usage in China, almost all men used it and about a quarter of the entire male population was addicted.

Access to opium and the high unemployment caused by the economic situation in China were a devastating combination. Opium dens like the one in **SOURCE 2** became popular, especially with unemployed men who did not have to work during the day. Patrons reclined and smoked opium through long pipes. Some dens were highly ornate and richly furnished; others were simple rooms. The décor reflected the social standing of those who used the rooms. The profusion of opium dens indicates just how widespread the use of the drug was. The effects of long-term use of opium are described in **SOURCE 3**. Despite attempts to ban the drug and threats of harsh punishments for selling it, as illustrated in **SOURCES 5** and **6**, trade and use of opium continued.

Eventually some British politicians recognised the responsibility they had for the disastrous situation in China. Some sixty years after the end of the Opium War, Lord Justice Fry of the British Court of Appeal expressed his views, seen in **SOURCE 4**. However, by then the damage had been done.

**SOURCE 2** An opium den in Canton, China, c. 1900

**SOURCE 3** A British observer's remarks on the effects of opium, from 1847

Those who begin its use at twenty may expect to die at thirty years of age; the countenance becomes pallid, the eyes assume a wild brightness, the memory fails, the gait totters, mental exertion and moral courage sink ... atrophy reduces the victim to a ghastly spectacle, who has ceased to live before he has ceased to exist.

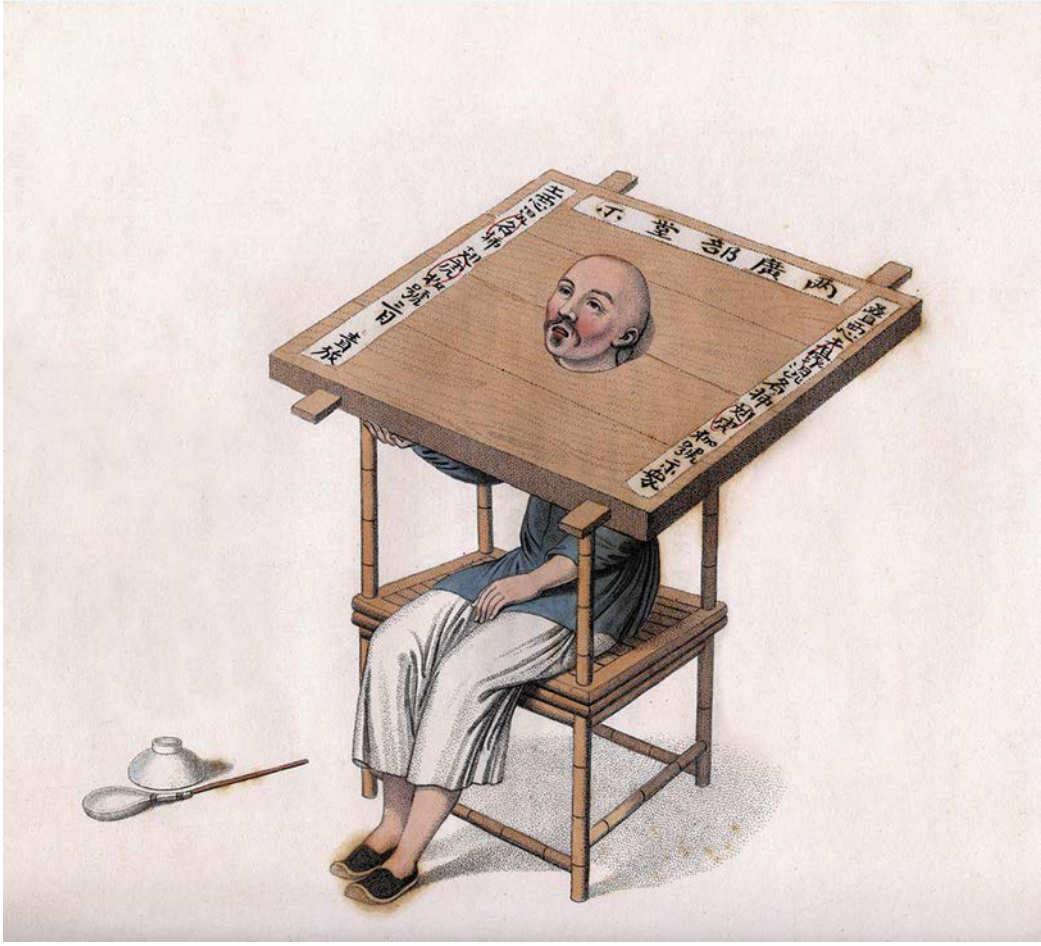
**SOURCE 4** Lord Justice Fry's comment regarding Britain's moral responsibility for the situation in China, from around 1908

We English, by the policies we have pursued, are morally responsible for every acre of land in China which is withdrawn from the cultivation of grain and devoted to that of the poppy; so that the fact of the growth of the drug in China ought only to increase our sense of responsibility.

**SOURCE 5** Edict following the ban on opium in 1839

Let the buyers and smokers of opium be punished with one hundred blows, and condemned to wear the wooden collar for two months. Then, let them declare the seller's name, that he may be seized and punished.

**SOURCE 6** An 1804 engraving of a wooden punishment collar as described in **SOURCE 5**. The writing indicates the crime for which the prisoner is being punished.



## DISCUSS

The opium trade was highly lucrative for the British in the 19th century, but its impact on China was significant.

1. Do you think all the positive and negative consequences were considered by the British as the trade progressed?
2. How much do you think governments in the modern world have an obligation to try to reach a balance of positive outcomes for both sides?
3. Think about what might happen today if a trade agreement between Australia and another nation had positive outcomes for one side but negative outcomes for the other. How might each country react in that situation?

**[Ethical Capability]**

# 7.7.3 Expanding contacts

## Foreign ideas

The Jesuit missionaries of the sixteenth century brought with them not only Christianity but also European ideas and technology, particularly in the fields of astronomy and science. They shared their European views with the Chinese and returned to Europe with tales of China's wonders. Yet their numbers were small and any ideas or new technology they conveyed tended to remain within the emperor's inner circle rather than circulated throughout the country.

Some missionaries, however, came to be trusted within the emperor's court and played an important role in early Chinese and European relations. Matteo Ricci and Adam Schall von Bell were two early examples. They learned the language and translated classical Western texts into Chinese, which helped to spread the ideas of European scholars such as Galileo. Particularly in the sixteenth and seventeenth centuries, the Jesuit missionaries promoted what was the first example of cultural exchange between China and the West.

As the inflow of foreigners in China increased in the eighteenth and nineteenth centuries the spread of Western ideas also began to increase. During this time, Chinese citizens began to travel abroad and brought home with them new ideas in the fields of science, technology and social reform. The nineteenth century had seen such unrest in China that more and more people were beginning to question their traditional beliefs. The Qing dynasty appeared to be losing the mandate of heaven.

In 1898, many of these ideas were brought together and promoted in what became known as the Hundred Days' Reform. The reformers, led by Emperor Guangxu, decided that for China to become strong again a range of changes were needed. They thought that reforms must be accompanied by fundamental changes to institutions and ideology. The ideas included the modernisation of the education system, the restructure and strengthening of the military and the modernisation of China's industrial capability.

The Hundred Days' Reform failed when conservative opponents, supported by Empress Cixi, removed Guangxu from power. The conservatives did not oppose the modernisation of China; rather, they feared that the intended reforms would only increase foreign influence.

## The Chinese Diaspora

During the nineteenth century a large number of Chinese decided, or were forced, to emigrate due to different factors. These people became known as the Chinese Diaspora. Famines in the southern coastal provinces of Fujian and Guangdong, combined with the effects of the Opium Wars and the Taiping Rebellion, disrupted agricultural and economic activity in many areas, putting further strains on Chinese resources. Around the same time slavery was being abolished in many parts of the world, creating labour shortages. In North America, Chinese migrants replaced African slaves as the major source of labour. The large-scale emigration alarmed the Qing but there was little they could do about it; the unequal treaties forced the government to allow emigration to colonial regions.

**SOURCE 7** This photograph from the early twentieth century shows two Chinese labourers at work in the Australian outback.

While many Chinese migrated to other Asian countries in search of work, a great number travelled further afield — to the United States, Canada, Australia and Europe. In 1849 gold was discovered in California, and when merchants brought news of the find to China a wave of migration to 'Gold Mountain' occurred. The Australian gold rushes of the 1850s provoked similar migrations and 'New Gold Mountain', as the Australian goldfields became known, saw the beginning of a long period of Chinese migration to Australia.

Across the world Chinese emigrants established what has become the most visible result of the Chinese Diaspora — the 'Chinatown'. Chinatown is the generic name given to that area of a city outside China in which Chinese businesses and restaurants predominate. There are about twenty Chinatowns in Australia, and many of them are thriving areas used as a focal point for traditional celebrations such as Chinese New Year. **SOURCE 8** shows Melbourne's Chinatown.

**SOURCE 8** Chinatown in Melbourne. This community was originally established in the 1850s during the gold rushes.

## Explore more with myWorldHistoryAtlas

Deepen and check your understanding of this topic with related case studies and auto-marked questions.

- Australia and Asia > **The Chinese diaspora**

## 7.7 ACTIVITY

**a.** Construct a visual diagram that summarises the causes of the Chinese Diaspora. Include both 'push factors' (reasons to leave China) and 'pull factors' (reasons to migrate to a particular country).

**b.** On a world map, label the countries and regions, with the dates if possible, to which Chinese migrants primarily travelled.

**Analysing cause and effect**

## 7.7 EXERCISES

**Historical skills key: HS1** Remembering and understanding **HS2** Sequencing chronology **HS3** Using historical sources as evidence **HS4** Identifying continuity and change **HS5** Analysing cause and effect **HS6** Determining historical significance

### 7.7 Exercise 1: Check your understanding

1. **HS1** What were 'cash crops'?
2. **HS1** What was the Canton System?
3. **HS1** How did the change in trade routes impact society?
4. **HS1** Draw a flow chart to explain the sequence of economic impacts of the opium trade.
5. **HS1** How did the British change the way opium was used in China?
6. **HS1** Why do you think the British and Chinese traders ignored the 1839 ban on opium?
7. **HS1** What sorts of changes was the Hundred Days' Reform movement hoping to achieve?
8. **HS1** What were the objections of the opponents of the movement?
9. **HS1** What is 'diaspora'?

### 7.7 Exercise 2: Apply your understanding

1. **HS3** Why would the Qing government be concerned by the image in **SOURCE 2**?
2. **HS3** Summarise the detrimental effects of opium as expressed in **SOURCE 3**.
3. **HS3** How does the attitude in **SOURCE 4** differ from most British attitudes towards the opium trade?
4. **HS3** Explain what **SOURCE 7** suggests about the extent and scale of the Chinese Diaspora.
5. **HS3** What do **SOURCES 5** and **6** illustrate about the Qing government's attitudes towards opium?
6. **HS3** Which negative effects of opium use outlined in **SOURCE 3** might be identifiable in **SOURCE 2**?

Try these questions in learnON for instant, corrective feedback. Go to www.jacplus.com.au.

# 7.8 Resistance in China

## 7.8.1 The Boxer Rebellion

Confucianism helped generate a view in China that foreigners were little more than barbarians. It was believed that there was little that could be gained from contact with the outside world. Many people and organisations in China actively sought to get rid of foreigners once and for all.

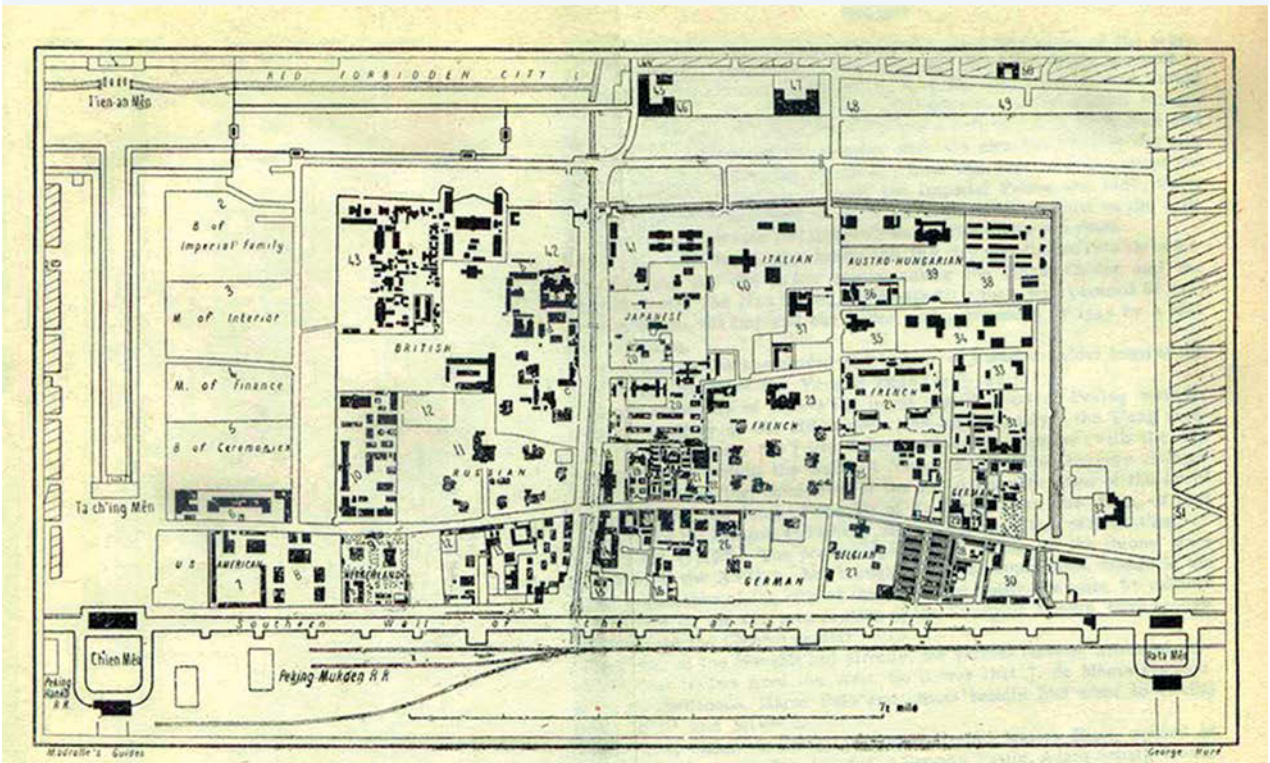
The Society of Righteous and Harmonious Fists, known as the Boxers, was a secret society that called for a return to traditional values and the expulsion of foreigners. They were anti-foreign and anti-Christian and resented the **gunboat diplomacy** used against China. Embracing **Daoist** and Buddhist ideas, the Boxers believed that through a combination of martial arts training and **spirit possession** they would be impervious to guns and cannon. Special women's groups such as the Red Lanterns and the Cooking Pot Lanterns helped feed the fighters. The Boxers also won over provincial officials to their program of helping the Qing expel foreigners.

In 1899 the Boxers began to attack Christian missionaries in protest of their increasing numbers and their interference with traditional Chinese life. A common sentiment in China was that missionaries were yet another attempt by foreign powers to divide and colonise China. The European 'extraterritoriality clause' meant that Europeans in China were exempt from most Chinese laws and were considered under the jurisdiction of their own countries' laws, thereby heightening the sense of helplessness towards the foreigners felt by many Chinese.

**SOURCE 1** A Boxer fighter from around 1900 with a spear and flag

The Boxers also targeted telegraph lines and 'iron centipedes' (railway tracks). In the face of such lawlessness the Qing government had to act, but it faced a dilemma. The foreign powers demanded that Cixi suppress the uprising but, while she publicly condemned the Boxers, secretly the Dowager Empress supported their cause. In June 1900 the Boxers arrived in Beijing (then known as Peking), laying siege to the foreign **legations**. An attack by the foreign Western powers and Japan on the Taku Forts in north-eastern China forced Cixi's hand. Unable to oppose the Boxers for fear of losing further Chinese support, on 21 June she formally declared war on the foreign powers.

**SOURCE 2** This map from 1912 shows that the foreign legations were concentrated in a small area in Peking (as they had been in 1900), providing focus points for anti-foreign sentiment during the Boxer Rebellion.




PEKING. — LEGATION QUARTER

1. Tzŭ-chin Ch'eng.
2. Tsung-jên Fu.
3. Li-pu.
4. Tu-chih-pu (formerly Hu-pu).
5. Li-pu.
6. French Hospital (St-Michel).
7. U. S. American Guard.
8. U. S. American Legation.
9. Netherlands Legation and Guard ..... a. Minister. b. Guard.
10. Russian Guard.
11. Russian Legation.
12. Russo-asiatic Bank.
13. Banque de l'Indo-Chine.
14. Hôtel des Wagons-lits.
15. German Post Office.
16. Russian Post Office.
17. Hongkong and Shanghai B. C.
18. Yokohama Specie Bank.
19. Spanish Legation.
20. Japanese Guard.
21. Japanese Legation.
22. French Post Office.
23. French Legation.
24. French Guard.
25. French Catholique Church (St-Michel).
26. German Legation.
27. Belgian Legation.
28. German Guard.
29. Deutsch-Asiatische Bank.
30. Stores.
31. German Lazaret.
32. Hopkins Memorial Hospital.
33. Electric Station.
34. Imperial Maritime Customs, Residences and Head Offices.
35. Peking Club.
36. Imperial Post of China, Secretary's Office.
37. Inspectorate General of Imperial Maritime Customs.
38. Austro-Hungarian Guard.
39. Austro-Hungarian Legation.
40. Italian Legation.
41. Italian Guard.
42. British Legation a. Minister. b. 1st Secretary. c. 2nd Secretary. d. Church.
43. British Guard.
44. Portuguese Legation.
45. Chinese Post Office.
46. Hôtel de Pekin.
47. Peking Han-k'ou R. R., Head Office.
48. International Banking Corporation.
49. Mexican Legation.
50. Telegraph Office.
51. Hôtel du Nord.

The Eight Nation Alliance of foreign powers comprised Japan, Russia, Great Britain, France, the United States, Germany, Italy and Austria-Hungary. The Australian colonies, not yet federated into the Commonwealth, offered support to the British, and troops from Victoria and New South Wales were formed into naval brigades.

Australia's first contingents, mainly men from Victoria and New South Wales, sailed for China on 8 August 1900. Troops from the Eight Nation Alliance were already fighting in China and, by the time the Australians arrived, most of the major fighting was over. They were then engaged in 'mopping up' operations or simply guarding prisoners. Six Australians died in the Boxer Rebellion, but none were the result of enemy action — all were from sickness and injury.

**SOURCE 3** Officers of the Australian Naval Brigade serving in China during the Boxer Rebellion

One of the most significant episodes of the uprising was the siege of the legations. This was the area of Beijing in which the foreign powers had their diplomatic legations or embassies. The siege of the foreign legations in Beijing lasted 55 days. By the time they were relieved on 14 August 1900, 66 foreigners and many more Christians had been killed across China. Cixi fled Beijing but returned when peace terms were arranged.

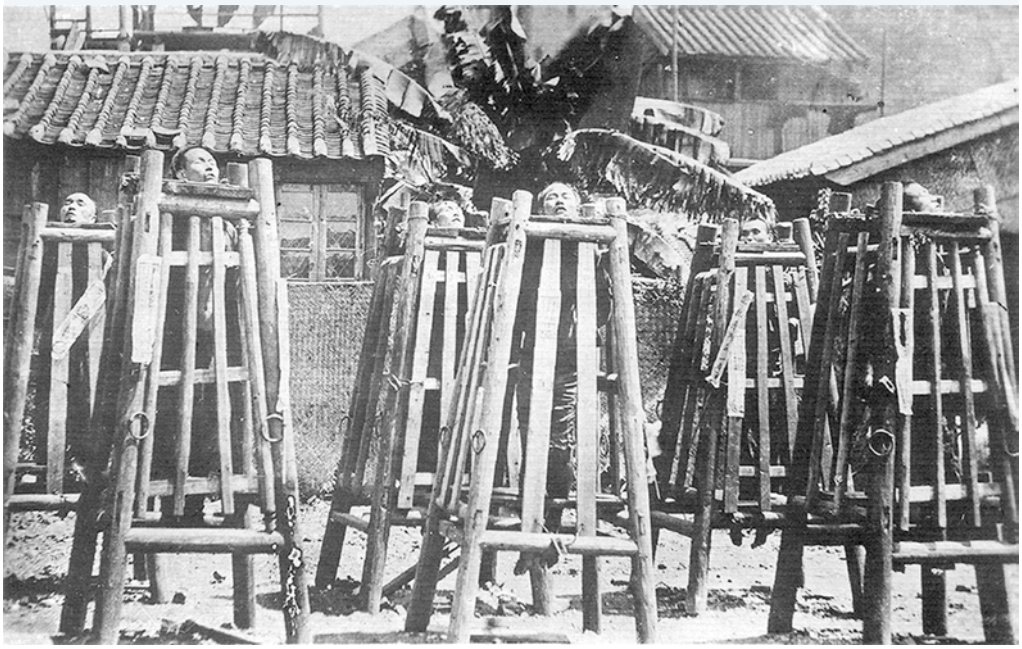
Yet again superior foreign military forces had quickly defeated China. Yet again a punishing peace treaty was forced on China, resulting in more reparation payments and the further deployment of foreign troops in China. And, yet again, the Qing government's weakness against foreign powers had been demonstrated. Cixi finally realised that reform offered the only hope for the survival of the Qing and of China. Most of the reforms that had previously been resisted by Cixi over the previous years were now initiated.

Technically, the Boxer Rebellion was actually not a rebellion at all. The term 'Rebellion' suggests the Boxers wanted to overthrow the dynasty, but this was never their intention. In fact, the Empress Dowager Cixi had some sympathy for the rebels: she too wanted an end to foreign influence in China. She chose to describe it as a rebellion to give the impression that she opposed it, in the hope of reducing the harshness of the peace terms imposed by the foreign powers.

**SOURCE 4** The aims of the Boxers as expressed in a rhyme in 1900

No talented people are in sight;
There is nothing but filth and garbage,
Rascals who undermine the Empire,
Leaving its doors wide open.
But we have divine power at our disposal
To arouse our people and arm them,
To save the realm and to protect it from decay.
Our pleasure is to see the Son of Heaven unharmed.
Let the officials perish,
But the people remain invincible.
Bring your own provisions;
Fall in to remove the scourge of the country.

**SOURCE 5** This photograph from around 1900 shows the public execution of captured Boxer rebel fighters.



**SOURCE 6** Sentiments expressed by Prince Kung of the Imperial Qing Court around 1900 about the foreign presence in China

Take away your opium and your missionaries, and you will be welcome! ... Do away with your extraterritoriality clause and missionaries may settle anywhere and everywhere; but retain it and we must do our best to confine you and our troubles to the treaty ports.

## 7.8.2 Reform and revolution

Major educational changes were among the reforms introduced by the Qing government under the terms of the Boxer Protocol. Modernisation of the curriculum began and for the first time Western subjects were introduced. While this might have helped placate some of the people, for example those who promoted the Hundred Days' Reform, it had some negative effects for the government. The new curriculum introduced beliefs and values that conflicted with traditional Confucian beliefs. Those who went through the new system tended to be more critical of the dynasty and were hungry for further change. In losing control of the education system, the Qing lost a key area of popular support.

In 1908 work began on a constitution in which the emperor would retain control over the armed forces, foreign policy and the judicial system but would extend the administrative powers of provincial and local leaders. The military was also decentralised, making it more efficient to run, and was also equipped with Western weapons and trained in Western tactics.

Despite, or perhaps because of, these reforms, the Qing dynasty was doomed. The reforms were intended to modernise China and restore faith in the government. They were only partially successful. While they did manage to modernise China, they also provided a degree of freedom for its people that was never known before. With this freedom came a demand for further change and, eventually, a demand for the Qing government to be removed from power altogether. A new sense of nationalism was evolving and people began to dream of a new, independent China free from foreign interference.

## Revolution

Over the course of the nineteenth century the Chinese people had witnessed the Qing dynasty's powerlessness to stop foreign encroachment into China. The violent upheavals of the Opium Wars, the Taiping Rebellion and the Boxer Rebellion repeatedly demonstrated the weakness of the Qing and the dynasty's inability to resolve pressures both from within and from outside China. Many Chinese came to believe that revolution, rather than reform, was the only way to save the country. This belief would be violently expressed in 1911.

Before her death in 1908, the Empress Dowager had nominated the three-year-old Pu Yi to be the next emperor. Pu Yi's father, Prince Jun, was himself not considered worthy of rule but would act as regent until Pu Yi was old enough to rule on his own. However, one man in particular had no time for a new emperor. His name was Sun Yixian and he would become a key figure in modern China.

Sun wanted to transform China into a republic and had already tried to overthrow the Qing in 1895. After this attempted coup failed he fled into exile but, in 1911, he saw a new opportunity, and this time he was more successful. Dissatisfaction with the Qing government's apparent weaknesses in the face of internal problems and foreign intervention had boiled over into open rebellion in many provinces. The imperial army refused to oppose the rebels unless the government granted the long-awaited constitution. When it refused to do so, the downfall of the Qing became only a matter of time. Without the army on its side there was no hope for the dynasty.

Sun Yixian was confirmed as president designate on 1 January 1912; only weeks later, on 12 February, Pu Yi abdicated. However, Sun had a rival — General Yuan Shikai — with very different goals for the new China. Many areas of the country were still under the control of local warlords. Despite being provisional president, Sun did not have the military power to bring order to strife-torn China. That power rested with Yuan, so to avoid civil war Sun Yixian stepped down on 10 March.

The declaration of a republic in China ended 267 years of Qing rule and some 2000 years of the imperial system. But this fundamental political change still did not bring peace to China.

### 7.8 ACTIVITY

Draw and label a timeline showing the key events in China from 1900 to 1912. **Sequencing chronology**

### 7.8 EXERCISES

**Historical skills key: HS1** Remembering and understanding **HS2** Sequencing chronology **HS3** Using historical sources as evidence **HS4** Identifying continuity and change **HS5** Analysing cause and effect **HS6** Determining historical significance

#### 7.8 Exercise 1: Check your understanding

1. **HS1** Why did Cixi secretly support the Boxers?
2. **HS1** Explain why control of education was so important in maintaining the Qing dynasty.
3. **HS1** What were the key changes of the proposed 1908 constitution?
4. **HS1** Why did the requested reforms help to bring an end to the Qing dynasty?
5. **HS1** How did Sun Yixian and Yuan Shikai differ in their ambitions for China?

#### 7.8 Exercise 2: Apply your understanding

1. **HS3** Read **SOURCE 4** and answer the following:
   (a) Who were the 'scourge of the country'?
   (b) What is this document asking Chinese people to do?
2. **HS3** Explain what **SOURCE 5** suggests to you about the nature of the fighting during the Boxer Rebellion.
3. **HS3** Selecting key words from **SOURCE 6** as evidence, describe the main concerns held by Prince Kung about the foreign presence.
4. **HS3** What are the values and limitations of **SOURCE 3** as a historical source?
5. **HS4** Do you think it could be said that the reforms introduced by the Qing government actually helped bring about its downfall? Discuss your opinions as a class and use evidence from this topic to help you write a paragraph response.
6. **HS6** How significant was the role of education in maintaining Qing rule over China and its people?

# 7.9 Continuity and change

## 7.9.1 A new emperor?

The China that emerged from the nineteenth century was barely recognisable compared with that of a century earlier. There is no doubt that this time period was a time of great change for many countries, but for China in particular, the consequences of the events of the nineteenth century would affect it well into the next century.

Early in 1912, after the revolution that ended the Qing dynasty, a new style of government was created under the rule of General Yuan Shikai (see **SOURCE 1**). But after coming to power it seemed that his true ambitions became clear. He had avoided civil war when Sun Yixian (see **SOURCE 2**) had stepped down from power, but China now found itself with two opposing political parties — Sun Yixian's Guomindang (GMD) or Nationalist Party, and the Jinbudang or Progressive Party. Both were formed in 1912. When Yuan organised the murder of a GMD leader in 1913, Sun launched a 'Second Revolution' to remove Yuan from the presidency. Yuan responded by declaring the GMD illegal and suspending Parliament. He also began to talk about making himself emperor.

Had China gone through so much turmoil to end the old imperial system only to have it replaced with a new one? Yuan put the question to the vote, but only those who were specially selected were allowed to cast a ballot. Unsurprisingly, the vote was unanimously in favour of the new empire, so Yuan crowned himself emperor in December 1915. In defiance of the vote, eight provinces declared independence and nationwide protests ensued. It seemed that China had had enough of monarchy. In March 1916 Yuan finally accepted that his imperial dream was out of reach and announced a return to republican government. He died in June that same year, leaving China once again in political turmoil. For millions of peasants, however, life continued as usual, with cycles of famine, drought, floods and unjust taxes.

**SOURCE 1** Yuan Shikai, first president of the Republic of China

**SOURCE 2** Sun Yixian, founder and first leader of the Guomindang

### What changed?

Politically, China had changed a great deal by the early twentieth century. The centuries-old imperial system had come to an end and the country had a new president in Sun Yixian. The upheavals of the previous century saw many areas of the country still in turmoil. But for much of the population, particularly the poorer classes, it is doubtful whether anything had actually changed for the better.

**SOURCE 3** Chinese peasants, 1920

**SOURCE 4** Peasants, late nineteenth century

**SOURCE 5** Present-day photo of a Chinese farmer tending the fields

**SOURCE 6** Present-day photo of Chinese farmers tending their fields

## 7.9.2 China and World War I

In 1914 the new Chinese republic, only three years old, found itself an ally of the British and French in World War I. The move away from monarchy was seen as a positive step by the West and China was certainly keen to improve its standing on the world stage. While officially neutral until declaring war on Germany in 1917, from the start of the war China sent more than 100 000 volunteer labourers to the Western Front to help dig trenches, work in factories or engage in other support work. But China gained little by being an ally of the British and French.

At the end of the war, when the Treaty of Versailles was forced upon Germany, the decision was made to confiscate all of Germany's overseas colonies. Some of these were in China and had been leased to Germany by the Qing government. However, these colonies were not returned to China but instead handed over to Japan. In 1915 Japan had taken advantage of its position as an ally of Great Britain and the United States to make a list of 'Twenty-One Demands' on China. These included territorial gains and would see Japan become a more powerful country in the region. Britain and the United States offered little opposition and the Japanese succeeded in most of their demands. Anti-foreign sentiment once again became common and in 1919 a massive protest was held against the government's perceived failure to protect Chinese interests following World War I. The subsequent renewal of anti-foreign sentiment in China created conditions that would play a role in the creation of the Chinese Communist Party in 1921.

## 7.9.3 Positive outcomes?

Over the course of the nineteenth century the Chinese people had witnessed the Qing dynasty's powerlessness to stop foreign encroachment into China. The violent upheavals of the Opium Wars, the Taiping Rebellion and the Boxer Rebellion repeatedly demonstrated the weakness of the Qing, and the dynasty's inability to resolve pressures both from within and from outside China.

Making any value judgement about positive or negative effects of particular events is difficult when studying history. Inevitably those judgements are highly subjective and will be different depending on the source or the historian. However, few historians disagree that during the nineteenth century there were not many positive effects of foreign influence on China. They highlight the Opium Wars, the Taiping Rebellion and the unfair treaties as evidence. However, most historians also agree that there were some advantages in the long term for China. The exposure of Qing weakness and the continued oppression from both their own government and that of the foreigners made the Chinese people fight for change. People realised that the emperor did not necessarily enjoy the 'mandate of heaven' and, for better or worse, many came to believe that revolution, rather than reform, was the only way to save the country.

### 7.9 ACTIVITIES

1. Gather a selection of newspaper or magazine articles that address China in some way. This could be to do with trade, culture or sport. Think about how China is represented in the different articles. Summarise your thoughts using the following questions:
   (a) What are the similarities and differences between the different articles and the way China is presented?
   (b) As you would do for a historical source, outline the values and limitations of each article. Consider who wrote the articles, what their focus is, and how this can influence their tone. For example, an article in the arts section of a newspaper writing about a visiting Chinese pianist would most likely have a different tone to an editorial which addresses the treatment of political dissidents in China.
   (c) What do your answers to the above questions highlight about the nature of international relations and the way they are portrayed in the media? **Determining historical significance**
2. Draw a timeline that includes the key events in China between 1912 and 1919. Consider the causes and effects of the events and discuss any similarities or differences. Can you identify any broad differences in the types of causes before and after the fall of the Qing dynasty? **Analysing cause and effect**

### 7.9 EXERCISES

**Historical skills key: HS1** Remembering and understanding **HS2** Sequencing chronology **HS3** Using historical sources as evidence **HS4** Identifying continuity and change **HS5** Analysing cause and effect **HS6** Determining historical significance

#### 7.9 Exercise 1: Check your understanding

1. **HS1** What was Sun Yixian's 'Second Revolution'?
2. **HS1** Why did Yuan Shikai renounce his title of emperor?
3. **HS4** How much did life actually change for the average peasant in China?
4. **HS1** Why did the new Chinese republic declare war on Germany in 1917?
5. **HS1** What did China get out of the Treaty of Versailles at the end of World War I?
6. **HS5** Describe reasons for the rise in the level of anti-foreign sentiment in China after World War I.

#### 7.9 Exercise 2: Apply your understanding

1. **HS3** Analyse **SOURCES 3–6** and record the changes that you can see in the photographs.
2. **HS3** Explain the values and limitations of the four sources from the question above.
3. **HS4** Discuss the extent to which you think change has occurred for peasants in China over the time period studied in this topic. What about changes to the current day? Do you have enough information to make any conclusions? If not, what other information would be useful?
4. **HS1** Why are judgements about history highly subjective?
5. **HS5** What were some positive and negative outcomes for China, on which most historians agree?

Try these questions in learnON for instant, corrective feedback. Go to www.jacplus.com.au.

# 7.10 SkillBuilder: Analysing cause and effect

online only

## Analysing the causes and effects of the fall of the Qing dynasty

When studying history it is important to remember that events don't 'just happen'. Many factors combine to bring about historical events. Being able to analyse cause and effect is an important historical skill.

### Select your learnON format to access:

- an explanation of the skill (Tell me)
- a step-by-step process to develop the skill, with an example (Show me)
- an activity to allow you to practise the skill (Let me do it)
- questions to consolidate your understanding of the skill.

# 7.11 Thinking Big research project: Key events visual summary

online only

## SCENARIO

The period 1750 to 1918 saw a series of key events take place in China that changed the nation dramatically. You will undertake an analysis of these major events and create a visual summary to identify where they occurred and how and why they were so significant in China's history.

### Select your learnON format to access:

- the full project scenario
- details of the project task
- resources to guide your project work
- an assessment rubric.

### Resources

**ProjectsPLUS** Thinking Big research project: Key events visual summary (pro-0186)

# 7.12 Review

online only

## 7.12.1 Key knowledge summary

Use this dot point summary to review the content covered in this topic.

## 7.12.2 Reflection

Reflect on your learning using the activities and resources provided.

### on Resources

**eWorkbook** Reflection (doc-31708)
Crossword (doc-31709)

**Interactivity** China (1750–1918) crossword (int-7641)

## KEY TERMS

**concubine** a woman who lives with a man she is not married to and has a lower social rank than his wife
**Daoist** ancient Chinese philosophical/religious tradition emphasising simple living in harmony and balance with the universe
**despot** a ruler with almost unlimited power who uses it unfairly or cruelly
**gunboat diplomacy** a coercive form of diplomacy in which a country threatens the use of military force to achieve its objectives
**junk** Chinese sailing ship
**kowtow** to kneel and touch the forehead to the ground in deep respect for an emperor
**legation** a foreign country's diplomatic office, similar to an embassy
**mandate of heaven** the idea that heaven blessed the rule of a just emperor but could rescind that blessing if the emperor ruled unjustly
**Marco Polo** merchant from Venice who travelled through Asia in the thirteenth century; generally credited with introducing Europeans to China and Central Asia
**spirit possession** an alleged supernatural event in which a spirit or god takes control of the human body, creating changes in behaviour
**subordinate** having a lower or less important position

# 7.10 SkillBuilder: Analysing cause and effect

When studying history it is important to remember that events don't 'just happen'. Many factors combine to bring about historical events. Being able to analyse cause and effect is an important historical skill.

## 7.10.1 Tell me

### What is 'cause and effect'?

Cause and effect underlies all history and historical events. Every event occurs for a variety of reasons and leaves behind it a range of effects. This is equally true for both the smallest and the largest events. But the causes are not always easily identified and the effects are not always obvious either. In fact, debate about the causes and effects of historical events is one of the most contentious areas of the study of history about which historians do not always agree.

### Why is it important to analyse cause and effect?

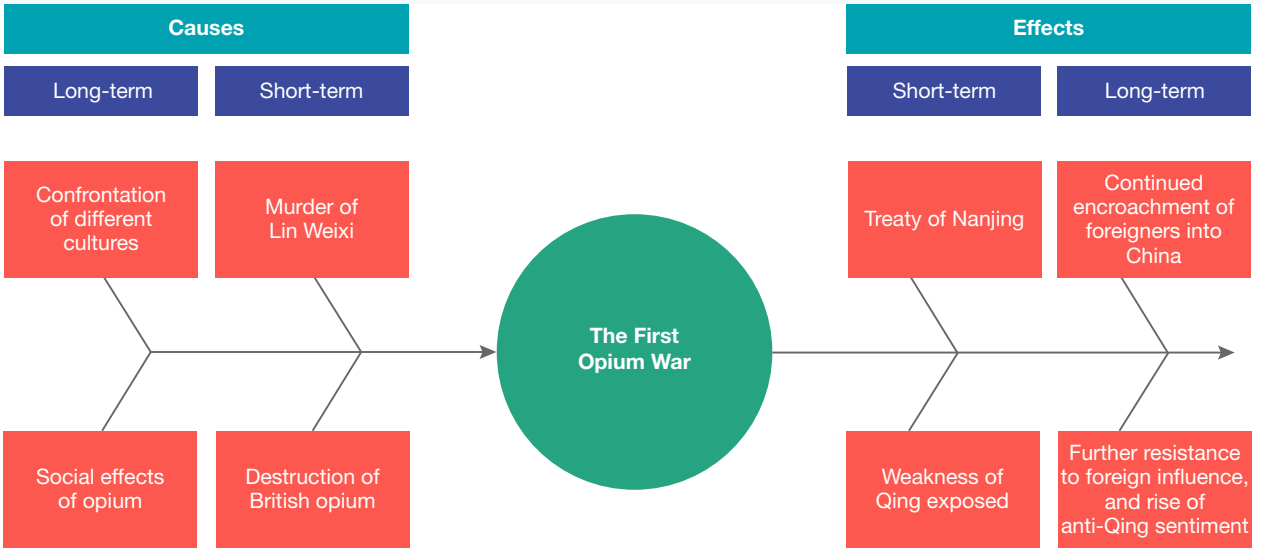
Analysing cause and effect helps us evaluate the importance of different events within historical periods. For example, we might come to the conclusion that one particular event was more significant to a period of change than another. This could be something like the importance of World War I in world history compared to that of World War II, or it could be about the significance of a particular invention (for example, the printing press or the telephone).

## 7.10.2 Show me

### How to analyse cause and effect

1. To begin thinking about the causes of an event, start by asking the question, 'Why did this event happen?' This can be a deceptive question because the answer is usually more complex than it might appear at first. Brainstorm and write down all the reasons you can think of. Try to classify them into long-term causes and short-term triggers.
2. Next, for effects, ask, 'What happened because of it?' Once again, brainstorm and then write down all the things you can think of, trying to separate the short-term or immediate effects from the long-term effects. For both causes and effects you will probably notice that the immediate or short-term factors are easier to identify than those of the longer term.
3. Now organise the results in a way that makes them easier to analyse. One of the most effective ways to analyse cause and effect in history is to use a graphic organiser such as that shown in **SOURCE 1**. As you can see, there is room in the centre for you to indicate the event you are analysing, and there is room on each side to list a number of different causes and effects, both long and short term.
4. Once you have set out your initial thoughts, you can start to evaluate the significance of the event you are studying. Consider these questions:
   - How different was the situation after the event from before it?
   - Was the event I am analysing a key factor of change in the historical period I am studying?
   - How many people were affected by the event?
   - Did the differences that this event brought about remain in place for a long time, or did the situation return to how it was beforehand?
   - Which of the effects were intended, and which were unintended? Did the event result in change that was expected? This requires some careful thinking because it might depend on whose perspective you are viewing the effects from.

**SOURCE 1** An effective way to identify and analyse cause and effect




## An example of analysing cause and effect

The example here uses the First Opium War to outline how to analyse cause and effect.

1. *Why did the First Opium War happen?* After brainstorming some ideas, long-term causes were the confrontation between British and Chinese cultures, and the social effects of the opium trade in China. Short-term triggers that set off the First Opium War were the destruction of British opium stocks by the Chinese authorities and the murder of Lin Weixi.
2. *What happened because of the First Opium War?* Immediate effects were the signing of the Treaty of Nanjing and the exposing of Qing government weaknesses. Long-term effects were increased encroachment into China by foreign powers and further popular resistance to foreigners and to the Qing government.

**SOURCE 2** The signature page of the Treaty of Nanjing

**SOURCE 3** The Guangxu emperor, who initiated the Hundred Days' Reform

3. The causes and effects have been put into the diagram, making it easier to identify and categorise them. Of course there may be more branches, depending on the historical event being analysed.

4. By analysing the diagram and considering both the causes and effects of the First Opium War, it becomes clear that it was a significant event in nineteenth-century China. In the long term, it played an important role in the changes that China experienced in the nineteenth century.
   a. *How many people were affected by the event?* The Opium War directly affected the thousands of people who fought in it. Indirectly, it could be argued that millions of people were affected. It exposed the weakness of the Qing dynasty and led to further anti-Qing sentiment. It also further expanded foreign influence in China through the signing of the Treaty of Nanjing, and this would have affected many people in different ways.
   b. *Did the differences that this event brought about remain in place for a long time, or did the situation return to how it was beforehand?* The differences remained in place and set in motion events that would change China permanently. The Treaty of Nanjing increased foreign influence which would eventually lead to further tensions and uprisings within China, ultimately helping to bring about the end of the Qing Dynasty.
   c. *Which of the effects were intended, and which were unintended? Did the event result in change that was expected?* For the Western powers, some of the effects of the Opium War were intended. They fought the war with the aim of increasing their influence and power over China through forced trade, and the Treaty of Nanjing gave them exactly that. However, the level of anti-Qing sentiment that arose may have been unexpected, given that some of these tensions were eventually directed at the foreign powers in the Arrow War and Boxer Rebellion.

**SOURCE 4** Opium being destroyed in China

## 7.10.3 Let me do it

Complete the following activities to practise this skill.

### 7.10 ACTIVITIES

1. (a) Now that you have seen an example of how to analyse cause and effect, create a chart similar to the diagram in **SOURCE 1** to identify the causes and effects of the Boxer Rebellion.
   (b) Pair up with a classmate to compare your charts. What differences are there in your causes and effects?
   (c) Explain your differences to each other and consider if your chart needs to be amended.
2. Rank the causes from more important to less important. Explain why you ordered them the way you did.
3. Repeat the process in part 2 for the effects you have identified.
4. Separate the effects into two groups — intended and unintended. Explain why you assigned them that way.

# 7.11 Thinking Big research project: Key events visual summary

## Scenario

The period 1750 to 1918 saw a series of key events take place in China that changed the nation dramatically. Such events included:

- Lord Macartney's visit to China (1792)
- the First Opium War (1839–1842)
- the Taiping Rebellion (1850–1864)
- the Second Opium War (1856–1860)
- the Sino-Japanese War (1894–95)
- the Hundred Days' Reform (1898)
- the Boxer Rebellion (1899–1901)
- the downfall of the Qing dynasty (1911)
- World War I (1914–1918).

Is it possible to determine which of these were the most significant and why?

**SOURCE 1** This image shows Hong Kong as an early settlement. It was ceded to the British after the First Opium War and remained a British colony until 1997. How significant does this fact make the First Opium War?

## Task

Undertake an analysis of these major events and choose the four that you believe were most significant, then create a visual summary to identify where they occurred and how and why they were so significant in China's history.

Your final product should be a map of China indicating the location of your chosen events, with annotations outlining the significance of each. Follow the steps in the **Process** section to complete this task.

**SOURCE 2** An opium den in Canton, China, c. 1900

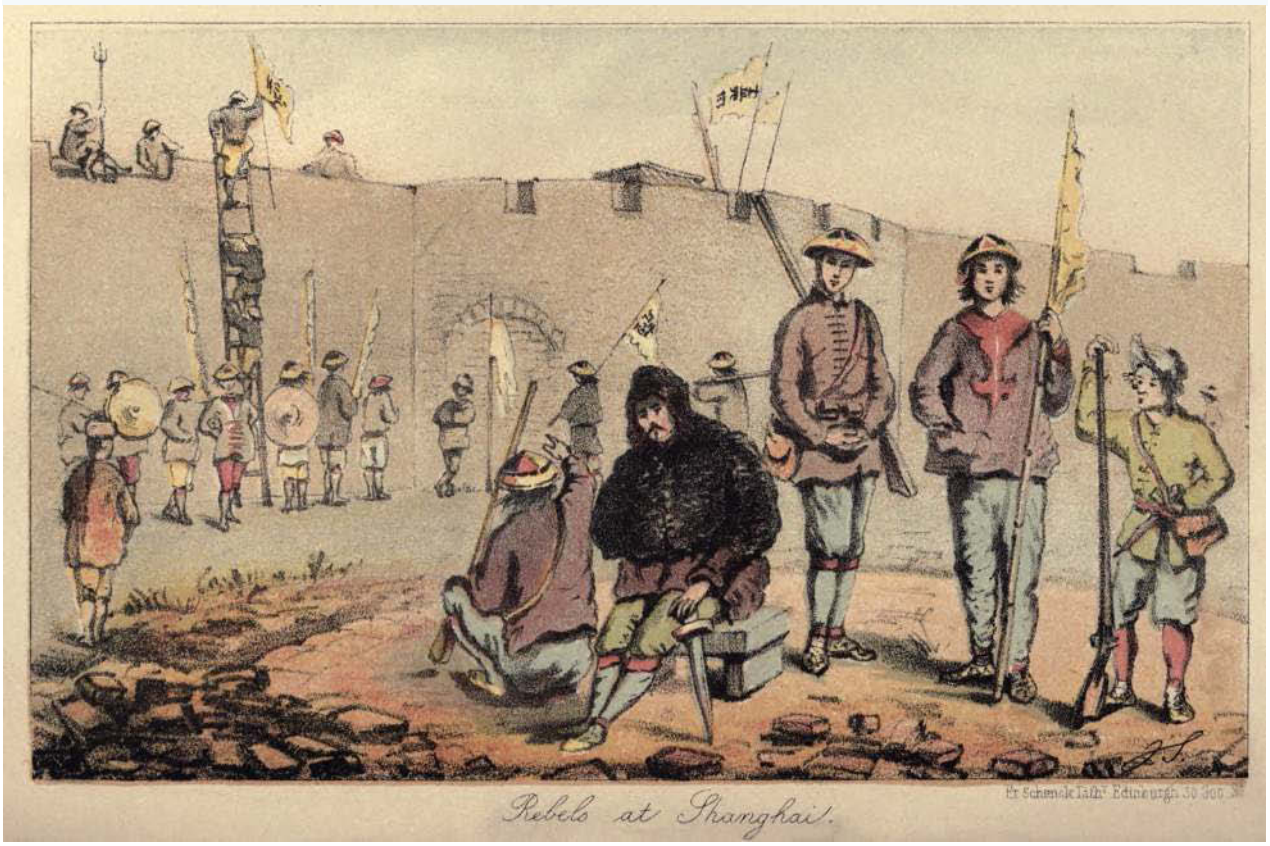
## Process

- Open the ProjectsPLUS application in the Resources for this topic. Click on the **Start new project** button to enter the project due date and set up your project group. For this task you should work with a partner, which will allow you to swap ideas and share responsibility for the project. Save your settings and the project will be launched.
- Navigate to the **Research forum**, where you will find starter topics (the events from the **Scenario** section) loaded to guide your research. You can add further topics to the Research forum if you wish. In the **Media centre** you will find an assessment rubric and some weblinks that will provide a starting point for your research. Remember to record details of your sources so you can create a bibliography to submit with your completed visual summary. Add your research notes and source details to the relevant topic pages in the Research forum. When you have completed your research, you can print out the **Research report** in the Research forum to easily view all the information you have gathered, if you wish.
- Refer back to the text and the work you have done throughout this topic and think about why these events were significant for China during this period. To measure the significance, think about the following factors:
  - What *change* resulted from the event?
  - How were people affected by it?

- How many people were affected by it?
- How long lasting were the changes or *consequences*?

- Once you have discussed and analysed the degree of change brought about by the events, you will be able to rank the events in order from *more significant* to *less significant*. Of course, this is your *perspective* of the events and others may think differently.
- Select the four events that you believe were the most significant.
  - Using a blank map of China, or the world if required, indicate the main location of each event so you can provide some geographic reference.
  - For each event, add a text box to your map that includes a dot-point summary of what occurred, and a paragraph clearly detailing *why* you have included the event — i.e., you should explain the measures of significance of each.
- Check your map thoroughly, ensuring that you have used correct spelling and grammar. Once you are happy with your work, submit your completed visual summary and bibliography to your teacher for assessment.

**SOURCE 3** Taiping rebels at Shanghai, China, 1853–54




## Resources

**ProjectsPLUS** Thinking Big research project: Key events visual summary (pro-0186)

# 7.12 Review

## 7.12.1 Key knowledge summary

### 7.2 Examining the evidence

- Traditional Chinese Confucian society placed great importance on knowledge and study.
- Chinese royal historians recorded the events of the royal families in what were known as the 'dynastic histories'.
- Modern historians must evaluate these sources carefully because they would often portray the represented dynasty in a very positive way, even though that was not always the case.
- The development of photography provided an entirely new medium through which to interpret historical events. However, like any other source, photography must be viewed with a critical eye.

### 7.3 Qing China

- Prior to the seventeenth century, China was largely isolated from and unknown to the European world.
- The key influencing philosophy of Confucianism formed the basis of Chinese culture, law, and society for centuries, resulting in an inward-looking traditional system of government.
- The emperor had ultimate power and ruled by what was known as the 'mandate of heaven'.
- If heaven turned against the emperor through bad harvests or failure in warfare, then the emperor was seen to have lost the mandate. This often resulted in the overthrow of the emperor and the rise of a different ruling family or 'dynasty'.

### 7.4 Living under the emperor

- Life in traditional China was governed closely by Confucianism, which resulted in a social structure not unlike the feudal system in Europe.
- The family was seen as the basic building block of society, so its structure remained very rigid.
- All members of the family were expected to know their place; women were subordinate to men.
- Socially, the 'four occupations' classified the population into a hierarchy, though in reality not all occupations were reflected in these four.
- Political challenges in the late nineteenth century began to defy social norms. As a result, twentieth-century Chinese society saw dramatic changes to many rules and customs previously held for centuries.

### 7.5 Arrival of the foreigners

- The first Europeans to make contact with China were traders, in the fifteenth and sixteenth centuries.
- They were not regarded as a threat to the Chinese, who felt that there was little that foreigners could offer them.
- However, more European powers began to seek trade. The Chinese attempted to limit the trade to specified cities under what became known as the 'Canton System'.
- This ultimately led to conflict with the foreign powers, in particular the British, when the British attempts to increase trade were rebuffed.
- Traditional Chinese weapons were no match for Western technology and China's repeated defeats at the hands of the foreign powers led to a range of 'unequal treaties' being signed and an increased sense of bitterness and resentment towards foreign influence in China.

### 7.6 Expansion, trade, conflict

- The mid to late nineteenth century saw great change in China, brought about largely by foreign influence.
- Pleas from Lin Zexu directly to Queen Victoria had little effect on foreign trade and influence.
- China's defeat in the Opium Wars, fought against a coalition of foreign powers, led to internal resentment towards the weak Qing dynasty.
- The resultant Taiping Rebellion and Boxer Rebellion saw Chinese anger directed both at the foreign powers and at the Qing dynasty itself.

- The emergence of Japan as a major world power presented a new threat for China.
- The monarchy found itself under threat from home and abroad, and attempts at reform to modernise and strengthen the country were resisted by then Empress Dowager Cixi.

### 7.7 Economic and social effects

- In addition to the political changes influenced by foreign powers, the economic and social effects also began to be felt more widely.
- The shift in agriculture from food crops to silk and tea to meet the British demand resulted in a fall in food production.
- This shortage drove prices up, making it difficult for poorer people to afford basic staple products.
- Socially, British imports of opium had a significant impact.
- More opium coming into China resulted in greater quantities of the drug being available more cheaply than ever before.
- Its use became widespread and at one point an estimated one-quarter of the adult male population was addicted.
- Foreign ideas also started to spread in China.
- Reformers called for modernisation of the country, but this was resisted because of the fear of ever-increasing foreign influence.
- The Qing dynasty was trying desperately to hang on to traditional power in a modernising world.

### 7.8 Resistance in China

- The Boxer Rebellion is the most well known of the violent reactions to foreign influence.
- The Boxers called for the expulsion of foreigners from China and a return to traditional values.
- The Empress Dowager Cixi was in a difficult position because secretly she agreed with the Boxers, but publicly denounced the uprising in the hope of reducing the harsh treatment imposed by the foreign powers after the uprising was crushed.
- Cixi's death in 1908 resulted in a power struggle between Sun Yixian and Yuan Shikai, which ultimately led to the declaration of China as a republic in 1911 and the end of the 300-year-old Qing dynasty.

### 7.9 Continuity and change

- Politically, the China that emerged in the first part of the twentieth century was drastically different to the China of the nineteenth century.
- It had become a republic with a president as head of state, rather than a monarchy with an all-powerful emperor.
- However, the new government faced challenges of its own.
- Japan's 'Twenty-One Demands' of 1915 was yet another humiliating imposition on China that once again saw foreign influence creating tensions both within China and with the international community.

A timeline of key events in China, 1750–1918

CE

1790

**1792**
Britain sends Sir George Macartney to China in an attempt to encourage diplomatic relations.

1800

1810

**Early 1800s**
Despite an import ban on opium,the British smuggle large amounts of it into China. Much of the population becomes addicted.

1820

1830

**1839**
The First Opium War begins.

1840

**1842**
The First Opium War ends with the signing of the Treaty of Nanjing.

**1847–52**
Natural disasters strike China, placing great strain on the government.

1850

**1850**
The Taiping Rebellion begins.

**1856**
The Second Opium War (Arrow War) begins.

1860

**1860**
The Second Opium War (Arrow War) ends.

**1861**
The new Empress Dowager Cixi comes to power.

**1864**
The Taiping Rebellion is finally subdued.

1870

1880

1890

**1894–5**
Sino-Japanese War

**1898**
The Hundred Days' Reform attempts to modernise China.

1900

**1899–1901**
Boxer Rebellion

**1908**
The Dowager Empress Cixi dies.

1910

**1911**
Revolutions erupt across much of China.

**1912**
Pu Yi, the last Chinese emperor, abdicates.

1920

CE

## 7.12.2 Reflection

Complete the following to reflect on your learning.

### 7.12 ACTIVITIES

Revisit the inquiry question posed in the Overview:

**How did foreign influence transform China from isolated monarchy to modern republic?**

1. Now that you have completed this topic, what is your view on the question? Discuss with a partner. Has your learning in this topic changed your view? If so, how?
2. Write a paragraph in response to the inquiry question, outlining your views.

### on Resources

**eWorkbook** Reflection (doc-31708)
Crossword (doc-31709)

**Interactivity** China (1750–1918) crossword (int-7641)

### KEY TERMS

**concubine** a woman who lives with a man she is not married to and has a lower social rank than his wife
**Daoist** ancient Chinese philosophical/religious tradition emphasising simple living in harmony and balance with the universe
**despot** a ruler with almost unlimited power who uses it unfairly or cruelly
**gunboat diplomacy** a coercive form of diplomacy in which a country threatens the use of military force to achieve its objectives
**junk** Chinese sailing ship
**kowtow** to kneel and touch the forehead to the ground in deep respect for an emperor
**legation** a foreign country's diplomatic office, similar to an embassy
**mandate of heaven** the idea that heaven blessed the rule of a just emperor but could rescind that blessing if the emperor ruled unjustly
**Marco Polo** merchant from Venice who travelled through Asia in the thirteenth century; generally credited with introducing Europeans to China and Central Asia
**spirit possession** an alleged supernatural event in which a spirit or god takes control of the human body, creating changes in behaviour
**subordinate** having a lower or less important position

# 8 World War I (1914–1918)

## 8.1 Overview

Millions fought and died in the Great War. Was there more to it than just winners and losers?

### 8.1.1 Links with our times

The years 2014–2018 marked the centenary of World War I, an anniversary of enormous significance for Australia and for much of the world. For Australians, this was a reminder of the terrible losses suffered by our nation a century ago. The Australian War Memorial plays a vital role in the remembrance of war. Inscribed in bronze on the memorial's Roll of Honour are the names of more than 102 000 Australians who have died in wars since 1885. Tragically, 62 000 of those names are from just one war: World War I.

World War I was a turning point in Australia's history; learning about it helps us to understand much about our country. It was also a turning point for the world, resulting in death and destruction on a massive scale, the rise of communism, and later of fascism, and the fall of empires. Wars have terrible consequences but they do not simply happen. They can be investigated and understood. If we learn from the past, it might help us to put an end to war in the future.

**on** Resources

**eWorkbook** Customisable worksheets for this topic

**Video eLesson** World War I (1914–1918) (eles-2398)

LEARNING SEQUENCE


**8.1** Overview
**8.2** Examining the evidence
**8.3** What caused the Great War?
**8.4** The world at war
**8.5** Australians in the Great War
**8.6** Gallipoli
**8.7** Gallipoli: the historical debate
**8.8** Trench warfare
**8.9** The Western Front
**8.10** The home front
**8.11** The conscription issue
**8.12** The Eastern Front: collapse and revolution
**8.13** Peace and commemoration
**8.14** The war's impact on Australia's international relations
**8.15** **SkillBuilder:** Analysing photos online only
**8.16** **Thinking Big research project:** Western Front battlefields guide online only
**8.17** **Review** online only


To access a pre-test and starter questions and receive immediate, **corrective feedback** and **sample responses** to every question, select your learnON format at www.jacplus.com.au.

## A timeline of World War I

CE

1880

**1882**
Germany, Austria–Hungary and Italy form the Triple Alliance.

**1907**
Britain, France and Russia form the Triple Entente.

1910

**1914**
28 July: Austria–Hungary declares war on Serbia.

1–3 August: Germany declares war on Russia and France, and invades Belgium.

4 August: Britain declares war on Germany.

5–10 September: French and British armies halt the Germans in Belgium and France.

15 September: Trench warfare begins in Western Europe.

**1916**
March–June: The AIF joins the fight against Germany on the Western Front.

The Australian Light Horse remains in Egypt to fight Turkish forces.

1 July: The British and French launch a big offensive in the Somme Valley on the Western Front.

28 October: The first referendum on conscription is held in Australia.

1915

**1915**
25 April: The Anzacs land at Gallipoli.

December: The Allies withdraw from Gallipoli.

**1917**
6 April: The USA enters the war.

31 July: The third battle of Ypres (Passchendaele) is launched by the Germans in Belgium.

7 November: Revolution in Russia leads to Russian withdrawal from the war.

20 December: The second conscription referendum is lost in Australia.

**1918**
21 March: The last German offensive on the Western Front is launched.

18 July: Australian forces lead the first successful large Allied attack in France.

The Armistice, signed on 11 November, ends the fighting.

1920

CE

# 8.2 Examining the evidence

## 8.2.1 How do we know about World War I?

Because of its global scale and impact, there is an enormous range of sources of evidence about World War I. Australia's population during the war years was under 5 million, yet around 60 000 Australians died in active service. As a result, Australia has among the world's most extensive collections of sources from the war.

### DID YOU KNOW?

World War I (the First World War), at the time called 'the Great War', was sometimes described as 'the war to end all wars'. However, in the century since World War I there has hardly been a time when war was not taking place somewhere in the world. Increasingly the main victims have come to be civilians. As many as 231 million people died in wars and other conflicts during the twentieth century. Since the beginning of this century, many more have died.

### Written sources

Thousands of books and articles have been written about World War I over the many years since it ended. There are also vast quantities of written primary sources. These include campaign maps, soldiers' military records, letters, diaries, memoirs and propaganda for and against conscription for the war. Many of these sources can now be read on the Australian War Memorial website (see **SOURCES 2** and **3**).

### Visual sources

Several countries, including France, Belgium and Britain, have great museums dedicated to World War I. Yet none of these surpasses the outstanding collections of the Australian War Memorial. Its holdings include many thousands of photographs and artworks, weapons, equipment and dioramas depicting specific battles. Many documentary films and several excellent websites are dedicated to the subject.

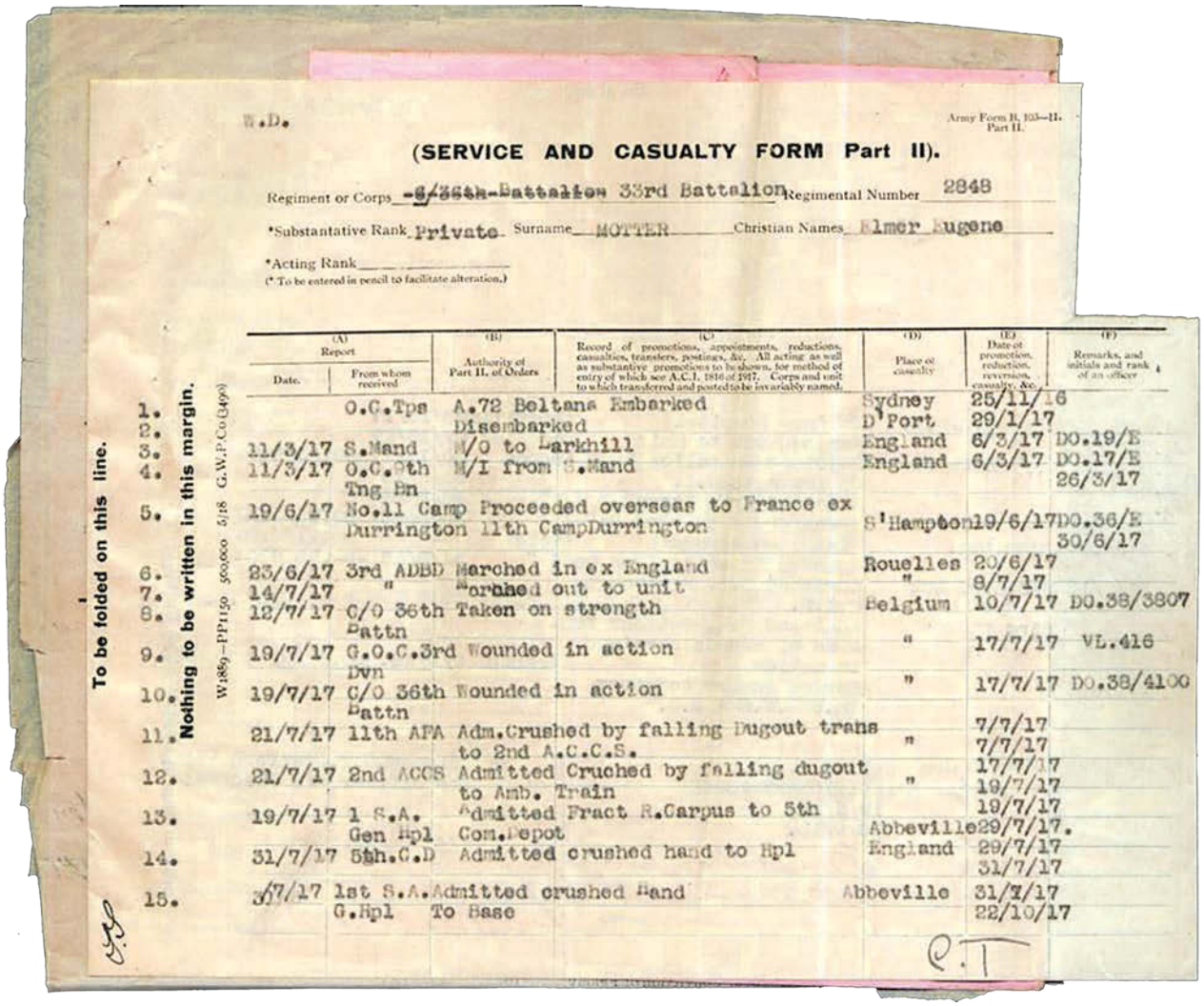
**SOURCES 1–4** will give you an idea of the variety of evidence that we have for this conflict.

**SOURCE 1** Australian 2nd Division monument near the town of Peronne in the Somme Valley, northern France

**SOURCE 2** Part of Second Lieutenant C.C.D. St Pinnock's account of the aftermath of fatal charges against Turkish lines by soldiers of the Australian Light Horse at Gallipoli, Turkey, on 7 August 1915. Pinnock himself was killed in action just one year later.

... you can imagine what it was like. Really too awful to write about. All your pals that had been with you for months and months blown and shot out of all recognition. There was no chance whatever of us gaining our point, but the roll call after was the saddest, just fancy only 47 answered their names out of close on 550 men. When I heard what the result was I simply cried like a child.

**SOURCE 3** Part of the World War I military service record of Private Elmer Motter of the 33rd Australian Battalion



W.D.

Army Form B. 103—11. Part II.

(SERVICE AND CASUALTY FORM Part II).

Regiment or Corps ~~8/36th Battalion~~ 33rd Battalion Regimental Number 2848

*Substantative Rank Private Surname MOTTER Christian Names Elmer Eugene

*Acting Rank

(* To be entered in pencil to facilitate alteration.)

| | (A) Report Date | (A) Report From whom received | (B) Authority of Part II. of Orders | (C) Record of promotions, appointments, reductions, casualties, transfers, postings, &c. All acting as well as substantive promotions to be shown, for method of entry of which see A.C.I. 1816 of 1917. Corps and unit to which transferred and posted to be invariably named. | (D) Place of casualty | (E) Date of promotion, reduction, reversion, casualty, &c. | (F) Remarks, and initials and rank of an officer |
|---|---|---|---|---|---|---|---|
| 1. | | | | | | | |
| 2. | | O.C.Tps | | A.72 Beltana Embarked | Sydney | 25/11/16 | |
| 3. | | | | Disembarked | D'Port | 29/1/17 | |
| 4. | 11/3/17 | S.Mand | | M/O to Larkhill | England | 6/3/17 | DO.19/E |
| | 11/3/17 | O.C.9th Tng Bn | | M/I from S.Mand | England | 6/3/17 | DO.17/E 26/3/17 |
| 5. | 19/6/17 | | | No.11 Camp Proceeded overseas to France ex Durrington 11th CampDurrington | S'Hampton | 19/6/17 | DO.36/E 30/6/17 |
| 6. | 23/6/17 | 3rd ADBD | | Marched in ex England | Rouelles | 20/6/17 | |
| 7. | 14/7/17 | " | | Marched out to unit | " | 8/7/17 | |
| 8. | 12/7/17 | C/O 36th Battn | | Taken on strength | Belgium | 10/7/17 | DO.38/3807 |
| 9. | 19/7/17 | G.O.C.3rd Dvn | | Wounded in action | " | 17/7/17 | VL.416 |
| 10. | 19/7/17 | C/O 36th Battn | | Wounded in action | " | 17/7/17 | DO.38/4100 |
| 11. | 21/7/17 | 11th AFA | | Adm.Crushed by falling Dugout trans to 2nd A.C.C.S. | " | 7/7/17 7/7/17 | |
| 12. | 21/7/17 | 2nd ACCS | | Admitted Crushed by falling dugout to Amb. Train | " | 17/7/17 19/7/17 19/7/17 | |
| 13. | 19/7/17 | 1 S.A. Gen Hpl | | Admitted Fract R.Carpus to 5th Con.Depot | Abbeville | 29/7/17. | |
| 14. | 31/7/17 | 5th.C.D | | Admitted crushed hand to Hpl | England | 29/7/17 31/7/17 | |
| 15. | 3?/7/17 | 1st S.A. G.Hpl | | Admitted crushed Hand To Base | Abbeville | 31/7/17 22/10/17 | |

To be folded on this line. Nothing to be written in this margin.

W1859—PP1150 500,000 5/18 G.W.P.Co(3499)

**SOURCE 4** A detail from a diorama in the Australian War Memorial, depicting conditions under which Australians fought on the Western Front during World War I

## 8.2 EXERCISES

**Historical skills key: HS1** Remembering and understanding **HS2** Sequencing chronology **HS3** Using historical sources as evidence **HS4** Identifying continuity and change **HS5** Analysing cause and effect **HS6** Determining historical significance

### 8.2 Exercise 1: Check your understanding

1. **HS1** Give five examples of types of primary sources that are available for studies of World War I.
2. **HS1** Name four countries that have museums dedicated to World War I.
3. **HS1** What two other names were used to describe World War I?
4. **HS1** Why would both of those names be considered inappropriate today?
5. **HS1** Where on the internet can you find many written primary sources for World War I?

### 8.2 Exercise 2: Apply your understanding

1. **HS3** Study **SOURCE 1**. The image shows a place where Australians fought in World War I.
   (a) What does the monument suggest about the French people's attitude to Australian soldiers?
   (b) Suggest why the street in the source has been named *Avenue des Australiens* (Avenue of Australians).
2. **HS3** Read **SOURCE 2**.
   (a) Identify when and where the event described in this source occurred.
   (b) Identify what percentage of the 550 men survived to answer their names after the attack.
3. **HS3** Study **SOURCE 3**. Elmer Motter died of wounds in France on 2 September 1918.
   (a) Identify how long he was in action before he was first wounded.
   (b) What incident occurred that led to Private Motter being admitted to the ambulance train?
4. **HS3** Analyse **SOURCE 4** and explain what you can tell from its details about conditions under which Australians fought during World War I.
5. **HS3** Describe what each of the sources in this subtopic tells us about the experience of Australian soldiers in World War I.

Try these questions in learnON for instant, corrective feedback. Go to www.jacplus.com.au.

# 8.3 What caused the Great War?

## 8.3.1 Long-term causes of the war

The immediate trigger of World War I was the assassination of the heir to the throne of the Austro-Hungarian Empire on 28 June 1914. Five weeks later the great powers of Europe, along with the countries of their empires and some other small nations, were at war. When the war began, most people thought that it would be over within a few months. Instead it raged for four years, causing great destruction and unimaginable suffering. Such conflicts rarely have one simple cause. To understand how and why the Great War happened we need to look well beyond the event that triggered the fighting.

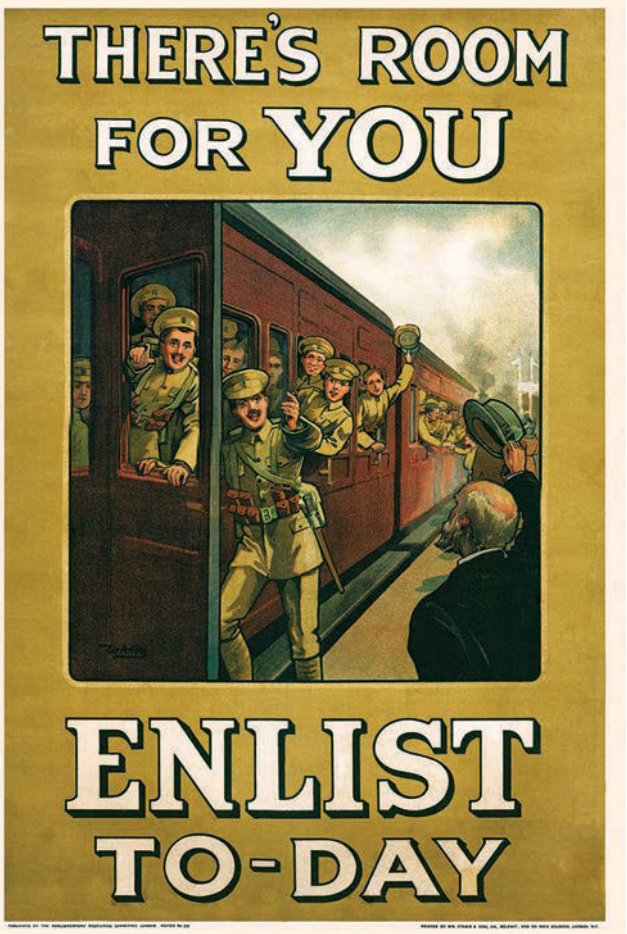
### Glorifying war

Today we know that war is terrible, cruel and destructive, and that it often has unforeseen consequences. However, most people did not understand this in early 1914. At school and in popular books, newspapers and magazines, war was often presented as a heroic adventure. Most people thought of wars as short, exciting, noble and glorious. At the same time, there was an arms race in Europe. Between 1870 and 1914 the great powers increased their military spending by 300 per cent and all the continental European powers adopted **conscription**. Some historians have described Europe in 1914 as a powder keg waiting for a spark to ignite an explosion.

### Growing tensions

**Imperialism** and **nationalism** had caused international tensions and conflicts long before 1914. Fear and suspicion of their rivals drove nations to seek security through alliances with others. Leaders came to believe that their countries would be safer if they could rely on others to come to their aid if ever they were threatened. But such alliances could also drag countries into conflicts.

**SOURCE 1** *There's Room for You* by W.A. Fry, 1915. Posters such as this one from Britain emphasised the adventure of war.




### Germany's alliances

From the early 1870s Germany sought an alliance with Austria–Hungary and Russia. This was because the German states had taken two provinces — Alsace and Lorraine — from France during war in 1870, and Germany feared that France would want revenge. But such an alliance could not last because Austria–Hungary and Russia had competing interests. In 1879 Germany created the Dual Alliance, under which Germany and Austria–Hungary agreed that each would help the other if either was attacked by Russia. This accord became the Triple Alliance when Italy joined in 1882. At the same time, Germany attempted to remain friendly with Britain and to mend relations with Russia.

### France finds allies

From 1888 Germany's foreign policy took a new direction. When Germany failed to renew a treaty with Russia in 1890, France

found an ally in Russia. In the 1894 Franco-Russian Alliance, each agreed to help the other if attacked by Germany. The new German ruler, Kaiser Wilhelm II, wanted to create a colonial empire and took steps to build up the German navy. This raised concerns in Britain, whose own empire depended on the Royal Navy's absolute superiority over any rival (see **SOURCES 3** and **4**). Alarmed by Germany's move, Britain signed the Entente Cordiale with France in 1904. When Britain and Russia settled their differences in 1907, Britain, France and Russia linked up in the Triple Entente.

**SOURCE 2** European alliances at the beginning of 1914

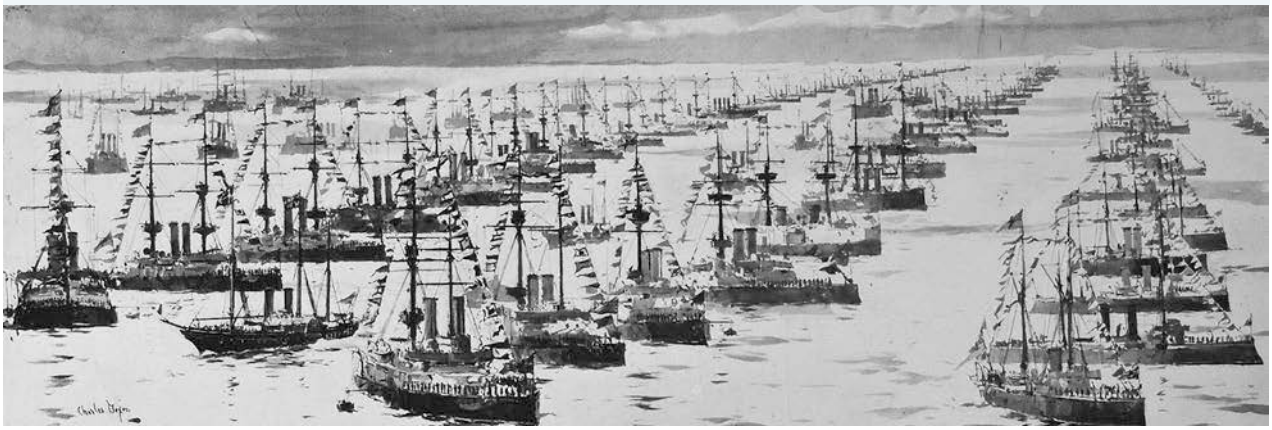
***Source:*** Spatial Vision

Conflicting French and German interests in North Africa and conflicting Russian and Austrian interests in the Balkans led to increased tensions. However, it was in the Balkans that these tensions would erupt into war.

**SOURCE 3** From a statement in 1914 by Sir Edward Grey, Britain's foreign minister from 1905 to 1916

The cause of anxiety now in public opinion here as regards Germany arises entirely from the question of the German naval expenditure ... if she had a fleet bigger than the British fleet, obviously she could not only defeat us at sea, but could be in London in a very short time with her army.

**SOURCE 4** The (British) Royal Navy's 1st and 2nd Battle Squadrons at sea in 1912. It was British policy to maintain a navy that was large enough and strong enough to defeat the navies of any two potential enemies.



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Deepen and check your understanding of this topic with related case studies and auto-marked questions.
- World War One > **Europe on the eve of war**

## 8.3.2 The short-term triggers of the war

### The Balkans powder keg

Nationalism was an especially strong force in Europe's Balkan peninsula, where several national groups had won their independence from the Turkish Ottoman Empire since the 1820s. This current alarmed the military leaders of Austria–Hungary, who feared that the Austro-Hungarian Empire could also be infected by national minorities seeking independence. The main problem was tension between Austria and Serbia, the most powerful of the independent Balkan nations.

Serbia was a **Slavic** nation. Serbian nationalists wanted other Slavic peoples within the Austro-Hungarian Empire to unite with it in a South Slav kingdom. Many Serbs were furious when, in 1908, Austria annexed two Turkish Balkan provinces, Bosnia and Herzegovina, where Serbs made up much of the population. By 1914 Serbia saw Austria as the main obstacle to its expansion. For its part, Austria viewed Serbia as a danger to its empire's continued existence. Austria–Hungary was much more powerful than Serbia, but Serbia had the backing of Russia, which portrayed itself as the champion of fellow Orthodox Christian Slavs (see **SOURCE 5**).

### Countdown to war

On 28 June 1914, during an official visit to the Bosnian town of Sarajevo, the heir to the Austrian throne, Archduke Franz Ferdinand, and his wife, the Duchess Sophie, were fatally shot. Their killer was Gavrilo Princip, a 19-year-old Bosnian Serb. Princip and his fellow assassins belonged to an extreme Serbian nationalist group, Young Bosnia. Its aim was to see Bosnia united with Serbia. They were armed and assisted by Danilo Ilić, a member of the Black Hand, a secret society directed by the head of Serbian military intelligence.

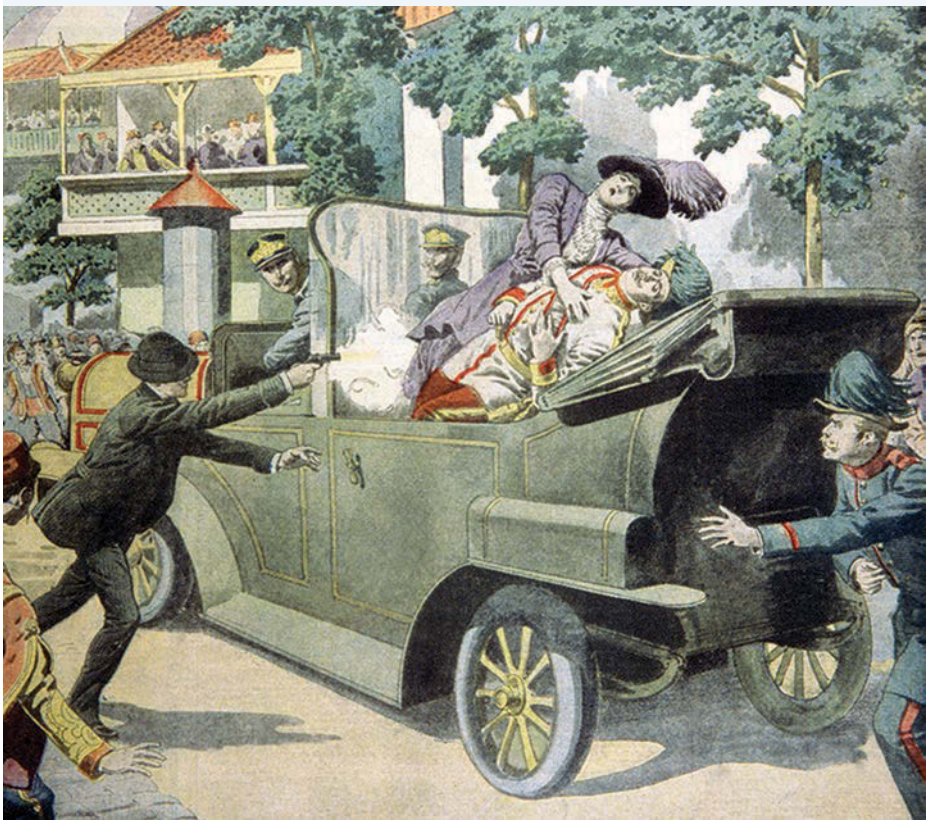
**DID YOU KNOW?**

The assassins did not know that Archduke Franz Ferdinand was strongly opposed to any war against Serbia and wanted political reform in the Austro-Hungarian Empire with more rights for its subjects.

**SOURCE 5** The Balkans and the Austro-Hungarian Empire at the end of 1913

***Source:*** Spatial Vision

**SOURCE 6** This illustration appeared in a French magazine shortly after the assassination. The caption read: 'The assassination of the Archduke, Austrian heir, and the Duchess, his wife, in Sarajevo'.



**SOURCE 7** From a letter written in 1918 by the youngest of the assassins, 17-year-old Vaso Čubrilović, to his sisters. Because he was under 20, Čubrilović was spared the death penalty but sentenced to 16 years' imprisonment.

I shall write as much as I remember about the assassination. I first thought about it in October 1913 in Tuzla, incensed by the fights we had with our teachers, the mistreatment of Serbian students, and the general situation in Bosnia. I thought I'd rather kill the one person who'd really harmed our people than fight in another war for Serbia. All I'd achieve in a war is to kill a couple of innocent soldiers, while these gentlemen who were responsible for it never come anywhere near the war itself ...

Ilić ... told me that there would be three others, apart from us three, and that Serbian officers were supplying the weapons. I asked if the Serbian government knew about it. He said no ...

Events soon spiralled out of control. Austria now had an excuse to crush Serbia but needed to be sure of Germany's backing. Germany gave Austria a guarantee of military support and, on 23 July, Austria presented Serbia with an **ultimatum**. Austria knew that Serbia could never accept all the terms of the ultimatum, especially its demand that Austrian troops be allowed to track down Serb terrorists inside Serbia.

## War begins

Serbia accepted many of the demands and offered to discuss others, but Austria proceeded to declare war on 28 July. Russia began to mobilise its forces to support Serbia on 30 July, so Germany declared war on Russia on 1 August. After France declared it would stand by its Russian ally, on 3 August Germany declared war on France. As you can see from **SOURCE 8**, Russia, Germany, France, Belgium, Britain and their empires were drawn rapidly into a world war.

**SOURCE 8** The steps by which countries were drawn into World War I

## 8.3 ACTIVITIES

**1.** Historians use arguments to interpret and explain the past, including how events caused changes and other events. However, we have to be careful to ensure that we avoid **reasoning errors**.

As you might know, an **argument** is a group of sentences arranged so that the sentence called the *conclusion* follows from the other sentences, called the *premises.*

A **logical argument** is one in which the conclusion *does* follow from the premises.

A **fallacy** is an argument in which the conclusion *does not* follow from the premises. It is an argument based on reasoning errors.

A common reasoning error is to assume that because one event came before another event or change, or because it was occurring around the same time, the first event must be a cause of the second event. We call this a **cause-and-effect fallacy** or **false-cause fallacy**. It goes like this: if X happens and Y occurs, you can conclude that X causes Y. An example could be the following argument:

*Premise 1:* Between 1870 and 1914 the great powers increased military spending by 300 per cent.

*Premise 2:* The continental powers of Europe adopted conscription before World War I.

*Conclusion:* Therefore increased military spending and conscription caused World War I.

This argument might seem reasonable until you consider what you get if you use the same kind of reasoning for a different argument. For example:

*Premise 1:* In 1910, the rulers of Germany, Austria–Hungary, Russia and France attended the funeral of England's King Edward VII.

*Premise 2:* World War I involved Germany and Austria–Hungary on one side against Britain, France and Russia on the other side

*Conclusion:* Therefore attending the funeral of Edward VII caused World War I.

The reasoning error with both arguments is assuming that the first event or events **caused** the second event without demonstrating any causal link between the two events. In the first example, developments that could have contributed to the likelihood of war are used as premises but all other possible causes are ignored. In the second, no direct link is shown between the events.

### Your task

(a) Work in small groups to develop **two arguments** to explain the outbreak of World War I. As you have learned, several developments contributed to World War I. They include long-term factors such as the arms race, alliances, imperialism, nationalism and glorification of war, and short-term triggers involving Serbia and Austria. In your first argument, use the same reasoning errors as in the above examples. In the second, your task is to present a logical argument.

(b) After the discussion, complete the table shown to outline both arguments decided upon by your group.

| Erroneous argument | Logical argument |
|---|---|
| | |

(c) Briefly describe how studying this subtopic has helped you to identify reasoning errors.

**[Critical and Creative Thinking Capability]**

**2.** With a partner, evaluate the significance of the assassination of Archduke Franz Ferdinand as the trigger for World War I, using the following questions as a guide. You can use a graphic organiser such as a mind map to organise your thinking and frame your responses if you wish.

(a) Is it likely that Austria–Hungary would have gone to war without German backing?

(b) What were the terms of the guarantee of military support that Germany gave to Austria–Hungary? (This guarantee is often referred to as the 'blank cheque'. You will need to use the internet to explore this issue.)

(c) What were Germany's motives for encouraging Austro-Hungarian aggression?

(d) Does the involvement of Serbian officers in the assassination plot prove that the Serbian government was involved?

(e) If the Serbian government really was involved, would it have accepted most of the Austrian ultimatum?

(f) As Serbia did accept most of the terms of the ultimatum, why did Austria still declare war?

(g) Is it likely that, had the assassination not occurred, other tensions would still have triggered the war?

**Determining historical significance**

## 8.3 EXERCISES

**Historical skills key: HS1** Remembering and understanding **HS2** Sequencing chronology **HS3** Using historical sources as evidence **HS4** Identifying continuity and change **HS5** Analysing cause and effect **HS6** Determining historical significance

### 8.3 Exercise 1: Check your understanding

1. **HS1** Identify three long-term causes of World War I.
2. **HS1** Explain Germany's motive for wanting alliances.
3. **HS1** Identify reasons why nationalism in the Balkans alarmed the leaders of the Austro-Hungarian Empire.
4. **HS1** What did Serbian nationalists want?
5. **HS1** Explain why a potential war between Serbia and Austria was likely to involve other nations.

### 8.3 Exercise 2: Apply your understanding

1. **HS3** Using **SOURCE 2**, identify the members of the two rival European alliances.
2. **HS3** Refer to **SOURCES 3** and **4**.
   (a) Why was Britain fearful of steps taken by Germany's Kaiser Wilhelm II to expand the German navy?
   (b) Explain how this development led Britain into an alliance with France and then with Russia.
3. **HS3** Explain how **SOURCE 5** can assist us in understanding why Austria–Hungary wanted a war with Serbia.
4. **HS3** Using **SOURCES 6** and **7** as your primary-source evidence, write a brief account of the assassination of Archduke Franz Ferdinand and the plot leading to it.
5. **HS3** Analyse the perspective of Vaso Čubrilović in **SOURCE 7**.
   (a) Decribe Čubrilović's motives.
   (b) Explain why he would have thought his actions were justified.
   (c) How was his perspective different from that of the leaders of Austria–Hungary?
6. **HS5** Using what you have discovered about short- and long-term causes, refer to **SOURCE 8** to describe the steps by which a local conflict quickly became a world war.

Try these questions in learnON for instant, corrective feedback. Go to www.jacplus.com.au.

# 8.4 The world at war

## 8.4.1 The main battlefronts

World War I was fought between two groups of countries — the Allies and the Central Powers. At first the Allies consisted of the British, French and Russian empires along with Serbia and Belgium. The Central Powers were Germany, the Austro-Hungarian Empire, Bulgaria and the Turkish Ottoman Empire. Partly because Britain, France, Germany and Turkey had empires outside Europe, what began as a European war became a global war. It was fought on many fronts: on land, on and under the sea and in the air.

In return for promises of territory, Italy withdrew from the Triple Alliance and joined the Allies in May 1915. As the war progressed, other countries joined the Allies. Among them were Greece, Portugal, Romania, Japan, China, Brazil and the small countries of Central America, although many of them expressed their support without joining the fighting. The United States of America joined the Allies in 1917.

### The Western Front

Germany's strategy was based on the fact that it had an enemy to the west (France) and a bigger enemy to the east (Russia), and that it would be impossible to defeat both at the same time. Count Alfred von Schlieffen had developed Germany's basic plan in 1905. Under the Schlieffen Plan, during the six weeks the Germans believed Russia would need to mobilise its army, Germany would launch a quick attack to defeat France. The victorious German forces could then be moved by rail to the east to fight Russia.

Attacking France through neutral Belgium in August 1914 would avoid the much slower task of a direct invasion across the heavily fortified French–German border. The plan failed largely because of strong Belgian resistance, something Germany had not expected. Belgian resistance delayed Germany's advance and helped French and British forces to halt the Germans in northern France in September 1914.

Both sides dug trenches to reduce their losses from enemy artillery and machine-gun fire. Over the next four years, millions of lives were lost in huge offensives aimed at breaking the **deadlock** that resulted from trench warfare.

**SOURCE 1** How the Schlieffen Plan was meant to work

***Source:*** Spatial Vision

### The Eastern Front

On the Eastern Front, Russian forces had some early successes but they were poorly led and equipped, and the Germans soon gained the advantage. Around 2 million Russian soldiers were killed, wounded or taken prisoner during the war. Despite some victories against Austro-Hungarian forces, Russia's military was collapsing by early 1917 and the Revolution of November 1917 ended Russia's involvement in the war (see subtopic 8.12).

## 8.4.2 Other theatres of war

### The war at sea

Germany's naval build-up had been a major reason for Britain's decision to become an ally of France and Russia. Both Britain and Germany believed that navies could determine the outcome of war. However, in 1914 the German fleet was trapped in its ports, so the British navy's main role was maintaining a **blockade** to prevent Germany from importing war materials. Germany retaliated by sending out U-boats to sink allied shipping. In January 1917 **U-boats** began to attack ships of neutral countries trading with the Allies. This led to the United States joining the Allies in April 1917.

### Other European fronts

When Italy joined the Allies a new front was opened along its mountainous frontier with Austria. Fighting continued there throughout the war. In 1916 Austrian and German troops overran Romania soon after it

joined the Allies. After Russian forces captured Armenia from Turkey in 1915, Turkish soldiers rounded up hundreds of thousands of Armenians living within Turkish territory. They were sent on a death march and massacred. In the same year, the Allies failed in their attempt to invade Turkey via the Gallipoli Peninsula (see subtopic 8.6).

**SOURCE 2** Major battlefields of World War I

***Source:*** Spatial Vision

## War in the colonies

With most of its navy bottled up in port, Germany was unable to defend its colonies. In 1914 South Africa took German South-west Africa, Australia took German New Guinea, and Japan seized Germany's Pacific islands colonies and territory in China. Turkey's Middle Eastern colonies became a theatre of war from 1915, when Britain encouraged Arab leaders to revolt against the Turks with promises of independent kingdoms. These promises were later dishonoured. Germany, in turn, created colonial problems for Britain by shipping arms to Irish rebels, who staged an unsuccessful revolt against British rule in Ireland in 1916.

### Explore more with myWorldHistoryAtlas

Deepen and check your understanding of this topic with related case studies and auto-marked questions.

- World War One > **World War I**

### 8.4 ACTIVITY

Use the internet to research the massacre of Armenians in 1915 and explain why this issue is still controversial.

**Using historical sources as evidence**

## 8.4 EXERCISES

**Historical skills key: HS1** Remembering and understanding **HS2** Sequencing chronology **HS3** Using historical sources as evidence **HS4** Identifying continuity and change **HS5** Analysing cause and effect **HS6** Determining historical significance

### 8.4 Exercise 1: Check your understanding

1. **HS1** At the beginning of the war, who were the Allies and who were the Central Powers?
2. **HS1** Which of these two groups were joined by other countries as the war progressed?
3. **HS1** How did the Allies arrange for Italy to change sides?
4. **HS1** Why was Germany able to achieve victories on the Eastern Front?
5. **HS1** Explain the effect of Britain's naval blockade on Germany's ability to import war materials and to defend its colonies.
6. **HS1** What were the effects of Germany's retaliation against the blockade?

### 8.4 Exercise 2: Apply your understanding

1. **HS3** Examine **SOURCE 1**. In a paragraph, explain:
   (a) why Germany needed to defeat France quickly
   (b) how the Schlieffen Plan was meant to achieve this
   (c) why the attack on France had to be made through neutral Belgium.
2. **HS3** With reference to **SOURCE 1**, explain why Germany's Schlieffen Plan failed.
3. **HS3** Examine **SOURCE 2**. Identify the locations of:
   (a) the Western Front and the Eastern Front
   (b) other theatres of war in Europe and the Middle East.
4. **HS5** Identify three developments that could be regarded as turning points in the war during 1914 and 1915.
5. **HS6** Explain the significance of the war's turning points in giving advantages to the Allies. Consider what effect each turning point had on the Allies.

Try these questions in learnON for instant, corrective feedback. Go to www.jacplus.com.au.

# 8.5 Australians in the Great War

## 8.5.1 Australia's response to the outbreak of war

Why were many Australians willing to fight in World War I, and where did they serve? You have already learned about how World War I began and the main developments that shaped the course of the war. Now we will try to understand why Australians took part and the ways in which they contributed.

When Britain declared war on Germany on 4 August 1914, Australia was part of the British Empire and therefore was also at war. The Australian Labor Party leader, Andrew Fisher, expressed a popular view when he pledged that Australia would back Britain 'to the last man and the last shilling'. Australia was the only combatant that did not impose conscription, so individual Australians still had the choice of whether or not they would fight. But enthusiastic volunteers from all over the country rushed to **enlist**.

Why did they do this? Soldiers' letters and diaries reveal that some went for personal reasons such as to escape unemployment, to travel or to seek adventure. Many imagined war as exciting and thought that this one would be over in weeks. But most joined believing that Britain's cause was right. They had been brought up to believe that men should be willing to die for their country and the empire, and that Australia needed to prove to Britain that Australians were heroic and worthy of being regarded as true Britons.

**SOURCE 1** Private A.J. McSparrow, in a letter dated 18 March 1915. Private McSparrow died of wounds in August 1916.

I have [enlisted] ... and I don't regret it in the very least. I believe it is every young fellow's duty ... besides every paper one lifts it has something to say about young fellows being so slow in coming forward ... we are the sort of men who should go.

**SOURCE 2** Corporal R.E. Antill, in a letter to his parents dated 23 April 1915. Corporal Antill was killed in action in July 1917. ('4/-' means four shillings.)

... things were so [economically] bad in Melbourne ... and they are a jolly site worse now ... every day that passes 4/- goes down to me and this war is bound to last a good while yet ... if I am killed you will get what is due to me just the same, as it goes to the next of kin.

## 8.5.2 Where did they fight?

Australia quickly recruited a volunteer army it called the Australian Imperial Force (AIF). By September 1914, 20 000 soldiers had been selected and organised into the 1st Infantry Division and a Light Horse (mounted) Brigade. By December they were training in Egypt. There the AIF was joined by 10 000 New Zealand troops to form the Australian and New Zealand Army Corps (ANZAC).

Australians took part in several theatres of the war on land, at sea and in the air.

**SOURCE 3** Where Australians fought in World War I

**Where Australians fought in World War I**

**Gallipoli**

In 1915 Australians played a major role in the Allies' failed attempt to invade Turkey through an attack on the Gallipoli Peninsula (see subtopic 8.6).

**The Western Front**

By September 1914 French and British forces had halted the German advance on the fields of northern France and Belgium. Between 1916 and 1918, all five Australian Divisions took part in the terrible fighting on the Western Front (see subtopic 8.9).

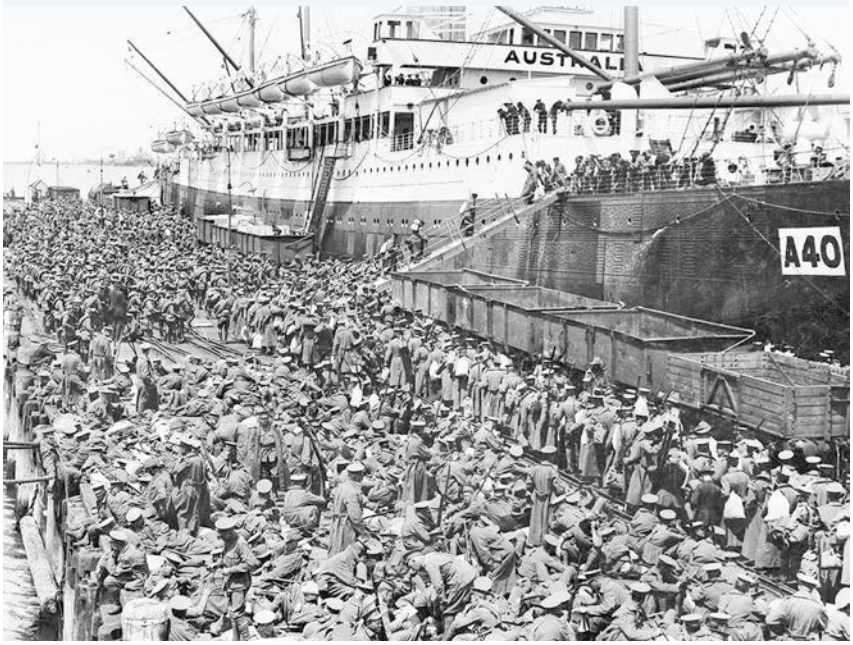
**War at sea**

In Australia's first action in the war, the small Royal Australian Navy (RAN) sent its only battle cruiser *Australia* with the Australian Naval and Military Force to capture German New Guinea in September 1914. The RAN also escorted convoys of transport ships carrying troops to the war. It drove the Germans out of the Pacific. It also served in the Atlantic and Indian oceans, the Mediterranean and the North Sea.

**The Middle East**

The Australian Flying Corps, the Australia Light Horse and Australians in the Imperial Camel Corps played a big role in battles against Turkish forces in Egypt and Palestine between 1916 and 1918.

**SOURCE 4** Troops embarking at Port Melbourne in 1915

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## DID YOU KNOW?

The light cruiser *Sydney* sank the German raider *Emden* near the Cocos-Keeling group of islands in the Indian Ocean on 9 November 1914. This was considered a great feat because the *Emden* had already sunk 25 Allied steamers and two warships and raided Allied bases in the Pacific.

**SOURCE 5** *Emden beached and done for, 9 November 1914*, painted by Arthur Burgess in 1920

Burgess, Arthur
*Emden beached and done for, 9 November 1914* (1920)
Oil on canvas, 168.5 × 254.5 cm
Australian War Memorial ART00191

## 8.5 ACTIVITIES

1. Working in small groups, use the website of the Australian War Memorial to find out more about the incident shown in **SOURCE 5**. Use this information to create a newspaper headline and the kind of news article that might have told of the incident in 1914. **Using historical sources as evidence**
2. Australians had fought for the British Empire in previous conflicts, so why was their involvement in World War I of much greater historical significance? Discuss in small groups.
**Determining historical significance**

## 8.5 EXERCISES

**Historical skills key: HS1** Remembering and understanding **HS2** Sequencing chronology **HS3** Using historical sources as evidence **HS4** Identifying continuity and change **HS5** Analysing cause and effect **HS6** Determining historical significance

### 8.5 Exercise 1: Check your understanding

1. **HS1** Explain what Andrew Fisher meant when he said that Australia would back Britain 'to the last man and the last shilling'.
2. **HS1** What indicates that Fisher's view was a popular one?
3. **HS1** In what way was enlistment in Australia different to that in other combatant countries?
4. **HS1** Explain the meanings of AIF and ANZAC.
5. **HS1** Refer to **SOURCE 3**. Make a list of places where Australians fought during World War I and when they fought there.

### 8.5 Exercise 2: Apply your understanding

1. **HS3** Compare and contrast **SOURCES 1** and **2**.
   (a) Identify Private McSparrow's motives for enlisting in **SOURCE 1**.
   (b) Identify Corporal Antill's motives for enlisting in **SOURCE 2**.
   (c) Explain how these sources represent different perspectives.
   (d) Form a hypothesis about motives for enlisting that could be supported by evidence from these two sources.
2. **HS3** Write an imaginary conversation between two of the men in **SOURCE 4** in which they discuss the beliefs and feelings that led them to sign up for the war, and what they expect war to be like.
3. **HS5** Identify beliefs about the British Empire that encouraged Australians to enlist for World War I.
4. **HS5** Create a concept map to show how those beliefs and other values contributed to enlistment.
5. **HS6** Australians had fought for the British Empire in previous conflicts, so why was their involvement in World War I of much greater historical significance?

Try these questions in learnON for instant, corrective feedback. Go to www.jacplus.com.au.

# 8.6 Gallipoli

## 8.6.1 Why Gallipoli?

Between 25 April and 18 December 1915 thousands of young Australian and New Zealand soldiers died on the beaches and cliffs and in the gullies of Turkey's Gallipoli Peninsula during Australia's first land campaign of World War I. Although the expedition was a failure, the courage and endurance of these men created the Anzac legend.

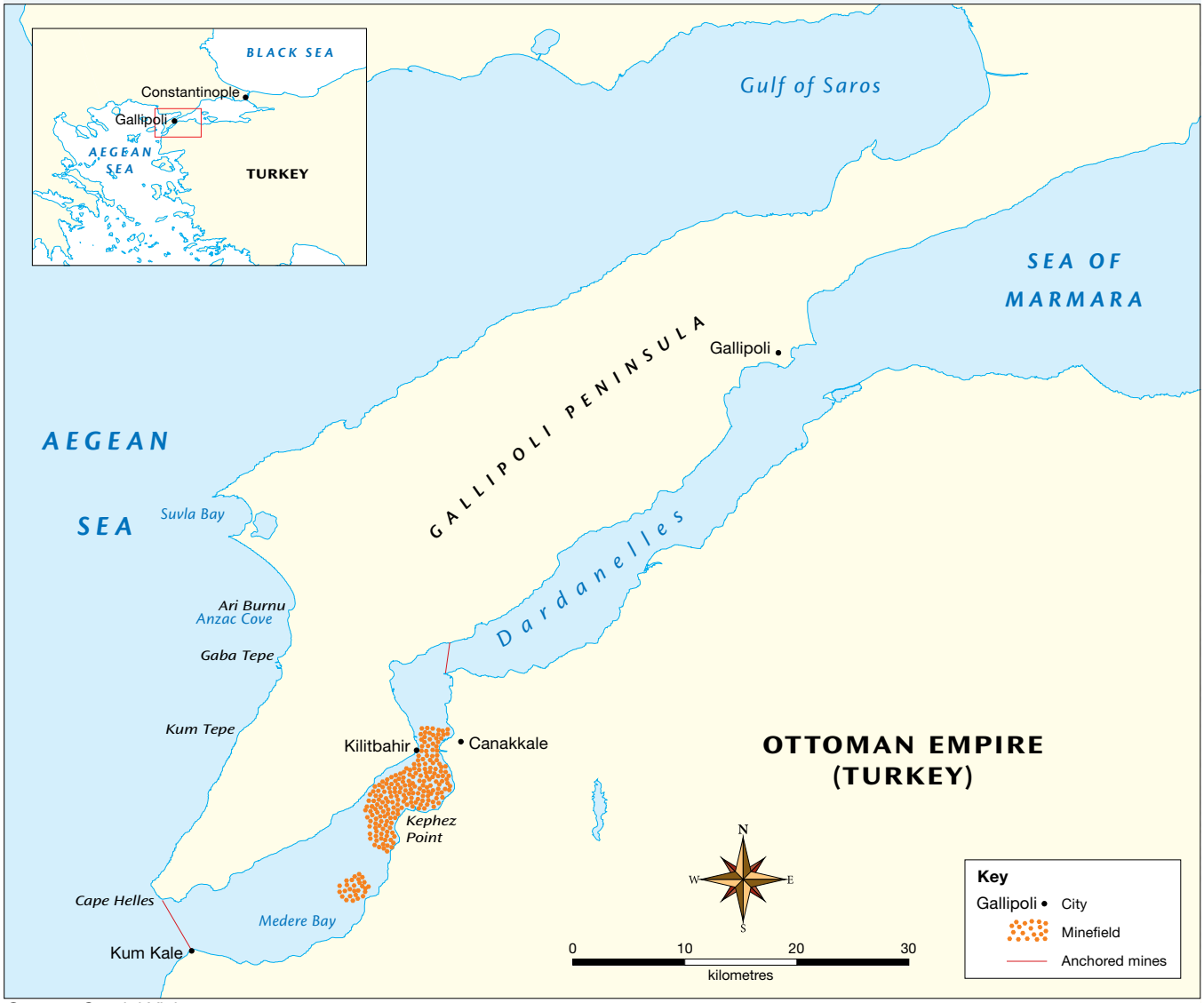
The soldiers of the AIF had expected to sail to England to complete their training and then be shipped off to the Western Front in France and Belgium, where most British troops were fighting the Germans. Instead the Anzacs were trained in Egypt to form a crucial part of a campaign against Germany's ally Turkey.

The strategy for an Allied attack on Gallipoli was based on the idea of Winston Churchill, who, as First Lord of the Admiralty, controlled Britain's Royal Navy. Churchill thought that an attack on Turkey would shorten the war because:

- Turkey could be defeated and Austria–Hungary would be threatened
- Greece, Bulgaria and Romania would be persuaded join the Allies
- supplies could be shipped through the Dardanelles (a narrow strait between the Aegean Sea and the Black Sea) to Russian troops, who were fighting Germany on the Eastern Front.

The first aim was to capture the Dardanelles (see **SOURCE 1**), opening the heavily fortified strait to Allied shipping. A landing of British, French, Anzac and other British Empire troops was planned after a failed naval attack. The Allied forces were to land on the Gallipoli Peninsula.

**SOURCE 1** The Gallipoli Peninsula




***Source:*** Spatial Vision

## 8.6.2 The landing at Gallipoli

The first landing of soldiers on the beaches of Gallipoli took place on the morning of 25 April 1915. British and French troops landed around Cape Helles. Australians and New Zealanders landed before dawn north of Gaba Tepe. The Anzacs had to reach the shore in landing craft and claw their way up steep cliffs under Turkish fire. Throughout the first day there was confusion and ferocious fighting, much of it hand-to-hand. The battle ebbed and flowed and at last the Turks, fighting courageously, won back control of the high ridges that had been reached by scattered groups of Anzacs. As night fell, the Anzacs found themselves holding only a few square kilometres of beach, cliffs and gullies, and they were ordered to dig in.

Through the night the Turks launched waves of fierce counterattacks. Both sides suffered heavy losses but the Anzac lines held. Strategically, the landing had failed, because the Turks still held the high positions. For the Anzacs it was a triumph of courage over inexperience, but they paid a high price. At least 2300 died that day.

**SOURCE 2** *Anzac, the landing 1915*, by George Lambert. Completed between 1920 and 1922, the painting shows men of the 3rd Brigade struggling under fire up the slopes of Ari Burnu shortly after 4.30 am on 25 April 1915.

Lambert, George
*Anzac, the landing 1915* (1920–1922)
Oil on canvas, 190.5 × 350.5 cm
Australian War Memorial ART02873

**SOURCE 3** From the diary of Sergeant W.E. Turnley, who took part in the initial landing at Anzac Cove

There are a couple of lights flashing about — they must have seen us ... Crack! Swish! Ping! At last ... the suspense is over! ... some get ashore safely, some are hit slightly, others are drowned in only a couple of feet of water because in the excitement nobody notices their plight. [One] fellow remains in the boat after all the others have disembarked ... he ... looks at us dazedly, leaning forward on his rifle ... the soldier falls forward into the bottom of the boat, dead.

**SOURCE 4** From a description of the landing by British general Sir Ian Hamilton, commander of the 80 000 Allied troops at Gallipoli

Like lightning they leapt ashore ... so vigorous was the onslaught that the Turks made no attempt to withstand it and fled from ridge to ridge pursued by Australian infantry.

## DID YOU KNOW?

In the days after the landing, Private John Simpson (Kirkpatrick), stretcher-bearer of the 3rd Australian Field Ambulance, calmly led his donkey up and down the gully from the front line to the beach, evacuating many wounded men, until he was killed on 19 May. Statues of Simpson and his donkey are located near the Shrine of Remembrance in Melbourne and at the Australian War Memorial in Canberra.

## 8.6.3 The long and tragic months on Gallipoli

The Gallipoli campaign was not to be the quick, glorious victory Australians had expected. It was a long, agonising ordeal in which the death toll mounted on both sides. During the first week the fighting hardly stopped. By early May most Anzac officers and about half the men in each battalion had been killed or wounded. Despite such casualties, many wounded men who had been evacuated were anxious to return to the front.

**SOURCE 5** The Australian 22nd Battalion, newly arrived from Egypt, going into the line at the southern part of Lone Pine, Gallipoli Peninsula

AWM A00847

### The Turkish counterattack

On the night of 18–19 May the Anzacs withstood a massive counterattack as 42 000 Turks were ordered to drive them from their positions and back into the sea. In courageous but suicidal charges, the Turks lost 10 000 men, half of whom lay dead or wounded in **no man's land**. Around midday a truce was arranged so both sides could bury their dead before the battle resumed.

### Life on Gallipoli

These were weeks of tragic waste, terror and extraordinary courage. With the Turks occupying much of the high ground above them, none of the Anzacs were ever free from danger. Yet they were forced to adapt to life on Gallipoli. Soldiers made grenades from jam tins filled with explosives, nails, stones and shrapnel. Some men learned to catch Turkish grenades and throw them back before they detonated. Mass bayonet charges were frequent but were doomed because, once in open ground, the men were cut down by machine-gun fire. Increasingly they turned to the tactic of mining under enemy trenches and blowing them up from below.

The heat of summer and the many rotting corpses in no man's land brought such incessant swarms of flies that soldiers wrote of their mouths filling with flies when they tried to eat a biscuit with jam. With the flies came diseases such as typhoid and dysentery.

Despite the fact that both sides often killed men rather than take prisoners, the Anzacs and the Turks came to respect each other's courage. The Australians affectionately called their adversaries 'Jacko', 'Abdul' or 'Johnnie Turk'. In between the bombs and bullets, gifts, jokes and greetings were exchanged.

### Lone Pine

In August, operations aimed at breaking the deadlock and seizing the high ground began. Australian troops had the task of diverting Turkish forces while another force of Anzac, British and Indian troops landed at Suvla Bay and advanced to capture the high ridges. The Lone Pine diversion was among the most savage battles of the Gallipoli campaign. The Australians charged the Turkish positions and more than 2300 were killed or wounded in four days and nights of hand-to-hand fighting. The Turks lost about 6000 men. New Zealand troops also suffered very heavy casualties in the August operations. As part of the main offensive, they had the task of clearing the foothills to the left of Anzac Cove and taking the high ridges at Chunuk Bair. They succeeded in holding Chunuk Bair for just a few hours on 8–9 August before the Turks won it back.

### The Nek

On 7 August, in another attack whose aim was to divert the Turks, troops of the Australian Light Horse were ordered to make bayonet charges up a narrow strip of open ground called the Nek. The attacks proceeded even though the plan to capture the ridges had failed. The naval bombardment of the Turkish trenches stopped several minutes too soon. This allowed the Turks to return to their firing positions. Four successive lines of Light Horsemen, each of about 150 men, charged from their trenches towards the Turkish lines. Cut down by machine-gun fire, nearly all fell dead or wounded within a few metres of their own trenches. Their bravery was extraordinary but their deaths achieved nothing.

## 8.6.4 Withdrawal from Gallipoli

After seven months, the British command finally accepted that victory would not be possible. Ironically, the best-managed part of the entire campaign proved to be the withdrawal of all Allied soldiers during December. The soldiers and war materials were evacuated secretly at night. Throughout the operation every effort was made to convince the Turks that nothing out of the ordinary was going on. Cricket matches were played on the beach, and empty crates were brought ashore each day. When the Turks charged down from the hills on 20 December they found that the enemy had vanished.

**SOURCE 6** During the evacuation, the Allied troops needed to make the Turks think they were still in their trenches. One trick was to rig rifles to fire automatically. Once enough water had dripped from the top tin into the bottom tin, its weight pulled the trigger.

AWM G01291

## DID YOU KNOW?

When they abandoned Gallipoli, the Anzacs left behind 7591 Australian and 2431 New Zealand dead. Many thousands of other British Empire soldiers and French and Turkish troops also died during the campaign.

## Explore more with myWorldHistoryAtlas

Deepen and check your understanding of this topic with related case studies and auto-marked questions.

- World War One > **The Gallipoli campaign**

## 8.6 ACTIVITIES

1. Visit the Australian War Memorial website and find at least three more photographs of events of the Gallipoli campaign. Use them to present a data show on Gallipoli. Explain why you chose each photograph and what each tells us about soldiers' experiences. **Using historical sources as evidence**
2. In pairs or small groups, evaluate the significance of the Gallipoli campaign for Australia. In your evaluation, consider:
   (a) how important it was to people living at the time
   (b) how many people were affected directly and indirectly
   (c) whose lives were changed and how they were changed
   (d) how long-lasting the consequences were
   (e) what has been the legacy of Gallipoli
   (f) why Gallipoli was considered a triumph as well as a tragedy. **Determining historical significance**

## 8.6 EXERCISES

**Historical skills key: HS1** Remembering and understanding **HS2** Sequencing chronology **HS3** Using historical sources as evidence **HS4** Identifying continuity and change **HS5** Analysing cause and effect **HS6** Determining historical significance

### 8.6 Exercise 1: Check your understanding

1. **HS1** What was Winston Churchill's role during World War I?
2. **HS1** Identify the strategic advantages that Churchill thought would be gained by capturing the Dardanelles.
3. **HS1** Identify the locations of the landings on the Gallipoli Peninsula and describe how the Anzacs reached the shore on the morning of 25 April 1915. You can refer back to **SOURCE 1** to find these locations.
4. **HS1** What was the strategic situation by the day after the landing at Gallipoli?
5. **HS1** Describe the scale of Anzac casualties in the first week of the Gallipoli campaign and the scale of Turkish casualties on 18–19 May.
6. **HS1** Make a list of some of the hardships faced by the Anzacs during the campaign and ways in which the Anzacs adapted and coped with such hardships.
7. **HS1** Describe the purposes and consequences of the attacks at Lone Pine and the Nek in August.
8. **HS1** How long did it take the British command to accept that victory at Gallipoli was impossible?
9. **HS1** Explain how the Allies kept the withdrawal secret from the Turks and why it is ironic that the withdrawal was the best managed part of the campaign.

### 8.6 Exercise 2: Apply your understanding

1. **HS3** Study **SOURCE 1**. Note that the Black Sea lies to the north of the Sea of Marmara.
   (a) Identify where Turkish mines were located in the Dardanelles.
   (b) Four Allied ships struck mines on 18 March 1915. Was it ever likely that they would get past such a minefield?
   (c) Explain why it might have been assumed that landing troops on the Gallipoli Peninsula might have more success than ships trying to get through the Dardanelles.
2. **HS3** Describe the details visible in **SOURCE 2**.
3. **HS3** **SOURCE 2** was painted by an official Australian war artist.
   (a) Would that fact guarantee its accuracy?
   (b) What kinds of sources could be used to corroborate it and evaluate its accuracy?

4. **HS3** Study **SOURCE 5** and identify reasons why it would have been very difficult for these men to attack the Turkish trenches at Lone Pine.
5. **HS3** Look closely at **SOURCE 6** and describe how this device worked and why it was used.
6. **HS3** Compare and contrast **SOURCES 3** and **4**.
   (a) Describe the difference in their perspectives.
   (b) Explain which source you would consider to be more reliable and give reasons for your choice.

Try these questions in learnON for instant, corrective feedback. Go to www.jacplus.com.au.

# 8.7 Gallipoli: the historical debate

## 8.7.1 What is a historical debate and why has the Anzac landing been debated?

One of the most important concepts in history is contestability. It means that interpretations of the past are open to debate. Sometimes this is because of a lack of evidence or the discovery of new evidence. It can also be because historians bring different perspectives to an investigation. Very often one interpretation of an event comes to be popularly accepted as the truth, and is thought to be the only possible interpretation. But then it is challenged and a new debate begins.

**SOURCE 1** *The beach at Anzac*, painted by war artist Frank Crozier in 1919. This source shows the terrain at Ari Burnu, where the Anzacs landed and established their hold on a small piece of the Gallipoli Peninsula.

Crozier, Frank
*The beach at Anzac* (1919)
Oil on canvas, 123.4 × 184.6 cm
Australian War Memorial ART02161

## A long-accepted interpretation

For much of the twentieth century, most Australians believed that the terrible losses Australian troops suffered during the landing at Gallipoli and, to an extent, the failure of the entire Gallipoli campaign, resulted from the troops being landed at Ari Burnu, north of their intended landing place below Gaba Tepe. Charles Bean, Australia's official war historian during World War I, stated that the Anzacs were put ashore at the wrong place. He wrote, 'The carefully laid plans had been torn to shreds by the current that had carried the tows [landing craft] too far northward ... ' Other historians and most people in general accepted this view, believing that the soldiers failed to gain the territory needed for the campaign's success at least partly because of the landing error.

## Challenging the accepted interpretation

More recently, several historians have challenged that view. This is common in historical work, partly because historians writing soon after events do not always have all the evidence they need. For example, Bean could not have used the military intelligence that went into planning the Gallipoli campaign because it was kept secret for 50 years.

## How to understand the historical debate

To understand this debate or any historical debate, we need to recognise how a new interpretation can challenge an earlier argument. To do this we:

- identify the main argument of the earlier interpretation
- identify the main argument of the later interpretation and how it differs from the earlier interpretation
- analyse the detailed evidence used to support the argument of the later interpretation.

**SOURCE 2** From Denis Winter, 'The Anzac landing: the great gamble?' in *Journal of the Australian War Memorial*, April 1984, pp. 15, 18

The problem to be resolved is whether the landing at Anzac was a simple piece of bad luck or whether it was part of Birdwood's plan ... An unsuspected sea current provides the strongest point in favour of failure being due to factors beyond human control ... But the case against the current is a strong one. Earlier work around the peninsula with submarines meant that the navy was well aware of swift currents around the landing point ... the possibility of an unsuspected or unmeasurable current may be discounted ...

Colonel W. R. McNicol ... gave an address ... on the anniversary of the landing, saying that the position attacked was identical with orders ...

AWM 02161

**SOURCE 3** From Chris Roberts, 'The Landing at Anzac: a reassessment', in *Journal of the Australian War Memorial*, April 1993, pp. 27–29

Birdwood's aim of taking the Turkish defenders by surprise was achieved. A landing north of Gaba Tepe had not been expected and the small garrison defending Anzac Cove put up a brief resistance before fleeing inland ... By about 5.00 a.m. the high ground overlooking Anzac Cove had been captured ...

Therefore, there is little ground for claiming, as Bean concludes, that the misplaced landing was a major reason for the failure of the ANZAC assault to achieve its intended objective.

Indeed, there is strong evidence that the error was fortunate. Birdwood himself believed so. The strongest Turkish defences were at Gaba Tepe and these covered the original landing beach and its seaward approaches ... Birdwood and others believed that heavy casualties would have been experienced had the landing gone as planned.

**DISCUSS**

In small groups, discuss why there will probably be ongoing historical debate on the issue of the Anzac landing at Gallipoli on 25 April 1915. **[Creative and Critical Thinking Capability]**

## 8.7 EXERCISES

### 8.7 Exercise 1: Check your understanding

1. **HS1** Use the words provided to fill the gaps and complete the following paragraph about historical debate.

| | | | | |
|---|---|---|---|---|
| only possible | discovery | perspectives | contestability | new |
| challenged | interpretations | the truth | debate | lack |

One of the most important concepts in history is _____. It means that _____ of the past are open to debate. Sometimes this is because of a _____ of evidence or the _____ of _____ evidence. It cans also be because historians bring different _____ to an investigation. Very often one interpretation of an event comes to be popularly accepted as _____, and is thought to be the _____ interpretation. But then it is _____ and a new _____ begins.

2. **HS1** Where, according to Charles Bean, were the Anzacs meant to have landed?
3. **HS1** Why, according to Bean, were they landed in the wrong place?
4. **HS1** What, according to Bean's long-accepted interpretation of the Gallipoli landing, was the consequence of landing 'too far northward'?
5. **HS1** Describe the steps in understanding a historical debate.

### 8.7 Exercise 2: Apply your understanding

1. **HS3** Using **SOURCE 1** as your evidence, state what you think are the advantages and disadvantages for the Anzacs of landing at Ari Burnu instead of at Gaba Tepe.
2. **HS3** In **SOURCE 2**, Denis Winter argues that Bean's interpretation is wrong because the Anzacs were landed where they were intended to be landed, at Ari Burnu. Explain what evidence Winter gives to support his interpretation.
3. **HS3** Read **SOURCE 3**. Identify Roberts' main argument and the evidence used to support his interpretation.
4. **HS3** Identify the significant differences between the interpretations of Winter and Roberts.
5. **HS3** Write a paragraph outlining your interpretation of the Gallipoli landing, based on the evidence presented in the sources in this subtopic.

Try these questions in learnON for instant, corrective feedback. Go to www.jacplus.com.au.

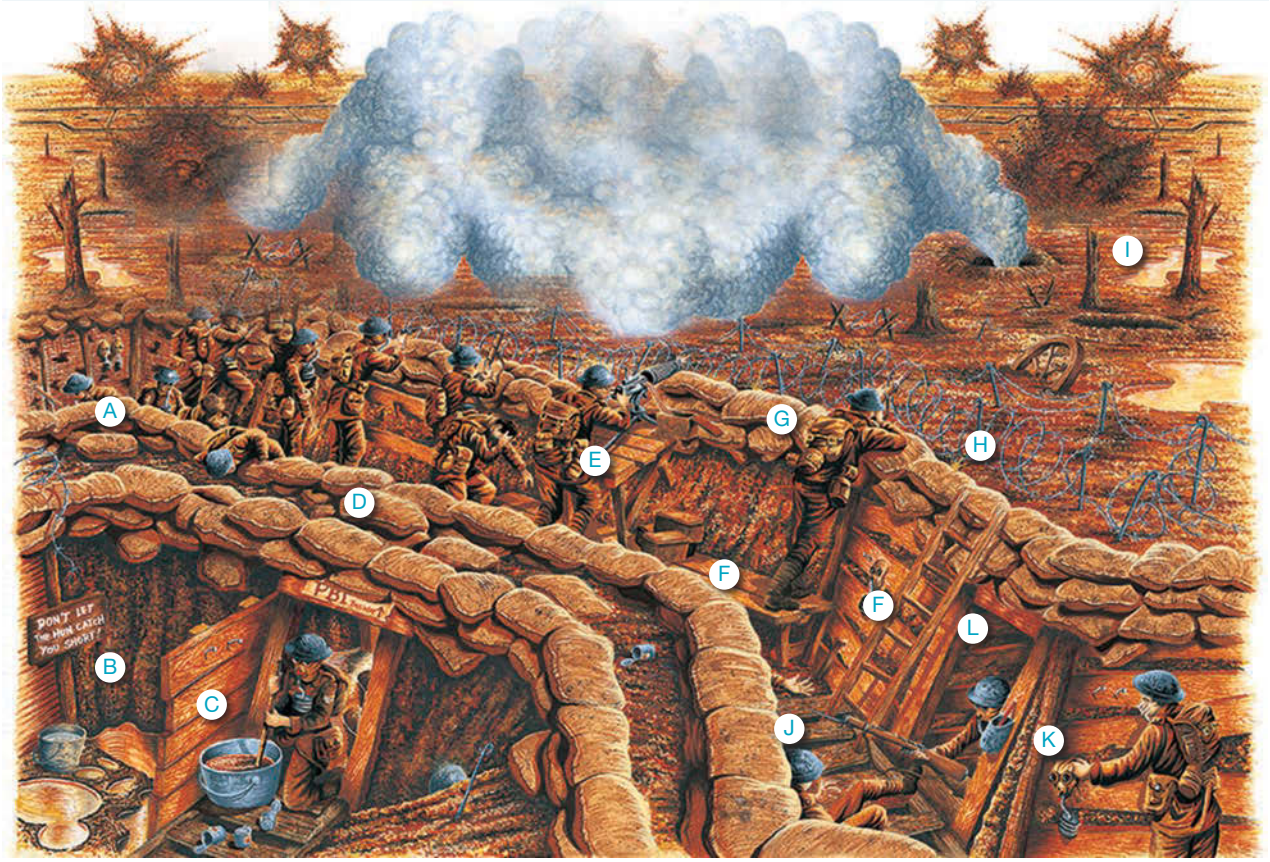
# 8.8 Trench warfare

## 8.8.1 The trenches of the Western Front

The main fighting of World War I took place in and around the trenches of the Western Front. By 1915 these stretched over 500 kilometres, from the Belgian coast through to the Swiss Alps, and were home to millions of troops. Trench warfare produced no winners; rather, it was a defensive tactic that led to continual **stalemate**. Over four years the armies of both sides lived and died in them. When the fighting was at its heaviest, tens of thousands of men could be killed or wounded in a single day.

Most battlefield trenches contained many defensive structures. The most commonly used arrangement was the three-line trench system. This allowed front-line trenches for firing at the enemy, support trenches where troops could be rested, and reserve trenches to hold reinforcements and supplies. Communication trenches linked all three trench lines, allowing for easier movement of troops and information. Some German trenches extended up to ten metres underground.

**SOURCE 1** Modern artist's interpretation of a typical trench system




**A** Trenches were generally designed in a zigzag pattern; this helped to protect the trench against enemy attack. Each bend could be defended separately if necessary and explosions could be contained.

**B** Trench toilets were called latrines. They were usually pits 1.5 metres deep, dug at the end of a short gangway. Each company had two sanitary personnel whose job it was to keep the latrines in good condition. Officers gave out sanitary duty as a punishment for breaking army regulations.

**C** The British army employed 300 000 field workers to cook and supply the food for the troops. However, in many instances there was not enough food for the workers to cook. Rations were regularly cut and of a poor standard. The bulk of the diet in the trenches was bully beef (canned corned beef), bread and biscuits.

**D** Sandbags filled with earth were used to shore up the edges of the trenches; they also helped to absorb bullets and shell fragments. The men packing and then stacking the filled bags worked in pairs and were expected to move 60 bags an hour.

**E** Machine guns were one of the most deadly weapons. They were able to fire 400–500 bullets every minute.

**F** Fire steps and scaling ladders were needed to enable the troops to go 'over the top' of the trenches. Going 'over the top' refers to the orders given to troops to leave the trenches and head out into no man's land in an attempt to attack the enemy trenches.

**G** Each soldier was issued with a kit containing nearly 30 kilograms of equipment. This included a rifle, two grenades, 220 rounds of ammunition, a steel helmet, wire cutters, field dressing, entrenching tool (a spade), a heavy coat, two sandbags, rolled ground sheet, water bottle, haversack, mess tin, towel, shaving kit, extra socks and preserved food rations. The weight made it very difficult to move quickly, and many men chose to share gear to minimise their load.

**H** Barbed wire was used extensively throughout the trench system. While it helped to protect the trenches, it made it very difficult to attack the opposing trench. In the dark of night, soldiers were sent out to cut sections of wire to make it easier for the attacking soldiers in morning raids. Minor cuts and grazes caused by the barbed wire often became infected in the unsanitary conditions of the trenches.

**I** No man's land was the space between the two opposing trenches; it was protected by rows of barbed wire. It could be anywhere from 50 metres to one kilometre wide.

**J** Duckboards were wooden planks placed across the bottom of trenches and other areas of muddy ground. They enabled soldiers to stand out of the mud. The trench system was constantly waterlogged, particularly during the winter months. Duckboards were the only way of protecting the men from contracting the dreaded **trench foot** and from sinking deep into the mud.

**K** The use of mustard gas and other chemical weapons meant that all soldiers needed to have gas masks near at hand. Until all troops could be issued with masks, many soldiers used urine-soaked material to help keep out the deadly gas. Mustard gas was almost odourless and took 12 hours to take effect. It was so powerful that small amounts, added to high-explosive shells, were effective. Once in the soil, mustard gas remained active for several weeks.

**L** Long, cold, wet winters and hot, dry summers would have made life in the trenches horrendous. Snow, rain and freezing temperatures drastically slowed combat during the winter months. Lack of fresh water, scorching sun with limited coverage, and the stench of dead bodies and rubbish would have made the hotter months unbearable.

### 8.8 ACTIVITIES

1. In small groups, use the internet to research the effects of mustard gas and other chemical weapons used during World War I. Discuss these effects and the ethics of the use of such weapons. **[Ethical Capability]**
2. Working in small groups, and referring to **SOURCE 1** (a secondary source), construct a trench diorama. Elect a group spokesperson to talk about one aspect of your model (e.g. its advantages or disadvantages). **Using historical sources as evidence**

### 8.8 EXERCISES

**Historical skills key: HS1** Remembering and understanding **HS2** Sequencing chronology **HS3** Using historical sources as evidence **HS4** Identifying continuity and change **HS5** Analysing cause and effect **HS6** Determining historical significance

#### 8.8 Exercise 1: Check your understanding

1. **HS1** Describe the features of the three-line trench system and the purpose of each element.
2. **HS1** Outline the experience of soldiers in relation to food and meals in the trenches.
3. **HS1** Why did many soldiers choose to share their gear with a fellow soldier?
4. **HS1** What was no-man's land?
5. **HS1** Suggest why the trench system was ultimately unsuccessful as a military tactic.

#### 8.8 Exercise 2: Apply your understanding

1. **HS3** Study **SOURCE 1**. Outline the features of trench systems that made attacks upon them so deadly.
2. **HS3** Imagine you are a soldier who has been blinded in the trenches. Describe what you would hear, smell and feel.
3. **HS3** Create a concept map to represent the hazards and hardships of trench warfare.
4. **HS3** Explain why duckboards were a necessary feature of trenches.
5. **HS3** Until they were given gas masks, how did soldiers like those depicted in **SOURCE 1** try to protect themselves from mustard gas?

Try these questions in learnON for instant, corrective feedback. Go to www.jacplus.com.au.

# 8.9 The Western Front

## 8.9.1 From Gallipoli to Fromelles and Pozières

After Gallipoli, the Anzacs returned to Egypt to be joined by fresh troops. The Light Horse remained in the Middle East along with Australians serving in the Imperial Camel Corps and the Australian Flying Corps. For the remainder of the war, these soldiers took part in desert warfare against Turkish forces. Most Australian troops left for France in 1916, where for three years they experienced the horrors and savagery of the war on the Western Front.

On 1 July 1916, the First Battle of the Somme began. The British and French attack on the Somme was intended to draw German troops away from their massive attack on French positions at Verdun. On that first day of the Somme offensive, the British army suffered the worst day in its history with 57 470 casualties (troops killed or wounded).

The Australian 5th Division suffered over 5000 casualties on 19 July in a **feint** at Fromelles, north of the Somme, which was meant to divert German reserve troops. On the Somme, the AIF suffered almost 23 000 casualties taking and holding the town of Pozières in a battle that began on 23 July. For seven weeks Australian soldiers were blown apart or buried alive as they fought to hold the captured town under a German **artillery** bombardment that pounded Pozières into a wasteland of rubble.

When the Battle of the Somme ended as the autumn rains filled the trenches, neither side had been able to break the stalemate. Nothing had been gained, but Germany had lost 450 000 men, France 200 000 and Britain 420 000.

**SOURCE 1** Major W.G.M. Claridge, writing from hospital after the Battle of Pozières, quoted in Bill Gammage, *The Broken Years*, 1975, p. 164

... God knows what we went through, was Hell itself. We just had to grit our teeth and go ahead and do our job. I am not going to tell a lie and say I wasn't afraid because I was and who wouldn't be with Death grinning at you from all round and hellish 5.9 shells shrieking through the air and shrapnel dealing death all round. I don't know how I stood it for so long without breaking.

## 8.9.2 From Bullecourt to the Armistice

### Bullecourt and Ypres

The spring offensive of 1917 followed the coldest winter in 40 years. In April the United States of America joined the war on the Allied side, although it would be many months before its troops would be ready to play a role. The Germans had pulled back to the strongly fortified **Hindenburg line** and most soldiers on both sides were war-weary with little enthusiasm left for fighting.

In April, Australians were sent to attack the German trenches near Bullecourt but the tanks that were meant to spearhead the attack broke down. The Australians were then struck by a misdirected British artillery barrage as well as German counterattacks, and the attacking force suffered 80 per cent casualties. Despite this, in May the Australians captured and held Bullecourt. In Belgium in September and October, the AIF suffered 38 000 casualties in the terrible Third Battle of Ypres, in which each side lost about half a million men.

**SOURCE 2** Trench warfare on the Western Front

***Source:*** © Robert Darlington. Map redrawn by Spatial Vision.

### Victory in 1918

In 1918 the end of fighting on the Eastern Front (see subtopic 8.12) enabled Germany to move many more troops to the Western Front. In March, the Germans threw everything they had into a last offensive aimed at gaining victory before US troops could arrive in sufficient numbers to make a German victory impossible. Australians played a key role in turning back this offensive through their fierce resistance at the French village of Villers-Bretonneux. Then, in July, Australians made the first large Allied attack of 1918. The AIF fought its last battles in October and when the fighting was ended with the Armistice of 11 November 1918 it was recognised that they had achieved more than any other British Empire troops and had suffered more casualties in proportion to their numbers.

### The human cost

Of the 417 000 men who enlisted in the AIF, about 324 000 served overseas and approximately 295 000 on the Western Front. Nearly 65 per cent became casualties and around 60 000 Australians died on active service. It was a terrible sacrifice for the nation.

**SOURCE 3** This painting depicts an attack, during the Third Battle of Ypres, in which Australian troops were trying to capture a German pillbox, a fortified concrete blockhouse with machine guns firing from loopholes. Pillboxes could be taken only by infantry attacking closely behind their own artillery barrage.

Leist, Fred
*Australian infantry attack in Polygon Wood* (1919)
Oil on canvas, 122.5 × 245 cm
Australian War Memorial ART02927

## 8.9 ACTIVITY

Visit the website of the Australian War Memorial. Use its resources to prepare a brief description of the role of the Australian soldiers who remained in the Middle East from 1916 to 1918. **Using historical sources as evidence**

## 8.9 EXERCISES

**Historical skills key: HS1** Remembering and understanding **HS2** Sequencing chronology **HS3** Using historical sources as evidence **HS4** Identifying continuity and change **HS5** Analysing cause and effect **HS6** Determining historical significance

### 8.9 Exercise 1: Check your understanding

1. **HS1** Identify the aim of the First Battle of the Somme.
2. **HS1** What were the consequences for the British army of their offensive on 1 July 1916?
3. **HS1** Describe the aim and the result of the Australian attack at Fromelles.
4. **HS1** How many casualties did the AIF suffer at Pozières and why were they so high?
5. **HS1** Describe the overall consequences of the Battle of the Somme for both sides.
6. **HS1** Describe what went wrong during the Australian attack at Bullecourt.
7. **HS1** What casualties did Australian troops suffer in the Third Battle of Ypres?
8. **HS1** Why did the Germans try one last big offensive from March 1918?
9. **HS1** When was the armistice that ended the fighting?

### 8.9 Exercise 2: Apply your understanding

1. **HS3** Analyse **SOURCE 1** using the following questions.
   (a) Who wrote this source, where was he when he wrote it and around when would it have been written?
   (b) Why and for whom might the source have been written?
   (c) How does the writer describe the Battle of Pozières?
   (d) What details does he give to support that description?
   (e) What aspects of this source would enable a historian to assess its reliability?

2. **HS3** Using **SOURCE 2**, identify the purpose of the Allied offensives at Bullecourt and Ypres.
3. **HS3** Look closely at **SOURCE 3**. Imagine you are one of the survivors of this attack on a German pillbox. Write a letter to your family, describing the conditions, dangers and difficulties of such fighting and your own feelings during the attack.
4. **HS5** Using what you have learned about individual battles from 1916 to 1918, explain why Australians suffered such heavy casualties on the Western Front.
5. **HS5** Drawing on developments you have explored so far in this topic, identify the turning points that led to the Allied victory in 1918.

Try these questions in learnON for instant, corrective feedback. Go to www.jacplus.com.au.

# 8.10 The home front

## 8.10.1 The war divides Australia

During the first years of fighting most Australians believed that the war was just and was worth the sacrifice that was being made. Australians proudly hailed the achievements of the Anzacs as proof of their country's standing among nations. However, as the conflict dragged on, and demanded ever greater sacrifices, Australian society became increasingly divided.

### Growing government controls

The Commonwealth Government gained new powers to manage Australia's war effort. The war was expensive, in both money and lives, and from 1915 a federal income tax and other taxes were introduced to help pay the interest on growing war debts. The government also took away many democratic rights. The War Precautions Act of 1915 and other Acts of Parliament allowed the government to restrict freedom of speech, freedom of association and freedom of the press. It became a crime to say anything that might discourage people from enlisting or to show disloyalty to the British Empire.

According to the government, **censorship** was needed to keep morale high and to keep information from the enemy. However, it was also used to silence people who criticised the war. Tom Barker was sentenced to 12 months in prison for publishing a cartoon that the government considered might harm recruiting. Barker was the editor of *Direct Action*, the newspaper of a revolutionary group called the Industrial Workers of the World (IWW). The IWW argued that the war was wrong because the workers' only real enemies were the wealthy capitalists who profited from the conflict.

**SOURCE 1** 'The Greater Patriot', by Claude Marquet, in *The Worker*, 1916

## Growing opposition

Most Australians believed wartime **propaganda** that portrayed German soldiers as monsters who raped nuns, murdered civilians and impaled babies on bayonets. Through newspapers and public meetings, people were continually told that the war was a simple struggle between good and evil, between British civilisation and German barbarism.

At first, opponents of the war were a tiny minority. **Pacifists** opposed it, as did some Irish Australians who resented British rule in Ireland. Some socialists saw it as a clash between capitalist empires for the right to exploit the workers of the world. Gradually opposition to the war became more widespread. Increased inequality played a part. While prices rose by almost 50 per cent, wages were frozen. At the same time, big profits were made by owners of woollen mills and others who supplied war materials. Growing inequality caused serious strikes in 1916 and a general strike in 1917 involving waterside workers, seamen, transport workers and miners. The use of strikebreakers to defeat the strikes caused great bitterness and deepened divisions.

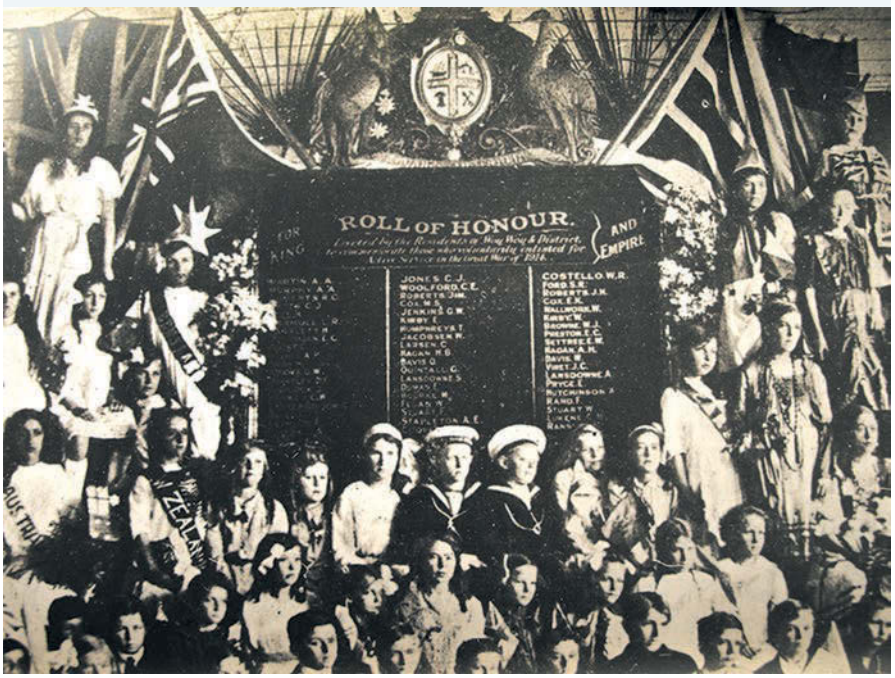
## Patriotic rallies and funds

Many people, possibly a majority, continued to support the war. At patriotic gatherings such as Empire Day, Allies Day and Anzac Day rallies, speakers encouraged Australians to stay loyal to Britain, to hate Germany and to make still greater sacrifices. Governments, churches and citizens organised and supported patriotic funds to help the war effort. They included the National Belgian Relief Fund, the Travelling Kitchen Fund and the Blind Heroes Fund. Local 'win-the-war' leagues donated food and labour to help soldiers' families.

## The children's war effort

Schools and community organisations involved children in patriotic activities including raising money and making clothes and equipment for war victims and troops. In particular, schools were used to inspire patriotism in children. At the age of 12, schoolboys became junior cadets. Girls made clothes for the troops and war victims. Children grew vegetables for soldiers' families, read stories of heroes of the British and Australian forces and recited loyalty pledges. School rolls of honour listed the names of former pupils and teachers who had gone to the war. Children were taught that all Allied countries were good while the Central Powers were evil.

**SOURCE 2** Students at Woy Woy Public School during a patriotic pageant in 1916 gather around a roll of honour erected by residents of the district.



## 8.10.2 Recruiting campaigns

In 1914 there were many more volunteers than the army could accommodate. But as the casualty lists grew, fewer men volunteered than were needed. As Britain requested ever more Australian troops, recruiting campaigns were used to encourage or shame men into enlisting. In some of these campaigns, people marched long distances, calling on others to join them and to enlist. By mid 1916 the campaigns were failing to attract the numbers the government wanted. In 1918 recruiting officers even visited schools in order to urge children to encourage their family members to enlist.

**SOURCE 3** From 'Instructions for the Guidance of Enlisting Officers at Approved Military Recruiting Depots', Brisbane, April 1916

Aboriginals, **half-castes**, or men with Asiatic blood are not to be enlisted. This applies to all coloured men.

**SOURCE 4** From 'Instructions to Enlisting and Recruiting Officers', December 1916

Half-castes may be enlisted when, in the opinion of the District Commandant, they are suitable ... As a guide in this matter it is to be borne in mind that these men will be required to live with white men and share their accommodation, and their selection is to be judged from this standpoint ...

**SOURCE 5** Produced by the State Parliamentary Recruiting Committee in Victoria, this was the first recruiting poster used in Australia.

Hannan, Jim
*An appeal from the Dardanelles: Will they never come*? (1915)
Offset lithograph on paper, 225 × 200 cm
Australian War Memorial ARTV07583

**SOURCE 6** Australian artist Norman Lindsay produced this poster for the Australian government in 1918.

Lindsay, Norman
*God bless dear Daddy* (1918)
Chromolithograph on paper, 46.8 × 38.4 cm
Australian War Memorial ART00040

### The racial barrier to recruiting

When World War I broke out, Indigenous Australians were an oppressed minority whose numbers over the previous century had been reduced by possibly 75 per cent through massacres, disease and dispossession. They had no reason to feel any loyalty to Australia or to the British Empire. The Australian government

required recruits for the AIF to be 'substantially of European origin or descent'. Despite this, many Indigenous Australians enlisted. Recent estimates put the total at around 1000 but the actual figure may have been higher. We have no evidence for their motives for enlisting because such information was neither sought nor recorded.

## 8.10.3 Women and the war effort

Some 3000 Australian women travelled overseas with the Australian Army Nursing Service. They served in all theatres of the war and on transport and hospital ships. These nurses worked under extreme conditions tending the wounded after battles. Several nurses were wounded and 13 were killed. However, the Australian government refused to allow women to serve in any direct roles in the armed forces. As the men went off to war, many women entered the paid workforce. Thousands more helped with recruiting campaigns, fundraising and charity work. A few women were able to replace enlisted men in fields such as banking, bookkeeping and typing. For many women, this was not enough. Recognising that the government and military were hostile to the idea of women taking on 'men's roles', women applied for clerical and cooking jobs in the military. However, they were not accepted and this greatly disappointed many who were aware of how different the situation was in Britain. There, women were employed as munitions workers, drivers, and in factories and on farms. Some British women actually gained military roles as drivers and radio operators when the Women's Army Auxiliary Corps was founded in Britain in 1917.

### Voluntary work

Thousands of women helped troops by providing extra clothing, tobacco, medicines and other comforts that the army failed to provide. They also made clothes for Allied refugees. Many other women cared for returning invalids through the Red Cross, including in the Australian Red Cross Voluntary Aid Detachment (see **SOURCE 7**). They met returning hospital ships and provided kitchens and rest homes. The Red Cross raised 12 million pounds during the war to pay for this work.

**SOURCE 7** Four women members of the Australian Red Cross packing comforts to be sent to servicemen overseas

## Women for and against the war

Some of the war's fiercest supporters were women. They helped in recruiting campaigns, issuing posters and pamphlets and speaking at rallies. Some women shamed men into enlisting by handing out white feathers — a symbol of cowardice — to those who had not volunteered. The Australian Women's National League campaigned for conscription. Women were also among the war's strongest critics. Vida Goldstein was among those who formed peace organisations and campaigned against conscription.

The greatest contribution of women, however, would hardly ever be spoken of. It was the lifelong care thousands gave to their fathers, husbands, sons and brothers who returned with terrible physical, emotional and mental wounds from the horrors of war.

**SOURCE 8** The arrival of the first Australian wounded from Gallipoli at the Third London General Hospital, by George Coates, 1915

## 8.10 ACTIVITIES

1. Use the internet to locate a World War I propaganda poster portraying German soldiers as monsters.
   (a) Describe the poster.
   (b) Analyse the poster to explain how it achieves that effect.
   (c) Explain the purpose of such posters. **Using historical sources as evidence**
2. In small groups, using the sources and other information in this subtopic, discuss and compile a summary of things that remained the same and those that had changed in Australia during World War I in:
   (a) attitudes to the war
   (b) racial attitudes
   (c) roles of women. **Identifying continuity and change**

## 8.10 EXERCISES

**Historical skills key: HS1** Remembering and understanding **HS2** Sequencing chronology **HS3** Using historical sources as evidence **HS4** Identifying continuity and change **HS5** Analysing cause and effect **HS6** Determining historical significance

### 8.10 Exercise 1: Check your understanding

1. **HS1** How did most Australians regard the war during the first two years of the conflict?
2. **HS1** What democratic rights did the Australian government restrict during the war?
3. **HS1** Describe how Australians of German descent were treated.
4. **HS1** Outline the reasons for growing opposition to the war.
5. **HS1** Why were recruiting campaigns needed by 1915?
6. **HS1** Around how many Indigenous Australians enlisted to fight in World War I?
7. **HS1** Approximately how many Australian women served overseas as nurses during World War I?
8. **HS1** Describe other ways in which Australian women contributed to the war effort.

### 8.10 Exercise 2: Apply your understanding

1. **HS3** Analyse **SOURCE 1** using the following questions.
   (a) Who created this cartoon and when was it created?
   (b) *The Worker* was a trade union newspaper. In the context of growing inequality and the 1916 strikes, what position would you expect a trade union newspaper to take?
   (c) Identify the social groups that are represented by the two figures in the cartoon.
   (d) Explain the message of the cartoon.
   (e) Which groups of Australians were most likely to have agreed with this message?
2. **HS3** Explain how schoolchildren in **SOURCE 2** are contributing to the war effort and why governments would have involved children in such activities.
3. **HS3** Examine **SOURCES 3** and **4**.
   (a) Use evidence from these sources to describe discrimination against Indigenous and Asian men wishing to enlist for World War I.
   (b) Explain to what extent this policy was changed between April and December 1916 and the probable reasons for this change.
4. **HS3** Look carefully at **SOURCES 5** and **6**. Analyse each of these posters, identifying:
   (a) the aim of the propaganda
   (b) the beliefs and emotions to which it appeals
   (c) the probable effectiveness of the propaganda at the time.
5. **HS3** Look closely at **SOURCE 8**. The nurses depicted in this artwork were members of the Australian Army Nursing Service. Use the details, your knowledge and imagination to describe what they would have thought about their work and the suffering of their patients.
6. **HS5** Explain how the war contributed to social conflict in Australia.

Try these questions in learnON for instant, corrective feedback. Go to www.jacplus.com.au.

# 8.11 The conscription issue

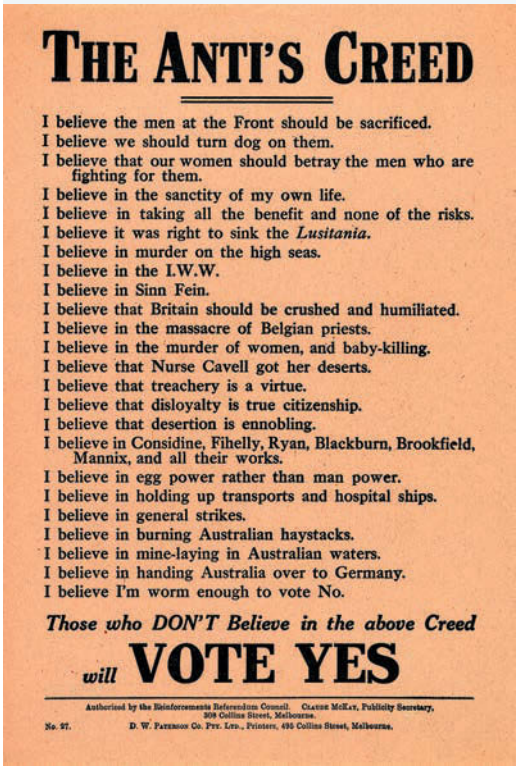
## 8.11.1 Support for conscription

Of all the armies fighting in World War I, only the AIF was formed entirely from volunteers. But by mid 1916 recruiting campaigns were no longer convincing enough men to enlist. When Labor prime minister William Morris ('Billy') Hughes decided that Australia should follow Britain's example by introducing conscription, divisions in Australian society became very bitter. The Australian Labor Party (ALP) was against conscription, but Hughes went against party policy and tried to win public support for conscription through two bitterly fought **referendum** campaigns in 1916 and 1917.

### A divisive issue

Conscription was among the most divisive issues in Australia's history. Divisions between social classes and between those holding different religious and political beliefs became more intense. Supporters of conscription argued that Britain was in peril and many Australians were already fighting and dying, so others who had not stepped forward should be forced to do their duty. They called those who had not volunteered traitors and cowards or accused them of being supporters of **Sinn Fein** or the IWW, or even of Germany.

**SOURCE 1** *The Anti's Creed*, a leaflet supporting conscription in the 1917 referendum



THE ANTI'S CREED

I believe the men at the Front should be sacrificed.
I believe we should turn dog on them.
I believe that our women should betray the men who are fighting for them.
I believe in the sanctity of my own life.
I believe in taking all the benefit and none of the risks.
I believe it was right to sink the *Lusitania*.
I believe in murder on the high seas.
I believe in the I.W.W.
I believe in Sinn Fein.
I believe that Britain should be crushed and humiliated.
I believe in the massacre of Belgian priests.
I believe in the murder of women, and baby-killing.
I believe that Nurse Cavell got her deserts.
I believe that treachery is a virtue.
I believe that disloyalty is true citizenship.
I believe that desertion is ennobling.
I believe in Considine, Fihelly, Ryan, Blackburn, Brookfield, Mannix, and all their works.
I believe in egg power rather than man power.
I believe in holding up transports and hospital ships.
I believe in general strikes.
I believe in burning Australian haystacks.
I believe in mine-laying in Australian waters.
I believe in handing Australia over to Germany.
I believe I'm worm enough to vote No.

*Those who DON'T Believe in the above Creed will* VOTE YES

Authorised by the Reinforcements Referendum Council. Clayton McKay, Publicity Secretary, 309 Collins Street, Melbourne.
No. 97. D. W. Paterson Co. Pty. Ltd., Printers, 495 Collins Street, Melbourne.

AWM RC00317

**SOURCE 2** Conscription — for and against

| Conscription supporters | Conscription opponents |
|---|---|
| • Representatives of every political party except the Labor Party<br>• Business organisations<br>• Major newspapers such as *The Argus, The Age* and *The Bulletin*<br>• Protestant churches<br>• Some returned soldiers | • Trade unions<br>• Most of the Labor Party<br>• The Catholic Church (Melbourne's Archbishop, Daniel Mannix, led the fight against conscription) — Britain had suppressed the Irish uprising of Easter 1916 and executed its leaders; most Australian Catholics were of Irish descent and many resented Britain's treatment of Ireland<br>• The Women's Peace Army<br>• Most working-class people<br>• Some returned soldiers |
| **Pro-conscription arguments** | **Anti-conscription arguments** |
| • It was Australia's duty to support Great Britain.<br>• Conscription meant 'equality of sacrifice'.<br>• Voluntary recruitment had failed.<br>• Australia had a good reputation that had to be protected.<br>• Other Allied countries, such as Great Britain, New Zealand and Canada, had already introduced conscription. | • No person had the right to send another to be killed or wounded.<br>• There would not be enough hands to farm if men were conscripted.<br>• The working class would unfairly bear the burden of the fight.<br>• Too many Australian men had already died or been wounded.<br>• Conscription would harm and divide Australia. |

## 8.11.2 Opposing conscription

Opponents argued that there should there be no conscription of working men when there was no conscription of the wealth of the privileged classes. Many feared that conscription would be used by employers to destroy rights won by Australian workers. In May 1916, conscription was used in Germany to destroy German workers' rights when striking munitions workers were conscripted and sent to the battlefront. Australian unions believed that conscription could be used for the same purpose here. They described supporters of conscription as destroyers of democracy, murderers and war profiteers. Most Australian Catholics were of Irish descent, and many became bitterly resentful when Britain executed several Irish rebel leaders after crushing the Irish uprising of Easter 1916. Melbourne's Catholic Archbishop, Daniel Mannix, quickly became the most outspoken leader of the anti-conscription movement.

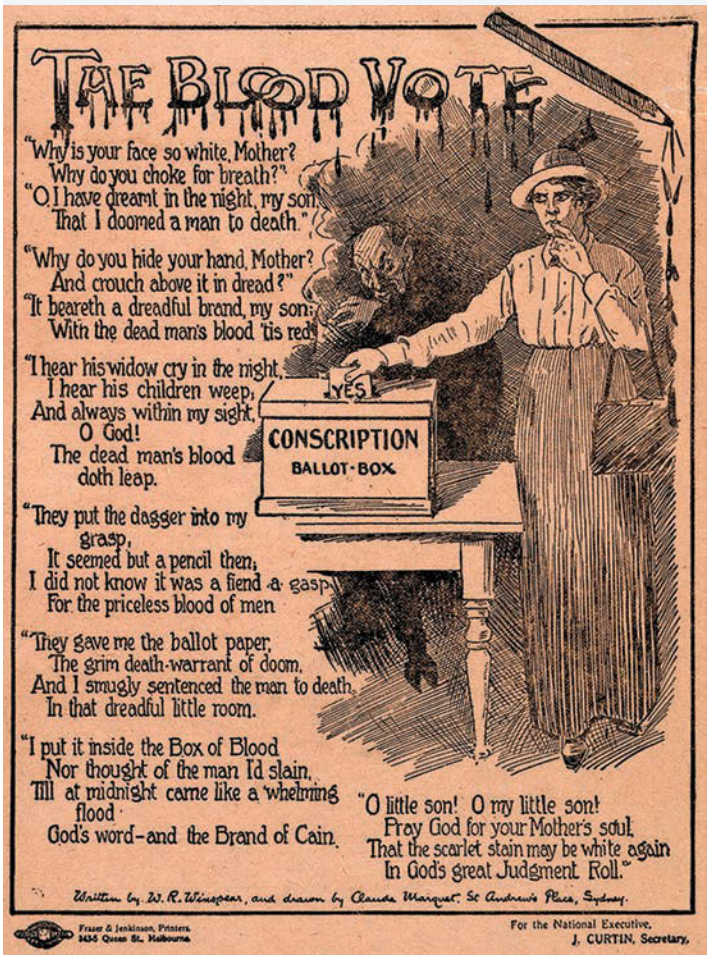
### DID YOU KNOW?

Billy Hughes' supporters, including many AIF soldiers, called him the 'Little Digger'. From November 1916 the labour movement, on the other hand, called him 'the Rat' and 'Judas' (in the Bible, Judas was said to have betrayed Christ).

**SOURCE 3** From speeches by Archbishop Daniel Mannix, reported in the *Advocate*: (1) 3 February 1917 and (2) 8 December 1917

1. The war was like most wars — just an ordinary trade war ... Even now, people were arranging how the vanquished nations — when they are vanquished — are to be crippled in their future trade.
2. [In] the daily papers of Australia ... there is no opening in their columns for those who want the answer on December 20 to be an emphatic NO ... [The] papers give plenty of space to any sort of silly twaddle on the other side ... The wealthy classes would be very glad to send the last man, but they have no notion of sending the last shilling, nor even the first ... the burden in the end will be borne by the toiling masses in Australia.

**SOURCE 4** *The Blood Vote*, an anti-conscription leaflet

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## The people decide

Conscription was defeated in the referendum of October 1916 (1 087 557 Australians voted in favour of conscription but 1 160 033 voted against it). 'Patriots' blamed Catholics and Australian Germans and demanded that Mannix be deported. The Labor Party was split. Hughes and his supporters left the party in November 1916, before it could expel them, and merged with the Liberal Party to form the Nationalist Party. Led by Hughes, the Nationalists won the federal election of May 1917. However, at a second referendum of December 1917, conscription was again defeated, this time by 1 181 747 against to 1 015 159 in favour.

### 8.11 ACTIVITIES

1. Working in small groups, use **SOURCES 1** and **4** as models to design a 'Yes' or 'No' poster or leaflet for either of the conscription referendums. **Using historical sources as evidence**
2. Conduct research to investigate the contribution of Vida Goldstein to the anti-war movement. (See subtopic 6.11 for some introductory information.) **Determining historical significance**
3. Daniel Mannix was regarded by many Australians as a villain and by many others as a hero for his role in the defeat of conscription. Conduct research to produce an assessment of his role in the struggle against conscription and evaluate his historical significance, using sources to support your argument. **Determining historical significance**

### 8.11 EXERCISES

**Historical skills key: HS1** Remembering and understanding **HS2** Sequencing chronology **HS3** Using historical sources as evidence **HS4** Identifying continuity and change **HS5** Analysing cause and effect **HS6** Determining historical significance

#### 8.11 Exercise 1: Check your understanding

1. **HS1** What was unique about Australia's army in World War I?
2. **HS1** Why did Australian Prime Minister 'Billy' Hughes decide in mid 1916 that Australia should introduce conscription?
3. **HS1** What reasons did Australian workers have for opposing conscription?
4. **HS1** Explain why many Australian Irish Catholics would have opposed conscription.
5. **HS1** What were the results of the two referendums on conscription in 1916 and 1917?
6. **HS1** Describe the impact of the conscription referendums on the Labor Party.
7. **HS1** What event prompted Melbourne's Archbishop Daniel Mannix to become the most outspoken opponent of conscription?

#### 8.11 Exercise 2: Apply your understanding

1. **HS3** Read **SOURCE 1**.
   The Industrial Workers of the World (IWW) campaigned against war and the exploitation of workers. Sinn Fein was a movement fighting for Irish independence from British rule. Nurse Cavell was shot by the Germans as a British spy. Explain why a pro-conscription leaflet would refer to these people.
2. **HS3** Using **SOURCE 2**:
   (a) list the main supporters of conscription
   (b) outline the main arguments for conscription
   (c) list the main groups opposed to conscription
   (d) outline the main arguments against conscription.
3. **HS3** What arguments did Mannix make against conscription in **SOURCE 3**?
4. **HS3** Analyse the technique used in **SOURCE 4** to argue against conscription.
5. **HS3** Compare **SOURCES 1** and **4**. Who do you think is the intended audience of each source? Which do you think would be more effective in influencing voters? Outline your view.

Try these questions in learnON for instant, corrective feedback. Go to www.jacplus.com.au.

# 8.12 The Eastern Front: collapse and revolution

## 8.12.1 Tsarist Russia collapses

By 1917 the war weariness, social divisions and disillusionment that led to a general strike and bitter opposition to conscription in Australia were also being experienced in other combatant nations.

Between April and June there were mutinies in the French army involving 27 000 men. Forty-nine mutineers were executed. In Germany in 1916 there had been huge strikes. The government broke them by conscripting strikers, but even bigger strikes took place in 1917. In Britain half a million people had joined anti-war organisations by 1917. Nowhere, however, was war weariness more widespread than in Russia. What happened there would change the world.

At the beginning of World War I the Russian army was referred to as 'the Russian Steamroller', because it was so big that many people thought it could defeat the Germans and Austrians through sheer weight of numbers. However, most Russian soldiers were conscripted peasants who were poorly trained and so poorly equipped that some did not even have boots or guns. Some Russian officers refused to lead their troops into battle, fearing that they would be shot by their own men.

When Russia entered the war it was ruled by Tsar Nicholas II, who held enormous power. Russia was ruled in the interests of its aristocratic landowners and wealthy industrialists, and there was great discontent among the peasants and workers who made up more than 90 per cent of the population. At first, many Russians supported the war, but they suffered heavy losses against the Germans in 1914–15. In 1916 they launched attacks to prevent the Germans shifting troops to the Western Front. By 1917, after a series of crippling defeats, Russian soldiers and sailors were becoming mutinous, while at home starving workers were demanding bread and peasants were demanding land.

**SOURCE 1** A description of support for the war in Russia in August 1914, from R.H. Bruce Lockhart, *Memoirs of a British Agent*, 1932

I recall the enthusiasm of those early days ... those moving scenes at the station; the troops, grey with dust and closely packed in cattle trucks; the vast crowd on the platform to wish them God-speed ... Revolution was not even a distant probability.

**SOURCE 2** From a letter sent home by a Russian general in 1915

In recent battles a third of the men had no rifles. These poor devils had to wait patiently until their comrades fell before their eyes and they could pick up weapons.

**SOURCE 3** From P.I. Lyashchenko, *Economic and Social Consequences of the War*, 1949

... by 1916 the country began to experience a critical food shortage ... By directing all industrial production into war channels, the government policy deprived the villages of their supplies of goods ...

### Revolution

Revolution broke out in March 1917 in the Russian capital, Petrograd (now St Petersburg) after soldiers refused orders to shoot striking workers. When he lost the support of his generals, the Tsar **abdicated** in favour of his brother Michael. But Michael refused to be Tsar and instead handed power to a provisional government, formed by members of the **Duma**. The Provisional Government kept Russia in the war, but its

authority was weakened by the rise of an alternative centre of power — the Petrograd **Soviet**. This council was made up of elected delegates from soviets of workers, soldiers, sailors and peasants from throughout Russia.

The Provisional Government lacked support from any part of Russian society. The old ruling classes wanted to restore the rule of the Tsar. Peasants wanted the aristocrats' land to be redistributed to them. Many soldiers, sailors and workers wanted Russia to withdraw from the war. The government could hold power only so long as the Petrograd Soviet gave it support.

**SOURCE 4** The Tsar's Winter Palace in St Petersburg has hundreds of luxurious rooms and is thousands of times bigger than the homes of Russian workers and peasants in 1917. The royal family also had other magnificent palaces.

**SOURCE 5** Looking towards the ceiling from the grand staircase at the Winter Palace

## 8.12.2 The second revolution

Russia's small but disciplined Bolshevik Party was led by Vladimir Ilyich Ulyanov, known as Lenin. The party's ideology was based on Marxism, the revolutionary socialist set of ideas developed by Karl Marx in the nineteenth century. Lenin was a Marxist but he departed from Marx's belief that socialist revolution could take place only in advanced capitalist societies in which industrial workers were the majority. Lenin came to believe that in Russia, an overwhelmingly agricultural country, a socialist revolution could be achieved through an alliance of workers and peasants.

Lenin, and his associate Leon Trotsky, believed that socialist revolution could succeed in backward Russia but only if it received support from socialist revolutions in the more advanced industrial countries. They thought a revolution in Russia would trigger similar revolutions in those countries. In April 1917 Lenin put these views to the other Bolsheviks. At first they totally opposed him. However, he soon won majority support and the Bolsheviks prepared to seize power.

**SOURCE 6** A Bolshevik painting depicting Lenin organising revolutionary workers, sailors and soldiers. The red armbands show that they are Bolsheviks. Red came to symbolise revolution.

### The Bolsheviks seize power

To gain popular support, the Bolsheviks adopted the slogans 'Peace, Bread and Land' and 'All Power to the Soviets' while they worked to build up their influence in the Petrograd Soviet. The Provisional Government tried unsuccessfully to suppress the Bolsheviks. But when the right-wing General Kornilov attempted to seize power in August 1917, it was the Bolsheviks who sabotaged his transport and persuaded his troops to desert. This earned them widespread support. The Bolsheviks had saved the Provisional Government, but now they set out to destroy it.

Trotsky had been elected Chairman of the Petrograd Soviet's Military Revolutionary Committee. Once the Bolsheviks had a majority of delegates in the Soviet, he planned the seizure of power. In November

1917, on Trotsky's orders, the Red Guards of Petrograd workers, soldiers of the Petrograd garrison and sailors of the Kronstadt naval base stormed the Provisional Government's headquarters in the Tsar's Winter Palace. They seized power in the name of the Soviet. The new communist government promised to create a state ruled by workers and peasants.

**SOURCE 7** This Bolshevik banner of 1918 represents the alliance of workers and peasants. In the right-hand corner, the hammer represents industrial workers while the sickle represents peasants.

## DID YOU KNOW?

Many Marxists and other socialists in Russia and in other countries opposed Lenin's views, which came to be called Marxism–Leninism. They predicted, correctly, that such a revolution could not create democracy and socialism but would lead instead to oppressive dictatorship.

Although the Bolsheviks failed to live up to their ideals, they would inspire many discontented workers in other lands. Significantly, their victory ended Russia's involvement in the war. In March 1918 the Bolshevik government signed a separate peace that enabled Germany to direct all its resources to the Western Front.

## 8.12 EXERCISES

**Historical skills key: HS1** Remembering and understanding **HS2** Sequencing chronology **HS3** Using historical sources as evidence **HS4** Identifying continuity and change **HS5** Analysing cause and effect **HS6** Determining historical significance

### 8.12 Exercise 1: Check your understanding

1. **HS1** Why was the Russian army weak despite its size?
2. **HS1** Describe the reasons for widespread discontent among workers, peasants and soldiers.
3. **HS1** Who was the leader of the Bolsheviks?
4. **HS1** How did the Bolsheviks' leader's ideas about socialist revolution differ from the ideas of Karl Marx?
5. **HS1** What were the two key symbols on the Bolshevik banner and what did they represent?

### 8.12 Exercise 2: Apply your understanding

1. **HS3** Study **SOURCES 1–5** and explain how these sources provide evidence for the growing opposition of Russian troops, workers and peasants to the Tsarist regime that led to the Tsar's abdication and the formation of the Provisional Government in March 1917.
2. **HS3** Look closely at **SOURCES 6** and **7**. Explain how these sources provide evidence that the Bolsheviks wanted the second revolution to be seen as an uprising of Russia's workers, peasants, soldiers and sailors rather than a seizure of power by a small party of dedicated revolutionaries.
3. **HS5** Most historians agree that the Bolshevik Revolution could not have succeeded without the conditions created in Russia by World War I. Explain why you agree or disagree with this view.
4. **HS6** For what reasons could the Bolshevik Revolution be regarded as a major turning point in World War I?
5. **HS2** Make a timeline of events from 1915 to 1918 to show how Russia's involvement in World War I led to a communist revolution.

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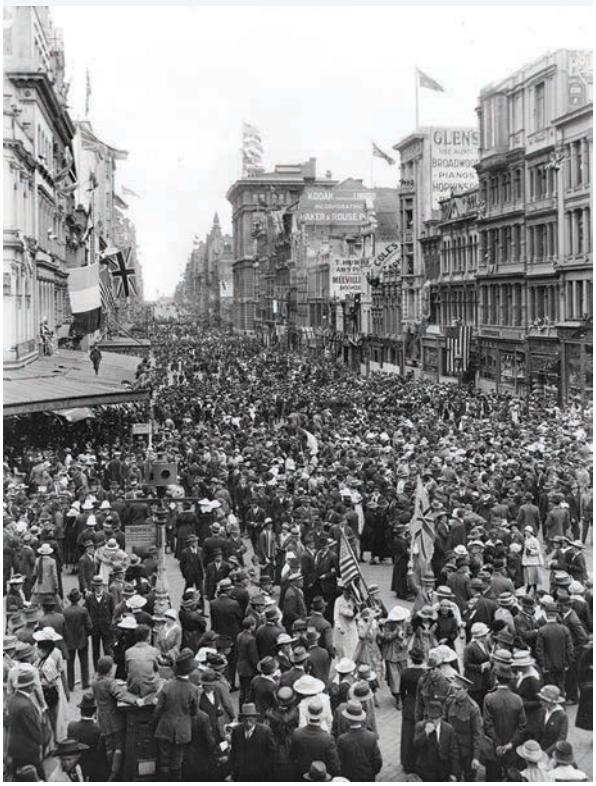
# 8.13 Peace and commemoration

## 8.13.1 Repatriation and memorials

War's full consequences are rarely foreseen. The Armistice of 11 November 1918 ended the fighting in World War I, but nothing could ever be quite the same again. The survivors of the great armies that had killed and maimed each other for four years with bullets, bayonets, grenades, artillery and gas emerged from their trenches to a world in ruins. The German, Austro-Hungarian, Turkish and Russian empires had been shattered. Revolutions and civil wars broke out in the defeated empires, and even the victor nations and colonies experienced widespread social unrest. In Australia, as we have seen, the war had brought deep divisions and there was scarcely a family that had not lost a brother, son, father or uncle on the battlefields.

**SOURCE 1** Crowds fill Melbourne's streets on Armistice Day, 11 November 1918.




### Repatriation

In 1918, 260 000 Australians had to be **repatriated**. Some had been fighting for four years and few people at home understood how deeply the experience had affected them. A shortage of shipping meant some soldiers had to wait more than 18 months to get home. The returning troops brought with them the 'Spanish' influenza, a deadly **pandemic** that swept the world in 1918–19. It caused almost 12 000 deaths in Australia, and many men had to be quarantined before being reunited with their families. Australians agreed that the nation should try to repay returned servicemen for their sacrifices. Some were provided with training in skilled trades while others were settled on the land with the help of low-interest loans. However, these measures could not help all ex-servicemen to readjust after four years of the horrors of war.

**SOURCE 2** Australian artillery units parade past Buckingham Palace (London) on Anzac Day, 25 April 1919.

**SOURCE 3** Bronze statue of Simpson and his donkey at the Australian War Memorial, Canberra

## Memorials

Australians were determined that their soldiers' sacrifices would not be forgotten. Across the nation, local committees built memorials in towns, cities and suburbs to display the names of the fallen. In the lands in which Australians fell, memorials and vast war cemeteries were established. Most are in northern France and Belgium, where they are maintained with great care by the Commonwealth War Graves Commission.

**SOURCE 4** French children at Villers-Bretonneux, in the Somme Valley, tend graves of Australians killed on the Western Front.

AWM E05925

**on** Resources

**Interactivity** One man visits the Somme (int-6666)

## 8.13.2 Anzac Day and the Anzac legend

In 1914, many Australians had seen World War I as a chance to prove that they deserved a place in Britain's great military tradition. The mateship, bravery and achievements of the Anzacs during the Gallipoli campaign were seen to represent Australian ideals and give Australia the legendary identity it sought.

**SOURCE 5** Message from King George V to the Australian government, in *The Age*, May 1915

I heartily congratulate you upon the splendid conduct and bravery displayed by the Australian troops in the operations at the Dardanelles, who have indeed proved themselves worthy sons of the Empire.

**SOURCE 6** From C.E.W. Bean, *The Story of Anzac*, 1941

What motive sustained them? ... It lay in the mettle of the men themselves ... life was very dear, but life was not worth living unless they could be true to their idea of Australian Manhood.

Anzac Day was first observed in 1916 to commemorate the landings at Gallipoli and the legend they created. Many people considered that Australia had only really become a nation at Gallipoli on 25 April 1915. Each year, Anzac Day has continued to be commemorated across Australia and New Zealand. For many people, it became Australia's unofficial national day. Traditionally it has been observed through dawn services, marches of veterans and gatherings of wartime comrades. It has also been observed in schools and churches.

At first the message of Anzac Day was similar to that of Empire Day — pride in their British heritage, loyalty to the empire, hatred of Germany, the need for greater sacrifice, and pride that Australia had earned an honourable place in the British military tradition. From 1920 Anzac Day became a public holiday.

What was the meaning of the Anzac legend, and has it changed over time? The legend was based on real characteristics of Anzac troops at Gallipoli and throughout the war. Many risked their lives for their mates. Some were decorated for bravery while others died unrecognised. Qualities like courage and mateship were not uniquely Australian — they were undoubtedly shared by many other soldiers. However, what the Anzacs did was remarkable. They made up less than 10 per cent of British Empire forces but on the Western Front no military force achieved more in proportion to their numbers. Anzac troops believed that they had proven themselves equal to or even better than the British.

## Did the Anzac legend change Australian nationalism?

Did the Anzac legend strengthen or weaken the spirit of national independence? In Australia of the late nineteenth and early twentieth century, radical nationalists saw Britain as the home of social inequalities. They wanted a fairer and more equal Australia that was independent of Britain. The military historian Bill Gammage has argued that the Anzac legend weakened the influence of radical nationalism because the Anzacs had fought and died for Britain, proving the strength of Australia's ties with the 'Old Country'.

**SOURCE 7** From Bill Gammage, *The Broken Years*, 1975, p. 278

But the Anzac tradition also introduced a deep division into Australian life ... roughly half those eligible had joined the AIF during the war ... A great rift had opened, a rift between those who had fought in the war and those who had not.

In significant ways, this was disastrous. Before the war radical nationalists had led the drive for a social paradise in Australia, but ultimately they were least at ease with the Imperial and martial implications of the Anzac tradition, and during the war they divided over the proper conduct of Australia's war effort ...

For their part the conservatives, who before 1914 had exerted a **tenuous** influence on Australian politics and society, were united and given purpose by the war ... Naturally enough that dedication and the motives behind it appealed to the men in the trenches ...

In short, that general majority which in 1914 had sought to create a social paradise in Australia was both split and made leaderless by the war, and by 1918 no longer existed, while the conservatives had joined with those who had fought in the war to take firm possession of the spirit of Anzac ...

So the Anzac legend fitted in well with the views of Australian conservatives who wanted Australia to stay loyal to the British monarchy and the empire. Conservatives dominated celebrations of Anzac Day in the 1920s and 1930s. To them, it was a celebration of loyalty to the empire as much as an expression of national pride. To many who had fought in the war, Anzac Day was a reminder of their sacrifice and a chance to be reunited with the only people who could really understand what they had suffered. World War II and subsequent conflicts would bring new generations into the Anzac tradition. However, Anzac Day would continue to reflect divisions in Australia as much as it expressed national pride. Some Australians resented what they saw as its use by conservatives to glorify war.

Perhaps today the meaning we give to Anzac Day can be shared by all Australians — pride in the courage and endurance of the Anzacs, sorrow for the terrible losses suffered by their generation and determination that such tragic waste of human lives should never be repeated.

**SOURCE 8** Some of the war graves at the Australian National Memorial at Villers-Bretonneux in France

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- World War One > **Consequences of World War I**

## 8.13 ACTIVITIES

1. Look back at subtopic 8.6 and conduct further research to explain why Private Simpson (depicted in **SOURCE 3** in section 8.13.1) was considered to be worthy of an individual memorial.
   **Determining historical significance**
2. (a) Explain what you believe to be the meaning of Anzac Day in modern Australia, based on:
      i. what you have learned about how the Anzac legend changed Australian nationalism and divided Australians
      ii. your own experiences of Anzac Day commemorations.
   (b) Share your thoughts with a partner. What were the similarities and differences between your view and your partner's view of the meaning of Anzac Day? **Determining historical significance**

### 8.13 EXERCISES

**Historical skills key: HS1** Remembering and understanding **HS2** Sequencing chronology **HS3** Using historical sources as evidence **HS4** Identifying continuity and change **HS5** Analysing cause and effect **HS6** Determining historical significance

#### 8.13 Exercise 1: Check your understanding

1. **HS1** Why did many Australian troops face a long wait after the Armistice before they were repatriated?
2. **HS1** Describe the effect of the 'Spanish' influenza pandemic on Australia.
3. **HS1** Why would many World War I soldiers have found it difficult to settle back into civilian life?
4. **HS1** Describe measures that were adopted in Australia to assist ex-servicemen and to ensure that their sacrifices were not forgotten.
5. **HS1** What were the Anzacs thought to have given Australia?
6. **HS1** Describe the message of Anzac Day in its first years.

#### 8.13 Exercise 2: Apply your understanding

1. **HS3** Describe what you think would have been the mood of the crowd in **SOURCE 1** and the emotions that would have been felt by those who had lost close friends and family members.
2. **HS3** Look at **SOURCE 2**. Explain why these Australian soldiers were in London so long after the war's end and how they might have felt about their situation.
3. **HS3** Study **SOURCES 5** and **6**.
   (a) According to **SOURCE 5**, what had the Australian troops proved?
   (b) Why might not all Australians have shared the same feelings about this message?
   (c) What motives did Australia's official war historian, C.E.W. Bean, identify to account for Anzac heroism?
4. **HS3** Read **SOURCE 7**. According to Gammage:
   (a) Why did the Anzac tradition introduce 'a deep division into Australian life'?
   (b) Who were 'least at ease with the Imperial and martial implications of the Anzac tradition' (that is, with the idea that it was noble to fight for the British monarch and empire)?
   (c) How did the Anzac tradition strengthen the influence of conservatives in Australia?
5. **HS3** Explain how **SOURCES 4** and **8** can be used as evidence of an ongoing commitment to commemorate the sacrifices of Australians in World War I.

Try these questions in learnON for instant, corrective feedback. Go to www.jacplus.com.au.

# 8.14 The war's impact on Australia's international relations

## 8.14.1 Australia, Britain and the United States

The Great War was not the first occasion on which Australians had fought for the British Empire. They had also fought in the Sudan Campaign in 1885, the Boer War in 1899–1902 and the suppression of the Boxer Rebellion in China in 1900. Australians had fought for Britain largely because they feared being invaded and felt that fighting for the empire would assure the British that Australia was worth defending. As you have discovered in this topic, most Australians had responded to the outbreak of World War I with unswerving loyalty to the British Empire, believing that Britain's cause was a just one. After Gallipoli, the Anzacs were believed to have given Australia the identity it sought within the British military tradition. So, after the enormous sacrifices made in the Great War, would Australia seek to broaden its international relations?

The chances of lasting peace would be strongly influenced by the terms of treaties negotiated at the Paris Peace Conference in 1919. At this conference, Australia was represented by Prime Minister W.M. 'Billy' Hughes. Australia was a dominion of the British Empire so it did not have an independent foreign policy. Nor did it seek independence. However, after the Armistice ended hostilities on 11 November 1918, Hughes and the other dominion leaders demanded the right to be represented at the conference. This demand was accepted and the representatives of the dominions, as part of the British Empire delegation, became delegates to the conference. There they were recognised as the representatives of separate nations.

What would Australia's position be at the conference? Australia had fought as part of the British Empire but her troops had been kept distinct from the British Army and their performance had been a source of national pride. Over 60 000 Australians had died. Tens of thousands were permanently disabled and many ended their lives in hospitals as a result of mustard gas and other horrors. So, although Hughes had acted during the war as a British imperialist, at the peace conference he also adopted the role of an Australian nationalist, willing to fight for what he saw as Australia's interests even if this brought him into conflict with Britain and the other great powers.

**SOURCE 1** From the diary of Corporal D. Morgan, 2nd Bn., on Armistice Day, 11/11/1918

The very flower of our manhood have paid the greatest price, not willingly, for not one of them but longed to live, return home and forget, yes just forget the horrors of the past. Most of us enlisted for ... Patriotism or Love of Adventure but not one ... had the slightest conception of the terrible price required ... Please God ... the sacrifices have not been in vain.

### Hughes clashes with the USA

Hughes quickly found himself aligned with those who demanded the harshest terms against the defeated powers. He was concerned with three main issues: reparations, German New Guinea and the White Australia Policy. On the reparations issue Hughes shared the view of the French government that Germany should be made to pay for the full cost of the war, and this brought him into conflict with the US President, Woodrow Wilson.

The peace conference produced the Treaty of Versailles (1919) with Germany, the Treaty of Neuilly (1919) with Bulgaria, the Treaty of St Germain (1920) with Austria, the Treaty of Trianon (1920) with Hungary and the Treaty of Sevres (1920) with Turkey. Under the treaties, all of the defeated powers lost territory. Germany lost land on its frontiers and all of its colonies. The Austro-Hungarian Empire disappeared, leaving the small states of Austria and Hungary without the nationalities they had ruled over. Bulgaria lost some lands to Greece and Yugoslavia while Turkey lost all its Middle Eastern provinces. Germany, along with its allies, had to accept responsibility for all losses suffered by the Allies. Germany was forced to agree that, over time, it would pay 6.6 billion pounds in reparations (compensation) for these losses. It also had to agree to give up its navy and most of its merchant ships, limit its army to 100 000 men, and provide free coal and livestock to France and Belgium.

The US president wanted a much less vengeful treaty that would strengthen democracy in Germany and create conditions for lasting peace. Kaiser Wilhelm II had abdicated following a revolution in Germany in November 1918, and by the time the treaty was signed Germany had become a democratic republic. But the overwhelming desire of France and, to a lesser extent, Britain was to weaken Germany and make her pay. Australia's leaders shared that desire.

The aggressive independence shown by Hughes at the conference did not mean any move towards independence from the British Empire. From 1923, the dominions gained the right to make their own foreign policies. But while Canada, South Africa and Ireland took up this independence, Australia remained content to follow British foreign policy.

## 8.14.2 Australia and the Asia–Pacific region

Hughes also clashed with the idealistic Woodrow Wilson on the issue of German New Guinea and with Japan on the issue of racial equality. To understand these disagreements, we need to look back at attitudes to Asia and the Pacific that took shape in Australia during the late nineteenth century.

The widely held belief in a white Australia was based on shared ideas of white superiority, fears of being engulfed by Asian nations to Australia's north, and fears that Asian and Pacific migration posed a threat to Australian living standards. The White Australia Policy had been expressed in two of the first laws passed by the new Commonwealth Government in 1901. These were the Immigration Restriction Act, which was used to prevent non-white migrants from coming to Australia, and the Pacific Island Labourers Act, under which most Pacific Islanders in Australia were deported.

## Australia clashes with the US president

US President Woodrow Wilson believed that former German colonies should not become spoils for the victors of war. Instead they should become **League of Nations** mandates, administered by countries that were on the winning side, but supervised by the League in accordance with humanitarian principles.

In contrast, Hughes' view was that New Guinea and the Pacific Islands should be controlled by Britain or Australia to prevent any foreign power gaining a foothold in the region. Following pressure from Queensland, Britain had made Papua a possession of the British Empire in 1888 and the Australian government administered it from 1910. Hughes wanted the same arrangement for the former German New Guinea. Hughes' concerns were based on fears for Australia's security and were linked to the White Australia Policy. Hughes did not want New Guinea to be at risk at falling into the hands of any power that might permit the entry of Asian immigrants. He wanted the right to annex New Guinea but had to settle for a compromise. The territory became a League of Nations 'class C' mandate. This meant that in theory the League had some overall supervising authority but in practice Australia had virtually complete control of its administration, including the right to prevent Asian immigration.

## Australia clashes with Japan

Hughes also successfully opposed Japan's demands for a racial equality clause in the Covenant of the League of Nations. He believed that the principle of racial equality would amount to a threat to Australia's right to maintain the White Australia Policy. The majority of delegates voted for Japan's proposal, but it was overruled on the grounds that a major change to the Covenant required a unanimous vote.

Thus, when Hughes returned to Australia, he could claim success on all three issues. Australia had, for the first time in history, played a significant role in world affairs in her own right. Significantly, Australia's stance on all three issues had been a reactionary one that was quite out of harmony with the idealistic hopes Wilson held for the League of Nations.

**SOURCE 2** *Too busy to listen*, a cartoon published in *Aussie* magazine in November 1920

## 8.14 EXERCISES

**Historical skills key: HS1** Remembering and understanding **HS2** Sequencing chronology **HS3** Using historical sources as evidence **HS4** Identifying continuity and change **HS5** Analysing cause and effect **HS6** Determining historical significance

### 8.14 Exercise 1: Check your understanding

1. **HS1** Explain how Australia was able to represent itself at the Paris Peace Conference even though it was not an independent nation.
2. **HS1** At the peace conference, on what issue did Australia agree strongly with France and Britain but clash with the United States?
3. **HS1** What powers did Australia decline that it could have taken up from the 1920s?
4. **HS1** Describe the differences between Hughes and Wilson over the former German New Guinea.
5. **HS1** On what issue did Australia clash with Japan?

### 8.14 Exercise 2: Apply your understanding

1. **HS3** Read **SOURCE 1**.
   (a) What conclusions can be drawn from this source about the legacies of World War I for Australia?
   (b) How do these legacies help us to understand why Australia's perceived interests were pursued so strongly at the Paris Peace Conference?
2. **HS3** Analyse **SOURCE 2** using the following questions.
   (a) Who or what is represented by the figure in the top left of the cartoon?
   (b) What conflicts within Australian society are represented by the other figures?
   (c) What is the message of the cartoon and how is it related to the White Australia Policy?
   (d) How does the cartoon support the position taken by Hughes on the issues of racial equality and the Asia–Pacific region?
3. **HS4** Identify ways in which Australia's conduct at the Paris Peace Conference represented:
   (a) a change in its level of independence in international relations
   (b) a continuation of past policies.
4. **HS4** Explain how Australia's stance at the Peace Conference on racial equality, Asia and the Pacific represented a continuation of policies based on racial discrimination. Use the following structure to organise your answer.
   (a) Explain the ideas behind the White Australia Policy.
   (b) Describe the aims and effects of the Immigration Restriction Act and the Pacific Island Labourers Act.
   (c) Explain why Australia wanted British or Australian control of the Pacific Islands, especially the former German New Guinea.
   (d) Explain why Australia opposed Japan's demand for a racial equality clause in the Covenant of the League of Nations.
   (e) Conclude with a general statement about continuity in Australia's foreign policy position on racial equality, Asia and the Pacific.
5. **HS6** Explain why Australia's stance on the terms of the Peace Conference was significant for the chances of lasting peace.

Try these questions in learnON for instant, corrective feedback. Go to www.jacplus.com.au.

# 8.15 SkillBuilder: Analysing photos

online only

## Analysing World War I photographs

Photographs can be very useful primary sources. Analysing a photograph is therefore a very important skill when studying the history of periods in which photography existed. During World War I, many tens of thousands of photographs were taken by official war photographers and ordinary soldiers.

### Select your learnON format to access:

- an explanation of the skill (Tell me)
- a step-by-step process to develop the skill, with an example (Show me)
- an activity to allow you to practise the skill (Let me do it)
- questions to consolidate your understanding of the skill.

# 8.16 Thinking Big research project: Western Front battlefields guide

online only

## SCENARIO

Increasing numbers of people are travelling to sites in northern France and Belgium where so many Australians were killed or maimed during World War I. You have been chosen to help prepare a battlefields guide to some of these sites.

### Select your learnON format to access:

- the full project scenario
- details of the project task
- resources to guide your project work
- an assessment rubric.

### on Resources

**ProjectsPLUS** Thinking Big research project: Western Front battlefields guide (pro-0187)

# 8.17 Review

online only

## 8.17.1 Key knowledge summary

Use this dot point summary to review the content covered in this topic.

## 8.17.2 Reflection

Reflect on your learning using the activities and resources provided.

### on Resources

**eWorkbook** Reflection (doc-31710)
Crossword (doc-31711)

**Interactivity** World War I (1914–1918) crossword (int-7642)

## KEY TERMS

**abdicate** to step down from the throne or from other high office
**artillery** large-calibre guns
**blockade** sealing off an area so that nothing can get in or out
**censorship** restriction or control of what people can say, hear, see or read
**conscription** compulsory enlistment of citizens to serve in the armed forces
**deadlock** a stalemate in which neither side can gain an advantage
**Duma** the Russian parliament
**enlist** to join voluntarily, usually the military
**feint** a dummy attack meant to deceive the enemy into moving troops from where the main attack will take place
**half-caste** of mixed race (a term widely used in the mid 1900s, but now considered offensive)
**Hindenburg line** a heavily fortified (German) position on the Western Front
**imperialism** the policy of an empire by which it gains land by conquest and rules other countries, or dominates them as colonies
**League of Nations** the world body set up at the Paris Peace Conference to solve disputes between nations peacefully
**nationalism** feeling of loyalty to a nation
**no man's land** unoccupied ground between the front lines of opposing armies
**pacifist** person who holds a religious or other conscientious belief that it is immoral to take part in war
**pandemic** disease epidemic affecting many different countries
**propaganda** distortion of the truth to persuade people to support an action or point of view
**referendum** ballot in which voters decide on a political question. Where there is no change to the Australian Constitution involved, this is called an advisory referendum or plebiscite.
**repatriated** returned to home country
**Sinn Fein** organisation formed in Ireland in 1905 to campaign for Irish independence from Britain. The name was also used by the pro-independence party after the failed 1916 uprising.
**Slavic** belonging to the Slavs (a language group including Russians, Serbs and other Central and Eastern European peoples)
**Soviet** a council representing workers, peasants, soldiers and sailors
**stalemate** (from chess) a situation in which neither side can gain a winning advantage
**tenuous** weak, thin
**trench foot** a painful, swollen condition caused by feet remaining wet for too long; if gangrene set in, the feet had to be amputated
**U-boats** German submarines
**ultimatum** a final set of demands or terms backed by a threat

# 8.15 SkillBuilder: Analysing photos

## 8.15.1 Tell me

### What are our main World War I photographs?

Many tens of thousands of photographs were taken during World War I, even though soldiers could be court-martialled for taking photographs in battlefront areas. A large number of photographs was taken for military reasons or to create a visual record of the war. Many of the best photographs were taken by official war photographers like Australia's Frank Hurley. The Australian government wanted to have official war photographers so that Australia's role in the war could be fully recorded. Hurley became the first official photographer to the AIF in 1917 and was given the rank of honorary captain.

### Why is it important to analyse and corroborate photographic sources?

Photographs can be very useful primary sources. Analysing a photograph is therefore a very important skill when studying the history of periods in which photography existed. You might think that a photograph is always an accurate record of what happened, rather than somebody's impression of it. But that is not necessarily true. Often when you take a photograph, you compose a picture, choosing the angle from which you want to shoot, what you will have in it, what part of a scene you will leave out and whether it will be taken close up or from a distance. Later you might edit it on your computer, altering such aspects as light, contrast and colour saturation, and cropping the photo to cut unwanted parts.

Modern digital photography had not been invented until long after World War I, but even with the cameras that existed at the time, skilful photographers could edit pictures in ways that changed their meaning. During World War I, to avoid blurring, cameras needed people to stay still for much longer times than are required with modern cameras. For that reason, action photos were sometimes posed. For dramatic effects and to show more than one kind of action in one image, Hurley and other skilled photographers also made composite pictures by combining two or more negatives. For such reasons we sometimes have to be careful with their photographs to recognise features that have been altered to make them useful for propaganda or to simply make them more exciting.

## 8.15.2 Show me

When you study a historical photograph you need to think carefully about the clues it provides and try to evaluate its accuracy, usefulness and reliability. You need to ask questions such as:

1. *The photographer.* Who took the photograph (if known) and what is the source (if stated)?
2. *Location.* Where is the location and when was the photograph taken?
3. *Editing.* Has the photograph been posed or has the photographer simply recorded a scene? Can you tell whether the photograph has been cropped and, if so, has this changed its meaning at all? Has the photograph been changed by adding or removing any details or by combining negatives to make composite images?
4. *Composition.* Is the photograph taken from close up or from a distance, or from a particular angle, and does this affect the viewer's reaction to it?
5. *Subject.* What is the main subject of the image? What background and minor details are shown? What extra information do the minor details add?
6. *Motive.* Why was the photograph taken (if known)?
7. *Usefulness.* For what aspect of the topic does the photograph provide useful evidence?
8. *Accuracy and reliability.* Is the evidence it provides accurate and reliable and how can you tell?

**SOURCE 1** is an example of a World War I photograph to which the above questions are applicable. To evaluate the photograph's accuracy and reliability, you could compare it with many other images. A good image for comparison is **SOURCE 2**, which may well be a posed photograph.

**SOURCE 1** Australian soldiers pass along the Menin Road beyond Ypres, Belgium, on 14 September 1917 during the Ypres battles. The photograph was taken by Frank Hurley, an official Australian war photographer. It is held in the collections of the Australian War Memorial.

**SOURCE 2** An Australian soldier runs across the road through Chateau Wood in the Menin Road area, in the Ypres sector, Belgium, on 5 November 1917. The photograph was taken by Frank Hurley, an official Australian war photographer. It is held in the collections of the Australian War Memorial.

| Questions about SOURCE 1 | Answers |
|---|---|
| 1. Who took the photograph (if known)? What is the source (if stated)? | The photographer was Frank Hurley, an official Australian war photographer. The photograph belongs to the Australian War Memorial. |
| 2. Where is the location? When was the photograph taken? | The photograph was taken near Ypres. It was taken on 14 September 1917, which places it at the time of the Third Battle of Ypres. |
| 3. Has the photograph been posed or has the photographer simply recorded a scene? Has the photograph been cropped and, if so, has this changed its meaning at all? Has the photograph been changed by adding or removing any details or by combining negatives to make composite images? | There is no evidence that the photograph has been posed, although it is possible that Hurley might have asked the soldiers to stand still for a moment to avoid blurring. (In contrast, **SOURCE 2** is very likely to have been posed, as it is improbable that a lone soldier would have been crossing the road just when Hurley was ready to take a photograph.) There is no evidence that **SOURCE 1** has been cropped, although it is equally possible that it could have been cropped. Nor is there evidence of any other tampering with the image, although there could easily have been tampering. |
| 4. Is the photograph taken from close up or from a distance, and does this affect the viewer's reaction to it? | The photograph has been taken close up to the dead horses, so that we react first to the scene in the foreground, and that our eyes then move to the soldiers on the road moving into the distance. This photographer has a good sense of composition. |
| 5. What is the main subject? What background and minor details are shown? What extra information do the minor details add? | The subject is the destructive power of the war and the experiences of Australian soldiers at the time of the Third Battle of Ypres. The bloated bodies of dead horses in the foreground are no more important than the soldiers marching away from them in the background, possibly to share their fate. The flatness of the land on both sides of the road provides evidence of the type of landscape in which many battles were fought on the Western Front. The bare trees and debris along the road contribute to an image of devastation. |
| 6. Why was the photograph taken (if known)? | As the photograph was taken by an official war photographer, it was undoubtedly taken for historical reasons, to document the conditions experienced during the fighting around Ypres. |
| 7. For what aspect of World War I does the photograph provide useful evidence? | It provides useful evidence for the effect of the war on the landscape, animals and men. |
| 8. Is the evidence it provides accurate and reliable and how can you tell? | The evidence in this photograph is accurate and reliable. We could tell this by comparing similar photographs and written records of the fighting at Ypres in 1917. **SOURCE 2**, which was taken almost two months later in the same general area, can be used to support its accuracy and reliability as it shows similar devastation and provides evidence of the added effects of rain. |

## 8.15.3 Let me do it

Complete the following activities to practise this skill.

### 8.15 ACTIVITIES

1. Use the questions in the example in the Show me section and repeated below to analyse **SOURCE 3.** You can use **SOURCE 4** as evidence for the accuracy and reliability of **SOURCE 3.**
   (a) Who took the photograph? What is the source?
   (b) Where is the location? When was the photograph taken?
   (c) Has the photograph been posed or has the photographer simply recorded a scene? Has the photograph been cropped and, if so, has this changed its meaning at all? Has the photograph been changed by adding or removing any details or by combining negatives to make composite images?

(d) Is the photograph taken from close up or from a distance, and does this affect the viewer's reaction to it?
(e) What is the main subject? What background and minor details are shown? What extra information do the minor details add?
(f) Why was the photograph taken?
(g) For what aspect of World War I does the photograph provide useful evidence?
(h) Is the evidence it provides accurate and reliable and how can you tell?

**SOURCE 3** Two soldiers of the Australian 5th Division crossing a frozen trench by a duckboard bridge at Bernafay Terminus on the Western Front in January 1917. The image was taken by an unknown official war photographer. It is held in the collections of the Australian War Memorial.

**SOURCE 4** An Australian officer plodding through the frozen mud in a trench near Gueudecourt, in France, during the winter of 1916–1917. The image was taken by an unknown official war photographer. It is held in the collections of the Australian War Memorial.

2. Based on what you have learned in this SkillBuilder, apply your skills in analysing photographs to answer the following questions.
   (a) Give two reasons why photographs were taken on the battlefronts during World War I.
   (b) In what ways could photographs be altered to change their meaning?
   (c) Who was Frank Hurley and what did he do as Australia's first official war photographer?
   (d) Why would Hurley's photographs be more questionable for reliability than photographs taken by ordinary soldiers?
   (e) What general conclusions about conditions on the Western Front can you draw from the four photographs used in this SkillBuilder?

# 8.16 Thinking Big research project: Western Front battlefields guide

## Scenario

Following the events held from 2014 to 2018 to mark the centenary of World War I, many Australians have become more aware that the battles on the Western Front cost far more Australian lives and had a much greater impact on the course of the war than the Gallipoli campaign. Increasing numbers of people are travelling to sites in northern France and Belgium where so many Australians were killed or wounded during World War I. You have been chosen to help prepare a battlefields guide to some of these sites.

**SOURCE 1** Australian war graves at Pozières British War Cemetery, France

## Task

You are to research and write guidebook articles for each of the three sites below. You will need to provide information to explain the role of Australians in the battles at each site, the aims and results of each battle, the casualties suffered and at least one contemporary photograph to show the conditions experienced at the time of the battle. The three battle sites are:

1. **Pozières** and nearby **Mouquet Farm, France**, where Australians fought from July to September 1916
2. **Hill 60,** near **Ypres, Belgium**, where Australians fought in November 1916
3. **Villers-Bretonneux, France**, where Australians fought in April 1918 and which has significant links with Victoria.

## Process

- Open the ProjectsPLUS application in the Resources for this topic. Click on the **Start new project** button to enter the project due date and set up your project group. Working in groups of three will enable you to share responsibility for the project. Save your settings and the project will be launched.
- Start by revisiting subtopics 8.9 and 8.15, then navigate to the **Research forum**, where you will find starter topics loaded to guide your research. You can add further topics to the Research forum if you wish. In the **Media centre** you will find an assessment rubric and some helpful weblinks that will provide a starting point for your research.

**SOURCE 2** Australian cemetery at the Villers-Bretonneux Military Cemetery, France

- As you conduct your research, remember to record details of your sources so you can create a bibliography to submit with your guidebook. Add your research notes and source details to the relevant topic pages in the Research forum. You can view, share and comment on other group members' research findings, and you can print out the **Research report** in the Research forum to easily view all the information you have gathered, if you wish.
- Once you have completed your research, write up your guidebook entries. Write clearly and concisely so that each article is no more than 300 words in length. You can also use images to make your articles more compelling.
- Review your work thoroughly, checking for correct spelling and grammar. When you are happy with your work, submit your guidebook articles and bibliography to your teacher for assessment.

## on Resources

**ProjectsPLUS** Thinking Big research project: Western Front battlefields guide (pro-0187)

# 8.17 Review

## 8.17.1 Key knowledge summary

### 8.2 Examining the evidence

- Australia has the world's most extensive collection of sources for the war.
- These include a vast number of written sources and visual sources.
- Britain, France and Belgium also have extensive collections.

### 8.3 What caused the Great War?

- Long-term causes include imperialism, nationalism, the glorification of war and development of rival alliances.
- The short-term trigger was the conflict between Austria–Hungary and Serbia, especially following the assassination of the Austrian Archduke Franz Ferdinand.

### 8.4 The world at war

- The war was fought between the Allies and the Central Powers, but the Allies quickly gained support from several other countries.
- The Germans failed in their plan to quickly defeat France in the west in order to then move east and defeat Russia.
- The war was fought on several fronts but the main fighting was in Europe on the Western and Eastern fronts.

### 8.5 Australians in the Great War

- Most Australians greeted the outbreak of war with enthusiasm.
- Volunteers rushed to enlist in the AIF. Loyalty to Britain was a motive for many of them.
- The AIF was combined with New Zealand troops to form the Australian and New Zealand Army Corps (ANZAC).
- The main theatres of war for Australian troops were Gallipoli, the Western Front and the Middle East.

### 8.6 Gallipoli

- The attack at Gallipoli was intended to defeat Turkey.
- The Anzacs landed successfully on 25 April 1915 but were unable to hold the high ridges, which were essential for success.
- Both sides suffered heavy losses.
- In August 1915, operations to break the deadlock were unsuccessful.
- A successful withdrawal ended the Gallipoli campaign in December 1915.

### 8.7 Gallipoli: the historical debate

- The long-accepted interpretation of the reason for high casualties suffered by the Anzacs during the landing and, to an extent, the failure of the entire campaign was that the troops were landed in the wrong place.
- This interpretation has been challenged in more recent times.

### 8.8 Trench warfare

- Trench warfare led to an almost continual stalemate.
- Trenches were complex systems in which soldiers on both sides lived and died.
- Attempts to attack enemy trenches produced enormous casualties.

### 8.9 The Western Front

- Anzac troops joined the fighting on the Western Front in 1916.
- They suffered high casualties in battles, including Fromelles and Pozières during the Somme offensive.
- Australian soldiers played a prominent role at Bullecourt and Ypres in 1917.
- They also played a key role in stopping the German offensive in March–April 1918 and in the first big Allied attack in July 1918.

### 8.10 The home front

- The war increasingly divided Australians on the home front, especially as it caused increased inequality.
- Patriotic rallies encouraged continued support for the war, patriotic funds were organised to aid the war effort and schools were used to instil patriotism.
- Except for nurses, women were denied any direct role in the armed services. Many other women contributed through voluntary work.
- Women were also among the war's leading critics.
- Recruiting campaigns failed to raise the numbers of new recruits that the government wanted. Despite this the government discriminated against Indigenous Australians in recruiting.

### 8.11 The conscription issue

- Australia was the only combatant nation that had a fully volunteer military.
- Prime Minister Hughes split the Labor Party when he tried to introduce conscription.
- The conscription issue was bitterly divisive.
- Referendums in 1916 and 1917 failed to win majority support for conscription.

### 8.12 The Eastern Front: collapse and revolution

- War weariness in Russia led to the revolution of March 1917 and the abdication of Tsar Nicholas II.
- A second revolution in November 1917 saw the Bolsheviks seize power.
- The Bolshevik Revolution ended Russia's involvement in the war, leading to a separate peace treaty in March 1918 that freed German forces for a last offensive on the Western Front.

### 8.13 Peace and commemoration

- After the Armistice ended fighting on 11 November 1918, lack of shipping caused long delays in repatriating Anzac troops.
- Australians were determined that their soldiers' sacrifices would be remembered, so memorials were built across the nation.
- Anzac Day became a national day of remembrance.
- The Anzac legend changed Australian nationalism and the meaning of the legend has changed over time.

### 8.14 The war's impact on Australia's international relations

- Australia attended the Paris Peace Conference in its own right, not just as part of the British Empire delegation.
- Prime Minister Hughes was concerned with three issues at the conference. He wanted harsh reparations imposed on the defeated powers, Australian or British control of the former German New Guinea and the right to maintain the racist White Australia Policy.
- Hughes gained all of his objectives at the conference but he clashed with both the United States and Japan on these issues.
- Despite the independence shown at the peace conference, Australia did not seek independence from Britain in foreign relations.

## A timeline of World War I

CE

1880

**1882**
Germany, Austria–Hungary and Italy form the Triple Alliance.

**1907**
Britain, France and Russia form the Triple Entente.

1910

**1914**
28 July: Austria–Hungary declares war on Serbia.

1–3 August: Germany declares war on Russia and France, and invades Belgium.

4 August: Britain declares war on Germany.

5–10 September: French and British armies halt the Germans in Belgium and France.

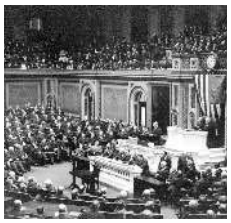
15 September: Trench warfare begins in Western Europe.

**1916**
March–June: The AIF joins the fight against Germany on the Western Front.

The Australian Light Horse remains in Egypt to fight Turkish forces.

1 July: The British and French launch a big offensive in the Somme Valley on the Western Front.

28 October: The first referendum on conscription is held in Australia.



1915

**1915**
25 April: The Anzacs land at Gallipoli.

December: The Allies withdraw from Gallipoli.

**1917**
6 April: The USA enters the war.

31 July: The third battle of Ypres (Passchendaele) is launched by the Germans in Belgium.

7 November: Revolution in Russia leads to Russian withdrawal from the war.

20 December: The second conscription referendum is lost in Australia.

**1918**
21 March: The last German offensive on the Western Front is launched.

18 July: Australian forces lead the first successful large Allied attack in France.

The Armistice, signed on 11 November, ends the fighting.

1920

CE

## 8.17.2 Reflection

Complete the following to reflect on your learning.

### 8.17 ACTIVITIES

Revisit the inquiry question posed in the Overview:

**Millions fought and died in the Great War. Was there more to it than just winners and losers?**

1. Now that you have completed this topic, what is your view on the question? Discuss with a partner. Has your learning in this topic changed your view? If so, how?
2. Write a paragraph in response to the inquiry question, outlining your views.

### on Resources

**eWorkbook** Reflection (doc-31710)
Crossword (doc-31711)

**Interactivity** World War I (1914–1918) crossword (int-7642)

### KEY TERMS

**abdicate** to step down from the throne or from other high office
**artillery** large-calibre guns
**blockade** sealing off an area so that nothing can get in or out
**censorship** restriction or control of what people can say, hear, see or read
**conscription** compulsory enlistment of citizens to serve in the armed forces
**deadlock** a stalemate in which neither side can gain an advantage
**Duma** the Russian parliament
**enlist** to join voluntarily, usually the military
**feint** a dummy attack meant to deceive the enemy into moving troops from where the main attack will take place
**half-caste** of mixed race (a term widely used in the mid 1900s, but now considered offensive)
**Hindenburg line** a heavily fortified (German) position on the Western Front
**imperialism** the policy of an empire by which it gains land by conquest and rules other countries, or dominates them as colonies
**League of Nations** the world body set up at the Paris Peace Conference to solve disputes between nations peacefully
**nationalism** feeling of loyalty to a nation
**no man's land** unoccupied ground between the front lines of opposing armies
**pacifist** person who holds a religious or other conscientious belief that it is immoral to take part in war
**pandemic** disease epidemic affecting many different countries
**propaganda** distortion of the truth to persuade people to support an action or point of view
**referendum** ballot in which voters decide on a political question. Where there is no change to the Australian Constitution involved, this is called an advisory referendum or plebiscite.
**repatriated** returned to home country
**Sinn Fein** organisation formed in Ireland in 1905 to campaign for Irish independence from Britain. The name was also used by the pro-independence party after the failed 1916 uprising.
**Slavic** belonging to the Slavs (a language group including Russians, Serbs and other Central and Eastern European peoples)
**Soviet** a council representing workers, peasants, soldiers and sailors
**stalemate** (from chess) a situation in which neither side can gain a winning advantage
**tenuous** weak, thin
**trench foot** a painful, swollen condition caused by feet remaining wet for too long; if gangrene set in, the feet would have to be amputated
**U-boats** German submarines
**ultimatum** a final set of demands or terms backed by a threat

# GEOGRAPHY

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# 9 Geographical skills and concepts

## 9.1 Overview

### 9.1.1 Introduction

As a student of Geography, you are building knowledge and skills that will be needed by you and your community now and into the future. The concepts and skills that you use in Geography can also be applied to everyday situations, such as finding your way from one place to another. Studying Geography may even help you in a future career here in Australia or somewhere overseas.

Throughout your study of Geography, you will cover topics that will give you a better understanding of the social and physical aspects of the world around you, at both the local and global scale. You will investigate issues that need to be addressed now and in the future.

**LEARNING SEQUENCE**


**9.1** Overview
**9.2** Work and careers in Geography
**9.3** Concepts and skills used in Geography
**9.4** **Review**


online only

To access interactivities and resources, select your learnON format at www.jacplus.com.au.

# 9.2 Work and careers in Geography

## 9.2.1 Skills for work

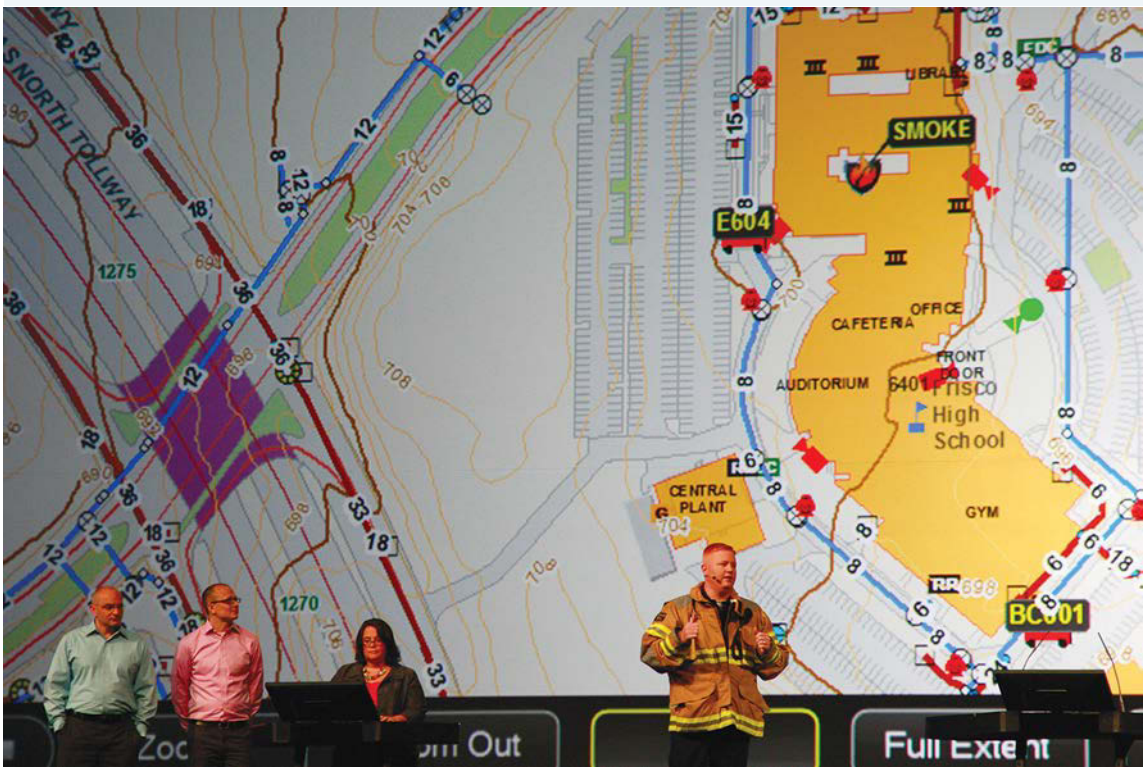
In Geography, students develop an understanding of the world. These skills are transferable to the workplace and can be used as a basis for evaluating strategies for the sustainable use and management of the world's resources. An understanding of Geography and its application for managing sustainable futures is pivotal knowledge that will be desirable to many future employers.

Geographical skills and knowledge are a foundation for many occupations. The study of Geography includes developing important geospatial and spatial technology skills, which underpin the knowledge base of a range of courses and careers.

- *Geospatial skills:* the ability to collect and collate information gathered from fieldwork and observations. Geospatial skills are used in careers such as surveying, meteorology, agricultural science and urban planning.
- *Spatial technologies*: technologies that demonstrate the connections between location, people and activities in digital formats. Jobs in the spatial industry are varied and include working in business and government. Spatial technologies apply many techniques, such as photogrammetry, remote sensing and global positioning systems (GPS). Spatial technologies manage information about the environment, transportation and other utility systems.

**FIGURE 1** Using GPS to survey and record road traffic movements for a local council

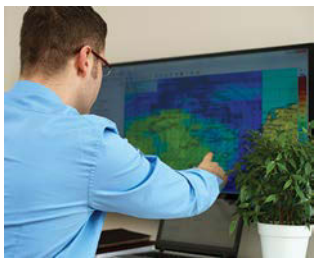
**FIGURE 2** GIS (geographical information systems) being used to manage spaces and plan escape routes during a fire



## 9.2.2 Where can Geography lead?

Careers that draw on Geography as a foundation skill are many and varied. As you consider your pathway options for senior studies you may like to research some of the careers that are provided in **FIGURE 3**.

**FIGURE 3** Geography pathways

| Meteorologist | Surveyor | Landscape architect |
|---|---|---|
| Meteorologists use geographical skills to forecast the weather, study the atmosphere and understand climate change. | Surveyors use geographical skills to measure, analyse and report on land-related information for planning and development. | Landscape architects use geographical skills to plan and design land areas for large-scale projects such as housing estates, schools, hospitals and gardens. |
|  | | |
| **Agricultural technician** | **Park ranger** | **Environmental manager** |
| Agricultural technicians use geographical skills to advise farmers on aspects of agriculture such as crop yield, farming methods, production and marketing. | Park rangers use geographical skills to support and maintain ecosystems in national parks, scenic areas, historic sites, nature reserves and other recreational areas. | Environmental managers use geographical skills for project management and the development of environmental reports. |
| | | |

### on Resources

**Weblink** Job Outlook

### 9.2 INQUIRY ACTIVITY

Job Outlook is a federal government website that provides information on employment in a range of occupations. It also includes information on the training, skills and tools needed for various careers. Use the **Job Outlook** weblink in the Resources tab to complete the following.

**a.** Select one of the occupational profiles presented in **FIGURE 3** that interests you and use the **Job Outlook** weblink to explore and learn more about this career.

**b.** Develop a career profile for your occupation of choice. In your profile include:

- the geographical skills needed for this job
- the geographical tools that may be used in this occupation
- the study and training requirements that lead to this occupation
- the job prospects for your chosen occupation over the next five years.

**Examining, analysing, interpreting**

# 9.3 Concepts and skills used in Geography

## 9.3.1 Skills used in studying Geography

As you work through each of the topics in this title, you'll complete a range of exercises to check and apply your understanding of concepts covered. In each of these exercises, you'll use a variety of skills, which are identified using the Geographical skills (GS) key provided at the start of each exercise set. These are:

- **GS1** Remembering and understanding
- **GS2** Describing and explaining
- **GS3** Comparing and contrasting
- **GS4** Classifying, organising, constructing
- **GS5** Examining, analysing, interpreting
- **GS6** Evaluating, predicting, proposing

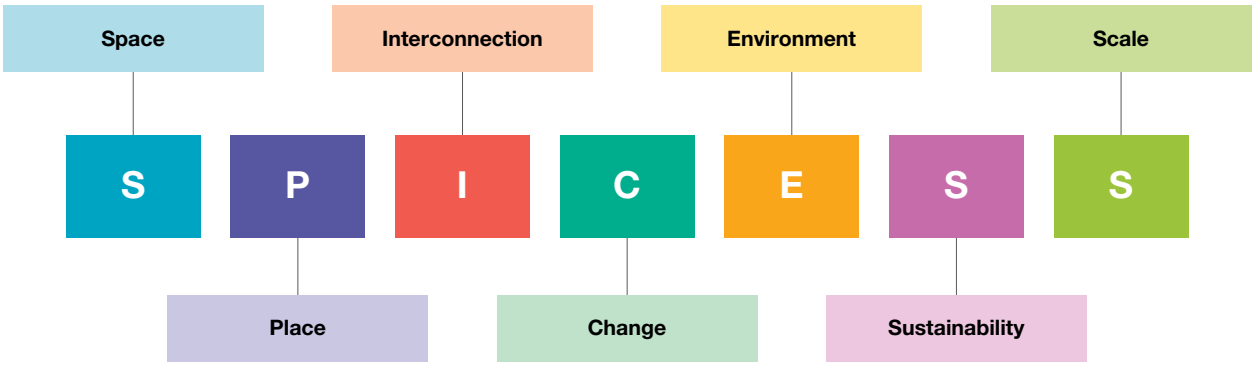
In addition to these broad skills, there is a range of essential practical skills that you will learn, practise and master as you study Geography. The SkillBuilder subtopics found throughout this title will tell you about the skill, show you the skill and let you apply the skill to the topics covered.
The SkillBuilders you'll use in Year 9 are listed below.

- Describing spatial relationships in thematic maps
- Constructing and describing a transect on a topographic map
- Constructing ternary graphs
- Describing patterns and correlations on a topographic map
- GIS — deconstructing a map
- Interpreting a geographical cartoon
- Constructing and describing complex choropleth maps
- Interpreting satellite images to show change over time
- Constructing a box scattergram
- Constructing and describing proportional circles on maps
- Interpreting topological maps
- Constructing and describing isoline maps
- Constructing and describing a doughnut chart
- Describing divergence graphs
- Constructing multiple line and cumulative line graphs
- Constructing and describing a flow map
- Constructing a table of data for a GIS
- Using advanced survey techniques — interviews

## 9.3.2 SPICESS

Geographical concepts help you make sense of your world. By using these concepts you can investigate and understand the world you live in, and you can use them to try to imagine a different world. The concepts help you to think geographically. There are seven major concepts: ***space***, ***place***, ***interconnection***, ***change***, ***environment***, ***sustainability*** and ***scale***. We will explore each of these concepts in detail in the following sections and through the activities and exercises in this subtopic.

**FIGURE 1** A way to remember the seven geographical concepts is to think of the term SPICESS.

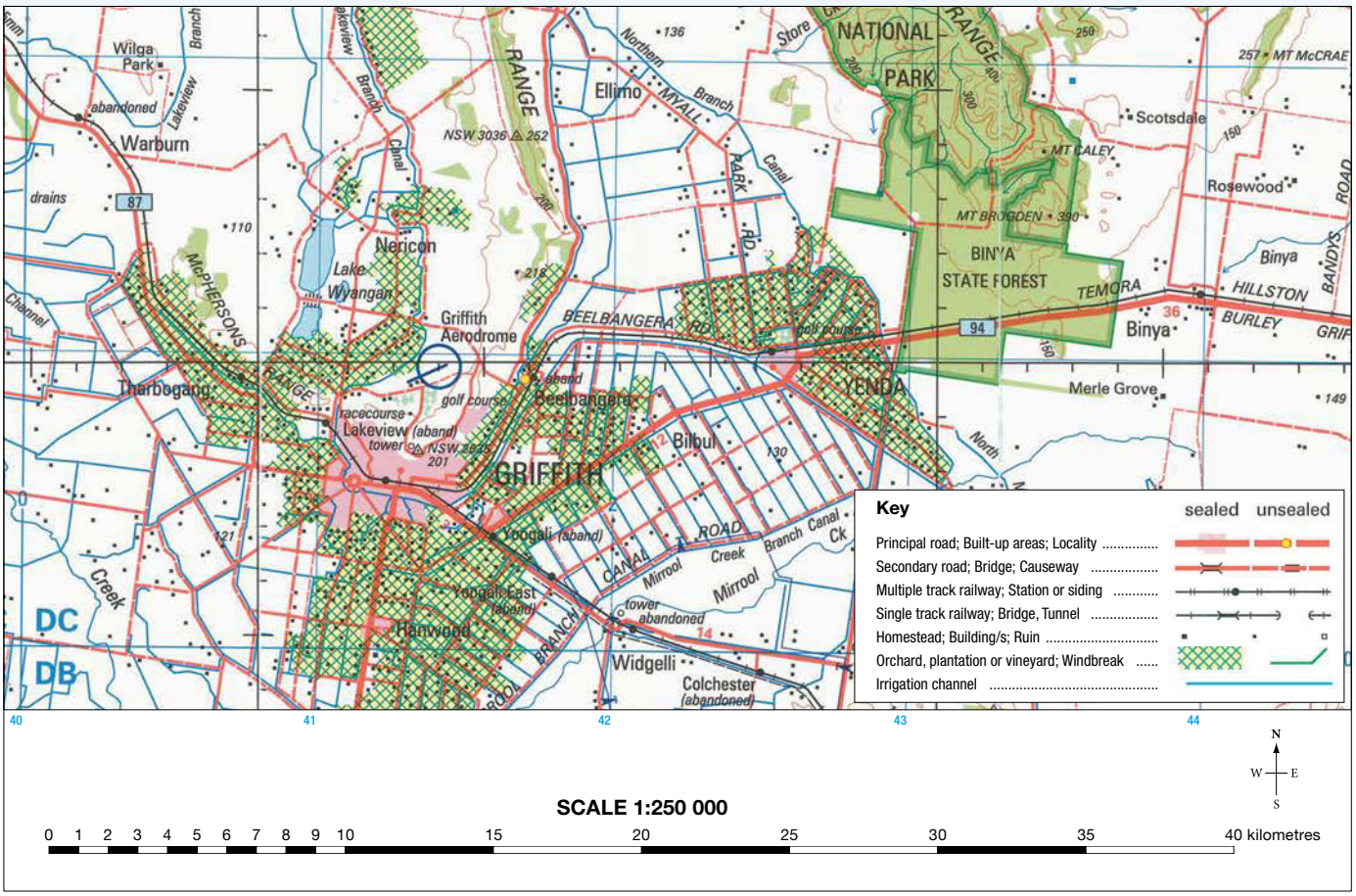



## 9.3.3 What is space?

*Everything has a location on the space that is the surface of the Earth. Studying the effects of location, the distribution of things across this space, and how the space is organised and managed by people, helps us to understand why the world is like it is.*

A place can be described by its absolute location: for example, latitude and longitude, a grid reference, street directory reference or an address. Or, a place can be described using its relative location — where it is in relation to another place in terms of distance and direction.

**FIGURE 2** Topographic map extract, Griffith, New South Wales




***Source:*** Commonwealth of Australia (Geoscience Australia)

Explore more with myWorldAtlas

Deepen your understanding of this topic with related case studies and questions.
- Developing Australian Curriculum concepts > **Space**

## 9.3.4 What is place?

*The world is made up of places, so to understand our world we need to understand its places by studying their variety, how they influence our lives and how we create and change them.*

Everywhere is a place. Each of the world's biomes — for example, a desert environment — can be considered a place, and within each biome there are different places, such as the Sahara Desert. There can be natural places — an oasis is a good example — or man-made places such as Las Vegas. Places can have different functions and activities — for example, Canberra is an administration centre, while the MCG is a place for major sporting events and the Great Barrier Reef is a place of great natural beauty with a coral reef biome. People are interconnected to places and other people in a wide variety of ways — for example, when we move between places or connect electronically via computers. We are connected to the places that we live in or know well, such as our neighbourhood or favourite holiday destination.

**FIGURE 3** Located in a desert biome, this array of greenhouses in Almeria, Spain, allows for the control of soil, moisture, nutrients and weather conditions, enabling the large-scale farming of fruit and vegetables.

Explore more with myWorldAtlas

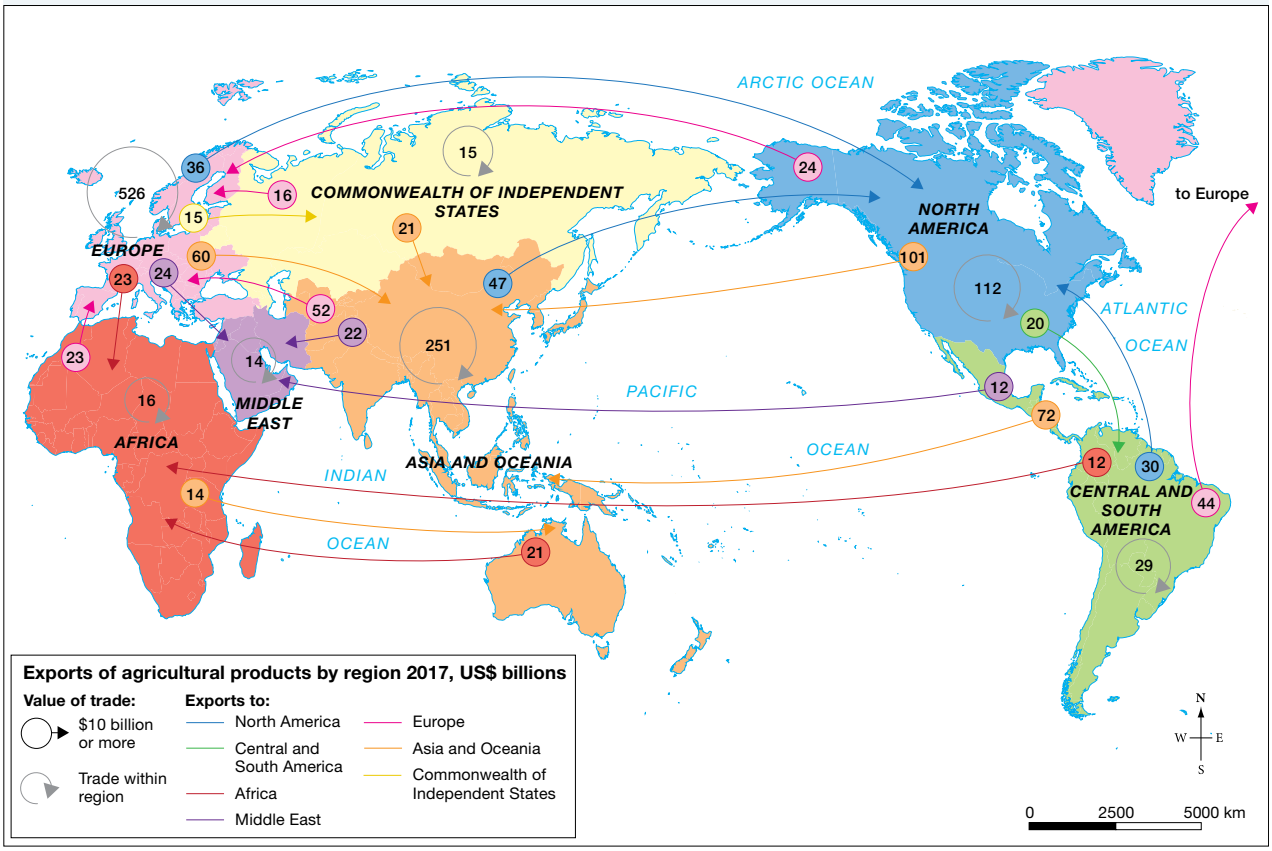
Deepen your understanding of this topic with related case studies and questions.
- Developing Australian Curriculum concepts > **Place**

## 9.3.5 What is interconnection?

*People and things are connected to other people and things in their own and other places, and understanding these connections helps us to understand how and why places are changing.*

Individual geographical features can be interconnected — for example, the climate within a place or biome, such as a tropical rainforest, can influence natural vegetation, while removal of this vegetation can affect climate. People can be interconnected to other people and other places via employment, communications, sporting events or cultural ties. The manufacturing of a product may create interconnections between suppliers, manufacturers, retailers and consumers. Trade in goods and services creates interconnections across the globe.

**FIGURE 4** World trade flows — exports of agricultural products by region, US$ billion




***Source:*** Data from World Trade Organization.

### Explore more with myWorldAtlas

Deepen your understanding of this topic with related case studies and questions.

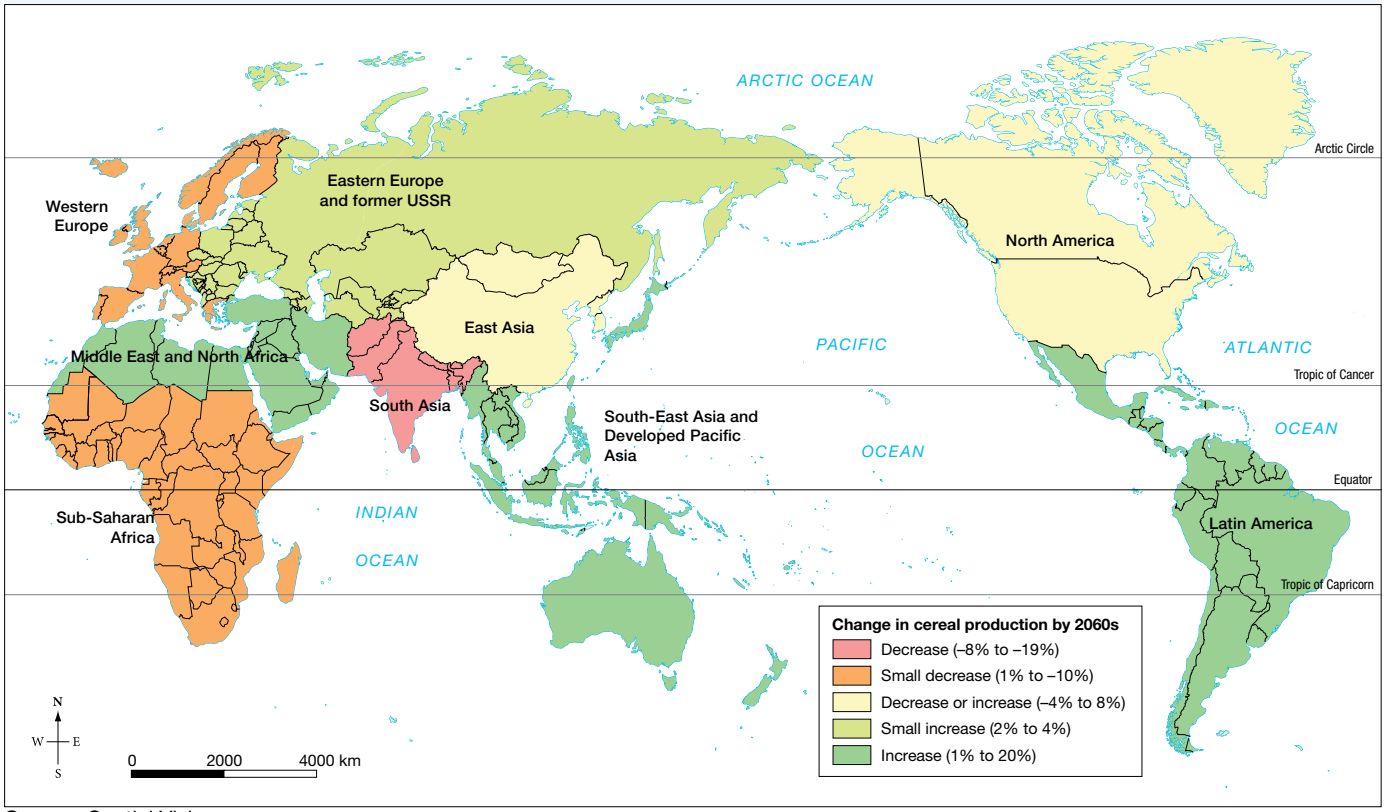
- Developing Australian Curriculum concepts > **Interconnection**

## 9.3.6 What is change?

*The concept of change is about using time to better understand a place, an environment, a spatial pattern or a geographical problem.*

From a geographical time perspective, change can be very slow — think of processes such as the formation of mountains or soil. On the other hand, a volcanic eruption or landslide can change landforms rapidly. It may take some years for the boundary of a city to expand outwards, but in the space of a few weeks whole suburbs can be demolished to make way for a freeway. Change can also have physical, economic and social implications. Consider the effect of the internet over the past few years.

**FIGURE 5** Predictions of the effects of climate change on cereal crops




***Source:*** Spatial Vision

Explore more with myWorldAtlas

Deepen your understanding of this topic with related case studies and questions.
- Developing Australian Curriculum concepts > **Change**

## 9.3.7 What is environment?

*People live in and depend on the environment, so it has an important influence on our lives.*

The biological and physical world that makes up the environment is important to us as a source of food and raw materials, a means of absorbing and recycling wastes, and a source of enjoyment and inspiration.

People perceive, adapt and use environments in many ways. For example, different people could look at a well-vegetated hillside and one might see it as a source of timber for construction, another might see a slope that could be cleared and terraced to produce food, while another might view it as a scenic environment for ecotourism.

**FIGURE 6** The East Kolkata wetlands act as a sewage filtration system and recycle nutrients through the soil to allow a wide range of food crops to be grown. The ponds provide one-third of the city's fish supply and are a protected Ramsar site for migratory birds.

Explore more with myWorldAtlas

Deepen your understanding of this topic with related case studies and questions.
- Developing Australian Curriculum concepts > **Environment**

## 9.3.8 What is sustainability?

*Sustainability is about maintaining the capacity of the environment to support our lives and those of other living creatures.*

Sustainability involves maintaining and managing our resources and environments for future generations. It is important to understand the causes of unsustainable situations to be able to make informed decisions on the best way to manage our natural world.

**FIGURE 7** The unsustainable nature of fishing

Explore more with myWorldAtlas

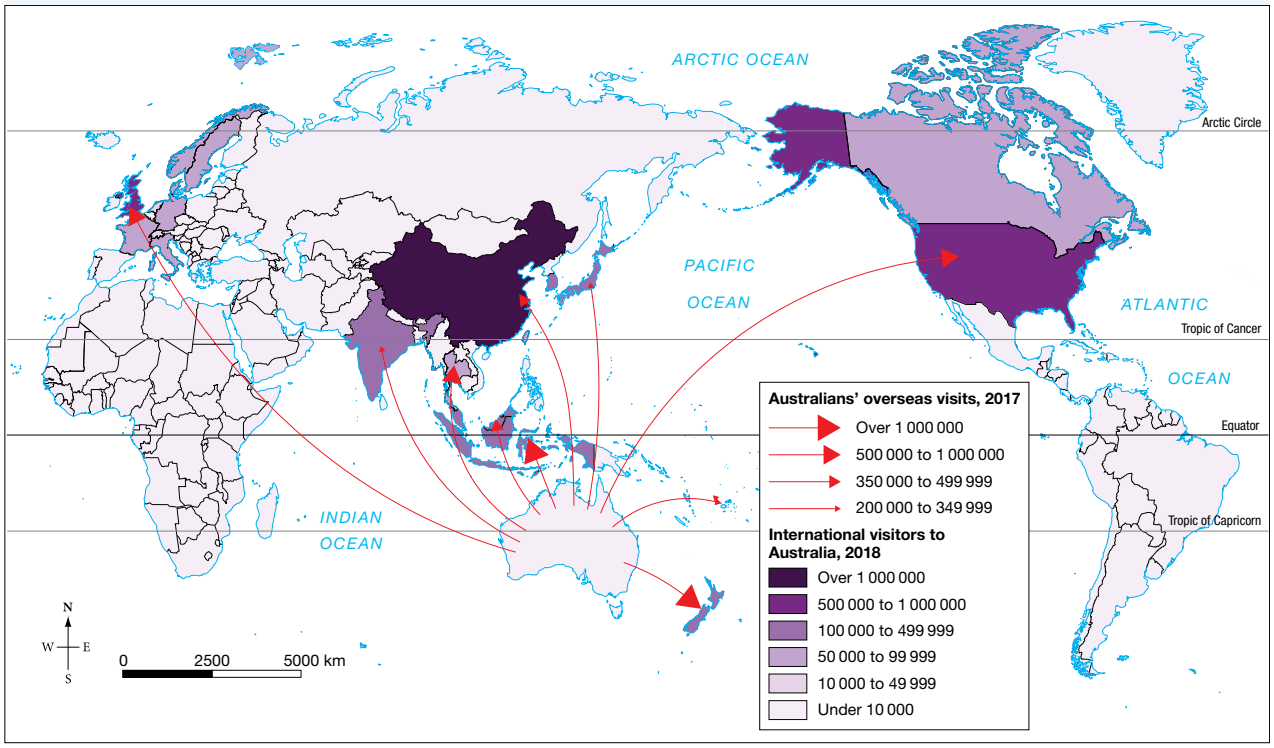
Deepen your understanding of this topic with related case studies and questions.
- Developing Australian Curriculum concepts > **Sustainability**

## 9.3.9 What is scale?

*When we examine geographical questions at different spatial levels we are using the concept of scale to find more complete answers.*

A little like a zoom lens on a camera, scale enables us to examine issues from different perspectives, from personal to local, regional, national or global. Using scale helps in the analysis and explanation of phenomena. For example, climate is the most important factor in determining vegetation type on a global scale, whereas, at a local scale, soil and drainage might be more important. Different activities can also have an impact at a range of scales; for example, the construction of an international airport in Cairns saw the development of tourism evolve from a local to an international scale, with direct flights between Australia and South-East Asia.

**FIGURE 8** Country of origin for tourists visiting Australia, and destinations for Australian tourists




***Source:*** ABS, Austrade.

## Explore more with myWorldAtlas

Deepen your understanding of this topic with related case studies and questions.

- Developing Australian Curriculum concepts > **Scale**

## 9.3 ACTIVITIES

1. Create a diagram to show the ***interconnections*** that could occur for the growing, manufacturing, sales and consumption of a can of pineapple slices. **Classifying, organising, constructing**
2. (a) Brainstorm with your class examples of ***environmental*** issues at local, national and global ***scales***.
   (b) How would solutions differ at each ***scale***? **Evaluating, predicting, proposing**

# 9.4 Review

online only

### 9.4.1 Key knowledge summary

Use this dot point summary to review the content covered in this topic.

### 9.4 Exercise 1: Review

Select your learnON format to complete review questions for this topic.

## on Resources

**eWorkbook** Crossword (doc-31713)

**Interactivity** Geographical skills and concepts crossword (int-7643)

# 9.4 Review

## 9.4.1 Key knowledge summary

### 9.2 Work and careers in Geography

- Many occupations are linked to the study of geography.
- New jobs are developing in the spatial sciences that use geographical tools such as GPS, GIS, satellite imaging and surveying.

### 9.3 Concepts and skills used in Geography

- The acronym SPICESS helps you remember the seven geographical concepts:
  - space
  - place
  - interconnection
  - change
  - environment
  - sustainability
  - scale.

## on Resources

**eWorkbook** Crossword (doc-31713)

**Interactivity** Geographical skills and concepts crossword (int-7643)

# UNIT 1
# BIOMES AND FOOD SECURITY

Food is essential to human life. To ensure we have reliable food sources, we alter our world biomes — clearing vegetation, diverting and storing water, adding chemicals and even changing landforms. We will need to carefully manage our limited land and water resources and use more sustainable farming practices to ensure we have future food security.


**10** All the world is a biome ..... 346
**11** Feeding the world ..... 373
**12** The impacts of global food production ..... 411
**13** Challenges to food security ..... 447
**14** Meeting our future global food needs ..... 470

## GEOGRAPHICAL INQUIRY: BIOMES AND FOOD SECURITY

online only

### Your task

Your team has been selected to create a website that not only grabs people's attention but also informs them of the importance of one particular biome as a producer of food, and the current threats to food production. Looking into the future, you will also suggest more sustainable ways of managing this biome.

Select your learnON format to access:

- an overview of the project task
- details of the inquiry process
- resources to guide your inquiry
- an assessment rubric.

### on Resources

**ProjectsPLUS** Geographical inquiry: Biomes and food security (pro-0148)

# 10 All the world is a biome

## 10.1 Overview

What on Earth are biomes? Are they just another part of the landscape or do we need them to survive?

### 10.1.1 Introduction

Where do the foods we eat and the natural products we use daily come from? The answer is biomes. Biomes are communities of plants and animals that extend over large areas. Some are dense forests; some are deserts; some are grasslands, like much of Australia; and so the variations continue. Within each biome, plants and animals have similar adaptations that allow them to survive.

Biomes can be terrestrial (land based) or aquatic (water based). Understanding the diversity within them is essential to our survival and wellbeing.

Within each biome, there are many variations in the landscape and climate, and in the plants and animals that have adapted to survive there.

**on Resources**

- **eWorkbook** Customisable worksheets for this topic
- **Video eLesson** Bountiful biomes (eles-1717)

**LEARNING SEQUENCE**


**10.1** Overview
**10.2** Defining biomes
**10.3** **SkillBuilder:** Describing spatial relationships in thematic maps online only
**10.4** The characteristics of biomes
**10.5** Australia's major biomes
**10.6** The grassland biome
**10.7** Coastal wetlands
**10.8** **SkillBuilder:** Constructing and describing a transect on a topographic map online only
**10.9** Coral reefs
**10.10** Managing and protecting biomes
**10.11** **Thinking Big research project:** Our world of biomes AVD online only
**10.12** **Review** online only

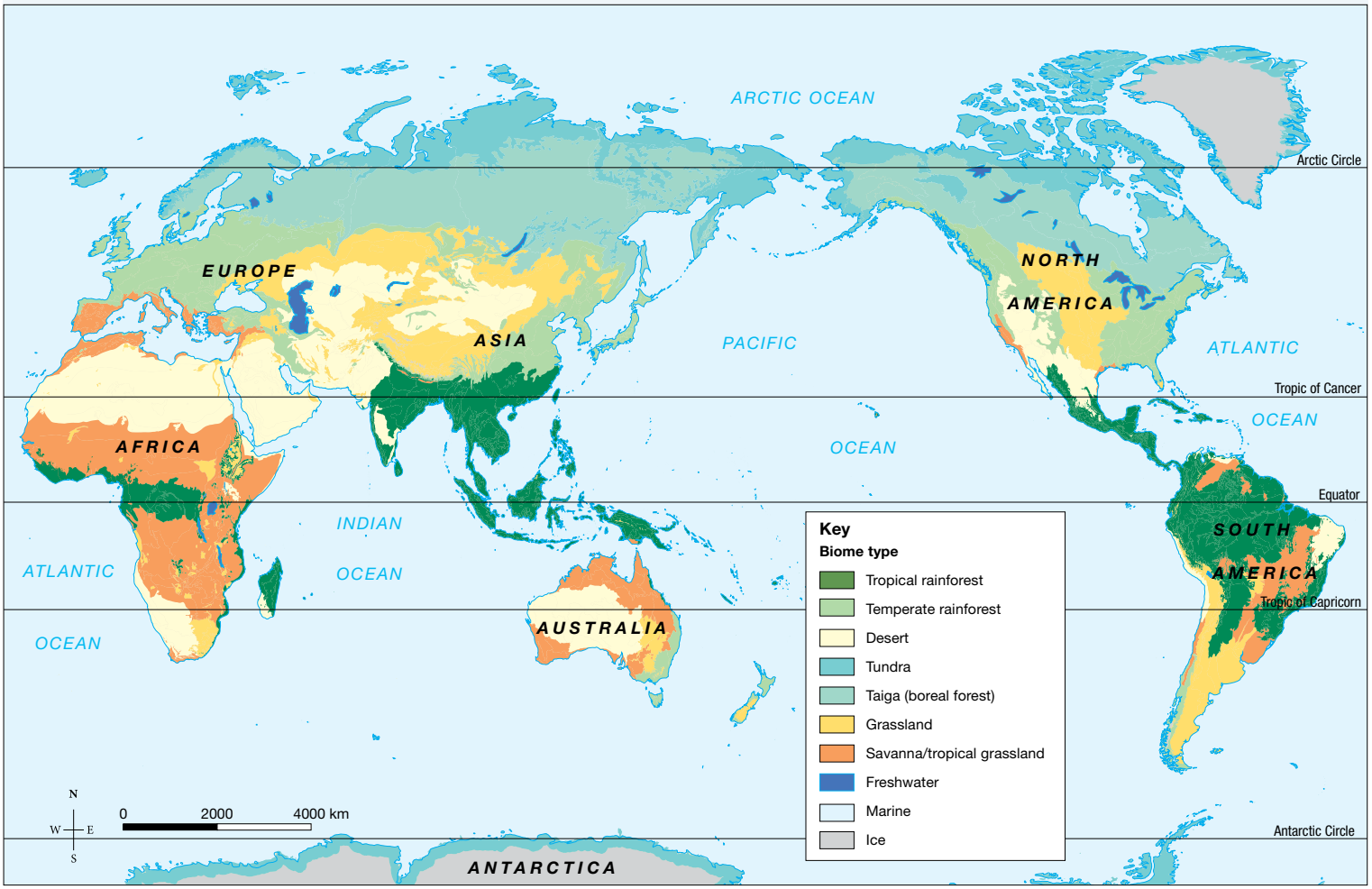

To access a pre-test and starter questions and receive immediate, **corrective feedback** and **sample responses** to every question, select your learnON format at www.jacplus.com.au.

# 10.2 Defining biomes

## 10.2.1 What and where are the major biomes?

Biomes are sometimes referred to as ecosystems. They are places that share a similar climate and life forms. There are five distinct biomes across the Earth: forest, desert, grassland, tundra and aquatic biomes. Within each, there are variations in the visible landscape, and in the plants and animals that have adapted to survive in a particular climate.

**FIGURE 1** Major biomes of the world




***Source:*** Redrawn by Spatial Vision based on the information from the Nature Conservancy and GIS Data

### Forests

Forests are the most diverse ecosystems on the Earth. Ranging from hot, wet, tropical rainforests to temperate forests, they have an abundance of both plant and animal life. Over 50 per cent of all known plant and animal species are found in tropical rainforests. Forests are the source of over 7000 modern medicines, and many fruits and nuts originated in this biome. Forests help regulate global climate, because they absorb and use energy from the sun rather than reflect it back into the atmosphere. Forest plants recycle water back into the atmosphere, produce the oxygen we breathe, and store the carbon we produce. Forests are under threat from **deforestation**.

**FIGURE 2** Forest biome

## Deserts

Deserts are places of low rainfall and comprise the arid and semi-arid regions of the world. Generally they are places of temperature extremes — hot by day and cold by night. Most animals that inhabit deserts are nocturnal (active at night), and desert vegetation is sparse. Desert rain often evaporates before it hits the ground, or else it falls in short, heavy bursts. Following periods of heavy rain, deserts teem with life. Not all deserts are hot. Antarctica and the Gobi Desert in central Asia are cold deserts. About 300 million people around the world live in desert regions.

**FIGURE 3** Desert biome

## Grasslands

Grasslands can be seen as transitional environments between forest and desert. Dominated by grass, they have small, widely spaced trees or no trees at all. The coarseness and height of the grass varies with location. They are mainly inhabited by grazing animals, reptiles and ground-nesting birds, though many other animals can be found in areas with more tree cover. Grasslands have long been prized for livestock grazing, but overgrazing is unsustainable and places grasslands at risk of becoming deserts. Over one billion people inhabit the grassland areas of the world.

**FIGURE 4** Grassland biome

## Tundra

**Tundra** is found in the coldest regions of the world, and lies beyond the **treeline**. The landscape is characterised by grasses, dwarf shrubs, mosses and lichens. The growing season is short. Tundra falls into three distinct categories — Arctic, Antarctic and alpine — but they share the common characteristic of low temperatures. In Arctic regions there is a layer beneath the surface known as permafrost — permanently frozen ground. The tundra biome is the most vulnerable to global warming, because its plants and animals have little tolerance for environmental changes that reduce snow cover.

**FIGURE 5** Tundra biome

## Aquatic biomes

Water covers about three-quarters of the Earth. Aquatic biomes can be classified as freshwater or marine. Freshwater biomes contain very little salt and are found on land; these include lakes, rivers and wetlands. Marine biomes are the saltwater regions of the Earth and include oceans, coral reefs and estuaries. Marine environments are teeming with plant and animal life, and are a major food source. Compounds from marine life have also been used in products such as cosmetics and toothpaste. Elements taken from the roots of mangroves have been used in the development of cancer medications.

**FIGURE 6** Aquatic biome

### Resources

**Interactivity** Beautiful biomes (int-3317)

## 10.2 EXERCISES

**Geographical skills key: GS1** Remembering and understanding **GS2** Describing and explaining **GS3** Comparing and contrasting **GS4** Classifying, organising, constructing **GS5** Examining, analysing, interpreting **GS6** Evaluating, predicting, proposing

### 10.2 Exercise 1: Check your understanding

1. **GS1** Name the five major biomes of the Earth and classify them as either aquatic or terrestrial.
2. **GS1** Identify the broad characteristics shared by biomes.
3. **GS2** Look carefully at **FIGURE 1**. Using geographic terminology and concepts (including reference to latitude), describe the location and characteristics of the major biomes.
4. **GS2** Are all biomes equally important? Explain your answer.
5. **GS1** Which biome has the greatest biodiversity?

### 10.2 Exercise 2: Apply your understanding

1. **GS2** Explain the important functions performed by the forest biome.
2. **GS6** Select one of the categories of biomes described in this subtopic. Suggest how this biome might be ***changed*** and used by humans and what impact this ***change*** might have on the ***environment***.
3. **GS2** With the aid of a diagram, explain how forests help regulate global climate.
4. **GS6** Predict what might happen if the permafrost beneath the Arctic surface thawed.
5. **GS6** 'Deserts are a dry, lifeless plain.' To what extent do you agree with this statement? Explain.

Try these questions in learnON for instant, corrective feedback. Go to www.jacplus.com.au.

# 10.3 SkillBuilder: Describing spatial relationships in thematic maps

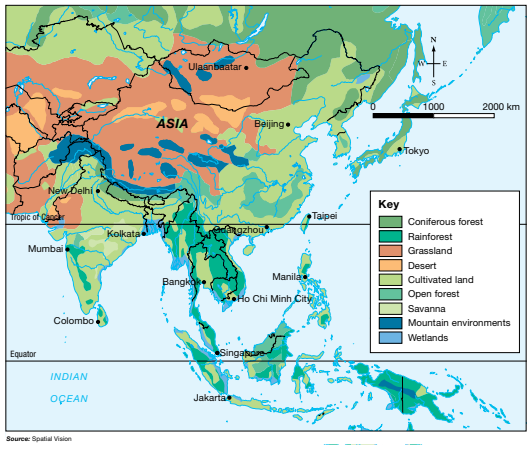
online only

## What are spatial relationships in thematic maps?

A spatial relationship is the interconnection between two or more pieces of information in a thematic map, and the degree to which they influence each other's distribution in space. Describing these relationships helps us understand how one thing affects another.

### Select your learnON format to access:

- an explanation of the skill (Tell me)
- a step-by-step process to develop the skill, with an example (Show me)
- an activity to allow you to practise the skill (Let me do it)
- questions to consolidate your understanding of the skill.




### Resources

**Video eLesson** Describing spatial relationships in thematic maps (eles-1726)

**Interactivity** Describing spatial relationships in thematic maps (int-3344)

# 10.4 The characteristics of biomes

## 10.4.1 Climate's influence on biomes

Biomes are controlled by climate. In turn, climate is influenced by factors such as the distance from the equator, altitude and distance from the sea, the direction of prevailing winds, and the location of mountain ranges. These play a key role in determining a region's climate and soil, which ultimately influence which plants and animals will inhabit it.

Temperature and rainfall patterns across the Earth determine which plant and animal species can survive in a particular biome. For instance, a polar bear could not survive in the hot climate of a desert or a tropical rainforest. Camels would not survive in the polar regions of the Earth, and fish cannot survive without water. The plants and animals of a region have adapted over time to the variations in the region's climate conditions.

## 10.4.2 What influences climate?

The geographical features of the Earth's surface, such as mountain ranges and **latitude**, are key influences on climate. Similarities have been found in the adaptations of plant and animal species in mountain regions and those found near the poles.

### Landform

The major geographical influence on climate is the location of mountain ranges (see **FIGURE 1**). Mountain ranges affect the amount of **precipitation** that reaches inland areas, because they pose a barrier to moisture-laden prevailing winds. **Rain shadows** form on the **leeward** side of mountains (opposite to the **windward** side). Deserts often form in rain shadows.

**FIGURE 1** The influence of mountains on climate. This illustration shows the pattern typical on the east coast of Australia, where there are warm ocean currents.

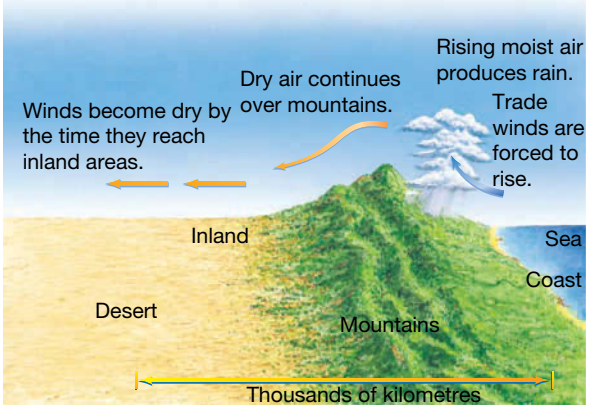



**FIGURE 2** Mt Kilimanjaro is only three degrees south of the equator but it is 5895 metres high; its altitude is the reason it has snow on its summit.

Altitude also plays a significant role in determining the climate. Temperatures fall by 0.65 °C for every 100-metre increase in elevation. This can be illustrated by Mt Kilimanjaro (**FIGURE 2**), which is located on the border of Tanzania and Kenya, in Africa, at approximately 3° latitude from the equator. Towering 5895 metres above sea level, Mt Kilimanjaro is the highest mountain in Africa. Depending on the time of the day, the temperature at the base of the mountain ranges from 21 °C to 27 °C. At the summit, temperatures can plummet to −26 °C. As you move from base to summit, variations occur in the landscape as it transitions from rainforest to alpine desert to desert tundra.

## Latitude

The sun's rays are more direct at the equator. With more energy focused on that region, it heats up more quickly. At the poles, the sun's rays are spread over a larger area and therefore cannot heat up as effectively. As a result, areas at the poles are much cooler than areas at the equator (see **FIGURE 3**).

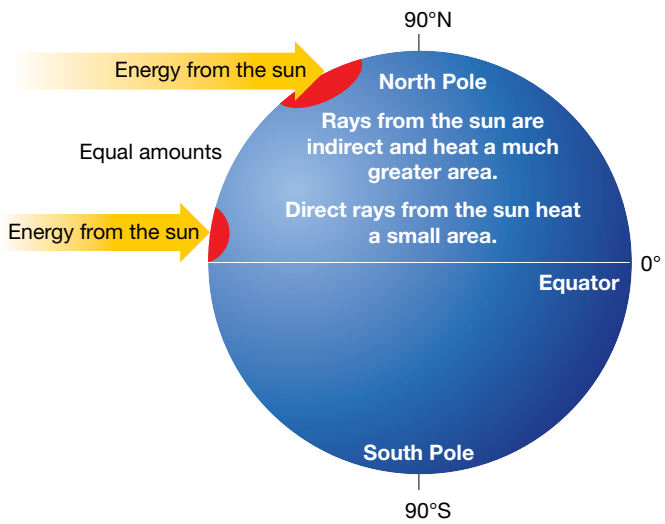
The tilt of the Earth on its axis also has a role to play. When a hemisphere tilts towards the sun, the sun's rays hit it more directly. This means that a larger space is in more intense sunlight for longer. The days are longer and warmer, and the hemisphere experiences summer. The reverse is true when a hemisphere tilts away from the sun in winter.

## Ocean currents and air movement

There are other factors that influence climate and play a role in the development of biomes. Two of these are ocean currents and air movement. In addition, differences also occur when you move from the coast to inland areas.

When cold ocean currents flow close to a warm land mass, a desert is more likely to form. This is because cold ocean currents cool the air above, causing less evaporation and making the air drier. As this air moves over the warm land, it heats up, making it less likely to release any moisture it holds; thus, deserts form. For example, cold ocean currents flow off the coast of Western Australia, while the east-coast Pacific Ocean currents are warmer. As a result, Perth on average receives less rainfall than Sydney.

**FIGURE 3** The influence of latitude on climate. The rotation of the Earth around the sun and the tilt of the Earth on its axis also influence the seasons.



## 10.4.3 The role of soil in biomes

Soil is important in determining which plants and animals inhabit a particular biome. Soils not only vary around the world but also within regions. The characteristics of soil are determined by:

- temperature
- rainfall
- the rocks and minerals that make up the bedrock, which is the basis of soil development.

The amount of vegetation present also plays an important role in determining the quality of the soil. **FIGURE 4** shows a typical soil profile. The different soil layers are referred to as horizons.

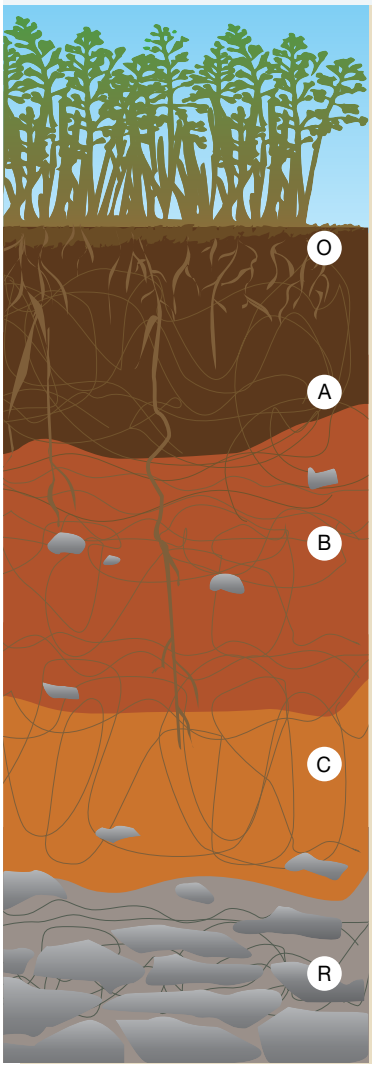
### Why do soils differ?

Biomes located in the high latitudes (those farthest from the equator) have lower temperatures and less exposure to sunlight than biomes located in the low latitudes (those close to the equator). There are also variations in the amount of precipitation that biomes receive. This is determined partly by their location in relation to the equator: lower latitude regions generally receive more precipitation than those in higher latitudes (see **FIGURE 5**).

Temperature and precipitation patterns are important factors in determining the rate of soil development. In addition, soil moisture, its nutrient content and the length of the growing season also play key roles in soil development and, ultimately, the biodiversity of a biome.

Soil is more abundant in biomes that have both high temperatures and high moisture than in cold, dry regions. This is because erosion of bedrock is more rapid when moisture content is high, and organic material decomposes at a faster rate in high temperatures. The decomposition of organic matter provides the nutrients needed for plant growth, which in turn die and decompose in a continuous cycle. This is further demonstrated in **FIGURE 6**.

**FIGURE 4** A typical soil profile has a number of distinct layers.




Horizon O (organic matter): A thin layer of decomposing matter, humus, and material that has not started to decompose, such as leaf litter

Horizon A (topsoil): The upper layer of soil, nearest the surface. It is rich in nutrients to support plant growth and usually dark in colour. Most plant roots and soil organisms are found in this horizon, which will also contain some minerals. In areas of high rainfall, such as tropical rainforests, minerals will be leached out of this layer. A constant supply of decomposing organic matter is needed to maintain soil fertility.

Horizon B (subsoil): Plant litter is not present in horizon B; as a result, little humus is present. Nutrients leached from horizon A accumulate in this layer, which will be lighter in colour and contain more minerals than the horizon above.

Horizon C (parent material): Weathered rock that has not broken down far enough to be soil. Nutrients leached from horizon A are also found in this layer. It will have a high mineral content; the type is determined by the underlying bedrock.

Horizon R (bedrock): Underlying layer of partly weathered rock

**FIGURE 5** Latitude is a key factor in climate, which in turn is linked to soil characteristics. Soils in high-latitude biomes differ from those in low latitudes.

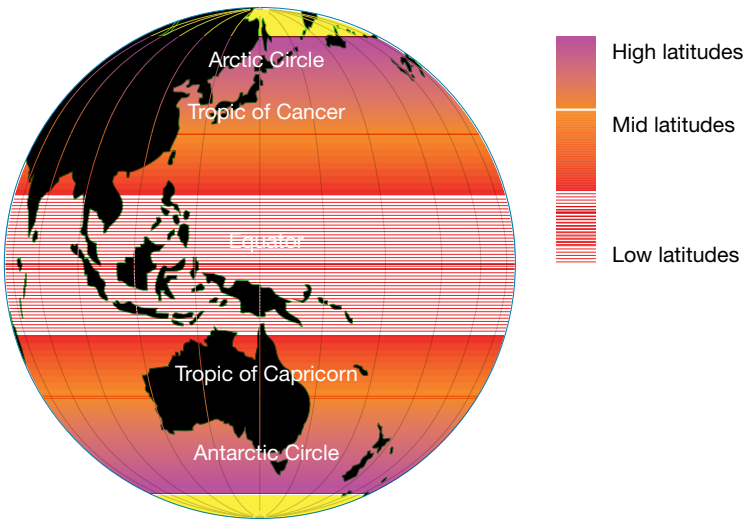
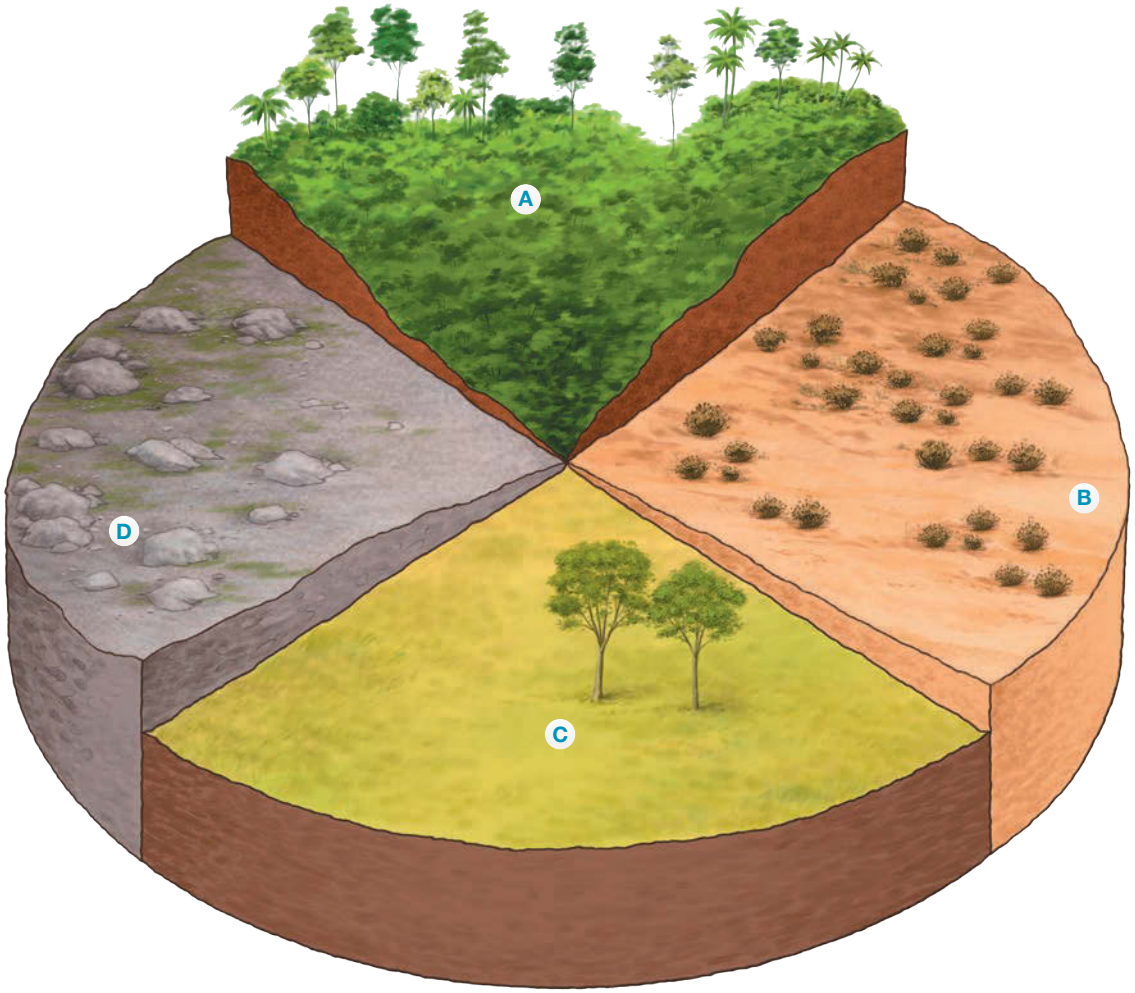


**FIGURE 6** Different biomes have different soil and vegetation characteristics.




**A Tropical rainforest**

- High temperatures cause weathering, or breakdown, of rocks and organic matter.
- High rainfall **leaches** nutrients from the soil.
- Soil is often reddish because of high iron levels.
- Organic matter is often a shallow layer on the surface. Nutrients are constantly recycled, allowing the rainforest to flourish.
- Soil fertility is rapidly lost if trees are removed, as the supply of organic material is no longer present.

**B Desert**

- Limited vegetation means a limited supply of organic material for soil development.
- High temperatures rapidly break down any organic material.
- Soils are pale in colour rather than dark.
- Lack of rainfall limits plant growth.
- Lack of vegetation makes surface soil unstable and easily blown away.
- Soil does not have time to develop and mature.

**C Temperate**

- Generally brown in colour, soils have distinctive horizons and are generally about a metre deep.
- Soils are ideal for agriculture; they are not subjected to the extremes of climate found in high and low latitudes.
- Moderate climate; temperature and rainfall are sufficient for plant growth.
- Dominated by temperate grasslands and deciduous forests.

**D Tundra**

- Soil is shallow and poorly developed.
- Some layers are frozen for long periods.
- Subsoil may be permanently frozen.
- Soil is covered by ice and snow for most of the year.
- Growing season may be limited to a few weeks.
- Soil may contain large amounts of organic material but extreme cold means it breaks down very slowly.
- Trees are absent; mosses and stunted grasses dominate.

## What else is in the soil?

Soil not only supports the plants and animals that we see on the surface of the land; the soil itself is also home to a variety of life forms such as bacteria, fungi, earthworms and algae.

While most soil organisms are too small to be seen, there are others that are visible. For instance, more than 400 000 earthworms can be found on a hectare of land. Regardless of size, all soil organisms play a vital role in maintaining soil quality and fertility. For example, earthworms:

- compost waste and fertilise the soil
- improve drainage and aeration
- bring subsoil to the surface and mix it with topsoil
- secrete nitrogen and chemicals that help bind the soil.

**FIGURE 7** There are more microbes in a teaspoon of soil than there are people on Earth.

### Resources

**Interactivity** Why are biomes different? (int-3319)

### 10.4 INQUIRY ACTIVITY

Use your atlas to locate Rwanda in central Africa.

**a.** What type of biome would you expect to find in Rwanda? Give reasons for your answer.

**b.** What do you think the soil would be like in Rwanda? Use the internet to test your theory.

**Evaluating, predicting, proposing**

### 10.4 EXERCISES

**Geographical skills key: GS1** Remembering and understanding **GS2** Describing and explaining **GS3** Comparing and contrasting **GS4** Classifying, organising, constructing **GS5** Examining, analysing, interpreting **GS6** Evaluating, predicting, proposing

#### 10.4 Exercise 1: Check your understanding

1. **GS1** What are the major influences on the development of biomes?
2. **GS2** Explain the difference between the windward and leeward side of a mountain range.
3. **GS2** Explain how temperature and rainfall can influence the development of soil across different biomes.
4. **GS2** Outline the different characteristics of soils in the tropical rainforest, tundra, desert and temperate biomes.
5. **GS2** Describe the role played by soil organisms in maintaining soil quality and fertility.

#### 10.4 Exercise 2: Apply your understanding

1. **GS6** Would you expect to find soil variations within biomes? Give reasons for your answer.
2. **GS6** Predict the ***changes*** that might occur if earthworms or micro-organisms within the soil were no longer present.
3. **GS6** What type of climate and biomes would you expect to find at the equator? Why?
4. **GS5** Describe the climate and landscape on Mount Kilimanjaro. Why is there so much variation?
5. **GS5** What are some of the factors that create variations in biomes?

Try these questions in learnON for instant, corrective feedback. Go to www.jacplus.com.au.

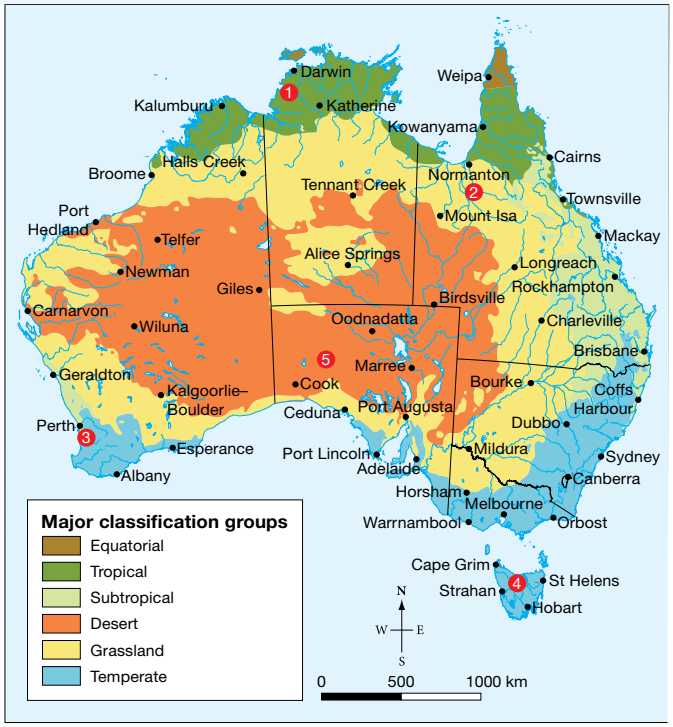
# 10.5 Australia's major biomes

## 10.5.1 What factors shape Australian biomes?

Australia is a land of contrasts. Its mountain ranges and river systems are small by world standards. In the north there are tropical rainforests and savanna grasslands. In the centre there is a wide expanse of desert that is second in area only to the Sahara Desert in Africa. In the south, temperate forests and grasslands dominate. Australia also has vast wetlands and coastal ecosystems.

Before European colonisation, the Australian landscape was shaped largely by natural processes and Aboriginal burning practices. With European occupation came large-scale land clearing, irrigation of the land through water diversion from rivers, and the draining of wetlands. New plant and animal species were introduced to the landscape. However, despite the large-scale changes made since European occupation, Australia's major biomes are still clearly evident.

**FIGURE 1** Climate classification of Australia




***Source:*** Data copyright Commonwealth of Australia, 2013 Bureau of Meteorology. Map drawn by Spatial Vision.

### 1. Wetlands and rivers

In northern Australia, wetlands have been inhabited by Indigenous Australian peoples since the beginning of the Dreaming (more than 50 000 years). These areas provided them with food and water, and they used wetland plants such as river reeds and lily leaves to make fishing traps. Today, wetlands are still important habitats for native and migratory birds. In many parts of Australia, they are under threat, because water is diverted from rivers to produce food crops and cotton.

**FIGURE 2** This billabong in Kakadu National Park is part of an extensive wetland system that develops during the wet season.

### 2. Savanna (grasslands)

Grasslands (or savanna) are generally flat, with either few trees and shrubs, or very open woodland. For many native species, grasslands provide vital habitat and protection from predators. Many grasslands depend on a regular cycle of burning to germinate their seeds and to revive the land. Periodic burning also prevents trees from gaining dominance in the landscape. Before European occupation, Indigenous Australian peoples hunted the animals in the grasslands. However, since then, grasslands have been used extensively for grazing.

**FIGURE 3** Savanna biomes are typically dominated by grasses and scattered trees.

These areas often mark the transition between desert and forest, and are a very fragile biome. Without careful management they can quickly change to desert. Less than one per cent of Australia's original native grasslands survive today.

## 3. Seagrass meadows

Seagrasses are submerged flowering plants that form colonies off long, sandy ocean beaches, creating dense areas that resemble meadows. Of the 60 known species of seagrass, at least half are found in Australia's tropical and temperate waters. Western Australia alone is home to the largest seagrass meadow in the world. Seagrasses provide important habitats for a wide variety of marine creatures, including rock lobsters, dugongs and sea turtles. They also absorb nutrients from coastal run-off, slow water flow, help stabilise sediment, and keep water clear.

**FIGURE 4** Seagrass meadows provide food, shelter and breeding grounds for marine life.

## 4. Old-growth forest

An old-growth forest is one in its oldest growth stage. It is multi-layered, and the trees are of mixed ages. Generally, there are few signs of human disturbance. These forests are biologically diverse, often home to rare or endangered species, and show signs of natural regeneration and decomposition. The trees within some old-growth forests have been felled for their timber and to create paper products. **Logging** can reduce **biodiversity**, affecting not only the forest itself but also the indigenous plant and animal species that rely on the old-growth habitat. It is estimated that **clear-felling** of Tasmania's old-growth forests would release as much as 650 tonnes of carbon per hectare into the atmosphere. In Victoria, near Melbourne, many old-growth forests lie within protected water supply catchments and help maintain the integrity of the city's water supply.

**FIGURE 5** Different layers of vegetation can be seen in old-growth forests.

## 5. Desert

Australian deserts are places of temperature extremes. During the day, temperatures sometimes exceed 50 °C, but at night this can drop to freezing. Australia's desert regions are often referred to as the outback but they are not all endless plains of sand. Some, such as the Simpson Desert and the Great Sandy Desert, are dominated by sand. The Nullarbor Plain and Barkly Tableland are mainly smooth and flat, while the Gibson Desert and Sturt Stony Desert contain low, rocky hills. In some areas, the landscape is dominated by spinifex and acacia shrubs.

**FIGURE 6** Vegetation in desert biomes has specific adaptations that enable it to survive in the harsh climate.

## Explore more with myWorldAtlas

Deepen your understanding of this topic with related case studies and questions.
- Investigating Australian Curriculum topics > Year 9: Biomes and food security >**Australia's alpine biomes**

### 10.5 INQUIRY ACTIVITIES

1. Select one of the climate zones shown in **FIGURE 1** and investigate the biomes found within it. Prepare a report on the importance of one of these biomes and discuss how it has ***changed*** over time. What do you think should be done to protect it? **Examining, analysing, interpreting**
2. (a) Investigate one of the Australian biomes and examine how plants and animals have adapted to survive in it. Create a class collage depicting the way plants and animals have adapted to the Australian ***environment***.
   (b) Explore what this biome is like in another ***place*** on Earth. With the aid of a Venn diagram, compare the two ***places***. **Examining, analysing, interpreting**

### 10.5 EXERCISES

**Geographical skills key: GS1** Remembering and understanding **GS2** Describing and explaining **GS3** Comparing and contrasting **GS4** Classifying, organising, constructing **GS5** Examining, analysing, interpreting **GS6** Evaluating, predicting, proposing

#### 10.5 Exercise 1: Check your understanding

1. **GS2** Explain why Australia has such a wide variety of biomes.
2. **GS2** With the aid of a flow diagram, show how the Australian ***environment changed*** when European occupiers arrived.
3. **GS2** Explain what you understand by the term ***biodiversity*** and why it is important.
4. **GS2** What other types of biomes would you expect to find in Australia?
5. **GS2** Explain why most of Australia's native grasslands have disappeared.

#### 10.5 Exercise 2: Apply your understanding

1. **GS5** Describe the ***interconnection*** between biomes and climate.
2. **GS6** Select one of the biomes discussed in this subtopic. Predict what might happen if it were ***changed***; for example, if the wetlands were drained, or all the old-growth forests were cut down. Include a reference to the effect this would have on biodiversity.
3. **GS6** Predict what might happen if Victoria's old growth forests were logged.
4. **GS2** Explain why burning is an essential element in maintaining the grassland biome.
5. **GS2** Explain why seagrass meadows are often referred to as 'the forests of the sea'.

Try these questions in learnON for instant, corrective feedback. Go to www.jacplus.com.au.

# 10.6 The grassland biome

## 10.6.1 What are the characteristics of grasslands?

Grassland, pampas, savanna, chaparral, cerrado, **prairie**, rangeland and steppe all refer to a landscape that is dominated by grass. Once, grasslands occupied about 42 per cent of the Earth's land surface, but today they make up about 25 per cent of its land area. Grasslands are found on every continent except Antarctica.

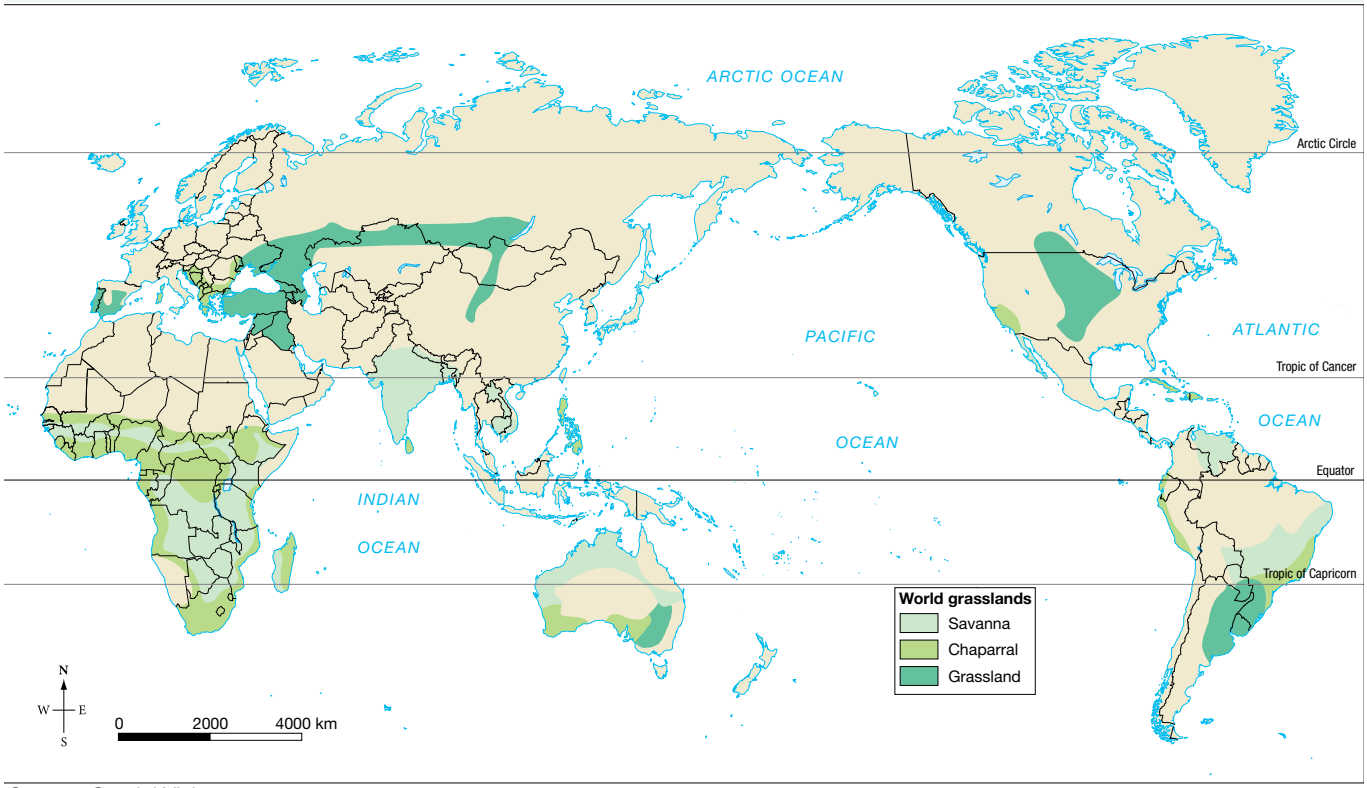
The grassland biome is dominated by grasses, and generally has few or no trees, though there may be more tree cover in adjoining areas, such as along riverbanks. They develop in places where there is not enough rain to support a forest but there is too much rain for a desert; for this reason they are sometimes referred to as a transitional landscape.

Grasslands are found in both temperate and tropical areas where rainfall is between 250 mm and 900 mm per year. In tropical regions, grasslands tend to have a distinct wet and dry season. In temperate regions, the summers tend to be hot and the winters cool. Generally, grasslands in the southern hemisphere receive more rainfall.

Grasslands can occur naturally or as a result of human activity. The presence of large numbers of grazing animals and frequent fires prevent the growth of tree seedlings and promote the spread of grasses. Unlike other plant species, grasses can continue to grow even when they are continually grazed by animals because their growth points are low and close to the soil. Because grasses are fast-growing plants, they can support a high density of grazing animals, and they regenerate quickly after fire.

Some grasses can be up to two metres in height, with roots extending up to one metre below the soil.

**FIGURE 1** Grasslands occupy about a quarter of the Earth's land surface.




***Source:*** Spatial Vision

## 10.6.2 Why are grasslands important?

Grasslands are the most useful biome for agriculture because the soils are generally deep and fertile. Almost one billion people depend on grasslands for their livelihood or as a food source. Grasslands are ideally suited for growing crops or creating pasture for grazing animals. The prairies of North America, for example, are one of the richest agricultural regions on Earth.

Grasslands are also one of the most endangered biomes and are easily turned into desert. The entire ecosystem depends on its grasses and their annual regeneration. It is almost impossible to re-establish a grassland ecosystem once desert has taken over.

Grasslands often depend on fire to germinate their seeds and generate new plant growth. Indigenous populations, such as Australian Aboriginal peoples, used this technique to flush out any wildlife that was hidden by long grass.

In more recent times, grasslands have been used for livestock grazing and are increasingly under pressure from **urbanisation**. Grasslands have also become popular tourist destinations, with people flocking to them to see majestic herds such as wildebeest, caribou and zebra, as well as the migratory birds that periodically inhabit these environments.

**FIGURE 2** Wheat is a type of grass.

All the major food grains — corn, wheat, oats, barley, millet, rye and sorghum — have their origins in the grassland biome. Wild varieties of these grains are used to help keep cultivated strains disease free. Many native grass species have been used to treat diseases including HIV and cancer. Others have proven to have properties useful for treating headaches and toothache.

Grasslands are also the source of a variety of plants whose fibres can be woven into clothing. The best known and most widely used fibre is cotton. Harvested from the cottonseed, it is used to produce yarn that is then knitted or sewn to make clothing. Lesser known fibres include flax and hemp. Harvested from the stalk of the plant, both fibres are much sturdier and more rigid than cotton but can be woven to produce fabric. Hemp in particular is highly absorbent and has UV-blocking qualities.

In Australia today, less than one per cent of native grasslands survive, and they are now considered one of the most threatened Australian habitats. Since European occupation, most native grassland has been removed or changed by farming and other development. Vast areas of grassland were cleared for crops, and introduced grasses were planted for grazing animals such as sheep and cattle.

**FIGURE 3** Grasslands can support a high density of grazing animals. In Australia, we use grasslands for fine wool production.

## DISCUSS

Few people realise that less than one per cent of Australia's native grasslands survive. Why does such a significant loss of grassland biomes not attract the same attention as the loss of other biomes, such as our tropical rainforest and coral reefs? How would each of the following groups perceive the value of grasslands?

**a.** Graziers (sheep and cattle farmers)
**b.** City dwellers
**c.** Environmentalists

**[Personal and Social Capability]**

## Explore more with myWorldAtlas

Deepen your understanding of this topic with related case studies and questions.
- Investigating Australian Curriculum topics > Year 9: Biomes and food security >**Wheat**

## on Resources

**Interactivity** Grass, grains and grazing (int-3318)

## 10.6 INQUIRY ACTIVITY

Grasslands are located on six of the Earth's seven continents. Working in groups, investigate one of the grassland biomes. Using ICT, create a presentation on your chosen biome that covers the following:

**a.** the characteristics of the ***environment***, including climate and types of grasses that dominate this ***place***
**b.** the animals that are commonly found there
**c.** how the ***environment*** is used and ***changed*** for the production of food, fibre and wood products
**d.** threats to this particular grassland, including the ***scale*** of these threats
**e.** what is being done to manage this grassland ***environment*** in a ***sustainable*** manner.

**Examining, analysing, interpreting**
**Classifying, organising, constructing**

## 10.6 EXERCISES

**Geographical skills key: GS1** Remembering and understanding **GS2** Describing and explaining **GS3** Comparing and contrasting **GS4** Classifying, organising, constructing **GS5** Examining, analysing, interpreting **GS6** Evaluating, predicting, proposing

### 10.6 Exercise 1: Check your understanding

1. **GS1** What is a grassland?
2. **GS1** Describe the global distribution of grasslands.
3. **GS1** Why are grasslands an important ***environment***?
4. **GS1** Describe the major threats to this ***environment***.
5. **GS2** Explain how Indigenous populations used the grassland ***environment*** in a ***sustainable*** way.
6. **GS2** Explain why so little of Australia's grasslands remain.

### 10.6 Exercise 2: Apply your understanding

1. **GS6** Grasslands are often referred to as a transitional landscape. Suggest a reason why grasslands might be classified in this way.
2. **GS2** Grasses are different to other plant species. Explain.
3. **GS2** Describe how grasslands differ in different climatic regions.
4. **GS2** Describe the different ways in which the grassland biome is used by people.
5. **GS6** In some ***places***, attempts are being made to re-establish native grasses. Suggest why it is important to re-establish native grasslands.

Try these questions in learnON for instant, corrective feedback. Go to www.jacplus.com.au.

# 10.7 Coastal wetlands

## 10.7.1 What are wetlands?

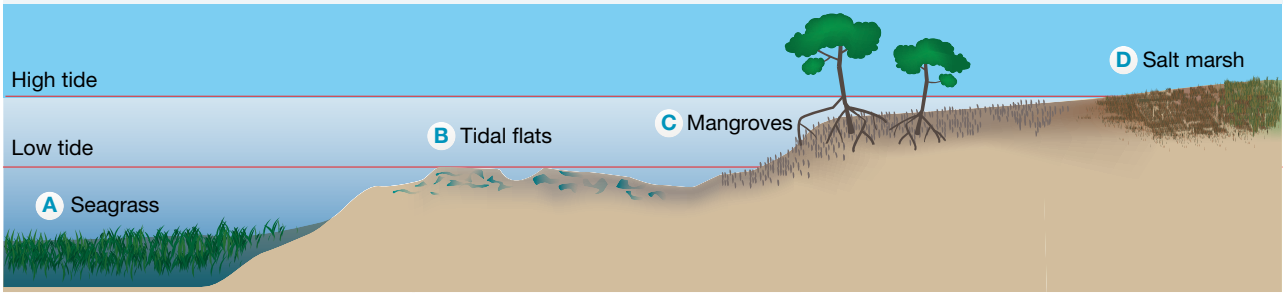
Wetlands are biomes where the ground is saturated, either permanently or seasonally. They are found on every continent except Antarctica. Wetlands include areas that are commonly referred to as marshes, swamps and bogs. In coastal areas they are often tidal and are flooded for part of the day. In the past they were often considered a 'waste of space', and in developed nations they were sometimes drained for agriculture or the spread of urban settlements.

## 10.7.2 Why are wetlands important?

Wetlands are a highly productive biome. They provide important habitats and breeding grounds for a variety of marine and freshwater species. In fact, a wide variety of aquatic species that we eat, such as fish, begin their life cycle in the sheltered waters of wetlands. They are also important nesting places for a large number of migratory birds.

Wetlands are a natural filtering system and help purify water and filter out pollutants before they reach the coast. In addition, they help regulate river flow and stabilise the shoreline. **FIGURE 1** shows a cross-section through a mangrove wetland.

**FIGURE 1** Cross-section of a wetland




**A Seagrass meadows:**

- are covered by water all the time
- bind the mud and provide shelter for young fish
- produce **organic matter**, which is consumed by marine creatures.

**B Tidal flats:**

- are covered by tides most of the time
- are exposed for short periods of the day (low tide)
- are formed by silt and sand that has been deposited by tides and rivers
- provide a feeding area for birds and fish.

**C Mangroves:**

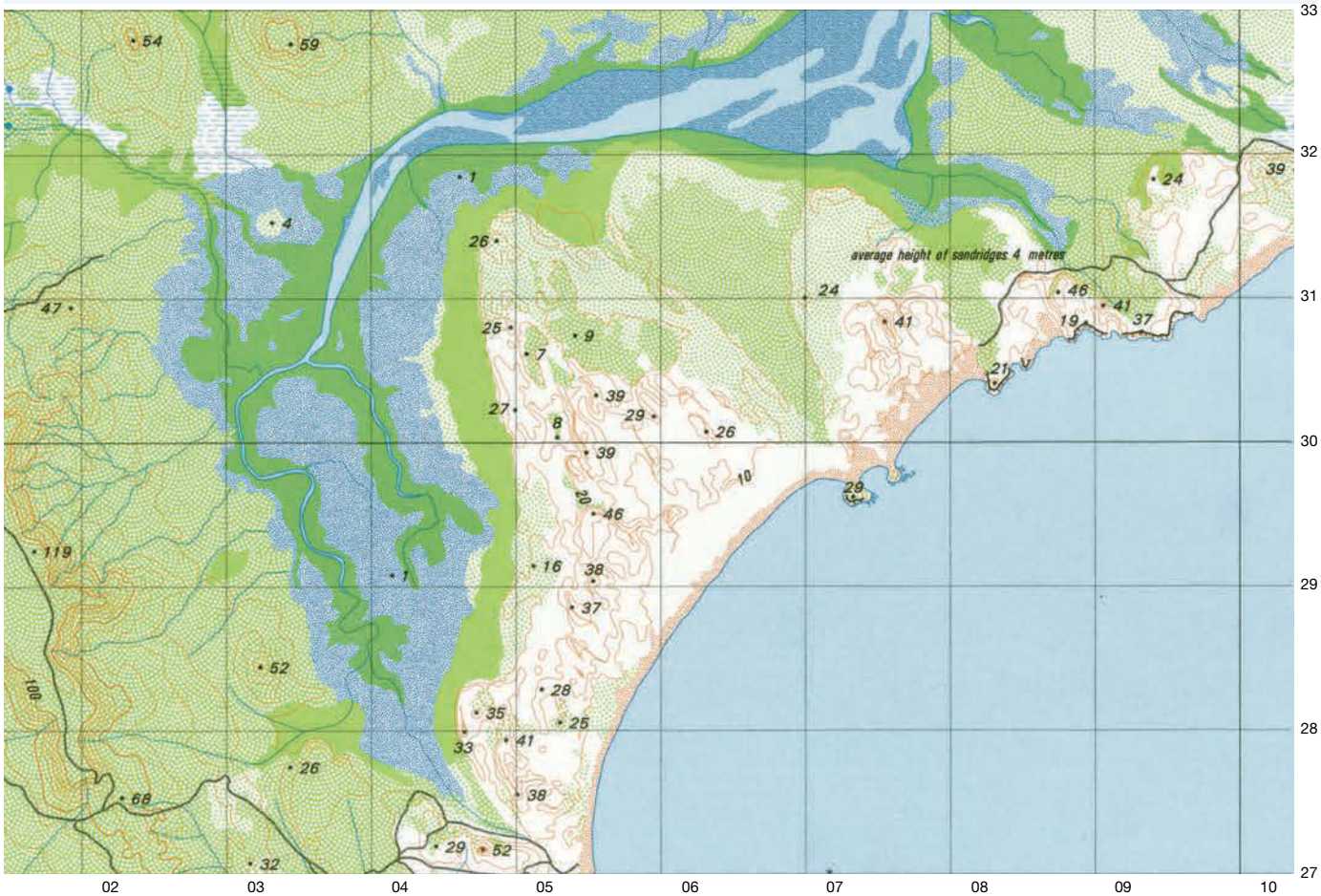
- have **pneumatophores** that trap sediment and pollutants from the land and sea
- change shallow water into swampland
- store water and release it slowly into the ecosystem
- have leaves that decompose and provide a food source for marine life
- provide shelter, breeding grounds and a nursery for marine creatures and birds.

**D Salt marshes:**

- are covered by water several times per year
- provide decomposing plant matter — an additional food source for marine life
- have high concentrations of salt.

Dalywoi Bay in the Northern Territory is a coastal mangrove wetlands area. The topographic map in **FIGURE 2** shows the features of this landscape.

**FIGURE 2** Dalywoi Bay, Northern Territory




**Key**

Vehicle track; Road bridge; Stock grid

Mine; Building; Ruin; Church; Windpump; Yard

Fence; Horizontal control point; Spot elevation

Contour with value and cliff; Pinnacle

Depression contours; Sand; Distorted surface

Levee; Sandbridge

Razorback ridgeline; fault line

Vegetation; Dense, medium, scattered; Cleared lane

Rain forest; Pine

Orchard or vineyard; Line if trees or windbreak

Watercourse; Area subject to inundation

Swamp; Swamp definite boundary

Perennial lake; Watercourse

Intermittent lake; Watercourse

Mainly dry lake; Watercourse

Tank or Small dam; Waterhole

Saline coastal flat; Intertidal flat; Rock bare or awash

Lighthouse; Intertidal ledge or reef

Exposed wreck; Submerged wreck

Submerged reef; Submerged rock

Indefinite watercourse; Mangrove swamp

***Source:*** The Australian Army © Commonwealth of Australia 1999

**FIGURE 3** Seagrass

**FIGURE 4** Pneumatophores — the exposed root system of mangroves that enables them to take in air when the tide is in

## 10.7 EXERCISES

**Geographical skills key: GS1** Remembering and understanding **GS2** Describing and explaining **GS3** Comparing and contrasting **GS4** Classifying, organising, constructing **GS5** Examining, analysing, interpreting **GS6** Evaluating, predicting, proposing

### 10.7 Exercise 1: Check your understanding

1. **GS2** How have mangroves adapted to survive in their marine–terrestrial ***environment***?
2. **GS2** What are seagrass meadows and why are they important?
3. **GS1** Define the term 'wetland'.
4. **GS2** Coastal wetlands are tidal. What does this mean?
5. **GS6** Wetlands were once described as 'a waste of ***space***'. Do you think this is an accurate description? Give reasons for your answer.

### 10.7 Exercise 2: Apply your understanding

1. **GS5** Refer to **FIGURE 2** and describe the landscape at the following grid references: 042309, 071329, 030320 and 055290.
2. **GS6** In **FIGURE 2**, locate the grid square inside grid references: 030300, 030310, 040030, 040310.
   (a) What is the area covered by these grid squares?
   (b) Describe how this ***environment*** would ***change*** over the course of the day.
   (c) A proposal has been put forward to construct a **canal housing estate** in this location. It is proposed that the estate will occupy this grid square and its surrounds. Describe the ***scale*** of this project.
   (d) Explain how the ***environment*** may ***change*** if this project goes ahead.
3. **GS3** Distinguish between a tidal flat and a salt marsh.
4. **GS5** Wetlands have been described as a natural purification system. Which part of the wetland ***environment*** would perform this function? Give reasons for your answer.
5. **GS6** Describe what might happen if there were no wetlands.

Try these questions in learnON for instant, corrective feedback. Go to www.jacplus.com.au.

# 10.8 SkillBuilder: Constructing and describing a transect on a topographic map

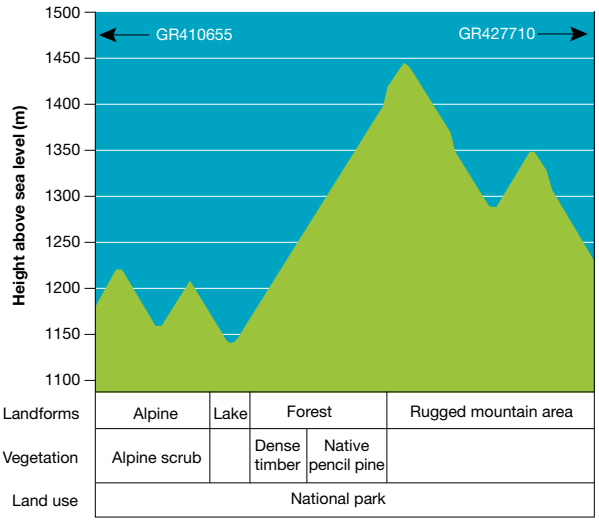
online only

### What is a transect?

A transect is a cross-section with additional detail, which summarises information about the environment. In addition to the shape of the land, a transect shows what is on the ground, including landforms, vegetation, soil types, settlements and infrastructure.

### Select your learnON format to access:

- an explanation of the skill (Tell me)
- a step-by-step process to develop the skill, with an example (Show me)
- an activity to allow you to practise the skill (Let me do it)
- questions to consolidate your understanding of the skill.




## learnON Resources

**Video eLesson** Constructing and describing a transect on a topographic map (eles-1727)
**Interactivity** Constructing and describing a transect on a topographic map (int-3345)

# 10.9 Coral reefs

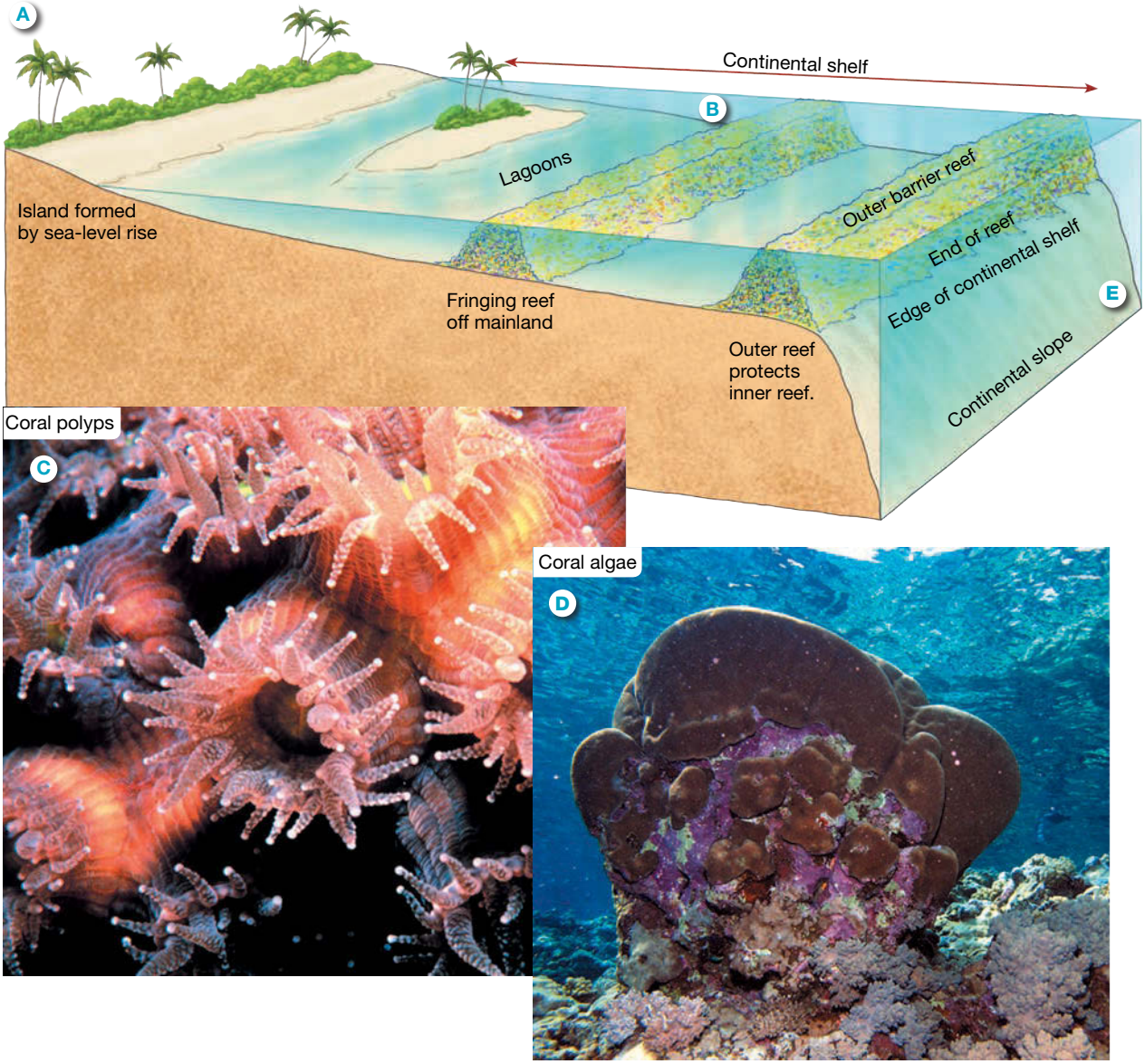
## 10.9.1 Formation of coral reefs

Coral reefs are found in spaces around tropical and subtropical shores. They require specific temperatures and sea conditions and an area free from sediment. Coral reefs are built by tiny animals called **coral polyps**. The upper layer is alive, growing on the remains of millions of dead coral. Coral reefs are one of the oldest ecosystems on Earth and also one of the most vulnerable to human activity.

Coral reefs are one of the most diverse biomes on Earth and are built by polyps that live in groups. A reef is a layer of living coral growing on the remains of millions of layers of dead coral. There are inner and outer reefs as well as coral cays (small islands of coral) and coral atolls.

**FIGURE 1** outlines the anatomy of a coral reef, and provides a close-up image of some of the millions of coral polyps that combine to form a reef. **FIGURE 2** shows how different reefs are formed over time.

**FIGURE 1** Anatomy of a coral reef




A Continental island and fringing reef

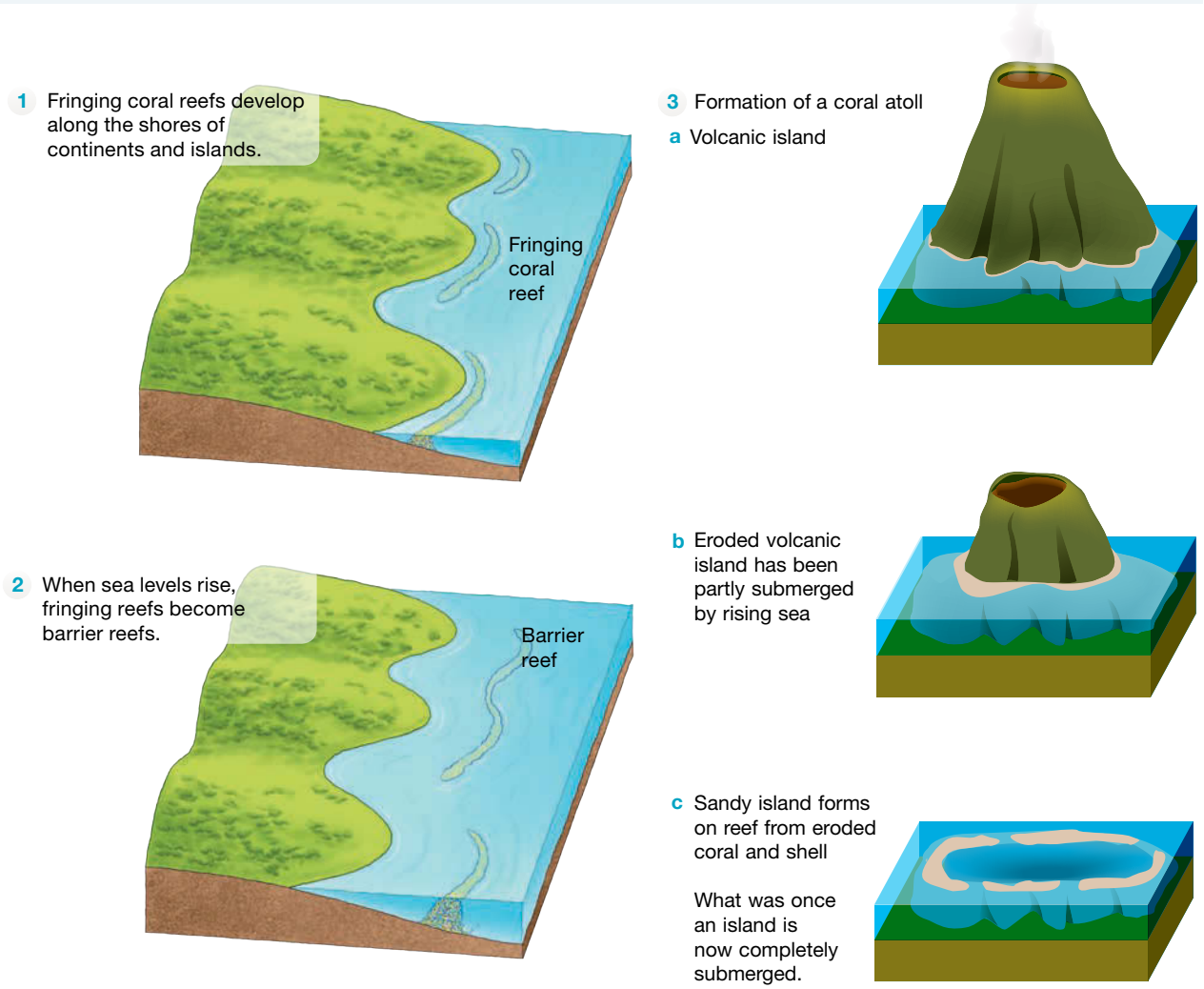
B
- Corals form in warm shallow saltwater where the temperature is between 18 °C and 26 °C.
- Water must be clear, with abundant sunlight and gentle wave action to provide oxygen and distribute nutrients.

C Coral polyps have soft, hollow bodies shaped like a sac with tentacles around the opening. They cover themselves in a limestone skeleton and divide and form new polyps.

D Producers such as algae give coral its colour and provide a food source for marine life such as fish. Coral reefs support at least one-third of all marine species. They are the marine equivalent of the tropical rainforest.

E Beyond the continental shelf, the water is too deep and cold for coral. Sunlight cannot penetrate to allow coral growth.

**FIGURE 2** The formation of fringing reefs, barrier reefs and coral atolls




## 10.9.2 Benefits of coral reefs

Today, about 500 million people rely on reef systems, either for their livelihood, as a source of food, or as a means of protecting their homes along the coastline. (Coral reefs help break up wave action, so waves have less energy when they reach the shoreline, thus reducing coastal erosion.) It is estimated that coral reefs contribute between US$28.8 billion and US$375 billion to the global economy each year.

Reefs are important to both the fishing and tourism industries. Approximately 2 million people visit Australia's Great Barrier Reef Marine Park alone, generating more than A$2 billion for the local economy. Nearly one-third of all tourists who visit Australia also visit the Great Barrier Reef.

Coral reefs have been found to contain compounds vital to the development of new medicines.

- Painkillers have been developed from the venom of cone shells.
- Some cancer treatments come from algae.
- Treatments for cardiovascular disease and HIV include compounds that were originally found in coral reefs.

## 10.9.3 Threats to coral reefs

Reefs face a variety of threats.

- Urban development requires land clearing and wetland drainage, which increases erosion. Sediment washed into water prevents sunlight penetrating the water.
- Contamination by fossil fuels, chemical waste and agricultural fertilisers pollutes the sea.
- Tourism damages coral through boats dropping anchor, or tourists taking coral or walking on it.
- Global warming increases water temperature, which bleaches the coral, turning it white and destroying the reef system.
- Predators, such as the crown of thorns starfish, prey on coral polyps, which affects the whole ecosystem.

### Explore more with myWorldAtlas

Deepen your understanding of this topic with related case studies and questions.

- Investigate additional topics > Environments > **The Great Barrier Reef**

### 10.9 INQUIRY ACTIVITIES

1. With the aid of a diagram, explain how coral reefs are formed. **Describing and explaining**
2. Investigate two of the threats to coral reefs and prepare an annotated visual display that outlines:
   (a) the nature of the threat
   (b) the ***changes*** that will occur or have occurred as a result of this threat
   (c) the impact of these ***changes*** on the ***environment***, including references to the rate and ***scale*** of the ***changes***
   (d) a strategy for the long-term ***sustainable*** management of the reef ***environment***.

   **Examining, analysing, interpreting**
   **Classifying, organising, constructing**

### 10.9 EXERCISES

**Geographical skills key: GS1** Remembering and understanding **GS2** Describing and explaining **GS3** Comparing and contrasting **GS4** Classifying, organising, constructing **GS5** Examining, analysing, interpreting **GS6** Evaluating, predicting, proposing

#### 10.9 Exercise 1: Check your understanding

1. **GS2** Explain the difference between a fringing reef and a barrier reef.
2. **GS2** Detail the steps in the formation of a coral reef.
3. **GS2** Why are coral reefs important ***places***?
4. **GS1** What gives coral its colour?
5. **GS1** Outline five key threats to coral reefs.

#### 10.9 Exercise 2: Apply your understanding

1. **GS6** Coral reefs are highly susceptible to climate ***change***.
   (a) Explain what you understand by the term ***climate change***.
   (b) Explain how the coral reef ***environment*** would ***change*** if sea temperatures were to rise by 2 °C.
2. **GS3** Coral reefs and rainforests have a lot in common. With the aid of a Venn diagram, show the similarities and differences between these two biomes.
3. **GS5** The English naturalist, biologist and evolutionary scientist Charles Darwin once described coral reefs as being like an oasis in the desert. Explain what you think Darwin meant by this analogy.
4. **GS2** Describe the ideal growing conditions for coral.
5. **GS2** Coral reefs have a ‘garden-like’ appearance, but they are not plants. Explain.

Try these questions in learnON for instant, corrective feedback. Go to www.jacplus.com.au.

# 10.10 Managing and protecting biomes

## 10.10.1 Can we recreate what has been lost?

It is important to consider the long-term impact of our actions and ensure that they do not have a negative impact on the environment. In the past, human activity has polluted and degraded the land. However, we are now attempting to learn from our mistakes and repair the damage done.

### The role of Biosphere 2

Biosphere 2 (see **FIGURES 1** and **2**) is a research facility in the Arizona Desert in the USA. It has been designed to investigate Earth's life systems. Covering an area of 1.5 hectares and standing almost 28 metres at its highest point, Biosphere 2 is the world's largest ecological laboratory. Its mission is to learn more about how the environment connects with us and how we in turn connect with the environment.

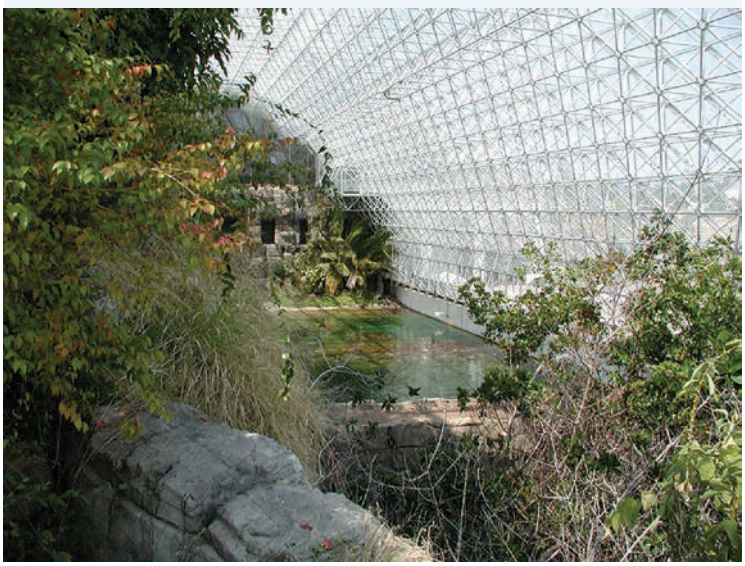
**FIGURE 1** Aerial view of Biosphere 2

Within the confines of Biosphere 2, five natural environments have been recreated: rainforest, desert, savanna, wetland and ocean (including a coral reef). In addition, agricultural and human living spaces have also been created. More than 3000 living organisms are found across the complex. All systems, including oxygen levels, water supply and climate are managed by complex computer systems within the facility.

While early experiments focused on our ability to artificially recreate the Earth's biosphere and sustain life within it, the emphasis has now moved to investigating the impact of human activity. Scientists are looking at how increased burning of fossil fuels and the destruction of habitats will affect the natural systems that sustain all life on the planet.

The project has helped demonstrate the complexity of the natural processes that occur on Earth and within particular biomes. Constant work, effort and thought is needed to maintain the natural order.

**FIGURE 2** Ocean recreated within Biosphere 2



## 10.10.2 Landcare and other action groups

Landcare was born in 1986, when a group of farmers near St Arnaud in central Victoria banded together to find sustainable solutions to their common problem: **land degradation**. The idea has since been adopted by the Australian government and has spread nationwide. Landcare is about communities working together on environmental projects such as:

- cleaning up polluted creeks and waterways
- planting trees
- restoring beach dune systems
- finding workable solutions to problems such as **salinity** in farming communities
- addressing the growing problem of waste disposal and plastic bags.

Other organisations such as Clean Up Australia and OceanCare operate with a similar vision of protecting our waterways and oceans from the impacts of land degradation and pollution.

**FIGURE 3** Members of the Tangaroa Blue OceanCare group with some of the rubbish collected during a beach clean-up day

## 10.10.3 Learning from Indigenous communities

Long before the arrival of European colonisers, Indigenous Australian peoples practised their own form of agriculture. Rather than simply hunting and gathering, they used knowledge amassed over thousands of years to manage the native plants and animals they relied on for sustenance. Fire formed the basis of the Indigenous land management system. A complex system of burning ensured that food supplies were both sustainable and predictable.

Careful planning enabled them to change the landscape to meet their needs. First they created a grassland devoid of trees, the food source for grazing animals. Adjacent to this they cleared out the undergrowth and thinned the trees to create an open forest area that would provide shelter for these same grazing animals. Then they burned the grassland to create the new growth that would encourage the grazers from the shelter of the trees and make hunting easier.

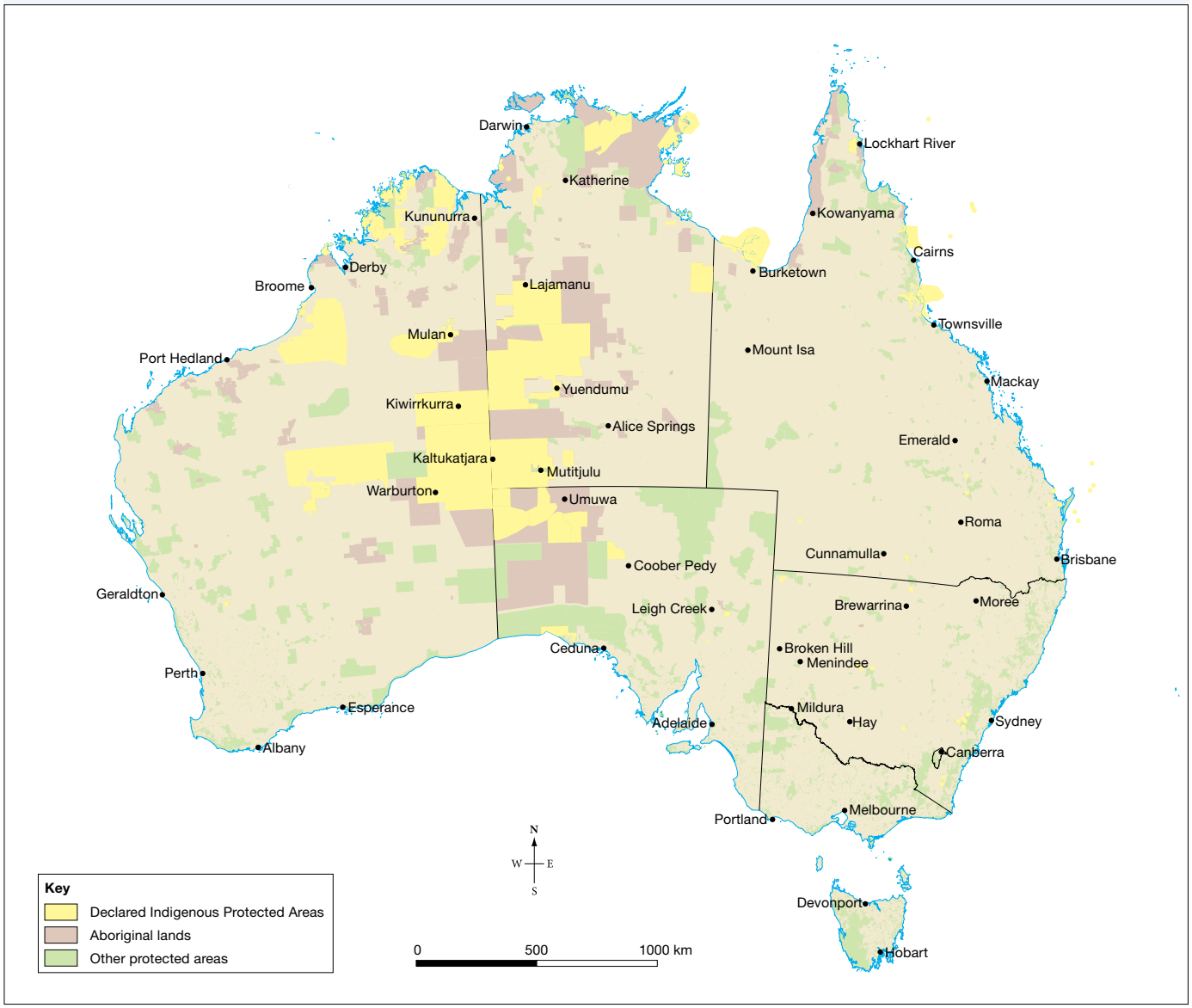
Burning was usually carried out at night time or in the early morning to produce a ‘cool fire’. The evening dew helped control the heat produced and made the fire easier to control. Such fires were also self-extinguishing; once the grass was burned, the fire simply went out.

This was preferable to a ‘hot fire’ fanned by the flammable oils sweated by plants in the heat of the day, which could easily get out of control.

## Indigenous Protected Areas

Indigenous Protected Areas (IPAs) are wholly managed using traditional practices. Generational knowledge is passed down and preserved for future generations. Approximately 36 per cent of Australia's protected areas is under the control of local Indigenous communities. The first IPA was established at Nantawarrina, about 555 kilometres north of Adelaide, in 1998. The largest is Southern Tanami in the Northern Territory, at 10.16 million hectares, and the smallest is Pulu Islet in the Torres Strait, at about 15 hectares.

**FIGURE 4** Map of Indigenous Protected Areas




***Source:*** © Commonwealth of Australia 2013, Department of Environment

## 10.10 INQUIRY ACTIVITIES

1. Use the internet to learn more about Biosphere 2 and a similar facility, the Eden Project, in England. Display your findings as an annotated visual display.
   **Examining, analysing, interpreting**
   **Classifying, organising, constructing**
2. Investigate what projects have been carried out in your local area to restore the natural ***environment.***
   **Examining, analysing, interpreting**

## 10.10 EXERCISES

**Geographical skills key: GS1** Remembering and understanding **GS2** Describing and explaining **GS3** Comparing and contrasting **GS4** Classifying, organising, constructing **GS5** Examining, analysing, interpreting **GS6** Evaluating, predicting, proposing

### 10.10 Exercise 1: Check your understanding

1. **GS1** How did Indigenous land management differ from that of European colonisers?
2. **GS1** What is Biosphere 2?
3. **GS2** Explain the purpose of Landcare.
4. **GS1** Identify three different types of projects that Landcare has undertaken.
5. **GS1** Why was the use of fire an integral part of land management for Indigenous communities?

### 10.10 Exercise 2: Apply your understanding

1. **GS6** Do you think projects such as Biosphere 2 serve a useful purpose? Give reasons for your answer.
2. **GS6** The media is constantly filled with information about the state of the ***environment***. Write a letter to the editor in response to the following statement: 'Biosphere 2 has done little to increase or improve our understanding of the ***environment***, which continues to deteriorate. Our energies should be directed towards the ***sustainable*** use of the resources we have, rather than being frittered away on such experiments, which are nothing more than expensive toys.'
3. **GS6** Why do you think Indigenous Protected Areas have been established?
4. **GS5** Each year bushfires cause an enormous amount of damage to biomes.
   (a) Why were uncontrolled fires relatively unknown prior to the arrival of European colonisers?
   (b) Do you think more widespread use of Indigenous land management methods could prevent such widespread destruction? Justify your point of view.
5. **GS2** Consider Indigenous land management techniques.
   (a) Outline the difference between a 'cool fire' and a 'hot fire'.
   (b) Explain why a 'cool burn' is used as a form of land management.

Try these questions in learnON for instant, corrective feedback. Go to www.jacplus.com.au.

# 10.11 Thinking Big research project: Our world of biomes AVD

online only

## SCENARIO

The Department of the Environment has commissioned you to carry out an in-depth study of biomes, their characteristics and the factors that influence their development. You will create an engaging annotated visual display to showcase your findings.

### Select your learnON format to access:

- the full project scenario
- details of the project task
- resources to guide your project work
- an assessment rubric.

### on Resources

**ProjectsPLUS** Thinking Big research project: Our world of biomes AVD (pro-0188)

# 10.12 Review

online only

## 10.12.1 Key knowledge summary

Use this dot point summary to review the content covered in this topic.

## 10.12.2 Reflection

Reflect on your learning using the activities and resources provided.

### on Resources

**eWorkbook** Reflection (doc-31714)
Crossword (doc-31715)

**Interactivity** All the world is a biome crossword (int-7644)

## KEY TERMS

**biodiversity** the variety of plant and animal life within an area
**canal housing estate** a housing estate built upon a system of waterways, often as the result of draining wetland areas. All properties have water access.
**clear-felling** the removal of all trees in an area
**coral polyp** a tube-shaped marine animal that lives in a colony and produces a stony skeleton. Polyps are the living part of a coral reef.
**deforestation** clearing forests to make way for housing or agricultural development
**land degradation** deterioration in the quality of land resources caused by excessive exploitation
**latitude** the angular distance north or south from the equator of a point on the Earth's surface
**leaching** the process by which water runs through soil, dissolving minerals and carrying them into the subsoil
**leeward** describes the area behind a mountain range, away from the moist prevailing winds
**logging** large-scale cutting down, processing and removal of trees from an area
**organic matter** decomposing remains of plant or animal matter
**pneumatophores** exposed root system of mangroves, which enables them to take in air when the tide is in
**prairie** native grassland of North America
**precipitation** the forms in which moisture is returned to the Earth from the sky, most commonly in the form of rain, hail, sleet and snow
**rain shadow** the dry area on the leeward side of a mountain range
**salinity** the presence of salt on the surface of the land, in soil or rocks, or dissolved in rivers and groundwater
**treeline** the edge of the area in which trees are able to grow
**tundra** the area lying beyond the treeline in polar or alpine regions
**urbanisation** the growth and spread of cities
**windward** describes the side of the mountain that faces the prevailing winds

# 10.3 SkillBuilder: Describing spatial relationships in thematic maps

## 10.3.1 Tell me

### What are spatial relationships in thematic maps?

A spatial relationship is the interconnection between two or more pieces of information in a thematic map, and the degree to which they influence each other's distribution in space.

### How are spatial relationships in thematic maps useful?

Spatial relationships between features or information in thematic maps are the links between the distribution of those features. Finding these links can help us to see the world in an organised manner. They are useful in helping you, as a student, to understand how one thing affects another.

They are also used by:

- councils, when determining planning permits
- transport authorities, when determining new freeways, rail links and tunnels
- meteorologists, when predicting the weekly weather.

A description of a spatial relationship in thematic maps:

- clearly identifies which features on thematic maps are linked or interconnected
- points out obvious anomalies, where no linkages or interconnections can be observed
- describes the extent of interconnections (for example, as strong or weak).

## 10.3.2 Show me

### How to find and describe a spatial relationship in thematic maps

#### You will need:

- two thematic maps that can be compared
- an atlas.

#### Model

The maps in **FIGURES 1(a)** and **1(b)** show that, across Asia, there is a strong interconnection between climate and biomes. In areas of high rainfall throughout the tropics, rainforest biomes dominate. In western India's hot desert and in the cold mountains, desert biomes exist. In central Asia, the cold deserts and semi-deserts are so dry that desert and grassland biomes dominate the environment. There is no interconnection between climate and the wetland biomes of north-east China and Bangladesh's delta region, but in Asia overall there is a strong spatial relationship between biomes and climate.

#### Procedure

#### Step 1

Use an atlas to familiarise yourself with the mapped area. Placenames are important to use in your writing. In **FIGURES 1(a)** and **1(b)**, identify places such as India and China.

#### Step 2

Identify areas on both maps that have a distinct interconnection by looking for similar patterns in similar parts of the maps. In **FIGURES 1(a)** and **1(b)**, biomes are clearly linked to climate, with temperatures, rainfall and other climatic factors having an important role in determining what will grow in an area. Write a few sentences outlining where these strong interconnections occur. For example: 'In central Asia, the cold deserts and semi-deserts are so dry that desert and grassland biomes dominate the environment.'

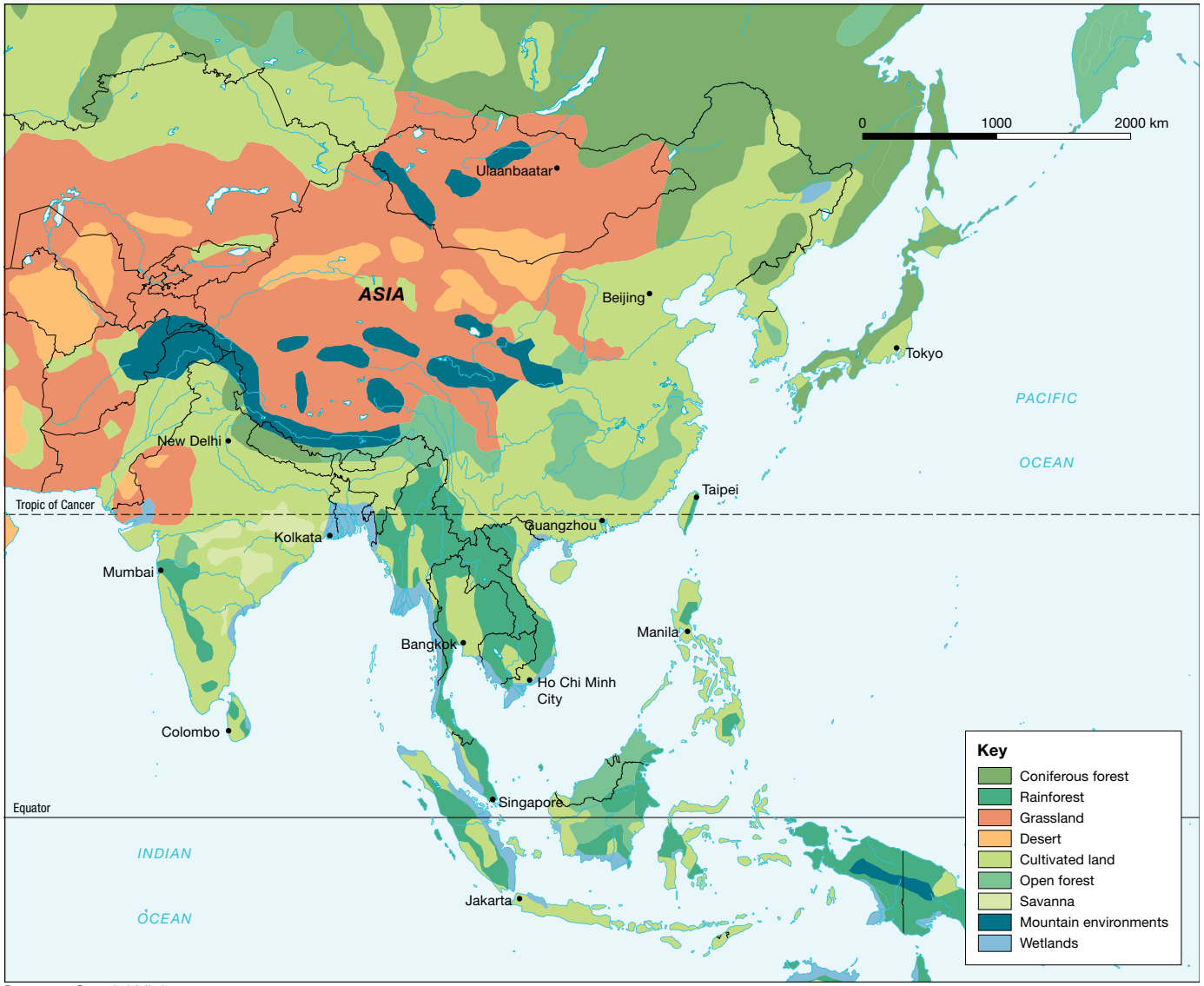
### Step 3

Search the maps carefully and look for any areas where there seem to be no connections between biomes and climate. If necessary, write a few sentences outlining where there are no interconnections. For example: 'The wetland biomes of north-east China and the Bangladesh delta are not linked to climate.'

### Step 4

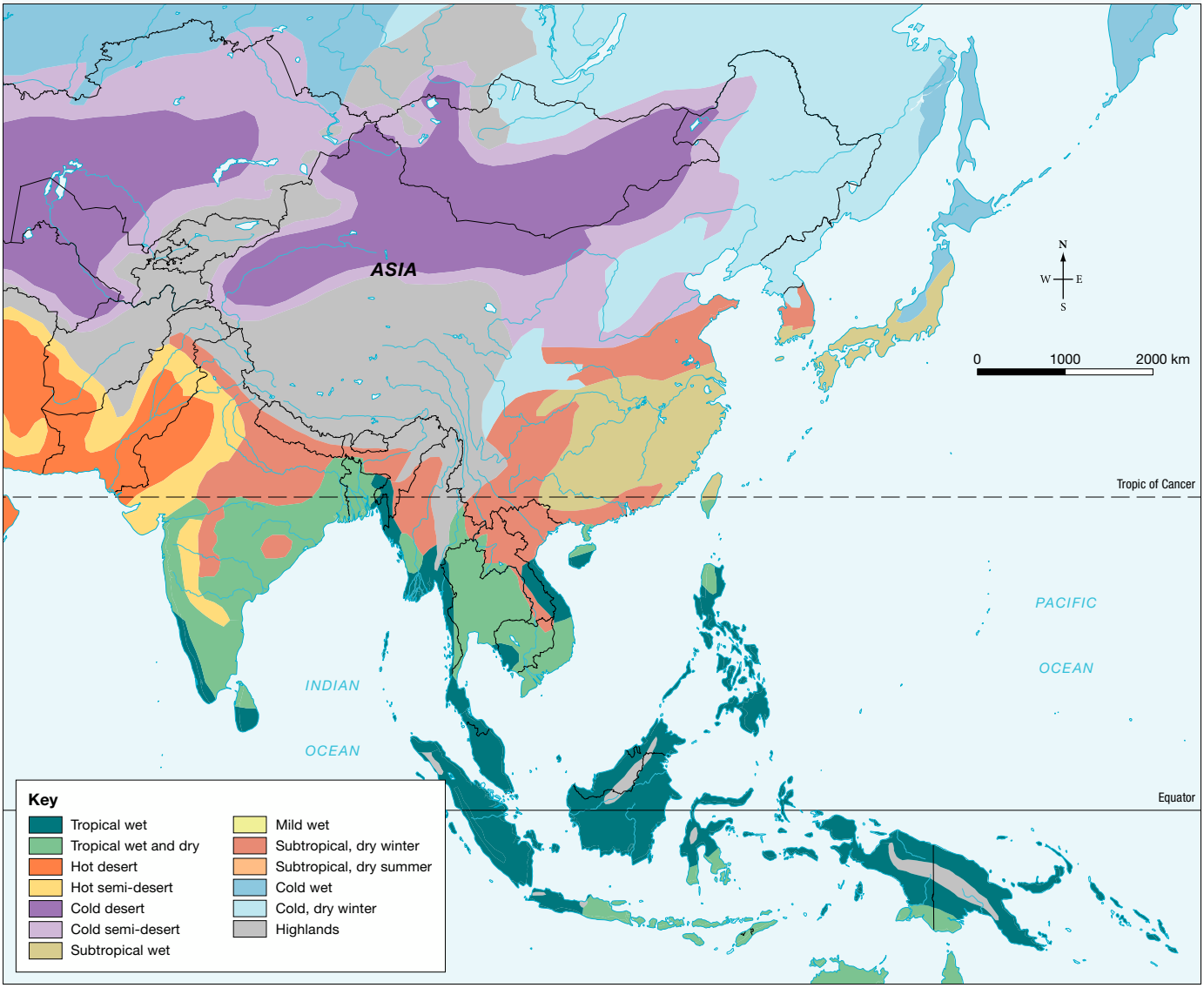
Conclude your paragraph with a final statement about spatial relationships. For example: 'In Asia there is a strong spatial relationship between biomes and climate.'

**FIGURE 1(a)** Thematic map of Asia showing biomes




***Source:*** Spatial Vision

**FIGURE 1(b)** Thematic map of Asia showing climatic zones




***Source:*** Spatial Vision using Natural Earth

## on Resources

**Video eLesson** Describing spatial relationships in thematic maps (eles-1726)

**Interactivity** Describing spatial relationships in thematic maps (int-3344)

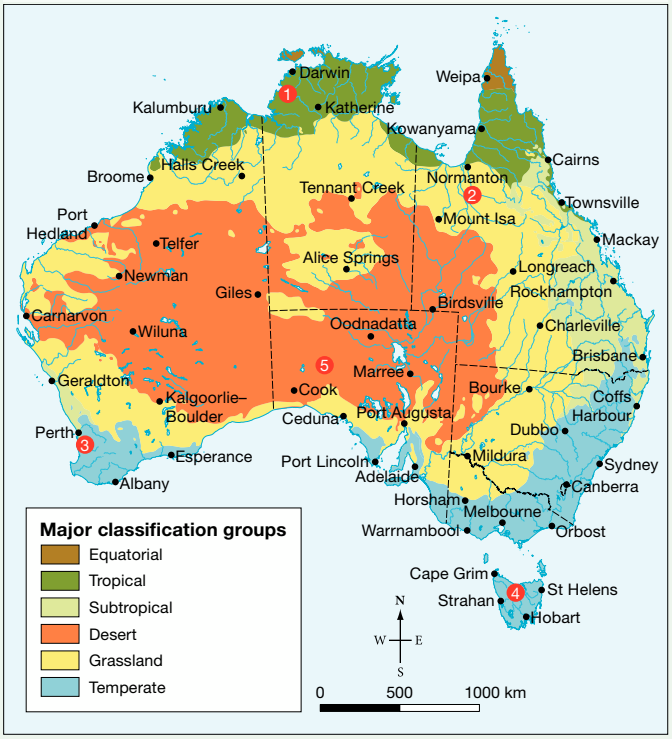
## 10.3.3 Let me do it

Complete the following activities to practise this skill.

### 10.3 ACTIVITIES

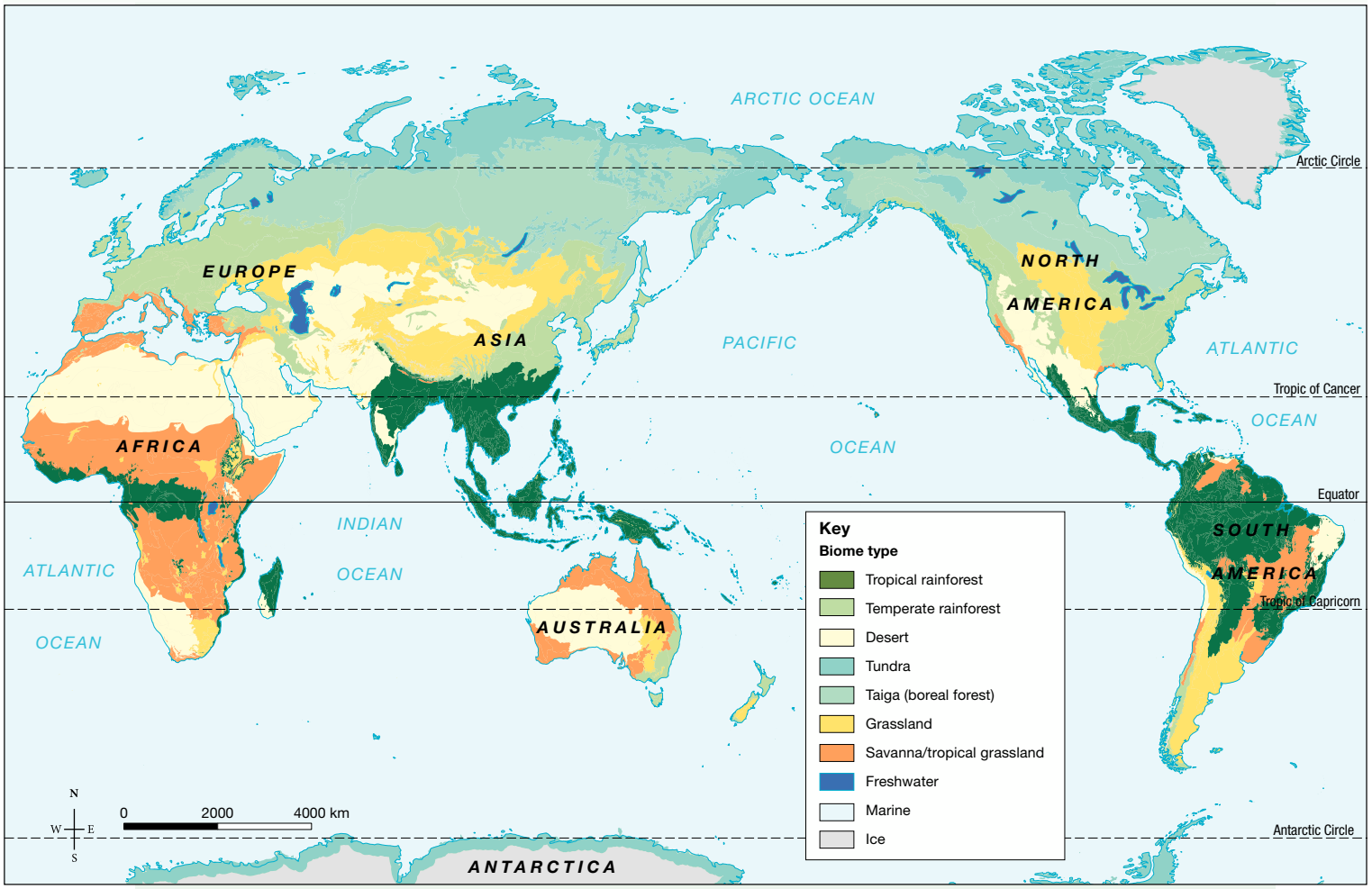
1. Study the thematic maps showing Australia's climate and biomes, shown in **FIGURES 2** and **3**. In a paragraph, describe the ***spatial*** relationship between biomes and climate in Australia. Use the checklist to ensure you cover all aspects of the task.
2. Based on what you have learned in this SkillBuilder, apply your skills to answer the following questions.
   (a) Is there a strong relationship between Australia's arid climates and desert biomes? Explain your answer.
   (b) Is there a ***spatial*** relationship between Australia's tropical rainforests and climate?
   (c) Is the ***spatial*** relationship between climate and the savanna (grassland) biome strong or weak? Explain your answer.
   (d) Name the main biome found in Tasmania. Why might there be only one biome on the map?
   (e) Find one biome that does not occur in Australia. Suggest reasons why this is the case.

**FIGURE 2** Climate classification of Australia




***Source:*** Data copyright Commonwealth of Australia, 2013 Bureau of Meteorology. Map drawn by Spatial Vision.

**FIGURE 3** Major biomes of the world




***Source:*** Redrawn by Spatial Vision based on the information from the Nature Conservancy and GIS Data

## Checklist

I have:

- clearly identified which features on thematic maps are linked or interconnected
- pointed out obvious anomalies, where no linkages or interconnections can be observed
- described the extent of interconnections (for example, as strong or weak).

# 10.8 SkillBuilder: Constructing and describing a transect on a topographic map

## 10.8.1 Tell me

### What is a transect?

A transect is a cross-section with additional detail which summarises information about the environment. In addition to the shape of the land, a transect shows what is on the ground, including landforms, vegetation, soil types, settlements and infrastructure.

### How are transects useful?

Transects can show:

- one or more features that occur along a line between two places
- interconnections between features
- change that occurs along the line.

You can use transects to identify changes in landforms, vegetation and land use. They can also help to show the way certain features, such as landforms, influence other features, such as vegetation. They help us to understand interconnections in the environment.

Transects are used by:

- land developers wanting to explore the key features of an environment
- agronomists seeking to record plant species between two points
- journalists wanting to show differences within a country.

A good transect:

- is drawn in pencil
- has ruled axes
- has labelled axes
- uses small dots
- is drawn with a smooth curve
- identifies key aspects such as slope, landform, vegetation and land use
- includes a title.

A good description of a transect:

- describes the key aspects of slope, landform, vegetation and land use
- identifies interconnections between key features
- notes any anomalies.

## 10.8.2 Show me

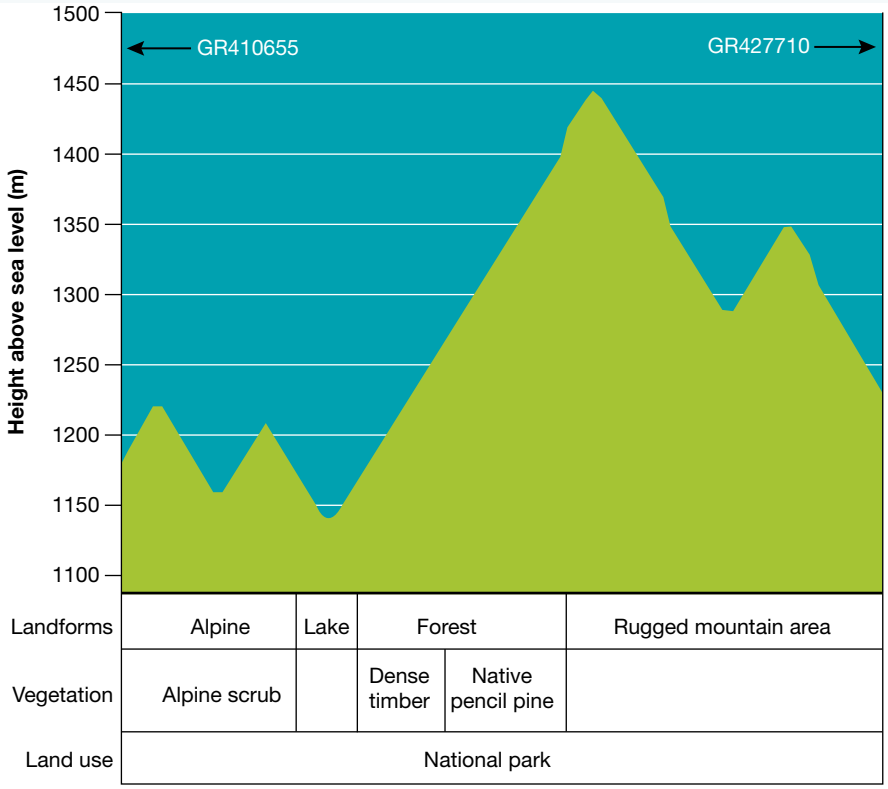
### How to construct and interpret a transect

**You will need:**

- a topographic map of the region being considered
- a piece of paper with a straight edge for marking the contours
- another sheet of paper, or graph paper, to draw the transect on
- a light grey pencil
- a ruler.

## Model

**FIGURE 1** A transect of the Walls of Jerusalem National Park, Tasmania




## Description of transect

The transect reveals that the main vegetation in the southern areas of the Walls of Jerusalem National Park (where the undulating land reaches 1200 metres) is light alpine scrub. This area contains a lake before the scrub changes to dense timber as the land increases in height. The dense timber gives way to native pencil pines as the land gains further height from 1250 metres to 1400 metres. Where the land rises to 1450 metres, the area is described as rugged mountains. All of this area is designated national parkland.

## Procedure

To complete a transect, you must have a topographic map of the place you wish to examine. You then need to choose the area you would like to look at and the two points that will give you the best line through that area. Remember that you will be examining the land's shape and features. In **FIGURE 1**, the two selected points are grid references 410655 and 427710.

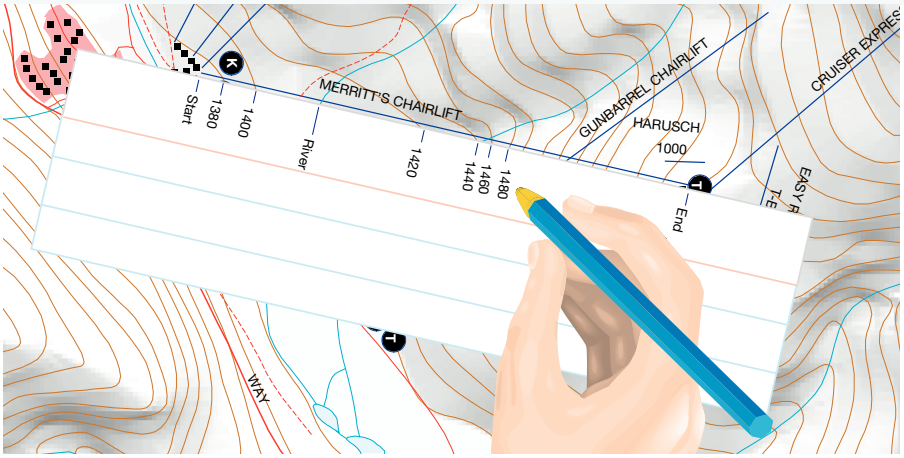
### Step 1

Place the straight edge of a piece of paper between the two points. Mark the two extremities of your transect on the edge. Label these 'Start' and 'Finish' or give them placenames or grid references from the map.

### Step 2

Create a mark where each contour line touches the edge of the paper. Beside each mark, write the height of the contour line (see **FIGURE 2**). (It's a good idea to check the contour interval on the topographic map. This will tell you how many metres the lines increase or decrease by.) It may be necessary to lift the page edge or follow the contour line to find a number. Hold your page firmly and lift the edges to prevent your page moving off the line of the transect. When you have completed all the contour markings, you can lift the page away from the map.

**FIGURE 2** Marking the contour lines




## Step 3

On the other sheet of paper, use your ruler to draw a vertical and a horizontal axis. The horizontal base line should be as long as your cross-section from start to finish. The vertical scale needs to give a realistic impression of the slopes and landforms. If you exaggerate the scale too much, you distort the shape of the land and a hilly area can appear mountainous. Although some vertical exaggeration is acceptable, try to choose a vertical scale carefully. For this exercise, use one centimetre to represent 100 metres.

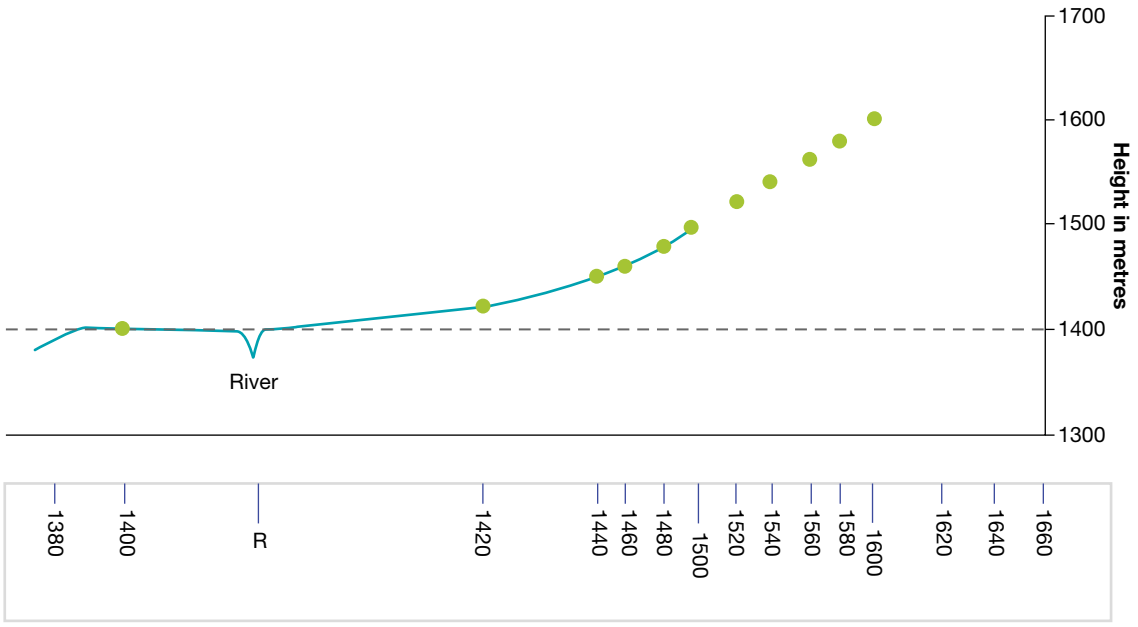
## Step 4

Place the marked edge of the paper along the horizontal axis. At each contour marking, find the matching height on the vertical scale. Put a small dot directly across from that height and above the contour marked on the edge of the paper.

## Step 5

Join the dots with a smooth line to show the slope of the land, as shown in **FIGURE 3**. Notice that a notch has been used to show a river on the cross-section, and that the river has been labelled. Think about the depth of the river, and keep the notch shallow. Other features can be marked in a similar way when preparing the cross-section.

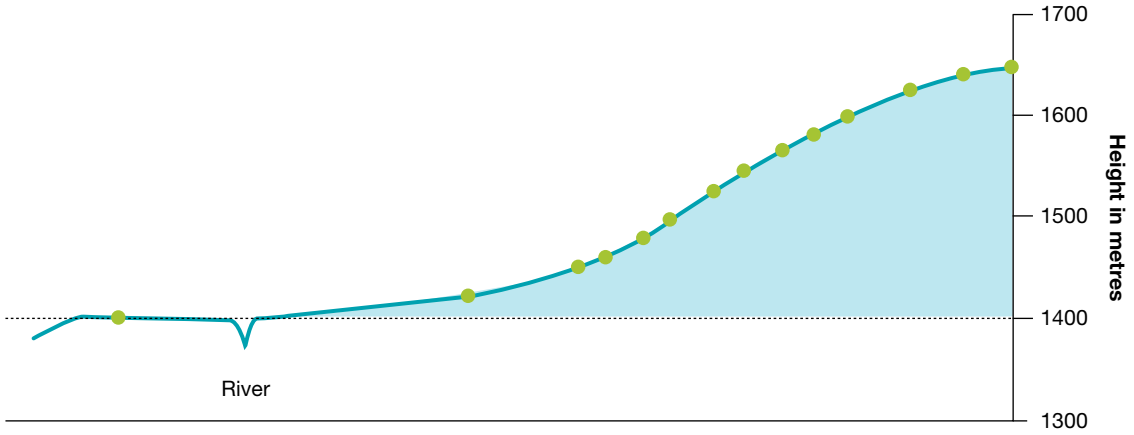
**FIGURE 3** Drawing up the shape of the transect



### Step 6

Complete the cross-section with the geographical conventions of a title and labelled axes. Shade the area below the line of your cross-section (see **FIGURE 4**).

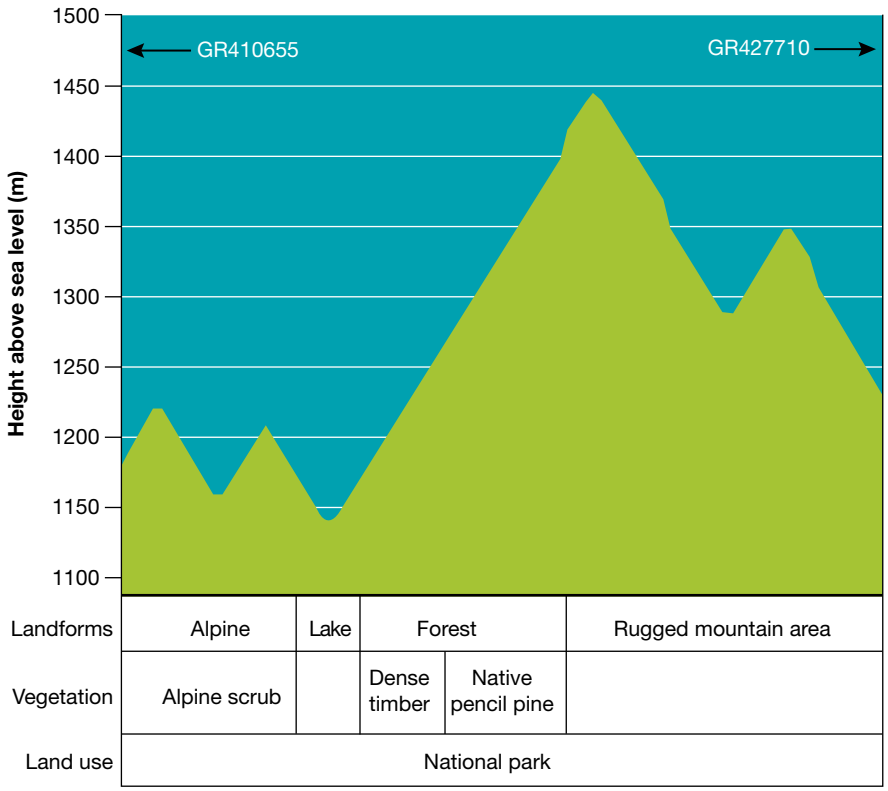
**FIGURE 4** The shape of the land is completed.




### Step 7

Beneath your completed cross-section, draw a table, like that in **FIGURE 5**, to indicate when a feature changes on the transect. Label each category to the left of the vertical axis, as in **FIGURE 5**. Common categories used here include landforms, vegetation, land use, transport, settlement and sometimes soils, depending on what you would like to show on your transect.

**FIGURE 5** A transect of the Walls of Jerusalem National Park, Tasmania



### Step 8
Complete your transect by referring back to the map to determine where a feature occurs, such as native pencil pine in **FIGURE 5**. Place your paper edge back onto the topographic map to be accurate. **FIGURE 5** shows three categories completed: landforms, vegetation and land use.

### Step 9
Check that the geographical conventions are complete on your transect: include a title and label the axes as 'Height above sea level' and 'Distance'.

### Step 10
Compare your transect with that of a classmate. Are the transects identical shapes? If not, it will be because you have chosen different scales to draw the vertical axis. Land formations can become distorted or misshapen by the choice of scale, and this is referred to as vertical exaggeration. To calculate the vertical exaggeration (VE) of your transect, find the scale bar on your map. In **FIGURE 5**, the original map had a scale of 1 centimetre to 250 metres, and the transect in **FIGURE 5** had a scale of 1 centimetre to approximately 75 metres. The vertical exaggeration of 3.3 is found by dividing the horizontal scale by the vertical scale:

$$\begin{aligned} \text{VE} &= \frac{250}{75} \\ &= 3.3 \end{aligned}$$

The VE is reflected in the shape of the transect, which has sharp, high peaks that are not truly representative of the real world. Ideally, vertical exaggeration should not distort the natural shape too much.

### Step 11
Write a description of the transect. Be sure to:
- describe the key aspects of slope, landform, vegetation and land use
- identify interconnections between key features
- make note of any anomalies.

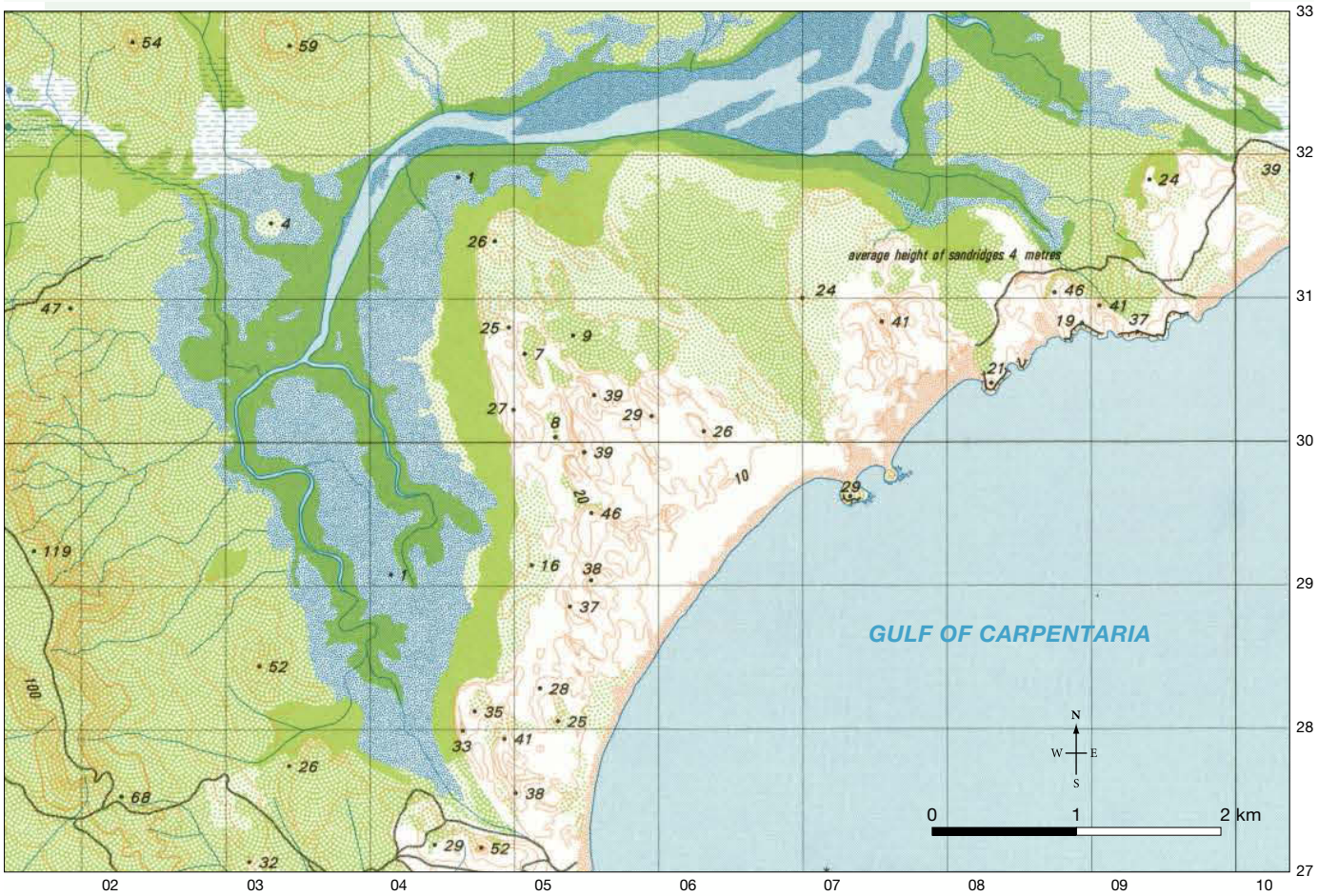
**on** Resources

| | |
|---|---|
| **Digital doc** | Topographic map of Dalywoi Bay, Northern Territory (doc-11565) |
| **Video eLesson** | Constructing and describing a transect on a topographic map (eles-1727) |
| **Interactivity** | Constructing and describing a transect on a topographic map (int-3345) |

## 10.8.3 Let me do it
Complete the following activities to practise this skill.

### 10.8 ACTIVITIES
1. Using the topographic map for Dalywoi Bay provided (you can download a copy of the map from the Resources tab, if you wish), construct a transect from grid reference 017310 to grid reference 080295. Use the categories of landforms, vegetation and land use. Also calculate the vertical exaggeration of your transect. Once complete, write a description of the transect. Use the checklist to ensure you cover all aspects of the task.
2. Based on what you have learned in this SkillBuilder, apply your skills to answer the following questions.
   (a) List the biomes found on your transect.
   (b) Using the ***scale***, mark the horizontal distance on your transect where the land is affected by water.
   (c) How is the vegetation ***interconnected*** with the shape of the land?
   (d) How does the landform affect human activities?
   (e) If you were to build a house on the land shown in your transect, where would you choose to build, and why?

**FIGURE 6** Dalywoi Bay, Northern Territory




***Source:*** The Australian Army © Commonwealth of Australia 1999

**Key**

| | |
|---|---|
| Vehicle track; Road bridge; Stock grid | Swamp; Swamp definite boundary |
| Mine; Building; Ruin; Church; Windpump; Yard | Perennial lake; Watercourse |
| Fence; Horizontal control point; Spot elevation | Intermittent lake; Watercourse |
| Contour with value and cliff; Pinnacle | Mainly dry lake; Watercourse |
| Depression contours; Sand; Distorted surface | Tank or Small dam; Waterhole |
| Levee; Sandbridge | Saline coastal flat; Intertidal flat; Rock bare or awash |
| Razorback ridgeline; fault line | Lighthouse; Intertidal ledge or reef |
| Vegetation; Dense, medium, scattered; Cleared lane | Exposed wreck; Submerged wreck |
| Rain forest; Pine | Submerged reef; Submerged rock |
| Orchard or vineyard; Line if trees or windbreak | Indefinite watercourse; Mangrove swamp |
| Watercourse; Area subject to inundation | |

## Checklist

In drawing a transect, I have:

- drawn in pencil
- ruled the axes
- labelled the axes
- used small dots

- drawn with a smooth curve
- identified key aspects such as slope, landform, vegetation and land use
- included a title.

In describing a transect, I have:

- described the key aspects of slope, landforms, vegetation and land use
- identified ***interconnections*** between the key features
- noted any anomalies.

# 10.11 Thinking Big research project: Our world of biomes AVD

## Scenario

Biomes are not all the same. Across the Earth we recognise four distinct terrestrial biomes: forests, deserts, grasslands and tundra. In addition, there are also different aquatic biomes: freshwater and marine (saltwater). Within each of these biomes there are also distinct variations — the list seems to be endless! The Department of the Environment is keen to produce a display that explains these differences and the various influences on biome development.

## Task

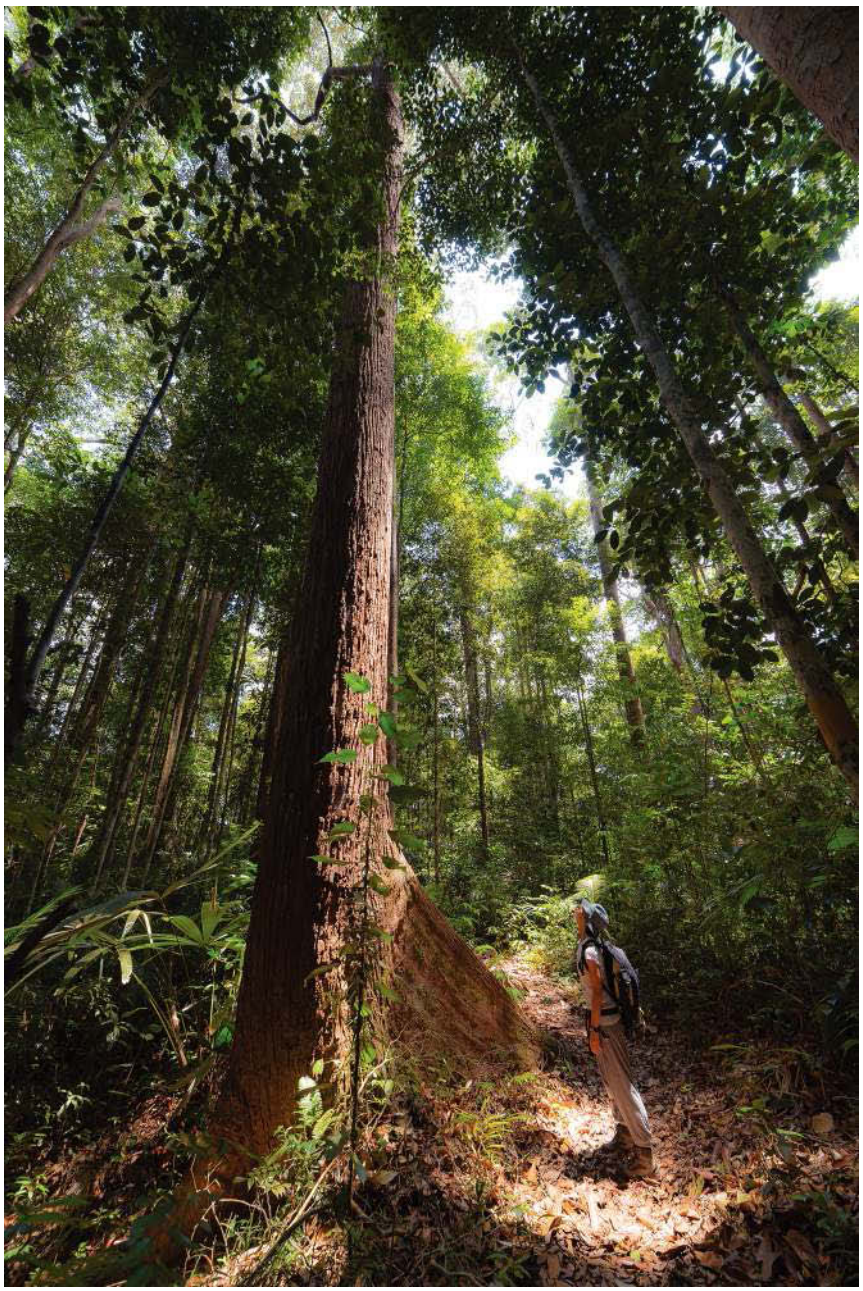
You have been commissioned by the Department of the Environment to carry out an in-depth study of biomes, their characteristics and the factors that influence their development and the variations that exist within them. You will create an engaging annotated visual display (AVD) to showcase your findings.

Your display must be visually appealing and should include:

- appropriate pictures
- maps (showing the location of different biomes)
- diagrams to help explain the variations within biomes
- written information about biome formation and characteristics.

## Process

- Open the ProjectsPLUS application in the Resources for this topic. Click on the **Start new project** button to enter the project due date and set up your project group if you wish. You may work individually or in pairs, depending on your teacher's preference. Save your settings and the project will be launched.
- Start by revisiting the content in this topic to refresh your knowledge about the various biomes, then navigate to the **Research forum**, where you will find starter topics loaded to guide your research. You can add further topics to the Research forum if you wish. In the **Media centre** you will find an assessment rubric and some helpful weblinks that will provide a starting point for your research.
- As you conduct your research, remember to record details of your sources so you can create a bibliography to submit with your AVD. Add your research notes and source details to the relevant topic pages in the Research forum. You can print out the **Research report** in the Research forum to easily view all the information you have gathered, if you wish.



- Once you have completed your research, create your AVD. Use headings to help organise and break up the information. Add images, diagrams and maps where appropriate and ensure your text information is clear and concise. Remember to give your AVD a suitable title and to complete your bibliography.
- Review your work thoroughly, checking for correct spelling and grammar. Ensure that all maps have BOLTSS applied and images have captions. Once you are happy with your work, submit your AVD and bibliography to your teacher for assessment.

## Resources

**ProjectsPLUS** Thinking Big research project: Our world of biomes AVD (pro-0188)

# 10.12 Review

## 10.12.1 Key knowledge summary

### 10.2 Defining biomes

- Biomes are sometimes referred to as ecosystems.
- Biomes share similar climate and life forms.
- The Earth has five major biomes: forest, desert, grassland, tundra and aquatic. There are variations within each biome.

### 10.4 The characteristics of biomes

- Biomes are controlled by climate.
- Climate is influenced by latitude, landform, ocean currents and air movement.
- Climate determines the type of soil that develops and the life forms that a biome can support.
- The characteristics of soil are determined by temperature, rainfall and the rocks and minerals that make up the underlying bedrock.
- There are more microbes in a teaspoon of soil than there are people on Earth.

### 10.5 Australia's major biomes

- All the major biome types, with the exception of tundra, are found in Australia.
- Before European settlement Australia's biomes were shaped by natural processes and Aboriginal burning practices.
- After European settlement, significant changes have been made to Australia's biomes.

### 10.6 The grassland biome

- All the major food grains that we use today have their origins in the grassland biome.
- Grasslands can occur naturally or as a result of human activity.
- Forty-two per cent of the planet was once covered in grasslands; today they make up just 25 per cent of the Earth's land area.
- Grassland soils are generally deep and fertile, which makes them ideal for agricultural production.

### 10.7 Coastal wetlands

- Wetlands are saturated either permanently or seasonally.
- They are often tidal and provide important breeding grounds and habitats for both marine and freshwater species.
- Wetlands are a natural filtering system and regulate river flow.

### 10.9 Coral reefs

- Coral reefs require specific temperature and sea conditions to develop and survive.
- The top part of the reef is alive; the reef comprises living coral polyps growing on the remains of dead coral.
- Not only are they an important tourism resource, but they also have compounds that are used in painkillers and other medicines.
- The reef ecosystem is fragile and easily damaged.

### 10.10 Managing and protecting biomes

- Research facilities such as Biosphere 2 help to demonstrate the fragile nature of biomes; they are easily damaged and difficult to re-create.
- Landcare projects are developed by local communities in an effort to restore and protect biomes from further damage.
- Indigenous land management practices are now being used in an effort to restore and protect biomes.

## 10.12.2 Reflection

Complete the following to reflect on your learning.

### 10.12 ACTIVITIES

Revisit the inquiry question posed in the Overview:

**What on Earth are biomes? Are they just another part of the landscape or do we need them to survive?**

1. Now that you have completed this topic, what is your view on the question? Discuss with a partner. Has your learning in this topic changed your view? If so, how?
2. Write a paragraph in response to the inquiry question, outlining your views.

### on Resources

**eWorkbook** Reflection (doc-31714)
Crossword (doc-31715)

**Interactivity** All the world is a biome crossword (int-7644)

### KEY TERMS

**biodiversity** the variety of plant and animal life within an area
**canal housing estate** a housing estate built upon a system of waterways, often as the result of draining wetland areas. All properties have water access.
**clear-felling** the removal of all trees in an area
**coral polyp** a tube-shaped marine animal that lives in a colony and produces a stony skeleton. Polyps are the living part of a coral reef.
**deforestation** clearing forests to make way for housing or agricultural development
**land degradation** deterioration in the quality of land resources caused by excessive exploitation
**latitude** the angular distance north or south from the equator of a point on the Earth's surface
**leaching** the process by which water runs through soil, dissolving minerals and carrying them into the subsoil
**leeward** describes the area behind a mountain range, away from the moist prevailing winds
**logging** large-scale cutting down, processing and removal of trees from an area
**organic matter** decomposing remains of plant or animal matter
**pneumatophores** exposed root system of mangroves, which enables them to take in air when the tide is in
**prairie** native grassland of North America
**precipitation** the forms in which moisture is returned to the Earth from the sky, most commonly in the form of rain, hail, sleet and snow
**rain shadow** the dry area on the leeward side of a mountain range
**salinity** the presence of salt on the surface of the land, in soil or rocks, or dissolved in rivers and groundwater
**treeline** the edge of the area in which trees are able to grow
**tundra** the area lying beyond the treeline in polar or alpine regions
**urbanisation** the growth and spread of cities
**windward** describes the side of the mountain that faces the prevailing winds

# 11 Feeding the world

## 11.1 Overview

Everyone needs to eat. How does the world produce all the food it needs, and is there a better way?

### 11.1.1 Introduction

Food is a fundamental part of every person's life. For many people, what to eat each day can be a constant thought and for some, a constant worry. What are the foods we eat, and why do these vary across the globe? How do we modify biomes to produce the food we need, and how can we build on our understanding of food sourcing and production strategies to feed the world's future generations?

**on Resources**

**eWorkbook** Customisable worksheets for this topic

**Video eLesson** A plate full of biomes (eles-1718)

**LEARNING SEQUENCE**


**11.1** Overview
**11.2** What does the world eat?
**11.3** How can we feed the world?
**11.4** Modifying biomes for agriculture
**11.5** Food production in Australia
**11.6** **SkillBuilder:** Describing patterns and correlations on a topographic map online only
**11.7** Indigenous Australians' food security over time
**11.8** Rice — an important food crop
**11.9** Cacao — a vital cash crop
**11.10** **SkillBuilder:** Constructing ternary graphs online only
**11.11** **Thinking Big research project:** Subsistence living gap-year diary online only
**11.12** **Review** online only


To access a pre-test and starter questions and receive immediate, **corrective feedback** and **sample responses** to every question, select your learnON format at www.jacplus.com.au.

# 11.2 What does the world eat?

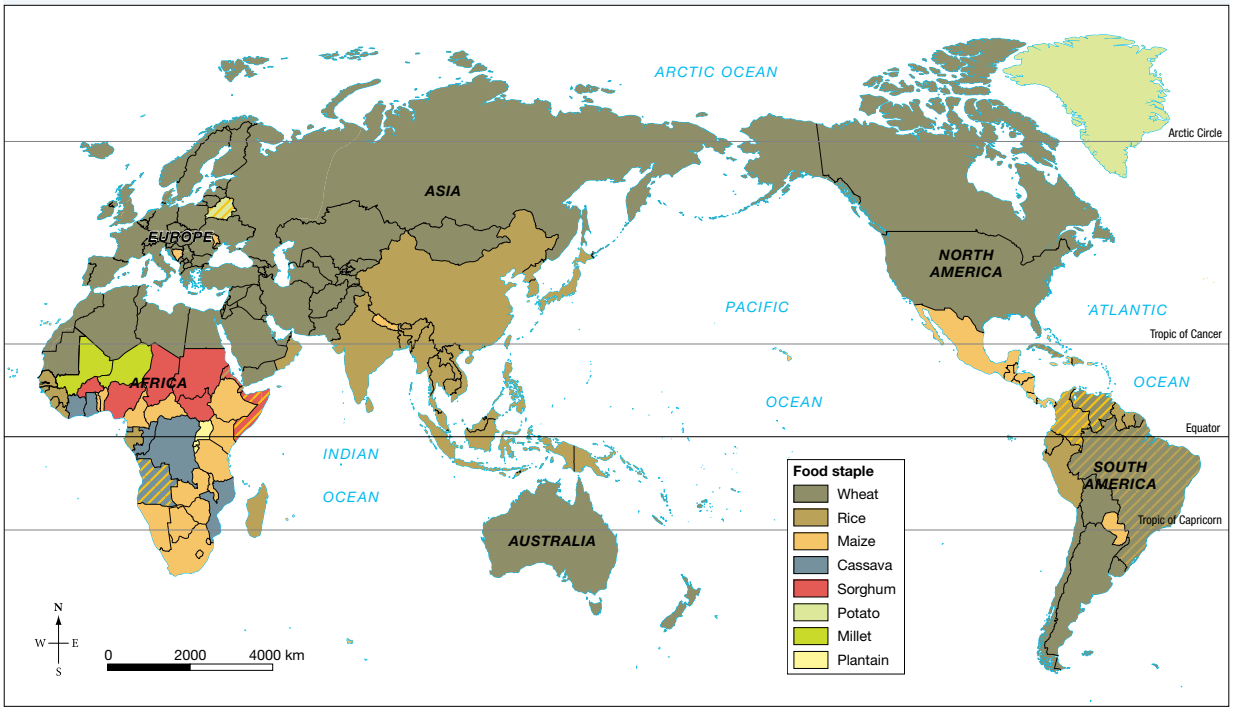
## 11.2.1 The major food staples

Staple foods are those that are eaten regularly and in such quantities that they constitute a dominant portion of a diet. They form part of the normal, everyday meals of the people living in a particular place or country. Staple foods vary from place to place, but are typically inexpensive or readily available. The staple food of an area is normally interconnected to the climate of that area and the type of land.

Most staple foods are cereals, such as wheat, barley, rye, oats, maize (corn) and rice; or root vegetables, such as potatoes, yams, taro and cassava. Rice, maize and wheat provide 60 per cent of the world's food energy intake; 4 billion people rely on them as their staple food.

Other staple foods include legumes, such as soya beans and sago; fruits, such as breadfruit and plantains (a type of banana); and fish.

**FIGURE 1** Staple foods around the world




***Source:*** Data from FAO

## 11.2.2 Wheat, maize and fish

### Wheat

Wheat is a cereal grain that is cultivated across the world. In 2019, the total world production of wheat was nearly 735 million tons, making it the second most produced cereal after maize (1.1 billion tons) and above rice (496 million tons). World trade in wheat is greater than for all other crops combined.

Wheat was one of the first crops to be easily cultivated on a large scale, with the added advantage of yielding a harvest that could be stored for a long time. Wheat covers more land area than any other commercial crop and is the most important staple food for humans.

**FIGURE 2** Wheat is used in a wide variety of foods such as breads, biscuits, cakes, breakfast cereals and pasta.

## Maize

Maize, or corn, was commonly grown throughout the Americas in the late fifteenth and early sixteenth centuries. Explorers and traders carried maize back to Europe and introduced it to other countries. It then spread to the rest of the world, thanks to its ability to grow in different environments. Sugar-rich varieties called sweet corn are usually grown for human consumption, while field corn varieties are used for animal feed and **biofuel**. Maize is the most widely grown grain crop in the Americas, covering 70–100 million acres of farmland in the US alone, which accounts for nearly 40 per cent of all maize grown in the world.

**TABLE 1** Top 10 maize producers, 2019

| Country | Production (million tonnes) |
|---|---|
| United States | 377.5 |
| China | 224.9 |
| Brazil | 83.0 |
| India | 42.3 |
| Argentina | 40.0 |
| Ukraine | 39.2 |
| Mexico | 32.6 |
| Indonesia | 20.8 |
| France | 17.1 |
| South Africa | 15.5 |

***Source:*** www.thedailyrecords.com

**FIGURE 3** Corn cobs drying outside in Serbia

## Fish

Fish is a staple food in many societies. The oceans provide an irreplaceable, renewable source of food and nutrition essential to good health. In general, people in developing countries, especially those in coastal areas, are much more dependent on fish as a staple food than those in the developed world. About 3 billion people rely on fish as their primary source of animal protein.

**FIGURE 4** A fish haul in Bali, Indonesia

Explore more with myWorldAtlas

Deepen your understanding of this topic with related case studies and questions.
- Investigating Australian Curriculum topics > Year 9: Biomes and food security > **Wheat**

### 11.2 EXERCISES

**Geographical skills key: GS1** Remembering and understanding **GS2** Describing and explaining **GS3** Comparing and contrasting **GS4** Classifying, organising, constructing **GS5** Examining, analysing, interpreting **GS6** Evaluating, predicting, proposing

#### 11.2 Exercise 1: Check your understanding

1. **GS1** Make a list of the main staple foods of the world and the ***places*** (continents) where they are grown.
2. **GS1** What is biofuel?
3. **GS2** Explain why plants, rather than animals, dominate as the major staple foods of the world.
4. **GS2** Australia is a major exporter of wheat. Why is Australia able to produce such a surplus?
5. **GS2** Why do people in developing countries rely heavily on fish as their primary source of animal protein?

#### 11.2 Exercise 2: Apply your understanding

1. **GS6** With the increase in world population and greater pressure on fish stocks, what can be done to sustain fish stocks in oceans and lakes?
2. **GS6** Maize is currently used as feed for animals, as biofuel, and as food for humans. Why might this become an ***unsustainable environmental*** practice in the future?
3. **GS6** Explain why, even though fish is a staple food for many people, it can't be a staple food for everyone.
4. **GS6** Referring to **TABLE 1**, why do you think countries other than those in the Americas are producing large quantities of maize?
5. **GS6** How can regional climates influence the growing of staple foods?

Try these questions in learnON for instant, corrective feedback. Go to www.jacplus.com.au.

# 11.3 How can we feed the world?

## 11.3.1 Challenges to feeding the global population

At the beginning of the twentieth century, the entire world population was less than 2 billion people. The current world population is more than 7.7 billion. Earth's population is projected to rise to 9 billion people by 2050, and we all need food. What can we do to ensure there is enough food for everyone?

**FIGURE 1** shows that crops occupy half the available agricultural land space. Almost all future population growth will occur in the developing world. This increased population, combined with higher standards of living in developing countries, will create enormous strains on land, water, energy and other natural resources.

There is currently about one-sixth of a hectare of **arable** land **per capita** in East and South Asia. With population growth, and almost no additional land available for agricultural expansion, arable land per capita will continue to decline.

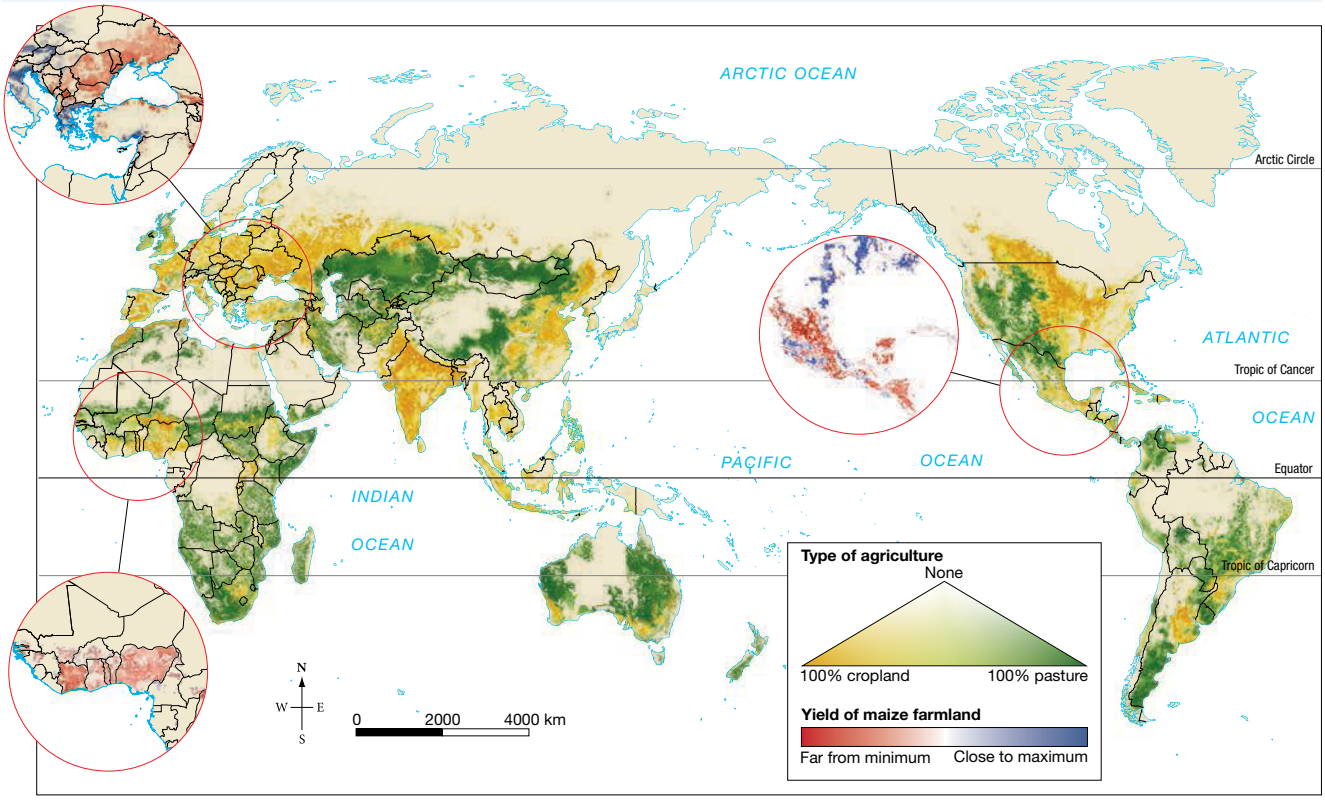
## 11.3.2 Food production increases

Agricultural yields vary widely around the world depending on climate, management practices and the types of crops grown. Globally, 15 million square kilometres of land are used for growing crops — altogether, that's about the size of South America. Approximately 32 million square kilometres of land around the world are used for pasture — an area about the size of Africa. Across the Earth, most land that is suitable for agriculture is already used for that purpose and, in the past 50 years, we have increased our food production.

According to the UN Food and Agriculture Organization (FAO), the three main factors that have affected recent increases in world crop food production are:

- increased cropland and rangeland area
- increased yield per unit area
- greater cropping intensity.

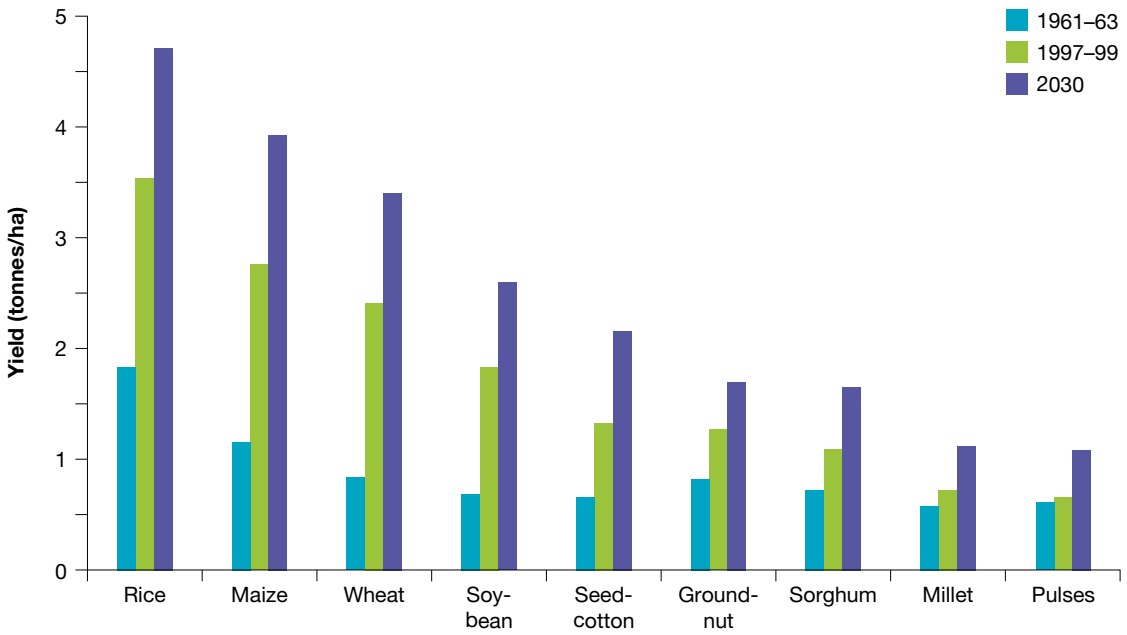
**FIGURE 1** World distribution of cropland, pasture and maize. More maize could be grown if improvements were made to seeds, irrigation, fertiliser and markets.




***Source:*** Spatial Vision

FAO projections suggest that cereal demand will increase by almost 50 per cent by 2050. This can either be obtained by increasing yields, expanding cropland through conversion of natural habitats, or growing crops more efficiently. **FIGURE 2** shows the growth in crop yields in developing countries from 1961 to what is predicted for 2030. Rice, maize and wheat have had significant increases in yield.

**FIGURE 2** Crop yields in developing countries, 1961–2030



Agricultural **innovations** have also changed and increased global food production. They have boosted crop yields through advanced seed genetics, agronomic practices (scientific production of food plants) and product innovations that help farmers maximise productivity and quality (see **FIGURE 3**). In this way, the nutritional content of crops can be increased.

**FIGURE 3** Farmers in a village in Kenya use a laptop to examine information on plant diseases at a plant health clinic. They can also consult a plant pathologist and show them samples of their crops.

## 11.3.3 Increasing our food production

World food production has grown substantially over the past century. Increased fertiliser application and more water usage through irrigation have been responsible for over 70 per cent of crop yield increases. The Second Agricultural Revolution in developed countries after World War II and the **Green Revolution** in developing countries in the mid 1960s transformed agricultural practices and raised crop yields dramatically.

Since the 1960s agriculture has been more productive, with world per capita agricultural production increasing by 25 per cent in response to a doubling of the world population.

It is possible to get even more food out of the land we are already using. For example, **FIGURE 1** shows the places where maize yields could increase and become more **sustainable** by improving nutrient and water management, seed types and markets.

### Environmental factors

In the past, growth in food production resulted mainly from increased crop yields per unit of land and to a lesser extent from expansion of cropland. From the early 1960s until 2014, total world cropland increased by only around 10 per cent, but total agricultural production grew by 60 per cent. Increases in yields of crops, such as sweet potatoes and cereals, were brought about by a combination of:

- increased agricultural inputs
- more intensive use of land
- the spread of improved crop varieties.

In some places, such as parts of Africa and South-East Asia, increases in fisheries (areas where boats are used to catch fish) and expansion of cropland areas were the main reasons for the increase in food supply. In addition, cattle herds became larger. In many regions — such as in the savanna grasslands of Africa, the Andes, and the mountains of Central Asia — livestock is a primary factor in food security today. Fertilisers have increased agricultural outputs and enabled more intensive use of the land. The global fertiliser use of 208 million tonnes in 2020 represents a 30 per cent increase since 2008.

**TABLE 1** Fertiliser use, 1959–60, 1989–90 and 2020

| | Fertiliser use | | | Annual growth | |
|---|---|---|---|---|---|
| **Region/nutrient** | **1959–60** | **1989–90** | **2020** | **1960–90** | **1990–2020** |
| | (million nutrient tonnes) | | | (per cent) | |
| Developed countries | 24.7 | 81.3 | 86.4 | 4.0 | 0.2 |
| Developing countries | 2.7 | 62.3 | 121.6 | 10.5 | 2.2 |
| East Asia | 1.2 | 31.4 | 55.7 | 10.9 | 1.9 |
| South Asia | 0.4 | 14.8 | 33.8 | 12.0 | 2.8 |
| West Asia/North Africa | 0.3 | 6.7 | 11.7 | 10.4 | 1.9 |
| Latin America | 0.7 | 8.2 | 16.2 | 8.2 | 2.3 |
| Sub-Saharan Africa | 0.1 | 1.2 | 4.2 | 8.3 | 3.3 |
| World total | 27.4 | 143.6 | 208.0 | 5.5 | 1.2 |
| Nitrogen | 9.5 | 79.2 | 115.3 | 7.1 | 1.3 |
| Phosphate | 9.7 | 37.5 | 56.0 | 4.5 | 1.3 |
| Potash | 8.1 | 26.9 | 36.7 | 4.0 | 1.0 |

***Source:*** Bumb, B. and C. Baanante. 1996. World Trends in Fertilizer Use and Projections to 2020. Policy Brief 38, Table 1. Washington, DC: International Food Policy Research Institute http://www.ifpri.org/publication/world-trends-fertilizer-use-and-projections-2020

## Trade factors and economic factors

From the 1960s onwards, there has been significant growth of world trade in food and agriculture. Food and fertiliser imports by developing countries have grown, reducing the threat of famine in those countries.

**TABLE 2** Percentage share of crop production increases, 1961–2030

| | Arable land expansion (1) | | Increases in cropping intensity (2) | | Harvested land expansion (1+2) | | Yield increases | |
|---|---|---|---|---|---|---|---|---|
| | **1961–99** | **1997/99 –2030** | **1961–99** | **1997/99 –2030** | **1961–99** | **1997/99 –2030** | **1961–99** | **1997/99 –2030** |
| All developing countries | 23 | 21 | 6 | 12 | 29 | 33 | 71 | 67 |
| South Asia | 6 | 6 | 14 | 13 | 20 | 19 | 80 | 81 |
| East Asia | 26 | 5 | –5 | 14 | 21 | 19 | 79 | 81 |
| East/North Africa | 14 | 13 | 14 | 19 | 28 | 32 | 72 | 68 |
| Latin America and the Caribbean | 46 | 33 | –1 | 21 | 45 | 54 | 55 | 46 |
| Sub-Saharan Africa | 35 | 27 | 31 | 12 | 66 | 39 | 34 | 61 |
| World | 15 | | 7 | | 22 | | 78 | |

## 11.3.4 The impact of the Green Revolution

The Green Revolution was a result of the development and planting of new **hybrids** of rice and wheat, which led to greatly increased yields. There have been a number of green revolutions since the 1950s, including those in:

- the United States, Europe and Australia in the 1950s and 1960s
- New Zealand, Mexico and many Asian countries in the late 1960s, 1970s and 1980s.

The Green Revolution saw a rapid increase in the output of cereal crops — the main source of calories in developing countries. Farmers in Asia and Latin America widely adopted high-yielding varieties. Governments, especially those in Asia, introduced policies that supported agricultural development. In the 2000s, cereal harvests in developing countries were triple those of 40 years earlier, while the population was only a little over twice as large.

Planting of high-yield crop varieties coincided with expanded irrigation areas and fertiliser use, leading to significant increases in cereal output and calorie availability.

**FIGURE 4** Applying fertiliser to crops in the Punjab, India

### 11.3 INQUIRY ACTIVITIES

1. **FIGURE 1** shows where more crops could be grown. Investigate how Mexico or a country in West Africa or Eastern Europe could improve the ***sustainability*** of its agriculture. Create a mind map or flow chart diagram to represent your findings. **Classifying, organising, constructing**
2. Research the background of the Green Revolution — why it occurred, the key ***places*** involved and the ***changes*** that resulted. Create a dot-point summary of your findings. **Examining, analysing, interpreting**
3. Some scientists are suggesting that there will be a new Green Revolution. Investigate current thinking and predict the potential ***scale*** of this possible agricultural ***change***. **Examining, analysing, interpreting Evaluating, predicting, proposing**

### 11.3 EXERCISES

**Geographical skills key: GS1** Remembering and understanding **GS2** Describing and explaining **GS3** Comparing and contrasting **GS4** Classifying, organising, constructing **GS5** Examining, analysing, interpreting **GS6** Evaluating, predicting, proposing

#### 11.3 Exercise 1: Check your understanding

1. **GS1** Refer to **FIGURE 1** and describe the distribution of ***places*** in the world with pasture and grasslands.
2. **GS1** How could crop production be increased in ***places*** such as Eastern Europe or Western Africa?
3. **GS2** Explain the impact of an increasing population on world ***environments***.
4. **GS2** Explain why agricultural innovations can ***change*** food production.
5. **GS1** In the past, what were the two reasons for the increase in food production?
6. **GS1** Refer to **TABLE 1**. Describe the trends in the use of fertilisers from 1960 to 2020.
7. **GS2** Explain the significance of trade in food production.
8. **GS2** Discuss the three reasons for improved crop production.

#### 11.3 Exercise 2: Apply your understanding

1. **GS6** Consider **FIGURE 1**. Suggest reasons why some regions are much higher crop producers than others.
2. **GS2** Were the ***changes*** brought about during the Green Revolution successful? Explain.
3. **GS6** With reference to specific ***places***, suggest how increasing population densities might influence future crop production.

4. **GS6 FIGURE 1** refers to the potential increase in maize crop yields. Suggest how this could be of benefit to a future world population.
5. **GS6** Would food production be secure if we grew fewer crops better? Explain your view.
6. **GS5 FIGURE 2** refers to crop yields in developing countries over time. Suggest why rice, maize and wheat have the greatest increases in yields. Would these increases be similar in the developed regions of the world? Explain your answer.

Try these questions in learnON for instant, corrective feedback. Go to www.jacplus.com.au.

# 11.4 Modifying biomes for agriculture

## 11.4.1 Using technology for food production

In the twentieth century, rapid global population growth gave rise to serious concerns about the ability of agriculture to feed humanity. However, newer processes and technology produced additional gains in food production.

Across the world, people have modified biomes to produce food through the application of innovative technologies. In general, the focus of agriculture is to modify water, climate, soils, land and crops.

## 11.4.2 How do we modify climate?

Irrigation is the artificial application of water to the land or soil to supplement natural rainfall. It helps to increase agricultural production in dry areas and during periods of inadequate rainfall. (See sections 11.5.3 and 11.8.3 for examples of irrigation farming.)

In flood irrigation, water is applied and distributed over the soil surface by gravity. It is by far the most common form of irrigation throughout the world, and has been practised in many areas, virtually unchanged, for thousands of years.

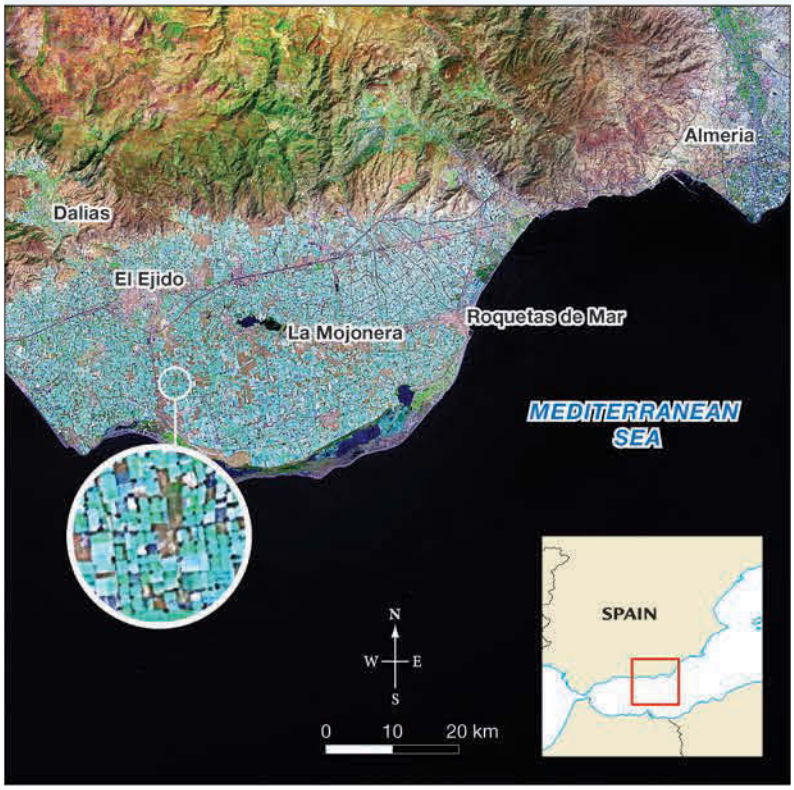
Modern irrigation methods include computer-controlled drip systems that deliver precise amounts of water to a plant's root zone.

Another way of modifying climate is with the use of greenhouses (or glasshouses), which are used for growing flowers, vegetables, fruits and tobacco (see **FIGURE 1**). Greenhouses provide an artificial biotic environment to protect crops from heat and cold and to keep out pests. Light and temperature control allows greenhouses to turn non-arable land into arable land, thereby improving food production in marginal environments. Greenhouses allow crops to be grown throughout the year, so they are especially important in high-latitude countries.

**FIGURE 1** Vegetables growing inside a greenhouse

The largest expanse of plastic greenhouses in the world is around the city of Almeria, in south-east Spain (see **FIGURE 2**). Here, since the 1970s, semi-arid pasture land has been replaced by greenhouse **horticulture**. Today, Almeria has become Europe's market garden. In order to grow food all year round, the region has about 26 000 hectares of greenhouses.

**FIGURE 2** False-colour satellite image of greenhouses in the Almeria region




***Source:*** American Geophysical Union

## 11.4.3 How do we modify soils?

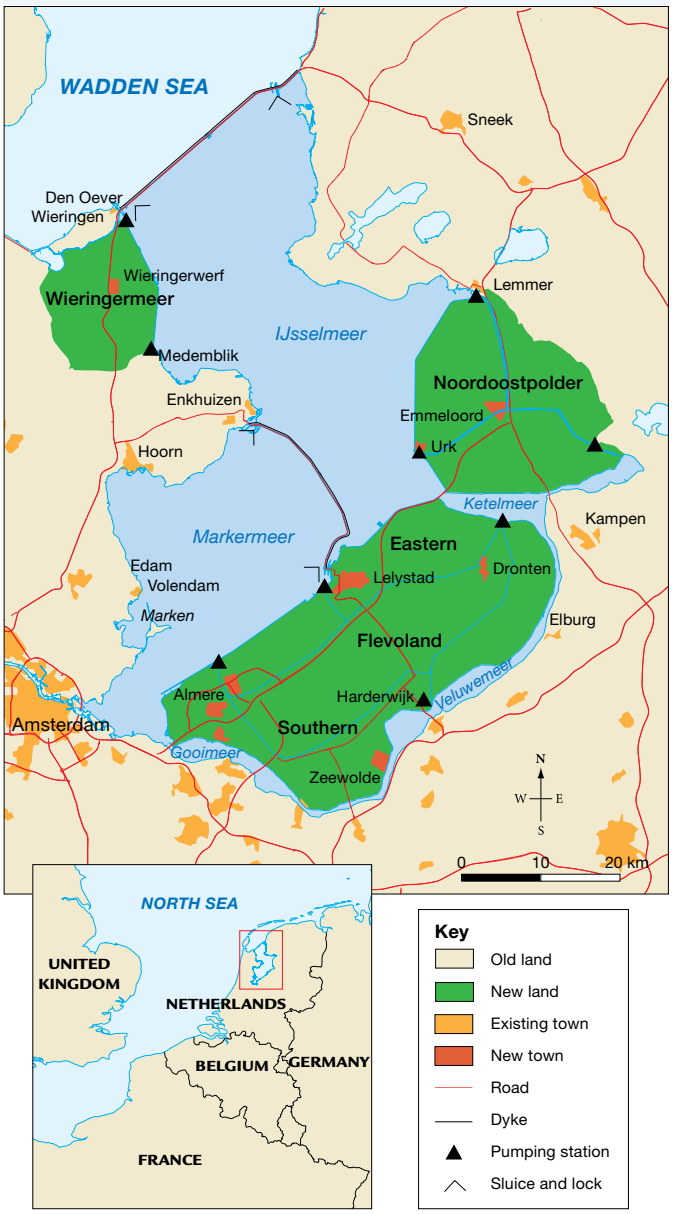
Fertilisers are organic or inorganic materials that are added to soils to supply one or more essential plant nutrients. As discussed in subtopic 11.3, fertilisers play a key role in producing high-yield harvests; it is estimated that about 40 to 60 per cent of crop yields are due to fertiliser use, and that by adding fertiliser to crops, food for almost half the people on Earth is produced.

## 11.4.4 How do we modify landscapes?

People change landscapes in order to produce food. **Undulating** land can be flattened, steep slopes terraced, or stepped, and wetlands drained. Land reclamation is the process of creating new land from seas, rivers or lakes. In addition, it can involve turning previously unfarmed land, or degraded land, into arable land by fixing major deficiencies in the soil's structure, drainage or fertility.

In the Netherlands, the Dutch have tackled huge reclamation schemes to add land area to their country. One such scheme is the IJsselmeer (see **FIGURE 3**), where four large areas (*polders*) have been reclaimed from the sea, adding an extra 1650 square kilometres for cultivation. This has increased the food supply in the Netherlands and created an overspill town for Amsterdam.

**FIGURE 3** Land reclamation in the Netherlands




***Source:*** Spatial Vision

## on Resources

**Interactivity** Changing nature (int-3321)

## 11.4 EXERCISES

**Geographical skills key: GS1** Remembering and understanding **GS2** Describing and explaining **GS3** Comparing and contrasting **GS4** Classifying, organising, constructing **GS5** Examining, analysing, interpreting **GS6** Evaluating, predicting, proposing

### 11.4 Exercise 1: Check your understanding

1. **GS1** To improve food production, what aspects of biomes are modified?
2. **GS1** What is the most common form of irrigation in the world?
3. **GS1** What ***changes*** to the ***environment*** are made by land reclamation?
4. **GS1** What is greenhouse horticulture?
5. **GS2** How do fertilisers improve crop yields?

### 11.4 Exercise 2: Apply your understanding

1. **GS6** Refer to **FIGURES 1** and **2**. How do greenhouses modify ***spaces*** and ***places*** on the Earth's surface?
2. **GS2** How is land that is reclaimed from the sea, such as the Netherlands' *polders*, made productive for farming and food production?
3. **GS2** Refer to **FIGURE 3**. Use the ***scale*** to calculate the approximate area of new land created in Flevoland.
4. **GS6** Study **FIGURE 3**. What might be the purpose of the pumping stations?
5. **GS2** People can modify landscapes in order to produce food. What can be done with:
   (a) undulating land
   (b) steep slopes
   (c) wetlands?

Try these questions in learnON for instant, corrective feedback. Go to www.jacplus.com.au.

# 11.5 Food production in Australia

## 11.5.1 The distribution of different agriculture

Modern food production in Australia can be described as commercial agricultural practices that produce food for local and global markets. Farms may produce a single crop, such as sugar cane, or they may be mixed farms that produce cereal grains and sheep for wool, for example. Farms today use sophisticated technology, and in many cases are managed by large corporations with an **agribusiness** approach.

There is a wide range of agriculture types in Australia, as shown in **FIGURE 1**. They occupy space across all biomes found in Australia, from the tropics to the temperate zones.

The location of farms in Australia shows that there is a change in the pattern of farming types, from the well-watered urban coastal regions towards the arid interior. Because much of Australia's inland rainfall is less than 250 millimetres, farm types in these places are limited to open-range cattle and sheep farming.

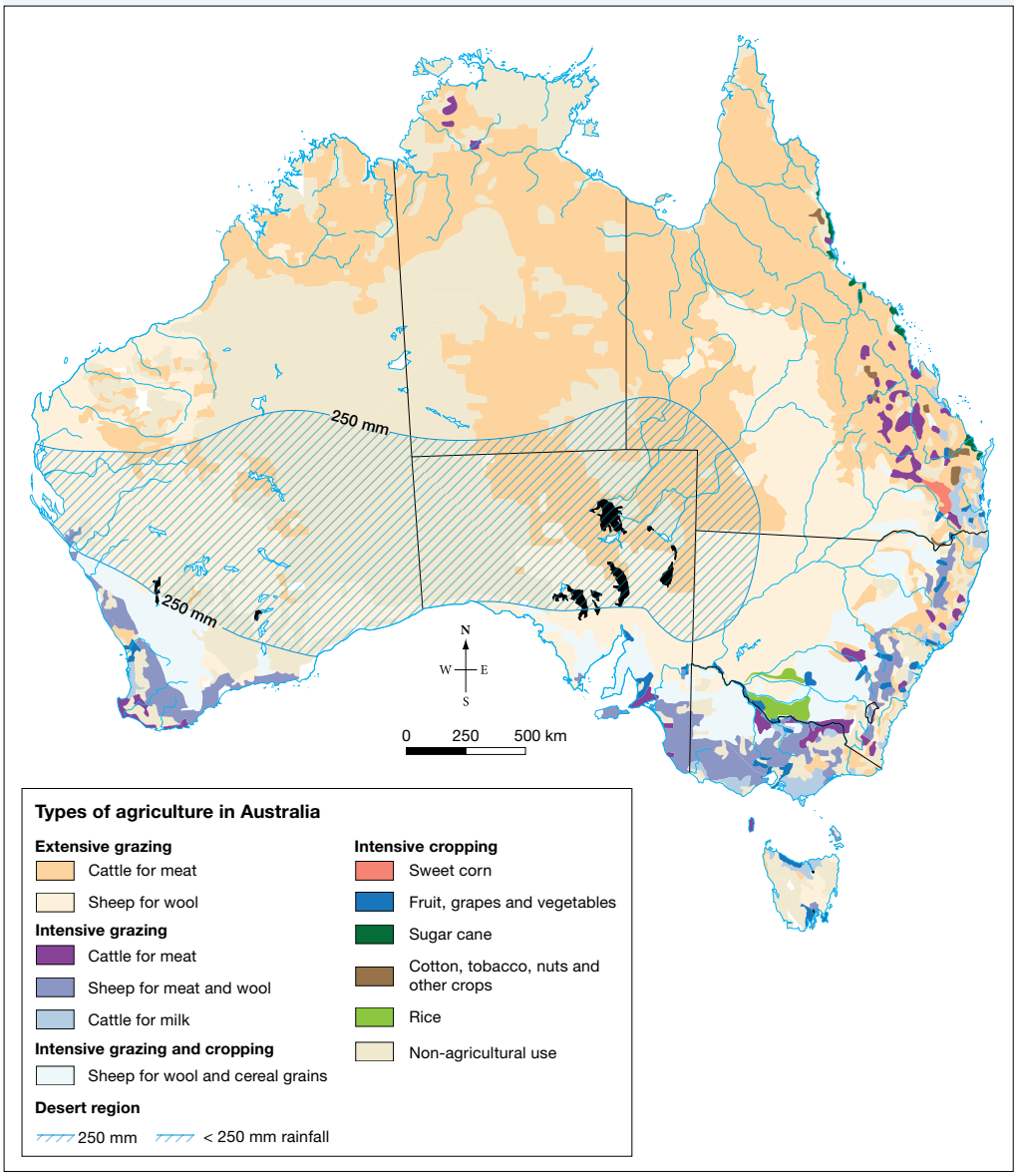
The pattern of land use and transition of farm types is shown in **FIGURE 2**. It illustrates that **intensive farms**, which produce perishables such as fruit and vegetables, are located on high-cost land close to urban markets. At the other extreme, the **extensive farms**, which manage cattle for meat and sheep for wool, are found on the less expensive lands distant from the market.

## 11.5.2 Types of farming in Australia

### Extensive farming of sheep or cattle

Sometimes known as livestock farming or grazing, sheep and cattle stations are found in semi-arid and desert grassland biomes, with rainfall of less than 250 millimetres. In 2017 Australia's 26 million cattle were predominantly farmed in Queensland, New South Wales and Victoria, while our 72 million sheep were found mainly in New South Wales, Victoria and Western Australia. Farms are generally large in scale, sometimes covering hundreds of square kilometres. These days, they have very few employees, and often use helicopters and motor vehicles for mustering. Meat and wool products go to both local and overseas markets for cash returns.

**FIGURE 1** Types of agriculture in Australia




***Source:*** © Commonwealth of Australia (Geoscience Australia) 2013

**FIGURE 2** Changes in agricultural land use

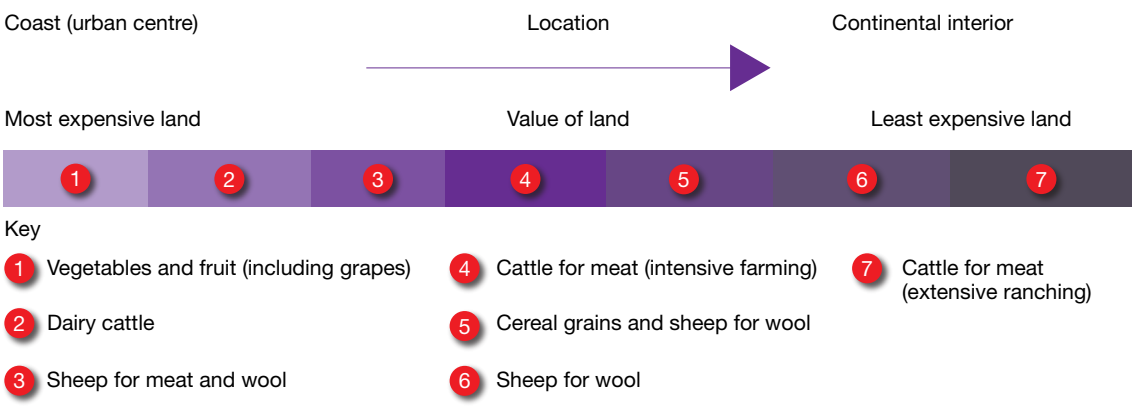


**FIGURE 3** Cattle mustering

## Wheat farms

About 30 000 farms in Australia grow wheat as a major crop, and the average farm size is 910 hectares, or just over 9 square kilometres. Wheat production in Australia for 2017 was 31 million tonnes. As in other areas of the world, extensive wheat farming is found in mid-latitude temperate climates that have warm summers and cool winters, and annual rainfall of approximately 500 millimetres. In Australia, these conditions occur away from the coast in the semi-arid zone. The biome associated with this form of food production is generally open grassland, **mallee** or savanna that has been cleared for the planting of crops.

Soils can be improved by the application of fertilisers, and crop yields increased by the use of disease-resistant, fast-growing seed varieties. Wheat farms are highly mechanised, using large machinery for ploughing, planting and harvesting. The farm produce, which can amount to 2 tonnes per hectare, is sold to large corporations in local and international markets.

**FIGURE 4** Harvesting wheat with a combine harvester

## Mixed farms

Mixed farms combine both grazing and cropping practices. They are located closer to markets in the wetter areas, and are generally small in scale, but operate in much the same way as cattle and sheep farms.

## Intensive farming

Intensive farms are close to urban centres, producing dairy, horticulture and market gardening crops. They produce milk, fruit, vegetables and flowers, all of which are perishable, sometimes bulky, and expensive to transport. The market gardens are capital- and labour-intensive, because the cost of land near the city is high, and many workers are required for harvesting.

**FIGURE 5** Strawberries are typically grown in market gardens.

## Plantation farming

This form of agriculture can often be found in warm, well-watered tropical places. Plantations produce a wide range of produce such as coffee, sugar cane, cocoa, bananas, rubber, tobacco and palm oil. Farms can be 50 hectares or more in size. Although many such farms in Australia are family owned, in other parts of the world they are often operated by large multinational companies. Biomes that contain plantations are mainly tropical forests or savanna, and require large-scale clearing to allow for farming. Cash returns are high, and markets are both local and global.

**FIGURE 6** A banana plantation near Carnarvon, Western Australia

## 11.5.3 CASE STUDY: Farming around Griffith, New South Wales

Modern-day food production relies heavily on technology to create ideal farming conditions. This may involve reshaping the land to allow for large agricultural machinery and for the even distribution and drainage of water. Uneven or unreliable rainfall can be supplemented by irrigation. As a result of such changes, large areas can become important farmland.

Griffith, located in the Western Riverina region of New South Wales, is an important agricultural and food-processing centre for the region, generating more than $2 billion dollars' worth of food in 2016–17. The Riverina region has a diverse agricultural sector. The most important commodities in the region in 2016–17 were wheat ($519 million), followed by cattle ($241 million) and canola ($218 million). Oranges and rice, which are irrigated crops, were valued at $150 million and $110 million respectively.

**FIGURE 7** Orange trees growing in an orchard near Griffith, New South Wales

The first European explorer to the area was John Oxley, who described the region as 'uninhabitable and useless to civilised man'. This was largely due to the lack of a suitable water supply. The construction of irrigation canals in 1906 established a reliable source of water that could be used in food production. The region has become an important food centre owing to the large-scale use of irrigation combined with suitable flat land, fertile soils and a mild climate.

To investigate the area in more detail, study the topographic map shown in **FIGURE 8**.

### on Resources

**Digital doc** Topographic map of Griffith (doc-11566)
**Google Earth** Griffith, New South Wales

**FIGURE 8** Topographic map extract, Griffith, New South Wales

***Source:*** Commonwealth of Australia (Geoscience Australia)

**SCALE 1 : 250 000**

0 1 2 3 4 5 6 7 8 9 10 15 20 25 30 35 40 kilometres

## 11.5 INQUIRY ACTIVITIES

1. Investigate which foods are grown closest to you. Create a map infographic showing locations and types of food grown.
   **Examining, analysing, interpreting**
   **Classifying, organising, constructing**
2. Collect information on the percentage of land used for the different forms of farming in Australia and present this data in a graph. Comment on the details shown in your graph.
   **Examining, analysing, interpreting**
   **Classifying, organising, constructing**
3. One plantation industry is palm oil production. It often has great impacts on tropical biomes; loss of habitat is one such impact. On a world map, locate major palm oil production areas and explain the implications of loss of habitat in those areas.
   **Examining, analysing, interpreting**
4. Various plantations in Queensland (such as pineapple, sugar cane and banana plantations) are associated with fertiliser run-off, which is affecting the Great Barrier Reef. Investigate this issue and find out what effects fertiliser has on this aquatic ***environment***.
   **Examining, analysing, interpreting**

## 11.5 EXERCISES

**Geographical skills key: GS1** Remembering and understanding **GS2** Describing and explaining **GS3** Comparing and contrasting **GS4** Classifying, organising, constructing **GS5** Examining, analysing, interpreting **GS6** Evaluating, predicting, proposing

### 11.5 Exercise 1: Check your understanding

1. **GS1** Which type of agricultural land use is closest to urban centres, and which is the furthest away?
2. **GS1** How does the ***environment*** in the centre of Australia affect farming types?
3. **GS1** What is the ***interconnection*** between climate and farm type in Australia? (*Hint:* Refer to a climate map in your atlas for ideas.)
4. **GS2** Explain why extensive, large-***scale*** cattle and sheep farms are typically located in remote and arid regions of Australia.
5. **GS2** Using the **FIGURE 1** map of agriculture types in Australia, describe and explain the location of:
   (a) wheat farms
   (b) dairy farms.
6. **GS4** Are orchards and vineyards an example of intensive or extensive farming? Explain.
7. **GS3** Compare the pattern of irrigation channels and buildings in AR3919 and AR4220 in **FIGURE 8**. Suggest a reason for the differences you can see.

### 11.5 Exercise 2: Apply your understanding

1. **GS6** What would be the impact of flood or drought on any of the commercial methods of food production?
2. **GS6** Predict the impact of the growth of Australian capital cities on the ***sustainability*** of surrounding market gardens.
3. **GS2** Why is much of Australia's food production available for export?
4. **GS6** It used to be said that Australia's economy 'rode on the sheep's back'. What do you think this means, and do you think it is still true today?
5. **GS6** What types of ***environment*** might have existed in the Griffith area when Oxley first arrived?
6. **GS5** Study **FIGURE 8**.
   (a) Identify and name a possible source of irrigation water on the map.
   (b) How is water moved around this area? (*Hint:* Follow the blue lines.)
   (c) Using the contour lines and spot heights as a guide, estimate the average elevation of the map area.
   (d) What is the importance of topography (the shape of the land) to irrigation?
   (e) What types of farming are found at the following ***places?***
      i. GR410195
      ii. GR413220
   (f) Approximately what percentage of the map area is irrigated?
   (g) Within Griffith there are many factories that process raw materials, such as rice mills, wineries and juice factories. What would be the advantages and disadvantages of locating processing factories close to growing areas?

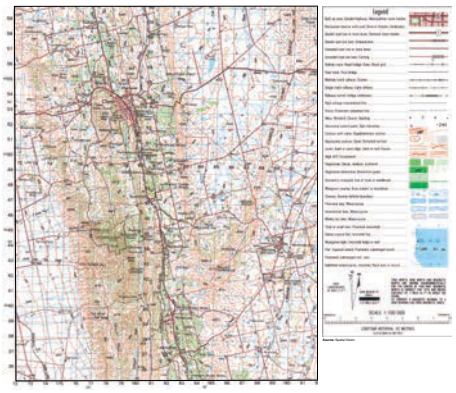
Try these questions in learnON for instant, corrective feedback. Go to www.jacplus.com.au.

# 11.6 SkillBuilder: Describing patterns and correlations on a topographic map

online only

### What are patterns and correlations on a topographic map?

A pattern is a sequence in which features are distributed or spread. A correlation shows how two or more features are interconnected — that is, the relationship between the features. Patterns and correlations in a topographic map can show us cause-and-effect connections.



**Select your learnON format to access:**

- an overview of the skill and its application in Geography (Tell me)
- a video and a step-by-step process to explain the skill (Show me)
- an activity and interactivity for you to practise the skill (Let me do it)
- questions to consolidate your understanding of the skill.

**on Resources**

**Video eLesson** Describing patterns and correlations on a topographic map (eles-1729)

**Interactivity** Describing patterns and correlations on a topographic map (int-3347)

# 11.7 Indigenous Australians' food security over time

## 11.7.1 Caring stewards of the land

The sustainable land and resource management practices of Aboriginal and Torres Strait Islander peoples carried out over many thousands of years ensured food security for the people and respect for the lands, waterways, lakes and marine environments that sustained them. At the time of European occupation in 1788, most Indigenous Australians were hunters and gatherers. However, some nations had abundant food supplies in their regions and were able to largely settle in one place. In all cases their deep knowledge and close association with the land allowed for sustainable management of the ecosystems and biomes in which they lived. The 'world view' that describes this sustainable lifestyle is called an 'earth-centred' approach. This means people's interaction with the environment is one of caring stewardship.

## 11.7.2 Sourcing food

Indigenous Australian peoples sourced their foods from a wide range of uncultivated plants and wild animals, with some estimates suggesting there were up to 7000 different sources of food. The composition of the food was greatly influenced by both the season and geographic location of the community region.

In Aboriginal communities there was a division of labour among men, women and children. Food sources based on cereals, fruits and vegetables were collected or gathered daily by women and children. Men were involved more in hunting for game and fishing, as well as in wider-scale land management using fire.

To ensure food security, communities developed a range of sustainable food-gathering techniques. For example, some seeds from gathered plants were left behind to allow for new growth, and a few eggs were always left in nests to hatch. This ensured that species would survive and communities could expect to find food in the same place in the future. **FIGURE 1** provides details of traditional food types from both tropical and temperate regions of Australia, including arid and desert regions.

**FIGURE 1** A selection of different foods and water resources

***Cereal foods:*** Grass seeds from the clover fern were ground to form flour for damper. Many other seed types were similarly treated.
***Fruit and vegetables:*** Fruits, berries, orchids and pods were available, depending on the region and seasonal availability (for example, sow thistle, lilly pilly, pigface fruit, kangaroo apple, wild raspberry, quandong and native cherry) as well as wild figs, plums, grapes and gooseberries. Also eaten were plant roots such as bull rushes, yams and bulbs; the heart of the tree fern and the pith of the grass tree; and the blister gum from wattles, native truffles and mushrooms.
***Eggs:*** Emu, duck, pelican and many other birds' eggs were eaten.
***Meat:*** Meats included insects such as the larval stage of the cossid moth or witchetty grub and the Bogong moth, honey ants, native bees and their honey, and scale insects; animals such as kangaroos, emus, eels, crocodiles, sea turtles, snakes, goannas and other lizards; and birds such as ducks, gulls and pelicans.
***Fish and shellfish:*** Freshwater fish, such as perch, yabbies and mussels in creeks and rock holes, and all varieties of saltwater fish were caught.
***Medicines:*** Over 120 native plants were used as sedatives, ointments, diarrhoea remedies, and cough and cold palliatives as well as for many other known treatments.
***Water:*** Water was obtained from rivers, lakes, rock holes, soaks, beds of intermittent creeks and dew deposited on surfaces. Moisture obtained from foods such as tree roots and leaves also provided water.

## Torres Strait Islander peoples

Torres Strait Islander peoples' food sources, both historically and today, are based on fishing, horticulture and inter-island trading activities. Torres Strait Islander peoples have a profound understanding of the sea, including its tides and sea life. While their food sources vary from island to island, their lifestyle can be best described as subsistence agriculture with seafood, garden foods and other produce stored and preserved for both local use and trade.

**FIGURE 2** Cooking bush food in a traditional Kup Murrie, or ground oven

## 11.7.3 The use of fire

The use of fire was a significant aspect of Indigenous Australian peoples' land management. What has been described as the 'park-like' landscape of the Australian bush was purposely created by clearing forest in controlled burns using fire sticks. After the fires, new plant growth with tender shoots attracted all types of birds and animals to the area. The grassland areas that resulted from the controlled burning of the landscape became ideal places to hunt kangaroos. Burning also flushed animals out into the open where they could be speared (see **FIGURE 3**). Indigenous Australian peoples' use of fire had to be carefully managed as part of their efforts to ensure food security. As such, it was a sustainable practice based on a sound knowledge of fire control and the environment.

**FIGURE 3** Using fire for hunting and to manage the land

## 11.7.4 The Bogong moth: a past food source

While there were many other sources of food for Indigenous communities that lived near the south-eastern Australian highlands, the Bogong moth was a particularly important seasonal specialty. The Bogong moths, which lived in the ground as larvae in Queensland, migrated in millions to the south-eastern highlands to seek out cool, rocky overhangs and crevices where they could sleep through the long, hot summer months, surviving off the fat in their bodies (see **FIGURE 4**).

The Bogong moths were a rich source of fat and protein for Indigenous peoples who lived adjacent to the highlands of Victoria and New South Wales. Many culture groups would migrate from the valleys and foothills into the highlands and set up camps for the feasting ceremony. They would smoke out the moths, collecting them by the thousands to be cooked over hot rocks. In addition to savouring this important seasonal food source, making the annual pilgrimage to the high country presented these groups with an important opportunity to interact socially, participate in ceremonies and to arrange inter-community marriages.

**FIGURE 4** Massed Bogong moths on a rock face

## 11.7.5 Eel farming by the Gunditjmara people

The home of the Gunditjmara people, the Budj Bim Cultural Landscape, is the site of one of Australia's largest ancient aquaculture systems. This area, which is part of the Mount Eccles National Park near Portland in Victoria, shows evidence of a large, permanent settlement of stone huts and channels used for farming and the local trade of eels (see **FIGURE 5**). The Gunditjmara people managed this landscape by digging channels and constructing weirs to bring water and young eels from Darlot Creek to local ponds and wetlands. Woven baskets placed at the weirs were used to harvest the mature eels. The area provided an abundance of food, ensuring food security for all.

Following European occupation of the area in the 1830s, the Gunditjmara people fought for their lands in the Eumerella Wars, which lasted for more than 20 years. By the 1860s the remaining Gunditjmara people were displaced to a government mission at Lake Condah. The mission lands were returned to the Gunditjmara people in 1987. The Deen Maar Indigenous Protected Area (IPA) was declared in 1999 and the area was listed on the Australian National Heritage register in 2004. The Budj Bim Cultural Landscape was added to the World Heritage List in July 2019.

Today the Gunditjmara people, as part of the Winda-Mara Aboriginal Corporation, manage the 248-hectare Darlots Creek (Killara), which flows from Lake Condah in the Budj Bim Cultural Landscape.

The wetlands and manna gum woodlands have been largely re-established through works to control weeds and feral animals. There are also prospects of restarting the eel aquaculture industry as a sustainable business. To further eco-tourism, boardwalks have been built, signage put in place, and a range of tours of the wetlands, lakes and woodlands are offered by Indigenous guides. These tours focus on the past way of life, and examine rebuilt channels, weirs and eel traps, and traditional sourcing of food stocks.

**FIGURE 5** Remains of Aboriginal stone eel traps at Lake Condah

## 11.7.6 Food security issues in remote Indigenous communities

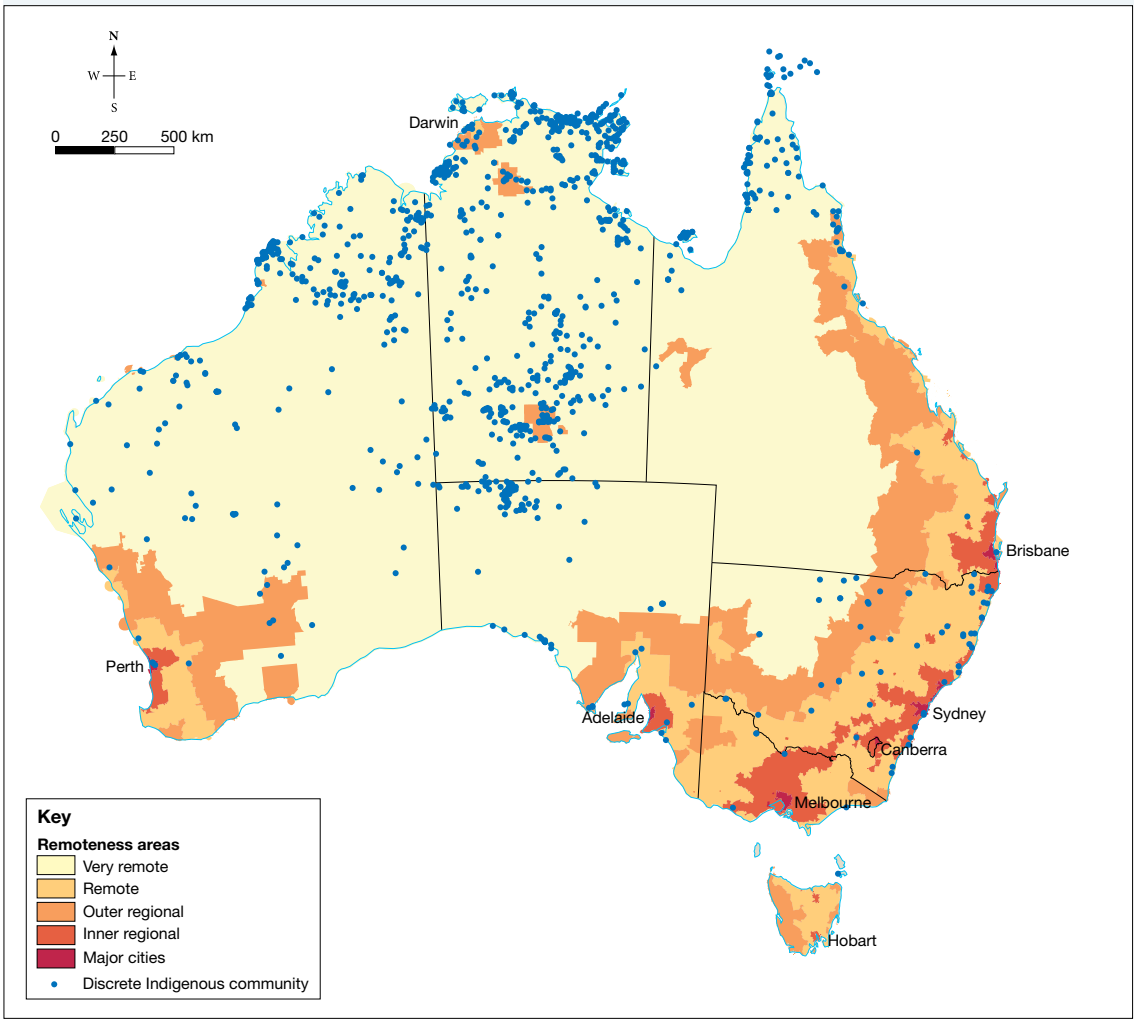
Historically, Aboriginal and Torres Strait Islander peoples managed their food and water resources sustainably to prevent food insecurity. With European occupation, however, over time they were largely displaced from their lands and traditional methods of sourcing food were altered. The loss of traditional hunting, gathering and fishing areas played a role in limiting people's access to nutritious and fresh sources of food.

In recent times, with the passing of the *Native Title Act 1993* and involvement of federal and state governments, members of Indigenous communities have been able to re-establish connections with their lands through various collaborative land- and water-management projects. However, many Indigenous peoples living in remote areas still experience food insecurity due to changes to traditional food sourcing methods and a range of social issues stemming from displacement and historical government policies. Related health issues include a higher risk of respiratory diseases, cardiovascular disease, diabetes, chronic kidney disease and mental health issues than that faced by non-Indigenous Australians. The importance of access to fresh, healthy food supplies cannot be understated as a factor in redressing this imbalance.

## Why is food security difficult in remote communities?

Over 80 per cent of Aboriginal and Torres Strait Islander peoples reside in cities and non-remote areas across Australia, and nearly 20 per cent live in remote and very remote areas (see **FIGURE 6**).

**FIGURE 6** Distribution of remote Aboriginal and Torres Strait Islander communities




***Source:*** Australian Bureau of Statistics

Access to affordable and nutritious food is an ongoing problem in remote communities. These remote areas have a high cost of living and suffer from a general unavailability of fresh fruit and vegetables as well as other high-quality foods, due to the associated costs of transportation and storage. The Australian government's 2016 National Workforce Action Plan Report found that 31 per cent of Aboriginal and Torres Strait Islander peoples living in remote areas were likely to be in households that had run out of food or could not afford to buy food, compared to 20 per cent for non-Indigenous people. As the main source of food is often limited to the local general store, there are ongoing risks of food insecurity and consequent health issues related to limited choices of diet.

## Measures to alleviate food insecurity

The Australian government's 2013 National Food Plan sought to address matters such as food security, the affordability and quality of food, and the sustainability of Australian food production. Measures that have been funded by federal and state governments that address food insecurity for remote Indigenous communities include:

- improving the food supply chain to remote areas
- establishing and improving community stores in remote areas through initiatives such as the Outback Stores program
- education campaigns about nutrition guidelines and healthy food choices
- grants to support the establishment or improvement of community food initiatives, such as farmers' markets, food cooperatives, food hubs, community gardens and city farms
- food subsidies for fruit and vegetable programs to improve health and nutrition for Indigenous children
- funding for the Stephanie Alexander Kitchen Garden National Program to develop gardens in schools
- improving skills of Indigenous health workers to enable them to have greater influence on food security through addressing health promotion and nutrition at the local level.

**FIGURE 7** Papunya Community Store, located 240 kilometres north-west of Alice Springs

Funding has also been made available to various industries that relate to Indigenous peoples' connection to the land. Industry ventures have included park and ranch management to further eco-tourism, and aquaculture. These ventures can also provide food and are a source of revenue for further community development, employment and training opportunities. They can be seen as developing a sense of pride as well as prospects for future generations. They are in keeping with Indigenous peoples' roles as caretakers and traditional custodians of the land.

One such initiative is Fish River Station in the Daly River region of the Northern Territory, home to an array of wildlife, plant life and important traditional food sources for Indigenous peoples. The partnership between government, conservation organisations and the Indigenous Land Corporation aims to preserve this unique environment for future generations, whilst providing employment for Indigenous people and opportunities to reconnect with this culturally significant land.

## DISCUSS

What can we learn from the land and resource management practices of Indigenous Australians in relation to food security? **[Intercultural Capability]**

**FIGURE 8** Fish River Station rangers Desmond Daly and Jeff Long patrol 178 000 hectares of land.

## on Resources

**Weblinks** Indigenous food sources
Fish River Station
Outback Stores

## 11.7 INQUIRY ACTIVITY

Use the weblinks provided in the Resources tab to explore and learn more about **Indigenous food sources**, the **Outback Stores** project and **Fish River Station**. With a partner, choose one of these topics and create an A4 infographic poster summarising your findings.

**Examining, analysing, interpreting**
**Classifying, organising, constructing**

## 11.7 EXERCISES

**Geographical skills key: GS1** Remembering and understanding **GS2** Describing and explaining **GS3** Comparing and contrasting **GS4** Classifying, organising, constructing **GS5** Examining, analysing, interpreting **GS6** Evaluating, predicting, proposing

### 11.7 Exercise 1: Check your understanding

1. **GS1** What was the division of labour for men, women and children when sourcing food?
2. **GS1** How did Indigenous Australian peoples use fire to source food?
3. **GS1** Who are the traditional owners of the Budj Bim region of Victoria?
4. **GS2** Why did Aboriginal and Torres Strait Islander peoples lose access to many traditional food sources after European occupation?
5. **GS2** How did the Indigenous Australian peoples access the Bogong moth as a food source?
6. **GS1** What are some of the increased health risks experienced by Indigenous Australians as compared with non-Indigenous Australians?

### 11.7 Exercise 2: Apply your understanding

1. **GS2** Identify two issues faced by Indigenous Australian communities living in remote locations.
2. **GS2** Explain what we mean when we talk about Indigenous peoples' role as caretakers and traditional custodians of the land.
3. **GS5** Examine **FIGURE 6**. Describe the distribution of remote Indigenous communities across Australia.
4. **GS5** Outline the various measures in place to address food insecurity issues in remote Indigenous communities. Analyse how two of these measures may improve food security.
5. **GS6** What ***changes*** in Indigenous peoples' health should result from a higher level of food security? Explain.

Try these questions in learnON for instant, corrective feedback. Go to www.jacplus.com.au.

# 11.8 Rice — an important food crop

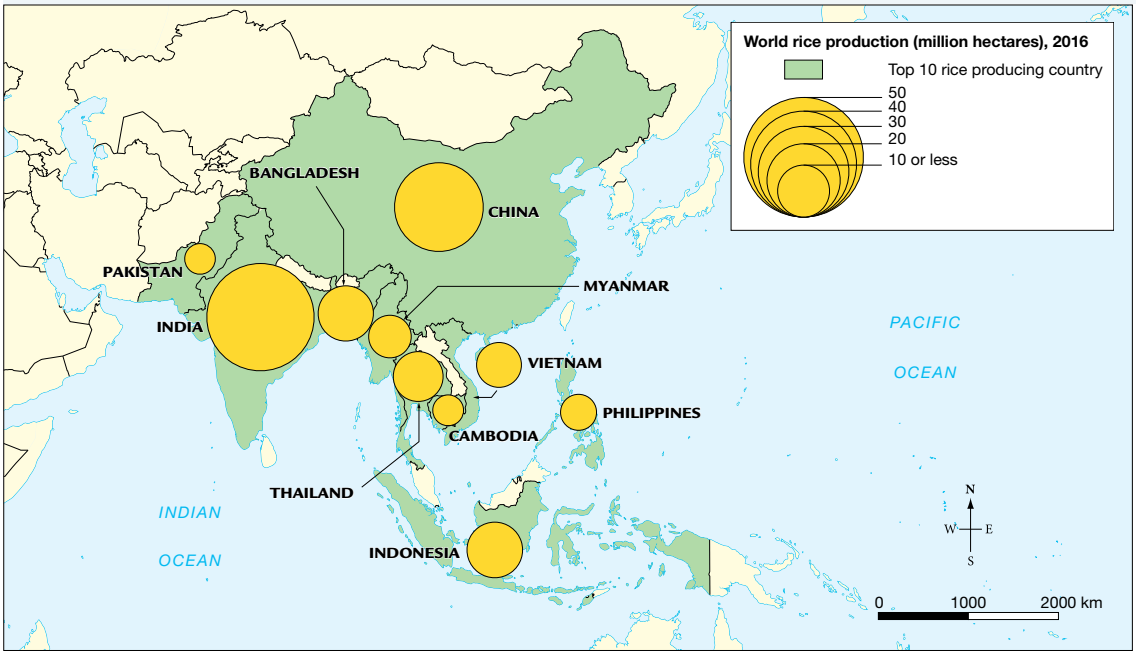
## 11.8.1 The importance of rice

Rice is the seed of a semi-aquatic grass. In warm climates, in more than 100 countries, it is cultivated extensively for its edible grain. Rice is one of the most important staple foods of more than half of the world's population, and it influences the livelihoods and economies of several billion people. In Asia, rice provides about 49 per cent of the calories and 39 per cent of the protein in people's diet. In 2017, approximately 760 million tonnes of rice were produced worldwide.

**FIGURE 1** shows that the largest concentration of rice is grown in Asia. About 132 million hectares are cultivated with this crop, producing 88 per cent of the world's rice. Of this, 48 million hectares and 31 per cent of the global rice crop are in South-East Asia alone.

Countries with the largest areas under rice cultivation are India, China, Indonesia, Bangladesh, Thailand, Vietnam, Myanmar (Burma) and the Philippines, with 80 per cent of the total rice area.

**FIGURE 1** Top ten rice-producing countries




***Source:*** WorldAtlas.com, http://www.worldatlas.com/articles/the-countries-producing-the-most-rice-in-the-world.html
(*Note:* most current data available)

## 11.8.2 Factors affecting rice production in Asia

### Climate and topography

Rice can be grown in a range of environments that are hot or cool, wet or dry. It can be grown at sea level on coastal plains and at high altitudes in the Himalayas. However, ideal conditions in South-East Asia include high temperatures, large amounts of water, flat land and fertile soil.

In Yunnan Province, China, the mountain slopes have been cultivated in terraced rice paddies by the Hani people for at least 1300 years (see **FIGURE 2**). The terraces stop erosion and surface run-off.

**FIGURE 2** Rice terraces in Yunnan Province, China. These terraces are at an elevation of 1570 metres.

### Irrigation

Traditional rice cultivation involves flooding the paddy fields (*padi* meaning 'rice plant' in Malay) for part of the year. These fields are small, and earth embankments (*bunds*) surround them. Rice farmers usually plant the seeds first in little seedbeds and transfer them into flooded paddy fields, which are already ploughed. Canals carry water to and from the fields. Houses and settlements are often located on embankments or raised islands near the rice fields.

Approximately 45 per cent of the rice area in South-East Asia is irrigated, with the largest areas being in Indonesia, Vietnam, the Philippines and Thailand. High-yielding areas of irrigated rice can also be found in China, Japan and the Republic of Korea. Because water is available for most of the year in these places, farmers can grow rice all year long. This intensive scale of farming can produce two and sometimes three crops a year.

Upland rice is grown where there is not enough moisture to nurture the crops; an example of such cultivation takes place in Laos. This method produces fewer rice varieties, since only a small amount of nutrients is available compared to rice grown in paddy fields.

**FIGURE 3** Planting rice in paddy fields in north-east Thailand

## Impacts on potential yield

Rice yields can be limited if any of the following conditions exist:

- poor production management
- losses caused by weeds (biotic factor)
- pests and diseases (biotic factor)
- inadequate land formation and irrigation water
- inadequate drainage that leads to a build-up of salinity and alkalinity.

## Technology

Agricultural biotechnology, especially in China, has produced rice that is resistant to pests. There are also genes for herbicide resistance, disease resistance, salt and drought tolerance, grain quality and photosynthetic efficiency. Genetic engineering may be the way of the future in rice cultivation in some parts of the world.

In the Philippines, through cross-breeding rather than genetic engineering, a new strain of rice has been developed that grows well in soils lacking phosphorus (see **FIGURE 4**). This could also have a significant positive impact on crop yields.

## Environmental issues

Increasing temperatures, caused by global warming, may be causing a drop in rice production in Asia, where more than 90 per cent of the world's rice is produced and consumed. The Food and Agriculture Organization of the United Nations (FAO) has found that in six of Asia's most important rice-producing countries — China, India, Indonesia, the Philippines, Thailand and Vietnam — rising temperatures over the past 25 years have led to a 10–20 per cent decline in rice output.

Scientists state that if rice production methods cannot be changed, or if new rice strains able to withstand higher temperatures cannot be developed, there will be a loss in rice production over the next few decades as days and nights get hotter. People may need to turn to a new staple crop.

Rice growing is eco-friendly and has a positive impact on the environment. Rice fields create a wetland habitat for many species of birds, mammals and reptiles. Without rice farming, wetland environments created by flooded rice fields would be vastly reduced.

**FIGURE 4** Rice demonstration plots at the International Rice Research Institute in the Philippines.

## 11.8.3 Factors affecting rice production in Australia

### Climate and topography

Eighty per cent of rice produced in Australia consists of temperate varieties that suit climates with high summer temperatures and low humidity. Large-scale production of rice is carried out in the Murrumbidgee and Murray valleys of New South Wales; the production process is sophisticated.

### Sowing and irrigation

In Australia, rice grows as an irrigated summer crop from September to March. Most of it is sown by aircraft rather than planted by hand. Experienced agricultural pilots use satellite guidance technology to broadcast seed accurately over the fields.

Before sowing, the seed is soaked for 24 hours and drained for 24 hours, leaving a tiny shoot visible on the seed. Once sown, it slowly settles in the soft mud, and within three to four days each plant develops a substantial root system and leaf shoot. After planting, fresh water is released from irrigation supply channels to flow across each paddy field until the rice plants are well established.

Most countries grow rice as a **monoculture**, whereas Australian rice grows as part of a unique farming system. Farmers use a **crop rotation** cycle across the whole farm over four to five years. This means that the growers have other agricultural enterprises on the farm as well as rice. This system, designed for efficiency, sustainability and safety, means Australian growers maintain water savings, and have increased soil nutrients, higher yields and much healthier crops.

Once Australian rice growers harvest their rice, they use the subsoil moisture remaining in the soil to plant another crop — either a wheat crop or pasture for animals. This form of rotation is the most efficient in natural resource use and agricultural terms.

### Pests and diseases

Rice bays (areas contained by embankments — see **FIGURE 5**) are treated with a chemical application, which prevents damage by pests and weeds. Without this treatment, crop losses would be extensive. In the last 100 days before harvesting, the rice plant has no chemical applications, so that when it is harvested, it is virtually chemical free.

**FIGURE 5** Murrumbidgee irrigation area rice bays

## Technology

Most farms use laser-guided land-levelling techniques to prepare the ground for production. This gives farmers precise control over the flow of water on and off the land. Such measurement strategies have contributed to a 60 per cent improvement in water efficiency. Most of the equipment used on rice farms is fitted with computer-aided devices, such as GPS (global positioning systems), GIS (geographical information systems) and remote sensing. Australian rice growers are the most efficient and productive in the world.

**FIGURE 6** Harvesting rice near Griffith, New South Wales

## Environmental issues

The rice industry encourages biodiversity enhancement and greenhouse gas reduction strategies. Some farms in southern New South Wales are avoiding the use of chemical fertilisers and pesticides by converting farms to biodynamic practices; for example, they have avoided salinity by planting red gums.

Drought conditions from 2002–09 and 2013–16 in the Murray-Darling Basin led to reduced water allocations for crop irrigation in the Riverina area. The subsequent 2015–16 drought years, in particular, led to a reduction in rice production. In the context of the health of our waterways, there is ongoing debate about the impact of irrigation-dependent farming and how best to sustainably balance environmental concerns and our food production needs now and for the future.

### Explore more with myWorldAtlas

Deepen your understanding of this topic with related case studies and questions.
- Investigating Australian Curriculum topics > Year 9: Biomes and food security > **Rice**

### on Resources

**Interactivity** How is rice grown? (int-3322)
**Weblink** Terraced rice

## 11.8 INQUIRY ACTIVITIES

1. Investigate two different rice-growing ***places*** in Asia and describe the reasons for the different ***environments***. **Examining, analysing, interpreting**
2. Investigate an example of an Australian rice farm and outline its yearly rice-growing cycle. **Examining, analysing, interpreting**
3. Research the ***interconnection*** between rice growing and the Murray River for ensuring a ***sustainable environment***. **Examining, analysing, interpreting**

## 11.8 EXERCISES

**Geographical skills key: GS1** Remembering and understanding **GS2** Describing and explaining **GS3** Comparing and contrasting **GS4** Classifying, organising, constructing **GS5** Examining, analysing, interpreting **GS6** Evaluating, predicting, proposing

### 11.8 Exercise 1: Check your understanding

1. **GS5** Refer to **FIGURE 1**. Which two countries produce most of the world's rice?
2. **GS2** Name the other top-ten rice-producing countries in the world. What is the geographical location of these ***places***?
3. **GS1** What is meant by the term *monoculture*?
4. **GS1** What is crop rotation?
5. **GS2** Explain why ***places*** in Asia are ideally suited to rice growing.

### 11.8 Exercise 2: Apply your understanding

1. **GS2** Explain the benefits of a crop-rotation system.
2. **GS2** Explain how mountain slopes in China have been ***changed*** to accommodate rice production.
3. **GS6** Explain the ***environmental*** issues that may affect future rice production.
4. **GS3** Describe and explain the similarities and differences between the rice cultivation methods used in Asia and Australia.
5. **GS6** Predict how technology will influence ***changes*** to rice cultivation in both Asia and Australia.

Try these questions in learnON for instant, corrective feedback. Go to www.jacplus.com.au.

# 11.9 Cacao — a vital cash crop

## 11.9.1 Global cacao production feeds global chocolate demand

Chocolate is made from the beans of the cacao plant. The chocolate that is produced from these beans might come from cacao grown in Ghana, Mexico, Malaysia or Indonesia. Look on the wrapper next time you eat a chocolate bar!

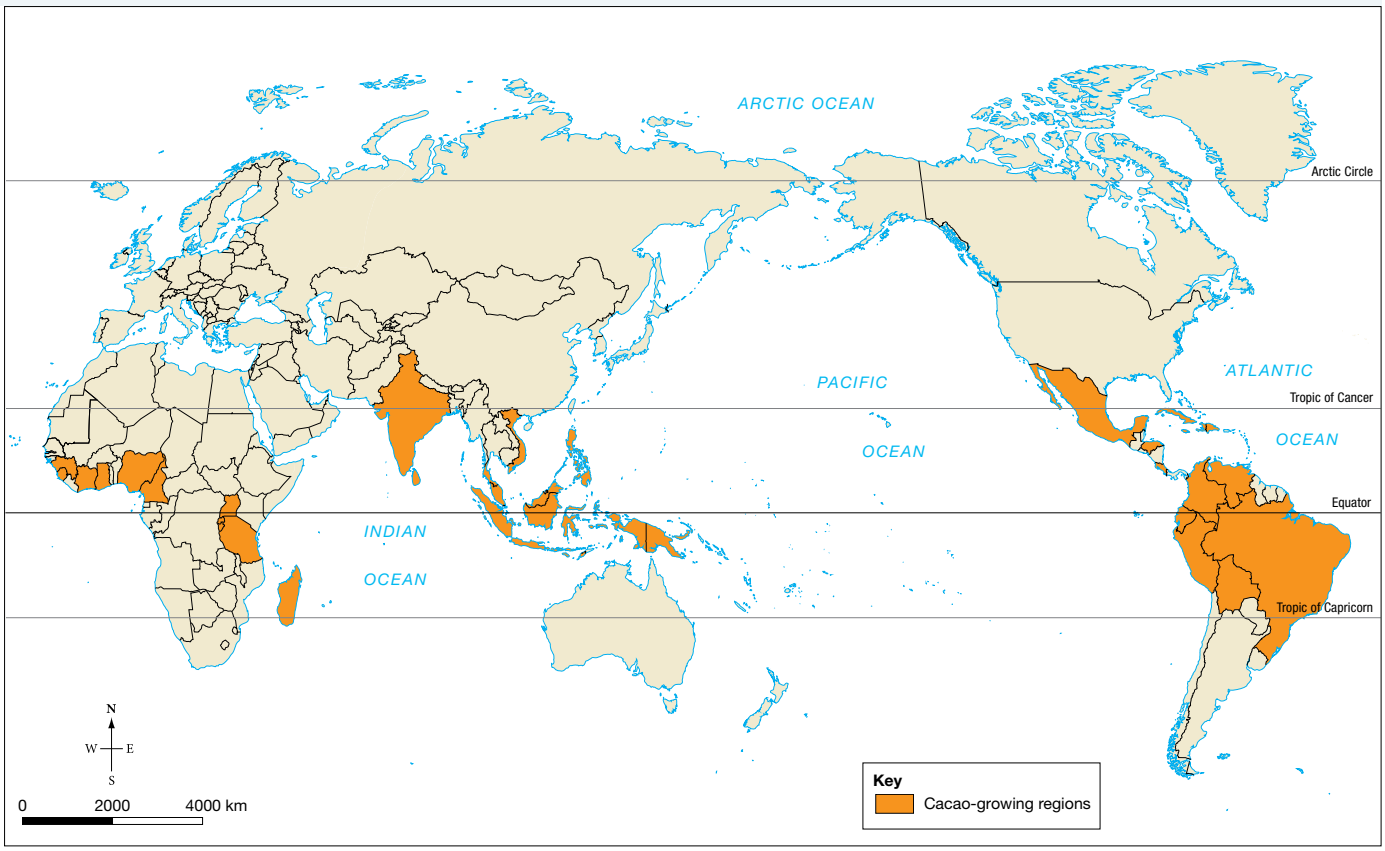
Chocolate has been eaten or drunk by people for 4000 years. A recent study showed that 91 per cent of females and 87 per cent of males consume chocolate products in places such as Great Britain, Australia, Switzerland and the United States. However, rising disposable incomes and changing tastes will continue to change the scale of production, both overseas and locally; people in places such as India and China are now eating more chocolate.

The cacao tree is a native of the Amazon Basin and other tropical areas of South and Central America, where wild varieties still grow in the forests. Many countries now grow cacao, but the main places are:

- West Africa — Ghana, Nigeria and Cote D'Ivoire
- South America — Brazil and Ecuador
- Asia — Malaysia and Indonesia.

Malaysia and Indonesia, where cacao is a relatively new crop, are becoming increasingly important growing areas.

**FIGURE 1** The main cacao-growing regions of the world




***Source:*** Spatial Vision

## 11.9.2 Influences on the growth and production of cacao

### Environmental factors

Most of the world's cacao is grown in a narrow belt between 10 degrees north and 10 degrees south of the equator. Cacao trees grow well in humid tropical climates with regular rainfall and a short dry season. The trees need temperatures between 21 °C and 23 °C and rainfall of 1000 to 2500 millimetres per year. The soil must drain well but have good moisture-holding capacity. The trees cannot tolerate tropical sun and must be grown in the shade of other trees, such as palms and rubber plants. Although cacao plants can reach a height of 12 metres, most are only six to seven metres tall. Growth is very fast, and the plant can flower and fruit two to three years after planting.

**FIGURE 2** A cacao bean and seeds

### Economic factors

Cacao is a **cash crop**, grown mostly in an **agroforestry** system, allowing for biodiversity and **income diversity** for families.

Around the world, six million cacao farmers — and 40 to 50 million people in total — depend on cacao for their livelihood. For the past century, demand has grown by three per cent per year.

Cacao beans are an important export for West African nations such as Ghana and the Cote d'Ivoire. These countries are the source of more than 70 per cent of the world's cocoa. Cacao beans are traded on the world market and their price can change daily, depending on supply and demand around the world. For example, too many beans on the world market can cause prices to drop, leaving farmers without the cash they need to cultivate their crops, and this ultimately lowers the supply. Adverse weather or tree disease can shrink supply as well.

**FIGURE 3** A cacao farmer from Ghana carrying cacao pods

## Labour

Cacao is one of the world's most labour-intensive crops. Much of the work is done by hand on a daily basis. The flowers are often pollinated by hand and defective pods are removed to allow the plant to put more energy into good ones.

## Cultural factors

For the farmers themselves, the work of cacao production can be a collective effort and very much a part of family and village life. Production stages such as 'turning the beans' — an involved process that takes place over several days — present an opportunity to commune with other farming families. But beyond this, cacao and chocolate are an important part of the cultural practices of many communities throughout the world.

In Oaxaca, Mexico, traditional healers called *curanderos* give chocolate drinks to cure bronchitis. They also plant cacao beans in the earth to ward off evil forces and heal those who have *espanto* — sickness caused by fright. Children drink chocolate for breakfast to protect them against stings from scorpions or bees. In Australia and many other countries, chocolate has become an integral part of cultural events such as Easter and Christmas. Indeed, in Western society, chocolate is very much a part of everyday life, which contributes to the ever-increasing global demand for this special crop.

## What is the future for chocolate?

Consumer demand for chocolate is on the rise, but the cacao tree is under threat from pests, fungal infections, climate change, and farmers' lack of access to fertilisers and other products that enhance yields. In West Africa, there are efforts to train farmers in organic, sustainable farming practices.

Global consumption is increasing, especially of darker, more cocoa-heavy varieties. Research is underway to develop hardier trees that can produce bigger yields while still making tasty chocolate. Fairtrade arrangements are improving the lives of farmers, increasing their income and helping them replace old trees and equipment (see subtopic 17.7). Through such arrangements, it is hoped that cacao production can be sustainably managed, providing ongoing income and contributing to the wellbeing of the many millions of people within the cacao-producing communities throughout the world.

## 11.9 INQUIRY ACTIVITY

Research Fairtrade International and learn how this organisation has enabled the ***sustainability*** of cacao in many ***places*** in the world. Create an infographic outlining your key findings. **Examining, analysing, interpreting Classifying, organising, constructing**

## 11.9 EXERCISES

**Geographical skills key: GS1** Remembering and understanding **GS2** Describing and explaining **GS3** Comparing and contrasting **GS4** Classifying, organising, constructing **GS5** Examining, analysing, interpreting **GS6** Evaluating, predicting, proposing

### 11.9 Exercise 1: Check your understanding

1. **GS1** List the main cacao-producing ***places*** in the world.
2. **GS2** Refer to **FIGURE 1** to describe the geographical location of cacao-producing ***places***. Refer to lines of latitude in your response.
3. **GS1** Outline the main ***environmental*** factors necessary for successful cacao-tree growth.
4. **GS1** What ***environmental*** factors suit cacao growing in the Daintree region of North Queensland?
5. **GS3** Explain the difference between a cash crop and a subsistence crop.

### 11.9 Exercise 2: Apply your understanding

1. **GS2** Explain the significance of chocolate in different cultures throughout the world.
2. **GS2** Explain how world cacao-bean prices can affect a cacao farmer's income.
3. **GS2** Why is cacao considered a labour-intensive crop?
4. **GS2** Describe the global consumption of chocolate and how it is ***changing***.
5. **GS6** It has been suggested that there could be a crisis in chocolate production in future years, with chocolate becoming rare and very expensive. Should money be spent on research to produce hardier cacao trees with bigger yields just to satisfy the chocolate desires of the Western world? Should money be spent on other types of agriculture? Outline your views on this issue, considering all you have learned in this subtopic.

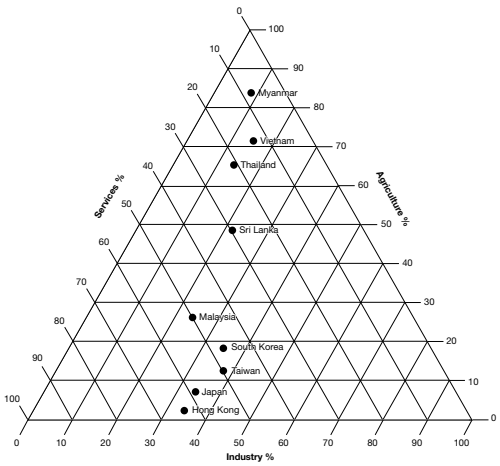
Try these questions in learnON for instant, corrective feedback. Go to www.jacplus.com.au.

# 11.10 SkillBuilder: Constructing ternary graphs

online only

## What are ternary graphs?

Ternary graphs are triangular graphs that show the relationship or interconnection between features. They are particularly useful when a feature has three components and the three components add up to 100 per cent.




### Select your learnON format to access:

- an overview of the skill and its application in Geography (Tell me)
- a video and a step-by-step process to explain the skill (Show me)
- an activity and interactivity for you to practise the skill (Let me do it)
- questions to consolidate your understanding of the skill.

### on Resources

**Video eLesson** Constructing ternary graphs (eles-1728)
**Interactivity** Constructing ternary graphs (int-3346)

# 11.11 Thinking Big research project: Subsistence living gap-year diary

online only

## SCENARIO

As an end-of-school gap-year experience, you have been given the opportunity to live with an indigenous community that relies on traditional subsistence approaches to food security such as nomadic herding, hunting-gathering or shifting agriculture. Your gap-year diary will help you remember forever the people you've met and their distinctive ways of managing their environment.

### Select your learnON format to access:

- the full project scenario
- resources to guide your project work
- an assessment rubric.

### on Resources

**ProjectsPLUS** Thinking Big research project: Subsistence living gap-year diary (pro-0189)

# 11.12 Review

online only

## 11.12.1 Key knowledge summary

Use this dot point summary to review the content covered in this topic.

## 11.12.2 Reflection

Reflect on your learning using the activities and resources provided.

### on Resources

**eWorkbook** Reflection (doc-31716)
Crossword (doc-31717)

**Interactivity** Feeding the world crossword (int-7645)

## KEY TERMS

**agribusiness** business set up to support, process and distribute agricultural products
**agroforestry** the use of trees and shrubs on farms for profit or conservation; the management of trees for forest products
**arable** describes land that can be used for growing crops
**biofuel** fuel that comes from renewable sources
**cash crop** a crop grown to be sold so that a profit can be made, as opposed to a subsistence crop, which is for the farmer's own consumption
**crop rotation** a procedure that involves the rotation of crops, so that no bed or plot sees the same crop in successive seasons
**extensive farm** farm that extends over a large area and requires only small inputs of labour, capital, fertiliser and pesticides
**Green Revolution** a significant increase in agricultural productivity resulting from the introduction of high-yield varieties of grains, the use of pesticides and improved management practices
**horticulture** the practice of growing fruit and vegetables
**hybrid** plant or animal bred from two or more different species, sub-species, breeds or varieties, usually to attain the best features of the different stocks
**income diversity** income that comes from many sources
**innovation** new and original improvement to something, such as a piece of technology or a variety of plant or seed
**intensive farm** farm that requires a lot of inputs, such as labour, capital, fertiliser and pesticides
**mallee** vegetation areas characterised by small, multi-trunked eucalypts found in the semi-arid areas of southern Australia
**monoculture** the cultivation of a single crop on a farm or in a region or country
**per capita** per person
**sustainable** describes the use by people of the Earth's environmental resources at a rate such that the capacity for renewal is ensured
**undulating** describes an area with gentle hills

# 11.6 SkillBuilder: Describing patterns and correlations on a topographic map

## 11.6.1 Tell me

### What are patterns and correlations on a topographic map?

A pattern is the way in which features are distributed or spread. A correlation shows how two or more features are interconnected — that is, the relationship between the features.

### Why are patterns and correlations in topographic maps useful?

Patterns and correlations in a topographic map can show us cause-and-effect connections. A feature may be seen to occur at a place on a map and, when we ask why, other features on the topographic map help to explain the answer.

Topographic maps are useful for showing:

- landforms and land use connections
- water features and flooding, for emergency services
- vegetation cover and slopes, for fire authorities
- landforms and settlements, for urban developers.

A good description of patterns and correlations in a topographic map:

- uses placenames
- mentions distances
- identifies regions
- identifies connections
- notes anomalies
- is written in paragraphs and includes an introduction that identifies the place and a conclusion that summarises the key findings.

## 11.6.2 Show me

### How to describe patterns and correlations in a topographic map

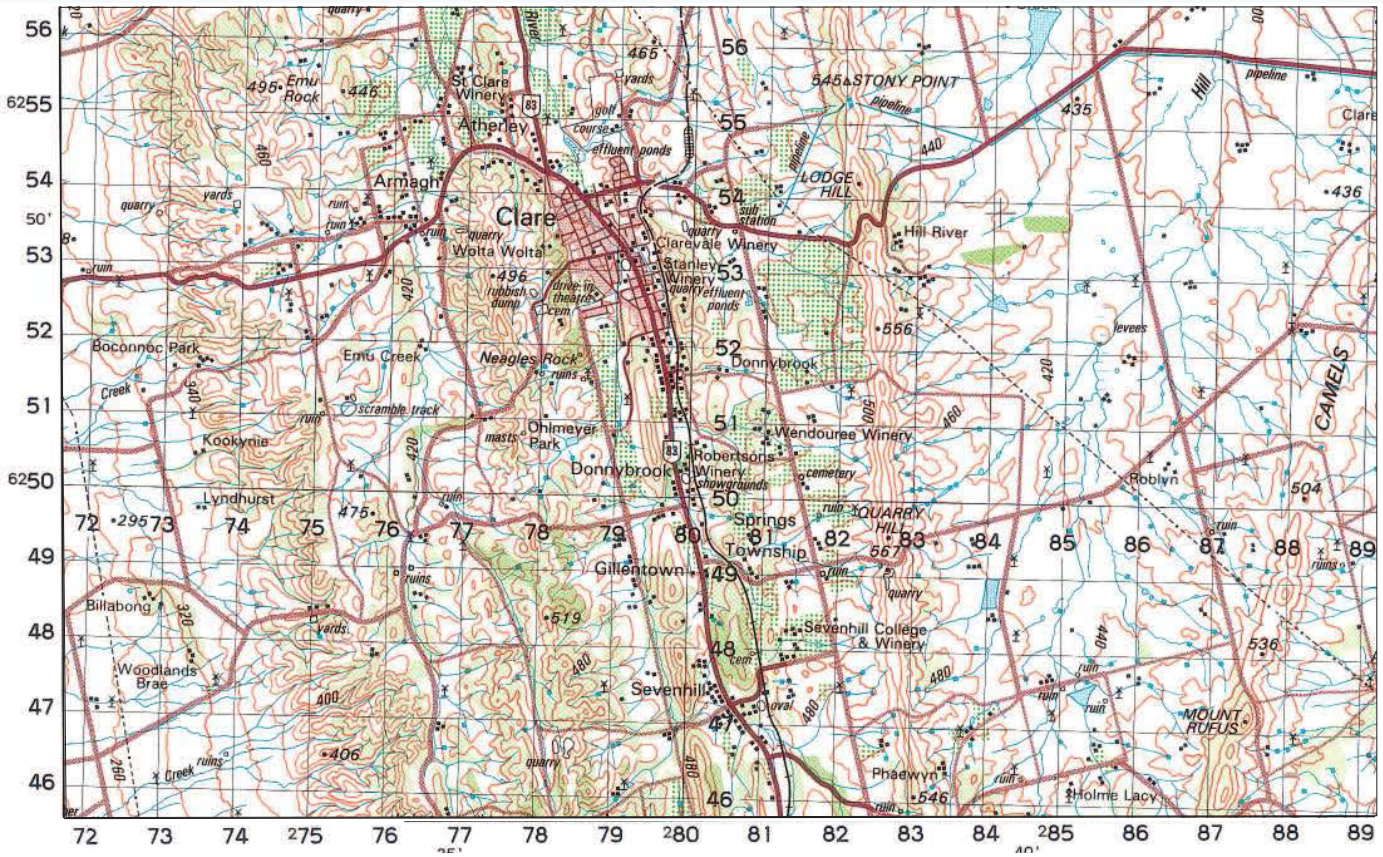
#### You will need:

- a topographic map of the place being considered.

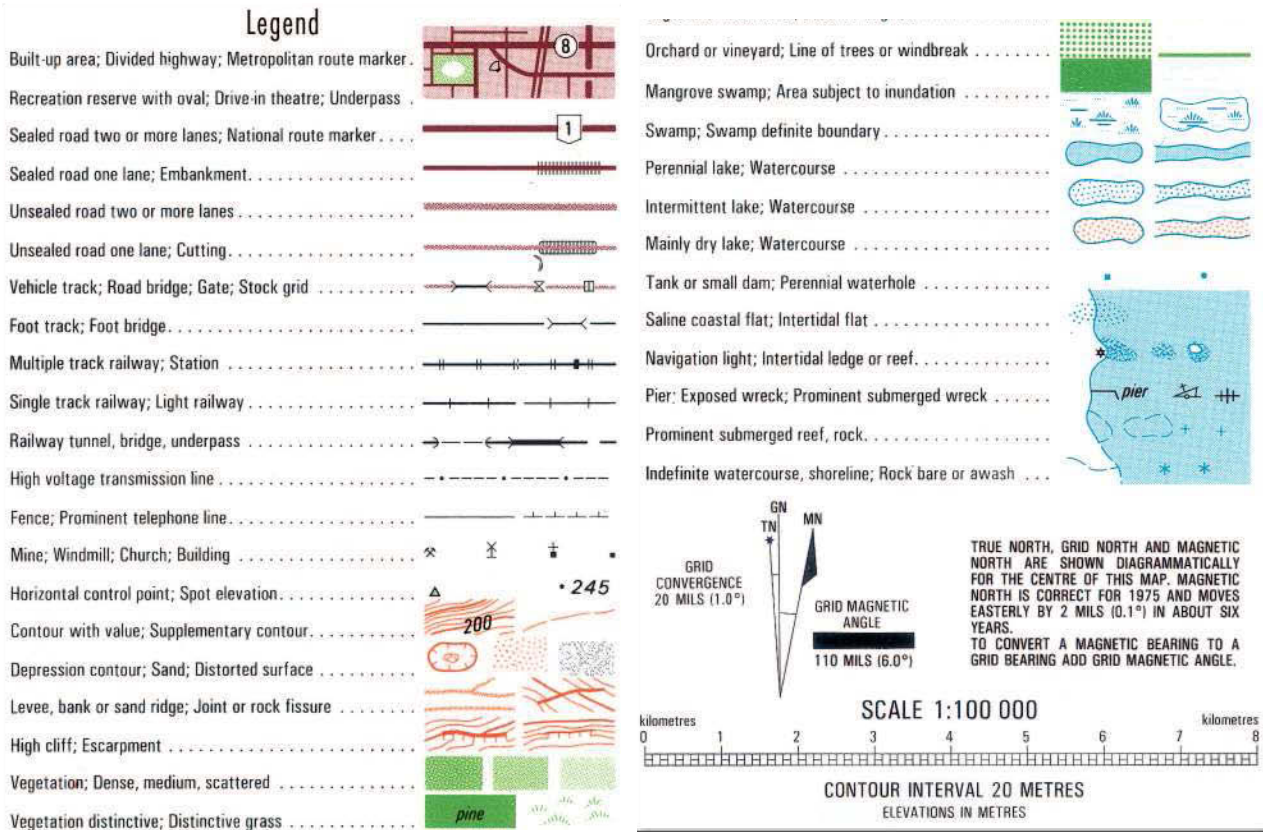
#### Model

In the environs of the township of Clare, South Australia, the eastern ridge slopes are used extensively for grape growing. Roads run parallel to the ridge and, owing to the steepness of the land, it is possible to drive over the ridge at only a few points, such as at Hughes Park (GR 800405). Settlements follow the ridge road along North Road. Streams that have their source on the ridge tend to flow west and form larger streams. Those streams flowing to the east are often dammed. Windmills throughout the flatter areas suggest water is needed for animal pasture in the drier months of the year. Spring Gully Conservation Park is a treed area on the steepest part of the ridge. The vineyards to the north at White Hut and Stanley Flat are not on sloped land, suggesting that the types of grapes grown there differ from those across most of the area. The Clare Valley region is an important vineyard area, adding significantly to the agricultural output of South Australia.

**FIGURE 1** Topographic map extract showing the Clare Valley, South Australia




***Source:*** Spatial Vision




***Source:*** Spatial Vision

## Procedure

### Step 1

Take the time to carefully analyse the topographic map, particularly its legend. Visualise the landforms and land use of the mapped place.

### Step 2

Now systematically look for connections between features, beginning with places that have strong connections. Try this list of connections that can be applied to most topographic maps:

- landforms and water or drainage
- landforms and vegetation types
- landforms and settlement
- landforms and agricultural use
- water and vegetation
- settlement and agricultural uses.

After you have identified these connections, write a few sentences describing any connections that are obvious. Begin by introducing the place being discussed, as in the model description, which opens with 'In the environs of the township of Clare, South Australia ... ' An example of a connection found in **FIGURE 1** is that there is a strong link between land slope and vineyards.

### Step 3

Now systematically look for any anomalies that are evident. You are looking for things that seem unusual or show no connections. For example, in **FIGURE 1**, the wineries at White Hut and Stanley Flat are not on east-facing slopes.

### Step 4

Complete your description with a concluding statement about the place. The model description concludes with the statement: 'The Clare Valley region is an important vineyard area, adding significantly to the agricultural output of South Australia.'

## on Resources

| | |
|---|---|
| **Digital doc** | Topographic map of Clare Valley (doc-27426) |
| **Video eLesson** | Describing patterns and correlations on a topographic map (eles-1729) |
| **Interactivity** | Describing patterns and correlations on a topographic map (int-3347) |
| **Google Earth** | Clare Valley |

## 11.6.3 Let me do it

Complete the following activities to practise this skill.

### 11.6 ACTIVITIES

1. Using the topographic map of the Griffith area (**FIGURE 8** in subtopic 11.5) write a paragraph identifying any patterns and correlations that are evident. Use the checklist to ensure you cover all aspects of the task.
2. Apply your skills to answer the following questions.
   (a) Why are the water channels straight? Is there an ***interconnection*** between slope and water resources? Explain your answer.
   (b) To what extent is there a correlation between orchards and slope? Explain your answer.
   (c) Describe the direction of development of Griffith township. Suggest why it has developed in this way.
   (d) How do we know that the irrigated orchards are smallholdings?
   (e) Is there a correlation between land slope and agricultural land use?

**Checklist**

I have:

- used placenames
- mentioned distances
- identified regions
- identified connections
- noted anomalies
- written in paragraphs and included an introduction that identifies the ***place*** and a conclusion that summarises the key findings.

# 11.10 SkillBuilder: Constructing ternary graphs

## 11.10.1 Tell me

### What are ternary graphs?

Ternary graphs are triangular graphs that show the relationship or interconnection between three features.

### Why are ternary graphs useful?

Ternary graphs are particularly useful when a feature has three components, and the three components add up to 100 per cent. Ternary graphs are most often used to represent elements such as soil types, employment structures and age structures. They allow us to clearly see the interconnection between features. For example, with soil types, three different properties can be identified — clay, sand and silt. They can be graphed according to the proportion of each within a soil type, such as clay loam, sandy clay loam or silty clay loam.

Ternary graphs are useful for:

- economists comparing economic features
- demographers considering population structures
- agriculturalists considering soil types.

A good ternary graph:

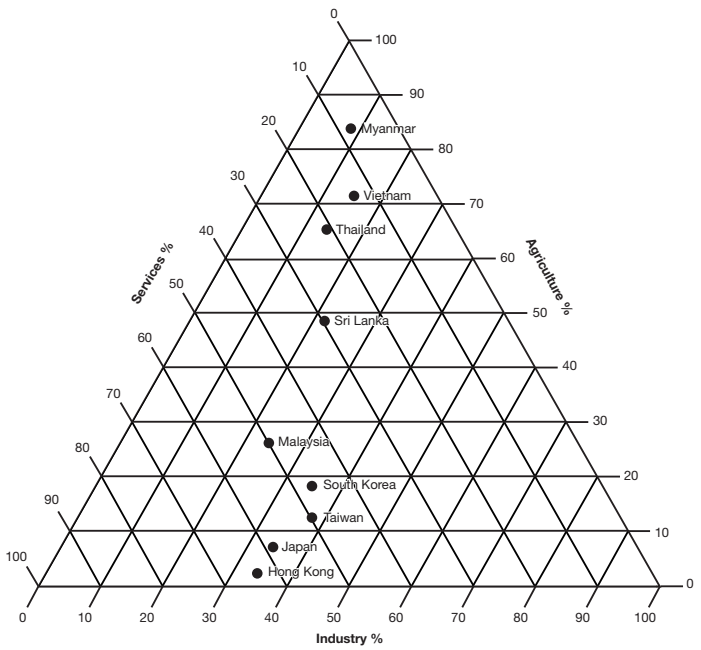
- is constructed as an equilateral triangle
- has each side of the triangle divided into 10 lines
- has lines drawn across the triangle that always total 100 per cent
- contains accurately plotted data
- has labelled axes
- includes a clear title.

## 11.10.2 Show me

### How to construct a ternary graph

#### Model

**FIGURE 1** Economic activity in selected countries



### You will need:

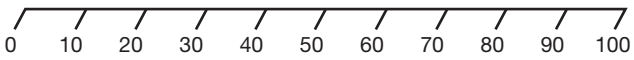
- data on three features expressed as percentages and totalling 100 per cent
- a pencil
- a ruler
- an eraser.

### Procedure

#### Step 1

First you need to create an equilateral triangle — all three sides are equal and all three internal angles are 60°. Each side of the triangle becomes an axis on the graph. Begin by drawing a 10-centimetre horizontal line, and draw ten marks that are 1 cm apart. Label these 0 to 10, with 0 on the left-hand side of your line and 100 at the right-hand side. Angle these marks to the left at 60° (see **FIGURE 2**).

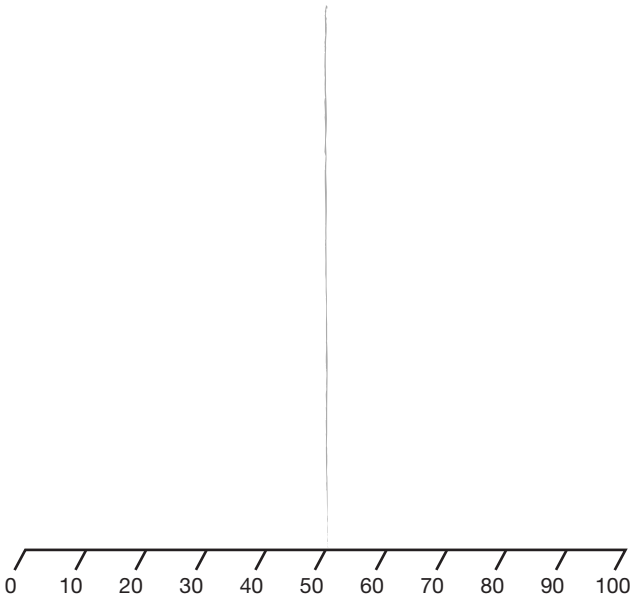
**FIGURE 2** Horizontal line with ten markings, 1 cm apart




#### Step 2

At the 50 per cent mark, draw a faint vertical line of about 9 cm length, which will help you to draw the other two axes (see **FIGURE 3**). Later, you can rub this line out.

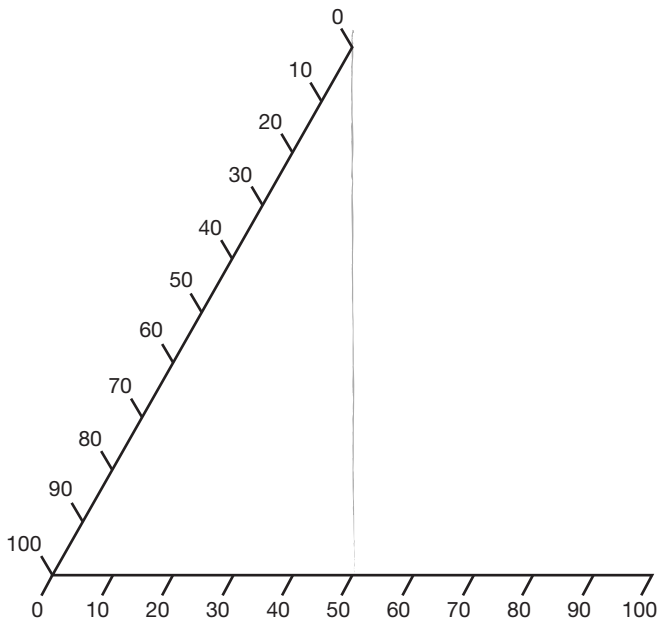
**FIGURE 3** Forming the equilateral triangle




#### Step 3

Now from the 0 per cent mark, draw a diagonal line that is 10 cm long and intersects with the vertical line shown in **FIGURE 3**. (It will intersect a few millimetres below the top of the vertical line.) Draw 10 marks that are 1 cm apart along this diagonal axis. However, this time, mark 100 per cent at the bottom of the line and 0 at the top (see **FIGURE 4**).

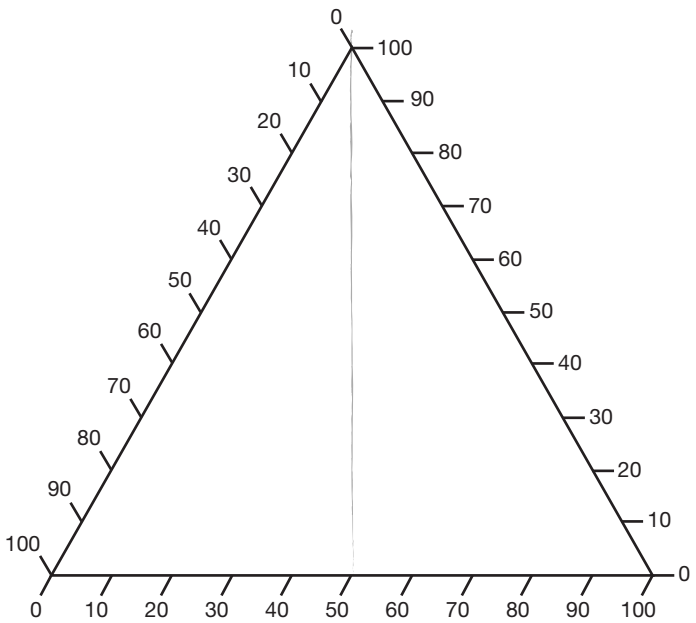
**FIGURE 4** Creating a second axis




### Step 4

Repeat this step on the other side of the vertical line to complete the triangle, but reverse the markings, so 0 is at the bottom of the line and 100 is at the top. Your base graph should show a flow of 0 to 100 per cent around the graph, as in **FIGURE 5**.

**FIGURE 5** A ternary graph outline




### Step 5

Erase the vertical line that you drew to centre your graph.

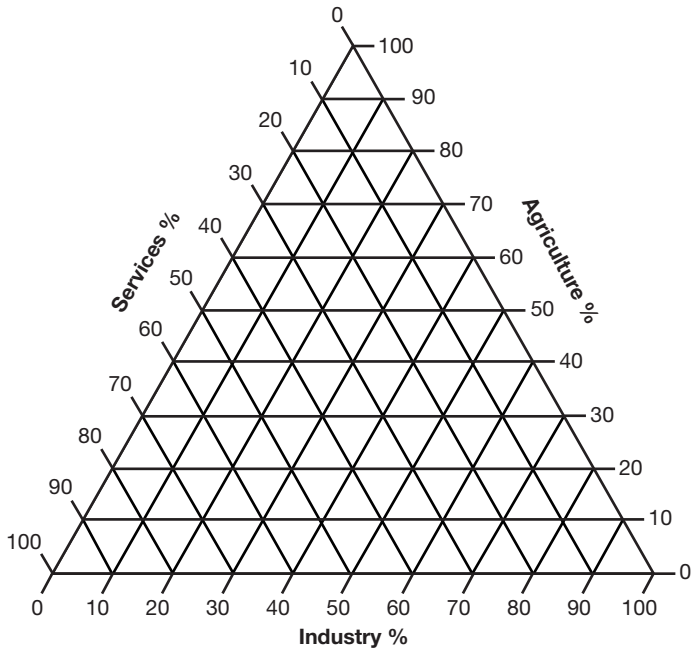
### Step 6

Now you need to use a ruler and carefully join points across the triangle that add to 100 per cent. This will provide a grid on which you can plot data.

### Step 7

Label the axes with the three features that you are going to plot. (In the **FIGURE 1** model, this is Services, Industry and Agriculture.) Put the percentage symbol (%) after each label (see **FIGURE 6**).

**FIGURE 6** A ternary graph with its grid completed and axes labelled




### Step 8

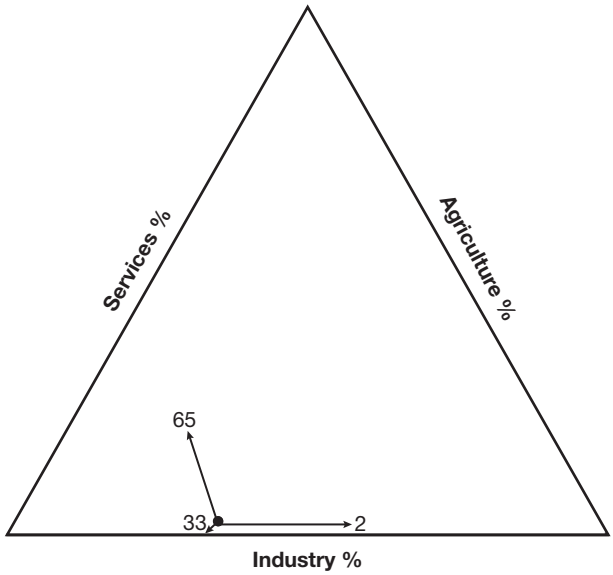
Sample data for **FIGURE 1** would appear in a table such as **TABLE 1**.

**TABLE 1** Sample data on economic activity for selected countries in **FIGURE 1**

| Country | Agriculture % | Industry % | Services % |
|---|---|---|---|
| Hong Kong | 2 | 33 | 65 |
| Myanmar | 84 | 8 | 8 |
| Sri Lanka | 49 | 21 | 30 |

To plot data, you need to find the point where the percentages for the three features intersect. Plotting and reading ternary graphs requires concentration. You need to follow the diagonal lines sloping down from left to right (\) from the left-hand axis, the diagonal lines sloping up from left to right (/) from the bottom axis, and the horizontal lines from the right-hand axis. Look at the patterns outlined in **FIGURE 7** to make sure you read the grid correctly. (Correctly angling the markers that fall outside the triangle will help you in plotting and reading the graph.)

**FIGURE 7** Reading the grid




When plotting country data, find the spot represented by the three sets of data and draw a small dot. Label it with the country name. Check that you can find the three countries in **TABLE 1** on your ternary graph.

### Step 9

Complete the graph with an appropriate title. In this case, the graph shows economic activity in selected countries.

## on Resources

**Video eLesson** Constructing ternary graphs (eles-1728)
**Interactivity** Constructing ternary graphs (int-3346)

## 11.10.3 Let me do it

Complete the following activities to practise this skill.

### 11.10 ACTIVITIES

1. Use the data presented in **TABLE 2** to construct a ternary graph on labour force by occupation, 2011–12, in selected countries. Use the checklist to ensure you cover all aspects of the task.

**TABLE 2** Labour force by occupation, 2011–12, selected countries

| Country | Agriculture % | Manufacturing % | Services % |
|---|---|---|---|
| Australia | 4 | 21 | 75 |
| Colombia | 18 | 14 | 68 |
| Finland | 4 | 24 | 74 |
| Germany | 2 | 24 | 74 |
| India | 53 | 19 | 28 |
| Indonesia | 38 | 13 | 49 |
| Italy | 4 | 28 | 68 |
| Sri Lanka | 32 | 26 | 42 |
| South Korea | 6 | 24 | 70 |
| Thailand | 41 | 13 | 46 |
| Venezuela | 7 | 22 | 71 |
| Vietnam | 48 | 22 | 30 |

2. Apply your skills to answer the following questions.
   (a) Which country has the greatest percentage of its population employed in agriculture?
   (b) Which country has the greatest percentage of its people employed in services?
   (c) Which countries have the lowest percentage of people employed in manufacturing?
   (d) Which country has the most even distribution across the three areas of employment?
   (e) On your graph, plot where you think the following countries would be placed: the United States, Gambia and Argentina. Explain your answer.

**Checklist**

I have:

- constructed an equilateral triangle
- divided each side of the triangle into 10
- drawn lines across the triangle that always total 100 per cent
- accurately plotted the data
- labelled the axes
- provided a clear title.

# 11.11 Thinking Big research project: Subsistence living gap-year diary

## Scenario

Across the globe there are communities that rely on traditional subsistence approaches to food security, such as nomadic herding, hunting-gathering and shifting agriculture. As an end-of-school gap-year experience, you have been given the opportunity to live with an indigenous community that practises one or more of these subsistence approaches.

## Task

You will create a gap-year diary to help you remember forever the people you've met and their distinctive ways of managing their environment.

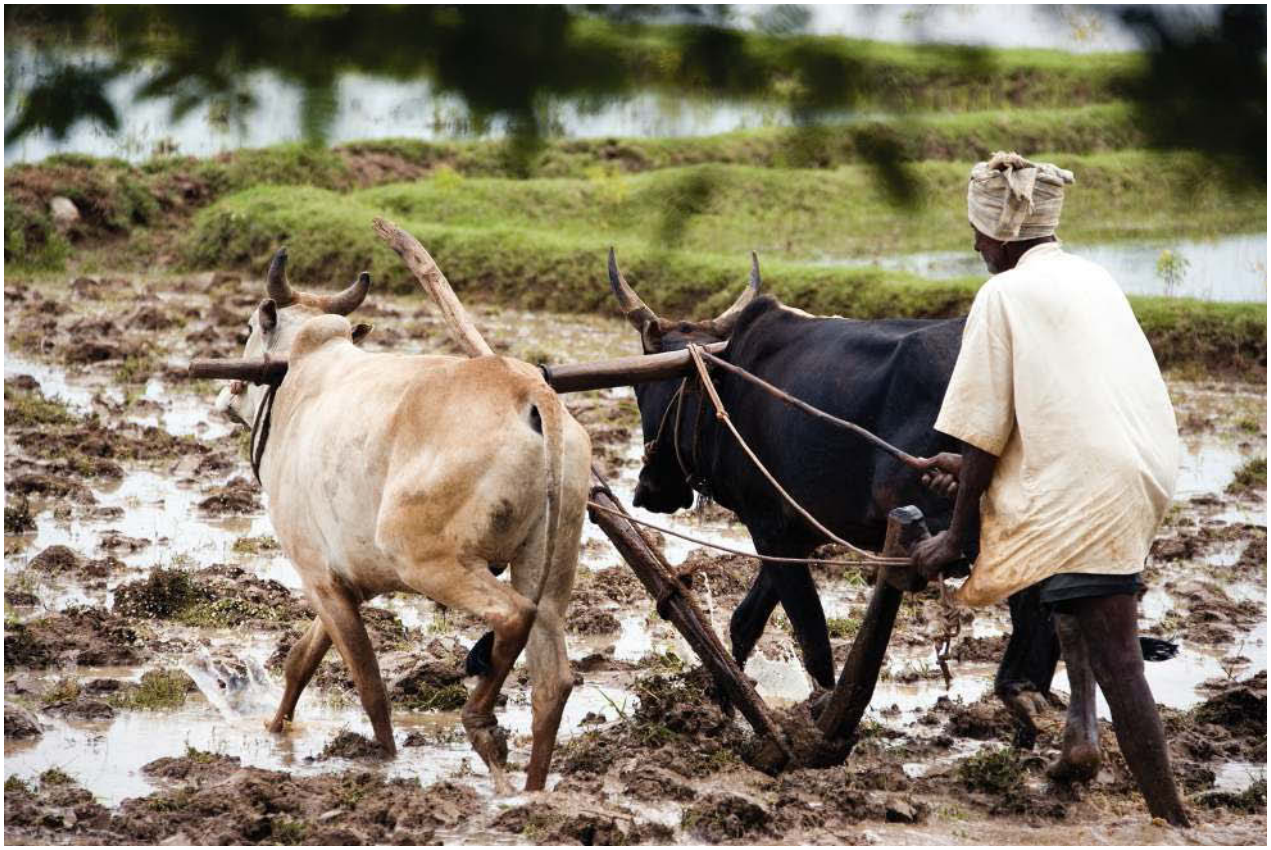
Your diary should include:

- an outline of the people you are living with
- a map showing the location of this community in the world
- written information, pictures and diagrams as appropriate, outlining the various activities undertaken at different times of the year and how food security is achieved by this community.

## Process

- Open the ProjectsPLUS application in the Resources for this topic. Click on the **Start new project** button to enter the project due date and set up your project group if you wish. You may work individually or in pairs, depending on your teacher's preference. Save your settings and the project will be launched.
- Conduct some preliminary research into various approaches to subsistence and choose a community on which to focus your research. Navigate to the **Research forum**, where you will find starter topics loaded to guide your research. You can add further topics to the Research forum if you wish. In the **Media centre** you will find an assessment rubric and some weblinks that will provide a starting point for your research.

- Conduct your detailed research. Investigate the foods eaten and the farming, hunting and gathering methods used. What activities are undertaken at various times of the year? What roles do men, women and children play in the process? As you conduct your research, remember to record details of your sources so you can create a bibliography to submit with your diary. Add your research notes and source details to the relevant topic pages in the Research forum. You can print out the **Research report** in the Research forum to easily view all the information you have gathered, if you wish.
- Once you have completed your research, create your diary. Create entries for different times of year to highlight the changing activities that occur. Add images, diagrams and maps where appropriate and ensure your text information is clear and informative.
- Review your work thoroughly, checking for correct spelling and grammar. Ensure that all maps have BOLTSS applied and images have captions. Finalise your bibliography. Once you are happy with your work, submit your diary and bibliography to your teacher for assessment.



## Resources

**ProjectsPLUS** Thinking Big research project: Subsistence living gap-year diary (pro-0189)

# 11.12 Review

## 11.12.1 Key knowledge summary

### 11.2 What does the world eat?

- Staple foods are those that are eaten regularly and in such quantities that they constitute a dominant portion of a diet.
- Staple food production is interconnected with climate, environment, culture and traditions.
- Most staple foods are cereals, such as wheat, barley, rye, oats, maize (corn) and rice; or root vegetables, such as potatoes, yams, taro and cassava.
- Other staple foods include legumes, such as soya beans and sago; fruits, such as breadfruit and plantain (a type of banana); and fish.

### 11.3 How can we feed the world?

- The ongoing provision of food for an ever-increasing world population requires new thinking in sustainable food production.
- The three main factors that have affected recent increases in world crop food production are increased cropland and rangeland area, increased yield per unit area and greater cropping intensity.
- Agricultural innovations have changed and increased global food production.
- The Green Revolution was a result of the development and planting of new hybrids of rice and wheat, combined with expanded irrigation and use of fertilisers, which have led to greatly increased yields.

### 11.4 Modifying biomes for agriculture

- Rapid global population growth has an impact on food production and the consequent modification of biomes.
- Modifications to climate include the use of irrigation and greenhouses.
- Soils can be modified through the use of fertilisers.
- Landscapes can be modified through measures such as flattening, terracing or draining. Land reclamation involves creating new land from seas, rivers or lakes.

### 11.5 Food production in Australia

- Climate and distance to markets are major factors in the control of all forms of agriculture in Australia.
- Types of farming in Australia include: extensive farming of sheep or cattle, extensive cereal crop farming, intensive farming such as dairy, horticulture and market garden cropping.

### 11.7 Indigenous Australians' food security over time

- Pre-European Indigenous food security was based on a profound knowledge of the land and water resources and a sustainable approach to sourcing the essentials for living.
- Changes brought by Europeans in the occupation of Australia resulted in many traditional sources of food no longer being available to Indigenous peoples.
- Recent changes in Native Title and government food security schemes have offered opportunities for Indigenous communities to reconnect to the land and/or achieve better access to quality foods.

### 11.8 Rice — an important food crop

- Rice is a staple food crop for more than half the world's population.
- The world's top ten rice-producing countries are located in Asia, where environmental conditions are favourable.
- Rice production has increased significantly due to technological advances.
- Rice production in the Australian Riverina relies on irrigation and thus has environmental impacts on the water resources of the Murray-Darling Basin.

### 11.9 Cacao — a vital cash crop

- Although cacao does not 'feed the world', it is an essential cash crop, connected to the livelihoods of 40–50 million people worldwide, providing them with income to purchase or cultivate crops for food.

- Most cacao is grown in a narrow belt between 10 degrees north and 10 degrees south of the equator.
- Consumer demand for chocolate is on the rise, but the cacao tree is under threat from pests, fungal infections, climate change, and farmers' lack of access to fertilisers and other products that enhance yields.

## 11.12.2 Reflection

Complete the following to reflect on your learning.

### 11.12 ACTIVITIES

Revisit the inquiry question posed in the Overview:

**Everyone needs to eat. How does the world produce all the food it needs, and is there a better way?**

1. Now that you have completed this topic, what is your view on the question? Discuss with a partner. Has your learning in this topic changed your view? If so, how?
2. Write a paragraph in response to the inquiry question, outlining your views.

### Resources

**eWorkbook** Reflection (doc-31716)
Crossword (doc-31717)
**Interactivity** Feeding the world crossword (int-7645)

### KEY TERMS

**agribusiness** business set up to support, process and distribute agricultural products
**agroforestry** the use of trees and shrubs on farms for profit or conservation; the management of trees for forest products
**arable** describes land that can be used for growing crops
**biofuel** fuel that comes from renewable sources
**cash crop** a crop grown to be sold so that a profit can be made, as opposed to a subsistence crop, which is for the farmer's own consumption
**crop rotation** a procedure that involves the rotation of crops, so that no bed or plot sees the same crop in successive seasons
**extensive farm** farm that extends over a large area and requires only small inputs of labour, capital, fertiliser and pesticides
**Green Revolution** a significant increase in agricultural productivity resulting from the introduction of high-yield varieties of grains, the use of pesticides and improved management practices
**horticulture** the practice of growing fruit and vegetables
**hybrid** plant or animal bred from two or more different species, sub-species, breeds or varieties, usually to attain the best features of the different stocks
**income diversity** income that comes from many sources
**innovation** new and original improvement to something, such as a piece of technology or a variety of plant or seed
**intensive farm** farm that requires a lot of inputs, such as labour, capital, fertiliser and pesticides
**mallee** vegetation areas characterised by small, multi-trunked eucalypts found in the semi-arid areas of southern Australia
**monoculture** the cultivation of a single crop on a farm or in a region or country
**per capita** per person
**sustainable** describes the use by people of the Earth's environmental resources at a rate such that the capacity for renewal is ensured
**undulating** describes an area with gentle hills

# 12 The impacts of global food production

## 12.1 Overview

Our planet works hard to feed the ever-growing human population ... but at what cost?

### 12.1.1 Introduction

The world's biomes support human life. We depend on them for food, water, fibres, fuel and wood. We also rely on the services they provide, such as air purification, climate regulation and spiritual and aesthetic comfort. However, our ecosystems are under threat; increasing population and demand for food have altered many of our biomes and we have seen a significant decline in species biodiversity. There is a growing concern that, unless such problems are addressed, we may not be able to enjoy food security in the future.

**on Resources**

**eWorkbook** Customisable worksheets for this topic

**Video eLesson** Trashing our biomes (eles-1719)

**LEARNING SEQUENCE**


**12.1** Overview
**12.2** Food production's effect on biomes
**12.3** Changing our forest biome
**12.4** **SkillBuilder:** GIS — deconstructing a map online only
**12.5** Paper profits, global losses?
**12.6** Depleting our bountiful ocean biome
**12.7** **SkillBuilder:** Interpreting a geographical cartoon online only
**12.8** Losing the land
**12.9** The effects of farmland irrigation
**12.10** Diminishing global biodiversity
**12.11** Does farming cause global warming?
**12.12** **Thinking Big research project:** Fished out! PowerPoint online only
**12.13** **Review** online only


To access a pre-test and starter questions and receive immediate, **corrective feedback** and **sample responses** to every question, select your learnON format at www.jacplus.com.au.

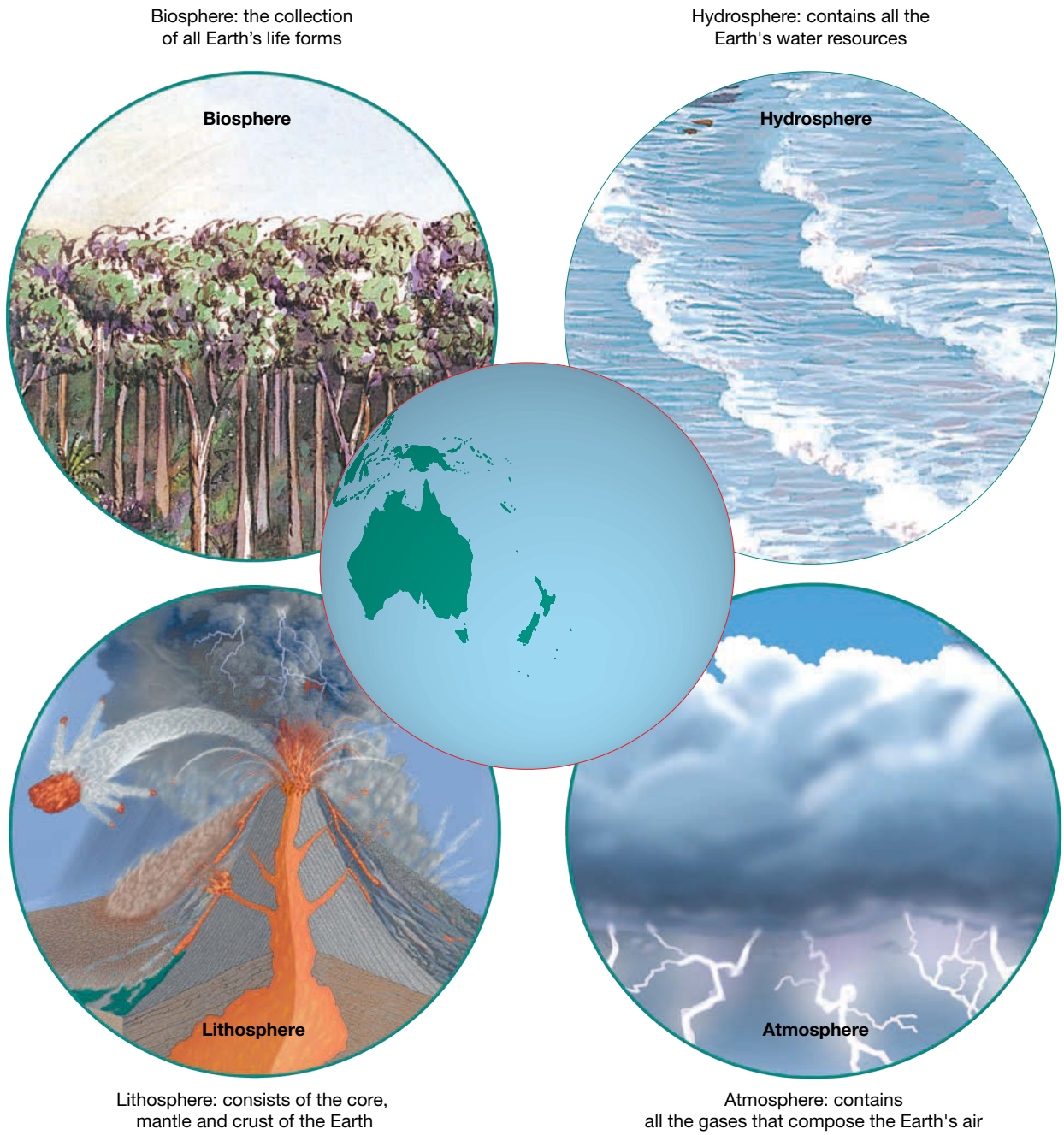
# 12.2 Food production's effect on biomes

## 12.2.1 What is our biophysical world?

Food is essential to human life, and over the past centuries we have been able to produce more and more food to feed our growing population. While technology has enabled us to increase production, it has come at a price. Large-scale clearing of our forests, the overfishing of our oceans, and the constant overuse of soils has resulted in a significant deterioration of our biophysical world.

Planet Earth is made up of four spheres: the atmosphere, lithosphere, hydrosphere and biosphere (see **FIGURE 1**).

**FIGURE 1** The Earth's four spheres



All these spheres are interconnected and make up our natural or **biophysical environment**. For example, rain falling from a cloud (atmosphere) may soak into the soil (lithosphere) or flow into a river (hydrosphere) before being taken up by a plant or animal (biosphere) where it may evaporate and return to the atmosphere. (It is interesting to note that 97 per cent of the Earth's water is found in salty oceans, and the remainder as vapour in the atmosphere and as liquid in **groundwater**, lakes, rivers, glaciers and snowfields.)

Natural events, such as storms or earthquakes, or human activities can create changes to one or all of these spheres. The production of food, whether from the land or sea, has the potential to change the natural environment and, in doing so, increases the likelihood of food insecurity. **TABLE 1** shows how food production can affect the biophysical world. As can be seen, activities such as land clearing and **irrigation** can have impacts on all four of the Earth's spheres.

**TABLE 1** How food production affects the biophysical world

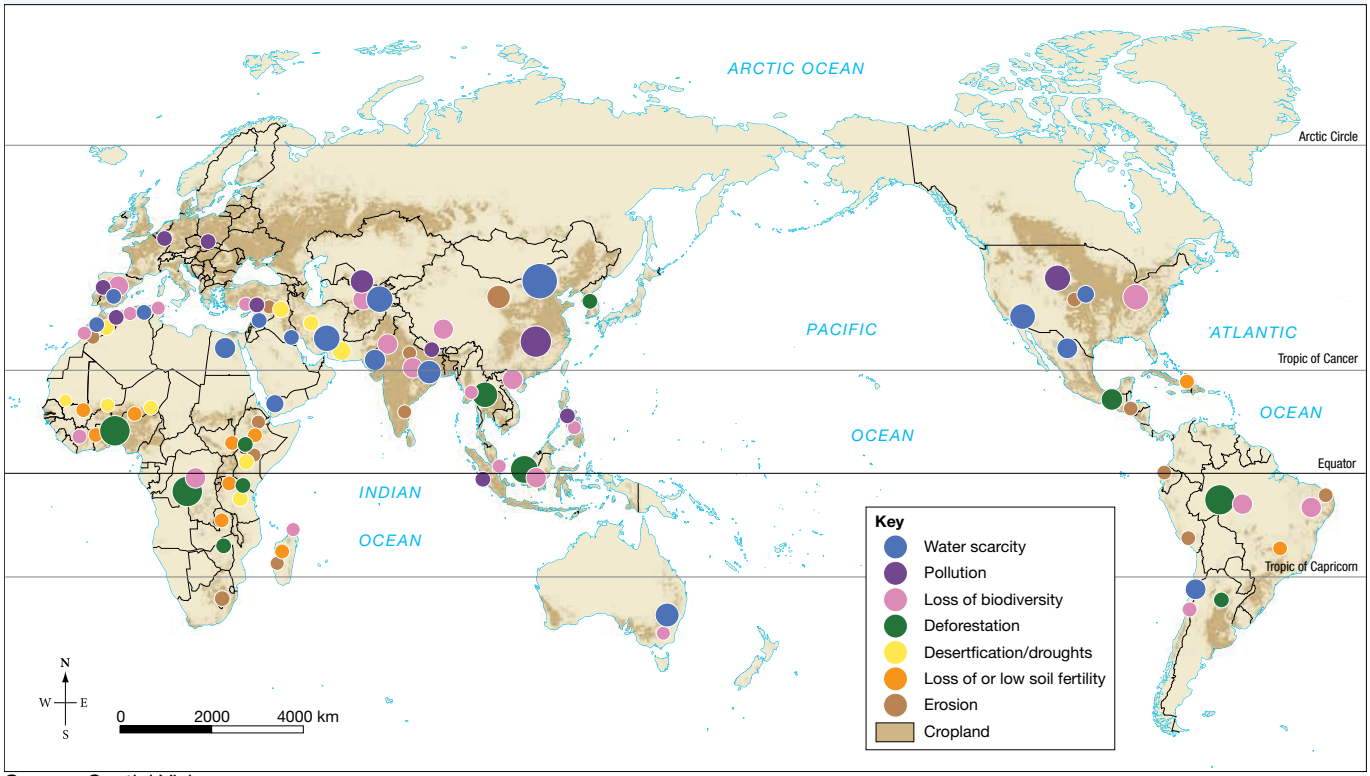
| Activities | Atmosphere | Lithosphere | Biosphere | Hydrosphere |
|---|---|---|---|---|
| Clearing of native vegetation for agriculture | x | x | x | x |
| Overgrazing animals | | x | x | x |
| Overusing irrigation water, causing saline soils | | x | x | x |
| Burning forests to clear land for cultivation | x | x | x | x |
| Run-off of pesticides and fertilisers into streams | | x | x | x |
| Producing greenhouse gases by grazing animals and rice farming | x | | | |
| Changing from native vegetation to cropping | | x | x | x |
| Withdrawing water from rivers and lakes for irrigation | x | x | x | x |
| Overcropping soils | | x | x | x |
| Overfishing some species | | | x | |

## 12.2.2 What has happened to our biophysical world?

Currently, the world produces enough food to feed all 7.7 billion people. We produce 17 per cent more food per person than was produced 30 years ago, and the rate of food production has been greater than the rate of population growth. This has been the result of: improved farming methods; the increased use of fertilisers and pesticides; large-scale irrigation; and the development of new technologies, ranging from farm machinery to better quality seeds.

There have been many benefits associated with this change, especially in terms of human wellbeing and economic development. However, at the same time, humans have changed the Earth's biomes more rapidly and more extensively than in any other time period. The loss of biodiversity and degradation of land and water (which are essential to agriculture) is not sustainable. With an expected population of 9.7 billion in 2050, it has been estimated that food production will need to increase by approximately 70 per cent. The global distribution of environmental risks associated with food production can be seen in **FIGURE 2.**

**FIGURE 2** State of the world's land and water resources for food and agriculture




***Source:*** Spatial Vision

## on Resources

**Interactivity** Degrading our farmland (int-3323)

## 12.2 INQUIRY ACTIVITIES

1. Use the following labels to create a flow diagram showing how the clearing of native vegetation can affect all four of the Earth's spheres.
   - Soil is left bare and exposed to wind and water erosion.
   - There is less evaporation of water from vegetation.
   - There is a loss of habitat for birds, animals and insects.
   - Increased water runs off from exposed land.
   - Increased sediment builds up in streams.

   **Classifying, organising, constructing**
2. (a) Rank what you consider to be the three most serious ***environmental*** issues shown on the **FIGURE 2** map.
   (b) What criteria did you use to make your decisions? (For example: extent of area covered, number of people affected, economic impacts.)
   (c) Share your list with at least two other students. What were the similarities and differences in the rankings?
   (d) Would you now alter your own ranking? Why or why not? **[Critical and Creative Thinking Capability]**
3. Select one agricultural product in Australia and conduct research to find data on how much is produced and how this has ***changed*** over time. **Examining, analysing, interpreting**

## 12.2 EXERCISES

**Geographical skills key: GS1** Remembering and understanding **GS2** Describing and explaining **GS3** Comparing and contrasting **GS4** Classifying, organising, constructing **GS5** Examining, analysing, interpreting **GS6** Evaluating, predicting, proposing

### 12.2 Exercise 1: Check your understanding

1. **GS2** Describe the biophysical ***environment*** of your local area.
2. **GS2** Why has food production increased so rapidly over time?
3. **GS2** Using **FIGURE 1**, explain how a bird might ***interconnect*** with the four Earth spheres.
4. **GS2** Select one example from **TABLE 1**. Describe how human activity can ***change*** the biophysical world.
5. **GS2** Refer to **FIGURE 2** and your atlas.
   (a) What are the main ***environmental*** issues facing Australia's food production?
   (b) In which ***places*** in the world is deforestation a major concern?
   (c) Which continents suffer from water scarcity?
   (d) What do you notice about the location and distribution of regions that do not have ***environmental*** problems relating to food production?

### 12.2 Exercise 2: Apply your understanding

1. **GS4** Which of Earth's spheres will be most impacted by each of the following activities?
   (a) Application of organic fertilisers to soil
   (b) Introduction of an aquatic pest species into a fish-farming enterprise
   (c) Excessive pumping of groundwater for irrigation
   (d) Construction of large-***scale*** dams in semi-arid regions
2. **GS6** Which of the activities in question 1 could have a positive impact on that sphere?
3. **GS2** Refer to **FIGURE 2**. Suggest a reason why water scarcity is an issue for all continents except Europe.
4. **GS6** Refer to **FIGURE 2**. Suggest one way in which pollution may impact on food production.
5. **GS6** If climate ***change*** was to lead to a higher frequency of drought in the southern hemisphere, predict how this might impact on Australia's land and water resources and food production in the future.

Try these questions in learnON for instant, corrective feedback. Go to www.jacplus.com.au.

# 12.3 Changing our forest biome

## 12.3.1 Why are forests important?

In pre-industrial times, nearly 45 per cent of the world's land surface was covered in forest. Today, this figure is only 30 per cent. With industrialisation, technological development and population growth, large-scale **deforestation** has occurred as a result of the increasing need over time for timber products and land for food. It is estimated that of the forest cover lost, 85 per cent can be readily attributed to human activity — with 30 per cent due to clearing, 20 per cent through degradation and 35 per cent through fragmentation. Agricultural use now accounts for 37 per cent of the Earth's land surface.

Human society, the global economy and forests are interconnected, with more than one billion people depending on forests and forest products. Forest biomes offer us many goods and services, from providing wood and food products to supporting biological diversity. They provide habitat for a wide range of animals, plants and insects. Forests contribute to soil and water conservation, and they absorb **greenhouse gases**. Despite the growing awareness of the value of preserving forests, large-scale clearing continues. **FIGURE 1** shows the annual rate of deforestation in Brazil, while **FIGURE 2** shows the cumulative amount of forest lost over time.

## 12.3.2 Why do we clear forests?

By clearing forests, trees can be harvested for timber and paper production, and valuable ores and minerals can be mined from below the Earth's surface. Sometimes, forests are flooded rather than cleared in order to construct dams for hydroelectricity. Forests may also be cleared for food production, such as small-scale subsistence farming, large-scale cattle grazing, and for **plantations** and crop cultivation.

**FIGURE 1** Annual loss of Amazon forest, Brazil, 1988–2018

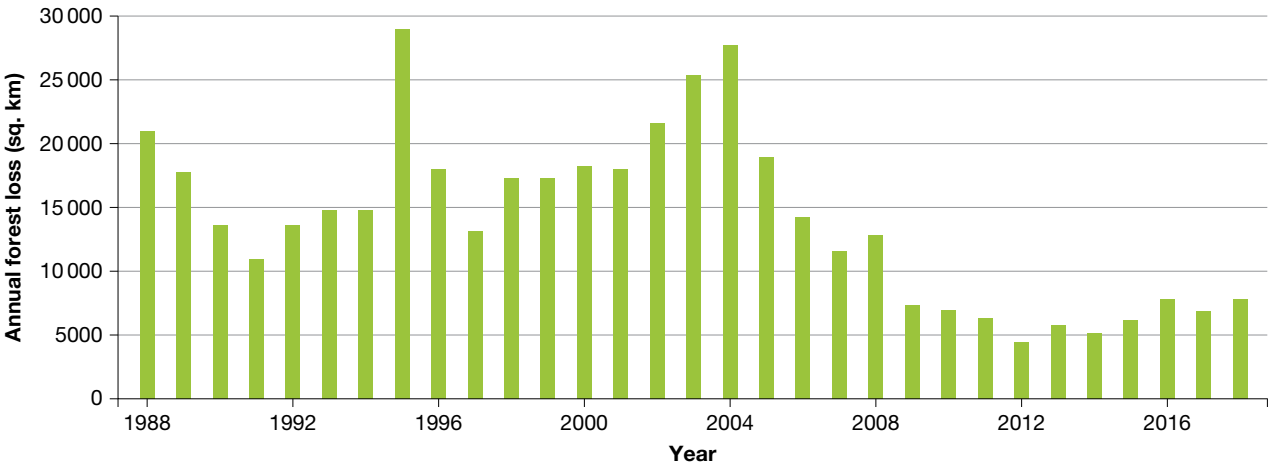
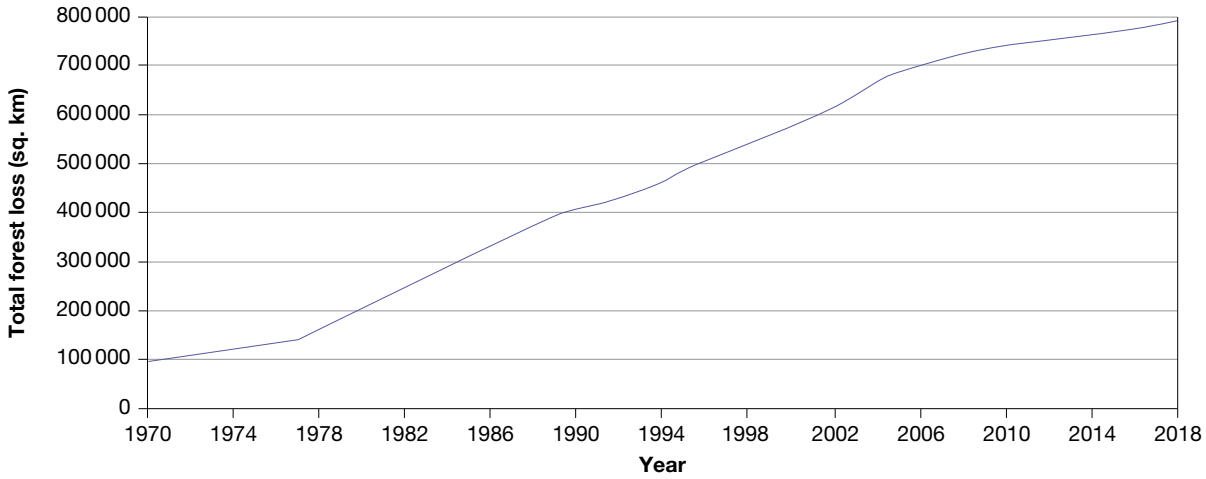



**FIGURE 2** Total loss of Amazon forest, Brazil, since 1970



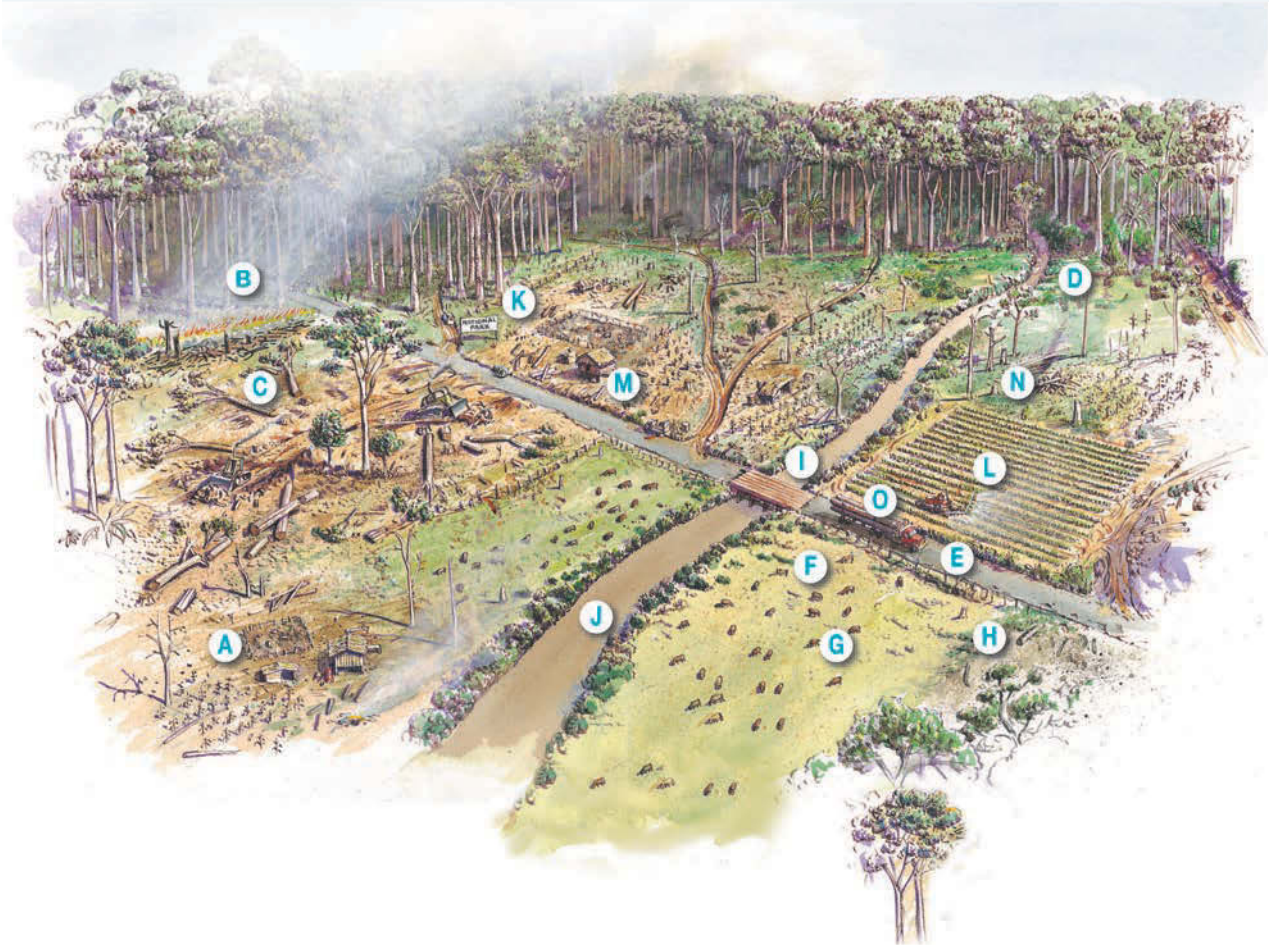

Road construction, usually funded by governments, also plays a part in changing rainforest environments (see **FIGURE 3**). Roads help to improve access and make more land available, especially to the landless poor. They also reduce population pressures elsewhere by encouraging people to move to new places. At the same time, businesses benefit from improved access to mining resources and forest timbers, and are better able to establish large cattle ranches and farms.

**FIGURE 3** The effects of road building in the Amazon. Settlements tend to follow a linear pattern along the roads and then gradually move inland, opening up the forests.

## 12.3.3 What happens when forests are cleared?

**FIGURE 4** illustrates some changes that forest clearing in the Amazon can have on the environment.

**FIGURE 4** Impacts of clearing the Amazon forest




A New farmland with mixed crops established
B Smoke from clearing and burning
C Newly cleared land, trees cut down and burned. This is called slash-and-burn agriculture.
D Weeds and exotic species invade edges of remaining forest
E New road gives access to more settlers and to animal poachers
F Large cattle ranch
G Introduced cattle erode the fragile topsoil with their hard hooves.
H Erosion of topsoil increases, caused by rain on exposed soils.
I Flooding increases as the stream channel is clogged with sediment.
J The river carries more sediment as soil is washed into streams.
K Fences stop movement of rainforest animals in search of food.
L Pesticides and fertilisers wash into the river.
M Farm is abandoned as soil fertility is lost
N Weeds and other species dominate bare land.
O Harvesting of timber reduces forest biodiversity.

### Explore more with myWorldAtlas

Deepen your understanding of this topic with related case studies and questions.
- Investigate additional topics > Environments > **Forest environments**

## 12.3 INQUIRY ACTIVITIES

1. Research soya-bean farming in the Amazon. How does it compare with cattle ranching in terms of ***environmental sustainability***?
**Comparing and contrasting**
2. Examine the illustration of rainforest destruction shown in **FIGURE 4**. Draw a sketch of what you predict the area will look like in ten years' time. Use labels and arrows to show important features.
**Evaluating, predicting, proposing**

## 12.3 EXERCISES

**Geographical skills key: GS1** Remembering and understanding **GS2** Describing and explaining **GS3** Comparing and contrasting **GS4** Classifying, organising, constructing **GS5** Examining, analysing, interpreting **GS6** Evaluating, predicting, proposing

### 12.3 Exercise 1: Check your understanding

1. **GS1** Refer to **FIGURE 2**. Describe the total loss in Brazilian forests since 1970. Use data in your answer.
2. **GS1** What are the advantages and disadvantages of road building in the Amazon?
3. **GS2** Why would subsistence farming in the Amazon be referred to as slash-and-burn farming?
4. **GS2** In what ways would the ***environmental changes*** of small-***scale*** subsistence farming differ from those of large-***scale*** soya-bean cropping?
5. **GS2** Why can the large-***scale*** clearing of tropical rainforests be considered an ***unsustainable*** practice?

### 12.3 Exercise 2: Apply your understanding

1. **GS6** Opening up the rainforest with roads can lead to fragmentation of the forest. What might the effect of this be on:
   (a) native animals
   (b) local indigenous populations?
2. **GS3** Compare how a small-***scale*** farmer from the Amazon and an ***environmentalist*** from another country might view the resources of a rainforest.
3. **GS5** Refer to **FIGURE 4**. Identify three ***changes*** to the river as a result of forest clearing.
4. **GS6** How might ***changes*** as a result of forest clearing affect farming downstream?
5. **GS2** Suggest two methods that could be used in the Amazon to reduce the amount of sediment washing into the river.

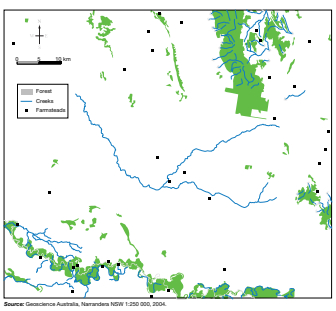
Try these questions in learnON for instant, corrective feedback. Go to www.jacplus.com.au.

# 12.4 SkillBuilder: GIS — deconstructing a map

online only

## What is GIS?

A geographical information system (GIS) is a storage system for information or data, which is stored as numbers, words or pictures.




### Select your learnON format to access:

- an explanation of the skill (Tell me)
- a step-by-step process to develop the skill, with an example (Show me)
- an activity to allow you to practise the skill (Let me do it)
- questions to consolidate your understanding of the skill.

### on Resources

**Video eLesson** GIS deconstructing a map (eles-1730)
**Interactivity** GIS deconstructing a map (int-3348)

# 12.5 Paper profits, global losses?

## 12.5.1 How do we use paper?

Look around you — how many different things can you see that are made out of paper? Paper is a renewable, recyclable material, and yet something so common and so useful also poses significant environmental consequences to biomes, at all stages of its usage cycle.

Biomes enable us to produce the food we eat, and they also supply many of the raw materials for manufacturing, such as minerals, ores and fibres. We are able to make cloth from cotton and wool using grassland biomes, while forest biomes give us wood for construction and **pulp** for making paper products. There are thousands of everyday items made from paper, ranging from toilet paper to disposable nappies, packaging, money, tickets and writing paper (see **FIGURE 1**).

Traditionally, paper has provided us with the means to record ideas, news, knowledge and even works of art. Paper is interconnected with social development as it aids in literacy and communication. Despite the advent of modern electronic communication, plastic bags and the 'paperless office', paper still remains an essential part of our homes and workplaces.

**FIGURE 1** Different paper products

## 12.5.2 Are we really a paperless society?

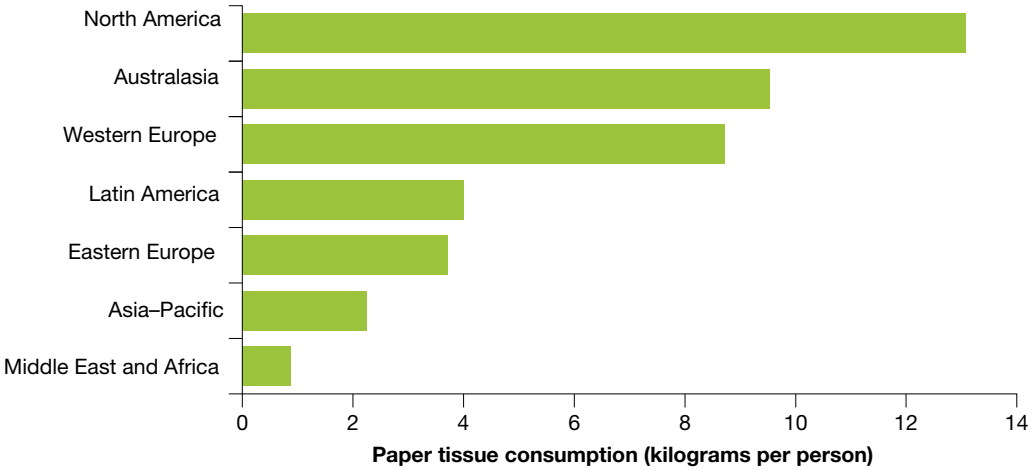
We have become very dependent on paper products, with global consumption increasing by 400 per cent since the late 1970s. Today the world consumes 300 million tonnes of paper annually, and this is expected to rise as developing countries in Asia increase their consumption. China has now surpassed the United States as the largest producer and consumer of paper products.

The paper industry now consumes nearly 50 per cent of all industrial wood logged and is the fifth-largest consumer of energy needed in the production process. While the demand for some paper products has declined (for example, printed magazines and newspapers), the rapidly expanding e-commerce sector has seen a greater demand for packaging material as people purchase items online.

There is a strong interconnection between a country's level of economic development and its consumption of paper products. The use of tissue products, such as paper towels, facial tissues and toilet paper, is a good example of this relationship. As living standards within a country improve there is a changing attitude towards hygiene and improved lifestyle, which then encourages more spending on associated products. **FIGURE 2** shows that on a regional scale, North America, Australasia and Western Europe are the largest users of tissue products. Supporting this is the fact that in the United States, on average, 141 rolls of toilet paper are consumed per person per year, compared to Germany with 134 rolls, Japan with 91 and China with 49 rolls.

It was thought that with the introduction of personal computers we would become a paperless society, but this is far from the case. It has been estimated that in the United Kingdom, 45 per cent of paper in the office has a lifespan of less than one day. With technological advancements, paper has now become a cheap, disposable product. This has resulted in a high level of both usage and waste.

**FIGURE 2** Regional consumption of paper tissue per capita, 2017




## 12.5.3 How does making and using paper affect biomes?

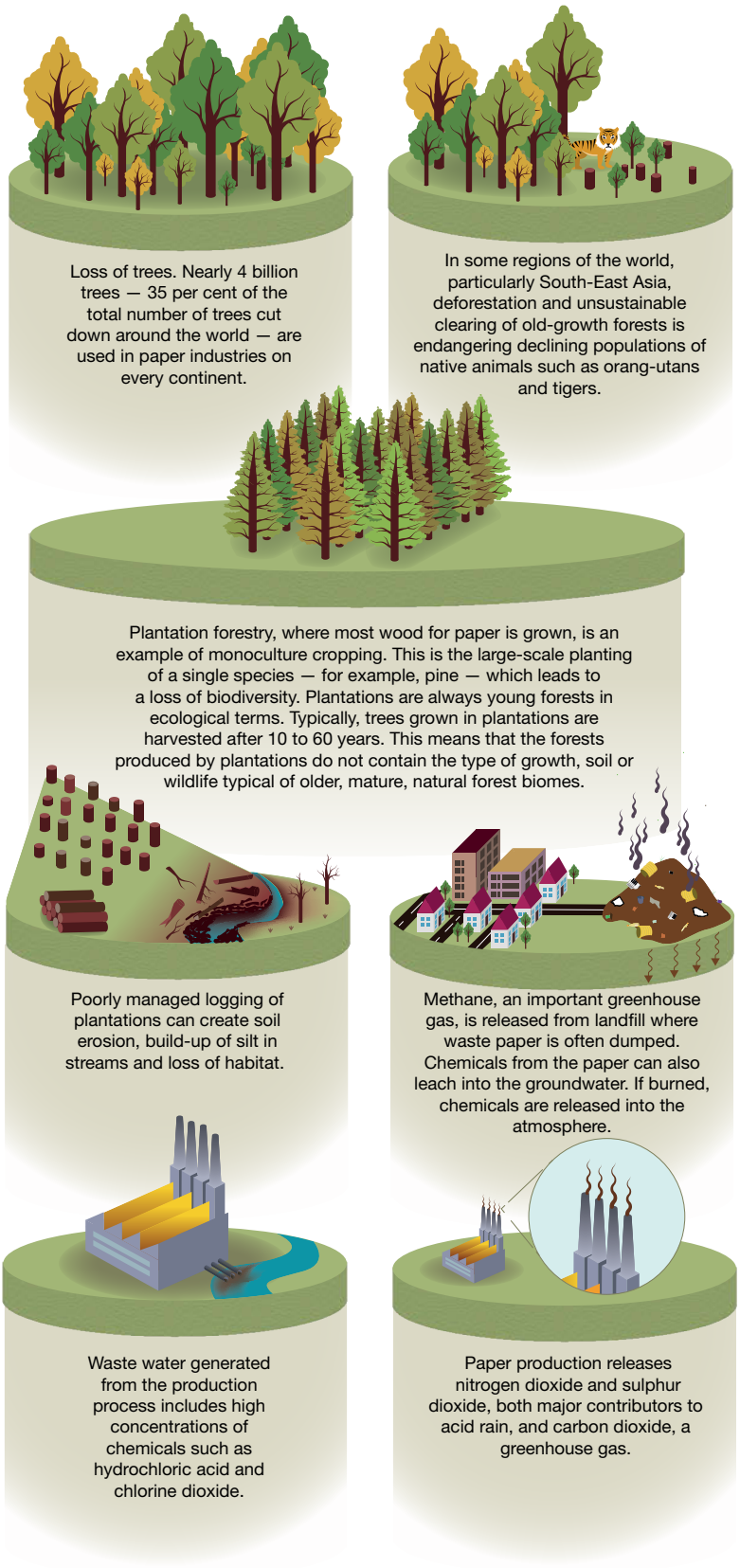
Pulp and paper production has been ranked as one of the most resource-intensive and highly polluting manufacturing industries. Besides wood fibre, the main inputs into the paper-making process are water, energy and chemicals needed for breaking down fibres and bleaching to create clean, white paper. The paper industry uses more water to produce one tonne of product than any other industry. It takes 10 litres of water to produce just one A4 sheet of paper.

Pulp and paper manufacturing has been linked to pollution of air, water and land through the discharge of toxic wastes. Paper's impact on biomes starts at the forest stage with the activity of logging the timber, and continues with the conversion of the timber to pulp and paper. Activities such as the logging of **old-growth forests** can have significant impacts on native animal populations and biodiversity. Environmental impacts continue even after paper has been used and discarded. In Australia, we waste on average 5.6 million tonnes of paper products per year, which equates to 229 kilograms per person. About 60 per cent is recycled and 40 per cent sent to landfill.

**FIGURE 3** Environmental effects of harvesting plantation timber

As paper decomposes, it releases methane, a dangerous greenhouse gas. **FIGURE 4** illustrates how biomes are affected by paper production.

**FIGURE 4** Environmental consequences of paper production



## 12.5.4 Is there a sustainable future for paper?

There has been an increase in environmental awareness and government legislation in recent years — this is helping to make the paper industry and people's use of paper more environmentally friendly, thus reducing the negative impacts on biomes. The Australian timber industry follows the Forest Code of Practice, which sets out rules and regulations regarding logging on slopes and protecting streams and habitat trees.

There has been considerable research conducted into the use of non-wood products, for example bamboo, sugarcane, hemp and **kenaf**, to provide fibre for paper. Currently these non-wood products make up only 10 per cent of the fibres used in paper production globally. Alternate fibres are critically important, however, in countries that do not have enough trees for paper production. Approximately 70 per cent of the raw materials used for paper in India and China come from non-wood products.

In some places, tree plantations are able to grow on land that is unsuitable for other forms of agriculture or is badly degraded, in which case there is likely to be an *increase* in habitat and biodiversity.

For the paper industry, the goals are to reduce fuel and energy requirements and reduce emissions. China, with its relatively new paper industry, is leading the way in this field. For everyday citizens, it is about making sensible choices, and reducing our use of paper and recycling. Products made from recycled paper can include masking tape, hospital gowns, bandages, egg cartons and even lampshades. However, paper can be recycled only 5 to 7 times, after which the fibres become too short and weak to bond together.

For every tonne of paper *not* consumed, the following savings are made:

- 18 trees
- 67 500 litres of water
- 9500 kilowatt hours of power
- 3300 kilograms of greenhouse gas emissions.

**FIGURE 5** Paper recycling factory

## DISCUSS

Do individuals have a responsibility to take action to reduce paper consumption or is this the responsibility of businesses and government? As a class, consider how you can reduce your paper consumption, as individuals, as a class and at the whole-school level. How could you encourage others to reduce consumption?

**[Ethical Capability]**

## on Resources

**Weblink** Paper production

## 12.5 INQUIRY ACTIVITIES

1. Construct a list of the ten most important paper items in your day-to-day life. How does your list compare with those of others in your class? Are there similarities and differences? Why is this?

   **Comparing and contrasting**

2. Use the **Paper production** weblink in the Resources tab to create a summary of key points for things you can do to promote ***sustainable*** paper production and consumption practices.

   **Examining, analysing, interpreting**

## 12.5 EXERCISES

**Geographical skills key: GS1** Remembering and understanding **GS2** Describing and explaining **GS3** Comparing and contrasting **GS4** Classifying, organising, constructing **GS5** Examining, analysing, interpreting **GS6** Evaluating, predicting, proposing

### 12.5 Exercise 1: Check your understanding

1. **GS2** What is *old-growth forest*? Why is it important to protect these types of biomes from being cleared?
2. **GS3** How might the structure and biodiversity be different in an old-growth forest compared to a tree plantation?
3. **GS2** Refer to **FIGURE 2**. With the use of data, describe the general consumption of tissue products globally.
4. **GS1** Refer to **FIGURE 3**. List the ***environmental*** effects of clearing a pine plantation that you can see in this photograph.
5. **GS2** What factors might contribute to a region increasing its consumption of tissue products in the future?

### 12.5 Exercise 2: Apply your understanding

1. **GS3** Refer to **FIGURE 2**. Suggest reasons why tissue consumption (paper towel, facial tissues, toilet paper etc.) has much higher consumption per capita in some regions than in others.
2. **GS2** How might a country's growing economy ***change*** its citizens' paper consumption?
3. **GS6** Do paperless societies exist? Do you think they might in the future? Write a paragraph expressing your viewpoint.
4. **GS6** Does your school have a paper recycling program? How effective do you think it is? How could it be improved? If there is not currently a program, outline measures you think could be taken to implement one.
5. **GS2** Many ***places***, including Victoria, have often exported their waste (including paper products) to overseas countries for disposal. (China and the Philippines are now clamping down on this practice.) What is one advantage and one disadvantage of exporting paper waste?

Try these questions in learnON for instant, corrective feedback. Go to www.jacplus.com.au.

# 12.6 Depleting our bountiful ocean biome

## 12.6.1 Overfishing — causes and consequences

The ocean biome has always been seen as an unlimited resource of food for humans. In fact, overfishing is causing the collapse of many of our most important marine ecosystems, and threatens the main source of protein for over one billion people worldwide. **Aquaculture** is a possible solution but, at the same time, it contributes to the decline in fish stocks.

Overfishing is simply catching fish at a rate higher than the rate at which fish species can repopulate. It is an unsustainable use of our oceans and freshwater biomes.

Massive improvements in technology have enabled fish to be located and caught in larger numbers and from deeper, more inaccessible waters. The use of spotter planes, radar and factory ships ensures that fish can be caught, processed and frozen while still at sea.

Globally, fish is the most important animal protein consumed (see **FIGURE 1**). Historically, a lack of conservation and management of fisheries, combined with rising demand for fish products, has seen a 'boom and bust' mentality (see **FIGURE 2**). The larger fish species are targeted and exploited and, after their populations are decimated, the next species are fished. Examples of these include blue whales, Atlantic cod and bluefin tuna.

**FIGURE 1** Global protein demand, 1980–2030 (million tonnes)

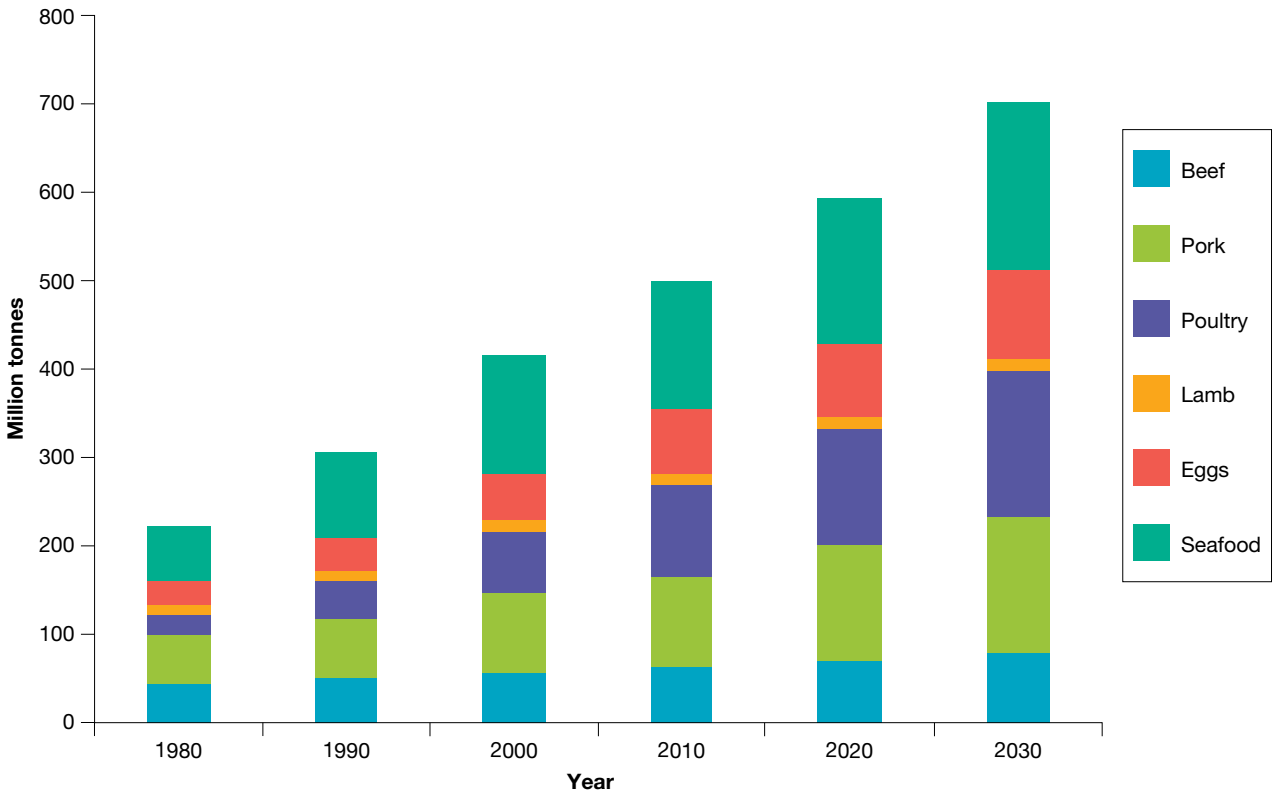


**FIGURE 2** Unsustainable fishing

## What happens when we overfish?

- With overfishing there are often large quantities of by-catch. This means that juvenile fish and other animals, such as dolphins and sea birds, are swept up in nets or baited on hooks before being killed and discarded. For every kilogram of shrimp caught in the wild, 5 kilograms of by-catch are wasted (see **FIGURE 3**).
- Destructive fishing practices such as cyanide poisoning, dynamiting of coral reefs and bottom trawling (which literally scrapes the ocean floor) cause continual destruction to local ecosystems.
- A large quantity of fish that could have been consumed by people is converted to fishmeal to feed the aquaculture industry, to fatten up pigs and chickens, and to feed pet cats (see **FIGURE 4**).
- Coastal habitats are under pressure. Coral reefs, mangrove wetlands and seagrass meadows, all critical habitats for fish breeding, are being reduced through coastal development, overfishing and pollution.

**FIGURE 3** Up to 80 per cent of some fish catches is by-catch.

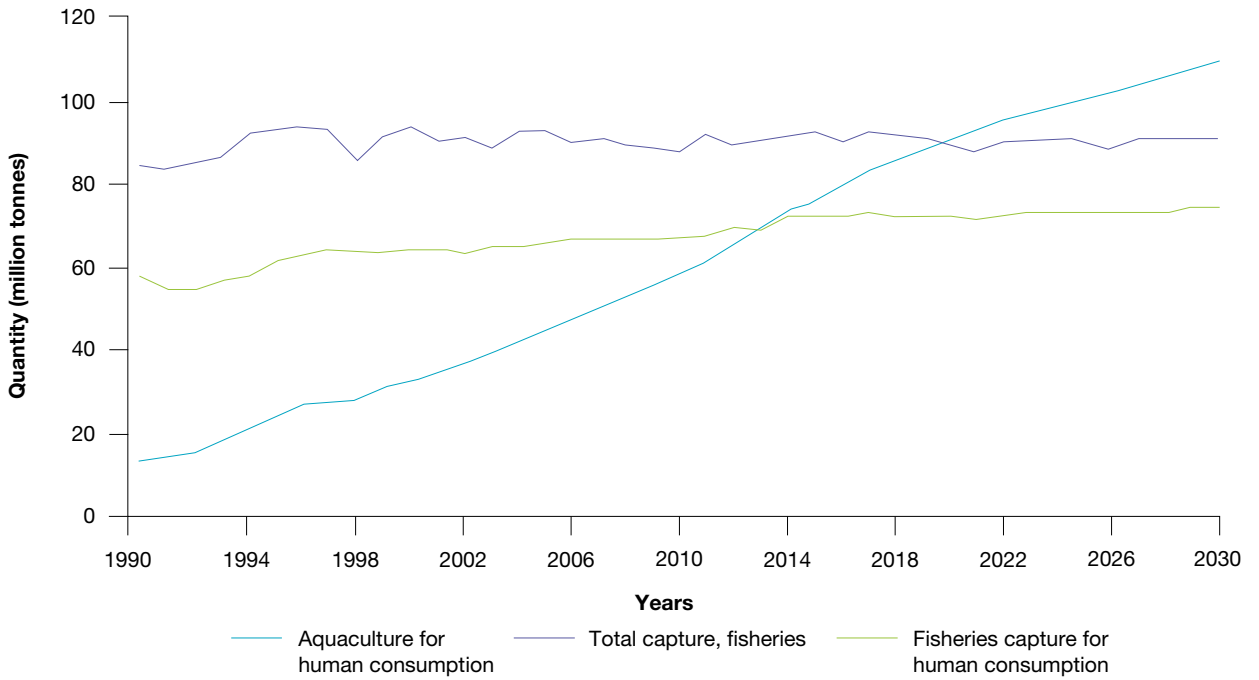
**FIGURE 4** In Australia, the average cat eats 13.7 kilograms of fish a year. The average Australian eats 15 kilograms per year.

## 12.6.2 Is fish farming the solution?

Aquaculture is one of the fastest-growing food industries, providing fish for domestic and export markets. It brings economic benefits and increased food security (see **FIGURE 5**).

Since 2014, fish farming has produced more fish than fish caught in the wild; a harvest of 80 million metric tons was recorded in 2016. China is the largest farmed-fish producer, followed by India, Indonesia, Vietnam, Bangladesh, Egypt and Norway. Australia's history of fish farming started more than 6000 years ago, when Indigenous Australians created a series of fish traps in Lake Condah, in south-west Victoria, to capture a reliable source of eels (see subtopic 11.7). Today, aquaculture is Australia's fastest growing primary industry, producing more than 40 per cent of Australia's seafood.

**FIGURE 5** Global fish and aquaculture 1990–2030




While aquaculture is often seen as a sustainable and eco-friendly solution to overfishing, its rapid growth and poor management in many places has created large-scale environmental change. Some of these changes are described below.

- *Pollution.* Many fish species are fed a diet of artificial food in dry pellets (see **FIGURE 6**). Chemicals in the feed, and the massive waste generated by fish farms, can pollute the surrounding waters.
- *Loss of fish stock.* Food pellets are usually made of fish meal and oils. Much of this comes from by-catch, but the issue is still that we are catching fish to feed fish. It can take 2 to 5 kilograms of wild fish to produce one kilogram of farmed salmon. Other ingredients in the food pellets include soybeans and peanut meal — products that are suitable for human consumption and grown on valuable farmland.
- *Loss of biodiversity.* Many of the fish species farmed are selectively bred to improve growth rates. If accidentally released into the wild, they can breed with native species and change their genetic makeup. This can lead to a loss of biodiversity. Capture of small ocean fish, such as anchovies, depletes food for wild fish and creates an imbalance in the food chain.
- *Loss of wetlands*. Possibly the greatest impact of aquaculture is in the loss of valuable coastal wetlands. In Asia, over 400 000 hectares of mangroves have been converted into shrimp farms. Coastal wetlands provide important ecological functions, such as protecting the shoreline from erosion and providing breeding grounds for native fish.

**FIGURE 6** Feeding fish in pens, Thailand

## on Resources

**Interactivity** Hook, line and sinker (int-3324)

## 12.6 INQUIRY ACTIVITIES

1. Investigate and write a newspaper article on the collapse of the Atlantic cod fishery in Newfoundland. What lessons in the ***sustainability*** of fishing can be learned from the case of the Atlantic cod?
   **Examining, analysing, interpreting**
2. Collect photographs and other information to create an annotated poster showing one of the destructive fishing practices mentioned in this subtopic. **Classifying, organising, constructing**

## 12.6 EXERCISES

**Geographical skills key: GS1** Remembering and understanding **GS2** Describing and explaining **GS3** Comparing and contrasting **GS4** Classifying, organising, constructing **GS5** Examining, analysing, interpreting **GS6** Evaluating, predicting, proposing

### 12.6 Exercise 1: Check your understanding

1. **GS2** Explain how overfishing can lead to a loss of biodiversity.
2. **GS1** What is aquaculture?
3. **GS1** What is by-catch?
4. **GS1** List three benefits and three drawbacks of fish farming.
5. **GS2** Why is it difficult to manage wild fish capture and prevent overfishing?

### 12.6 Exercise 2: Apply your understanding

1. **GS1** Refer to **FIGURE 1**. How important is fish as a source of protein compared with other sources? Use figures in your answer.
2. **GS5** Examine closely the photograph in **FIGURE 3** and describe the by-catch that you see.
3. **GS3** Refer to **FIGURE 5**. Compare the predicted growth of fisheries capture (fish caught in the ocean) with aquaculture production to 2030.
4. **GS6** Suggest one reason why wild capture will not increase greatly in the future.
5. **GS6** What do you think the future of aquaculture might be? Explain your view.

Try these questions in learnON for instant, corrective feedback. Go to www.jacplus.com.au.

# 12.7 SkillBuilder: Interpreting a geographical cartoon

online only

### What are geographical cartoons?

Geographical cartoons are humorous or satirical drawings on topical geographical issues, social trends and events. A cartoon conveys the artist's perspective on a topic, generally simplifying the issue.

### Select your learnON format to access:

- an explanation of the skill (Tell me)
- a step-by-step process to develop the skill, with an example (Show me)
- an activity to allow you to practise the skill (Let me do it)
- questions to consolidate your understanding of the skill.

**on Resources**

**Video eLesson** Interpreting a geographical cartoon (eles-1731)
**Interactivity** Interpreting a geographical cartoon (int-3349)

# 12.8 Losing the land

## 12.8.1 What is land degradation?

Land is one of our most basic resources and one that is often overlooked. In our quest to produce as much as possible from the same area of land, we have often failed to manage it sustainably. Land **degradation** is the result of such poor management.

Land degradation is a decline in the quality of the land to the point where it is no longer productive. Land degradation covers such things as soil **erosion**, invasive plants and animals, **salinity** and desertification. Degraded land is less able to produce crops, feed animals or renew native vegetation. There is also a loss in soil fertility because the top layers, rich in **humus**, can be easily eroded by wind or water. In Australia, it can take up to 1000 years to produce just three centimetres of soil, which can be lost in minutes in a dust storm.

Globally, 75 per cent of the Earth's land area is substantially degraded. The rate of fertile soil loss is now averaging 24 billion tons per year globally. In Australia, of the five million square kilometres of land used for agriculture, more than half has been affected by, or is in danger of, degradation.

Land degradation is common to both the developed and developing world, and results from both human and natural causes.

## Human causes

Human causes of land degradation involve unsustainable land management practices, such as:

- *land clearance* — deforestation or excessive clearing of protective vegetation cover
- *overgrazing of animals* — plants are eaten down or totally removed, exposing bare soil, and hard-hoofed animals such as cows and sheep compact the soil (see **FIGURE 1**)
- *excessive irrigation* — can cause watertables to rise, bringing naturally occurring salts to the surface, which pollute the soil
- *introduction of exotic species* — animals such as rabbits and plants such as blackberries become the dominant species
- *decline in soil fertility* — caused by continual planting of a single crop over a large area, a practice known as monoculture
- *farming on marginal land* — takes place on areas such as steep slopes, which are unsuited to ordinary farming methods.

**FIGURE 1** Soil erosion as a result of overgrazing in Australia

## Biophysical causes

Natural processes such as prolonged drought can also lead to land degradation. However, land can sometimes recover after a drought period. Topography and the degree of slope can also influence soil erosion. A steep slope is more prone to erosion than flat land.

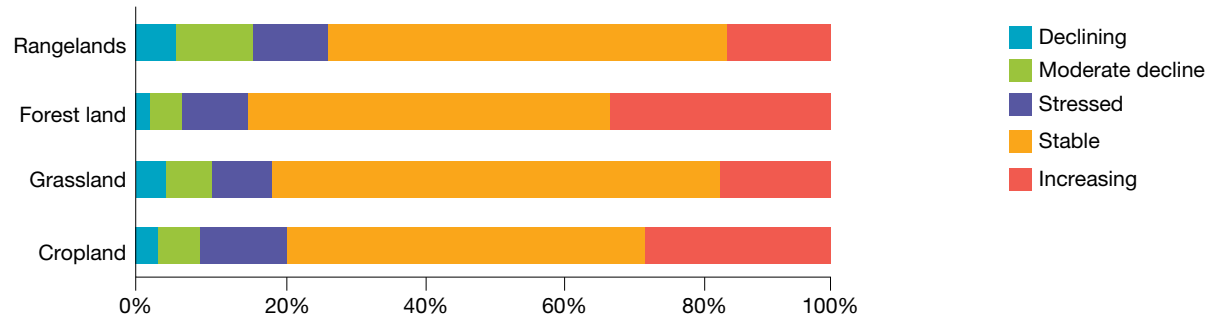
## 12.8.2 Impacts of land degradation

As land becomes degraded, productivity, or the amount of food it can produce, is lost. Some countries in sub-Saharan Africa have lost up to 40 per cent productivity in croplands over two decades, while population has doubled in the same time period. Farmers may choose to abandon the land, try to restore the land or, if the pressure to produce food is too great, they may have no choice but to continue using the land. Unproductive land will be exposed to continual erosion or weed invasion.

If extra fertilisers are applied to try to improve fertility, the excessive nutrients can create pollution and algae build-up in nearby streams. Airborne dust creates further hazards for both people and air travel. Land degradation is a classic example of human impact on all spheres of the environment — atmosphere, biosphere, lithosphere and hydrosphere.

**FIGURE 2** illustrates global land productivity for different land uses, which is an important indicator of land degradation. Twenty per cent of the world's cropland shows declining or stressed land productivity, despite the efforts and resources being used to maintain food production.

**FIGURE 2** Global land productivity for selected land uses




***Note:***
**Rangelands** refers to shrublands mostly used for grazing.
**Forest land** applies to land with more than 40 per cent tree cover.
**Grassland** includes natural grasslands and pasture for grazing.
**Cropland** includes all arable land and where 50 per cent of land is used for crops.

About 40 per cent of degraded lands are found in places that experience widespread poverty, which is a contributing factor to food insecurity. Poor farmers with degraded land and few resources often have little choice but to continue to work the land. There is a strong interconnection between land degradation, migration and political instability. If declining soil quality and an increase in droughts due to climate change continue, between 50 and 700 million people could be forced to move by 2050.

Desertification is an extreme form of land degradation. It usually occurs in semi-arid regions of the world, and the result gives the appearance of spreading deserts. Desert biomes, or arid regions, are harsh, dry environments where few people live. In contrast, semi-arid regions, or drylands, occupy 41 per cent of the Earth's surface and support over two billion people, 90 per cent of whom live in developing nations. Economically, drylands support 44 per cent of the world's food production and 50 per cent of the world's livestock. Although traditional grazing and cropping has taken place in dryland regions for centuries, population growth and the demand for food have put enormous pressure on land resources. Overclearing of vegetation, overgrazing and overcultivation are a recipe for desertification.

### on Resources

**Interactivity** Losing land (int-3325)

### 12.8 INQUIRY ACTIVITIES

1. Create an annotated sketch to show the ***interconnection*** between plants and soil. Use the following points as labels on your sketch.
   - Plant roots help hold soil together.
   - Decomposing plants add nutrients to the soil.
   - Plants shade the topsoil and reduce evaporation.
   - Plants reduce the speed of wind passing over the ground.

   **Classifying, organising, constructing**
2. Investigate an area in Victoria that is suffering from land degradation. Identify the location, causes and impacts of the degradation. Are any steps being taken to reduce the impacts?

   **Examining, analysing, interpreting**

### 12.8 EXERCISES

**Geographical skills key: GS1** Remembering and understanding **GS2** Describing and explaining **GS3** Comparing and contrasting **GS4** Classifying, organising, constructing **GS5** Examining, analysing, interpreting **GS6** Evaluating, predicting, proposing

#### 12.8 Exercise 1: Check your understanding

1. **GS1** List four human causes of land degradation.
2. **GS1** List two natural causes of land degradation.
3. **GS1** Which biome supports more life: desert or drylands? Why?
4. **GS2** Explain how land degraded by drought may recover, whereas land degraded by cultivation may not.
5. **GS2** Consider the photograph in **FIGURE 1**. Why would it be difficult to either graze animals or grow crops on this land?

#### 12.8 Exercise 2: Apply your understanding

1. **GS6** Examine the photograph in **FIGURE 1**. If this was your property and your livelihood, what steps would you take to reduce the erosion problem?
2. **GS5** Refer to **FIGURE 2**.
   (a) Which land cover has the greatest percentage of stressed and declining productivity?
   (b) What type of farming activities could explain the increased productivity in croplands?
3. **GS2** Why is poverty often linked to food insecurity?
4. **GS6** How might climate ***change*** in the future contribute to desertification in semi-arid regions of the world?
5. **GS6** Propose three steps that a farmer could take to reduce the impact of overgrazing.

Try these questions in learnON for instant, corrective feedback. Go to www.jacplus.com.au.

# 12.9 The effects of farmland irrigation

## 12.9.1 What is the purpose of irrigation?

Food production and security is directly related to water availability. Water is a finite resource and, although there is plenty of water in the world, it is not always located where people are concentrated or where food is grown. Therefore, humans have drawn water from both surface and underground sources to improve food production in areas of high population.

Most of the world's food production is rain fed, or dependent on naturally occurring rainfall. Only a small proportion of agricultural land is irrigated, yet **irrigation** is now the biggest user of water in the world, consuming 70 per cent of the world's freshwater resources. Irrigation brings many benefits, such as:

- supplementing or replacing rain, especially in places where rainfall is low or unreliable. In many parts of the world, it is not possible to produce food without irrigation.
- increasing crop yields, up to three times higher than rain-fed crops. Only 20 per cent of the world's farmland is irrigated but it produces over 40 per cent of our food.

- enabling a wide variety of foods to be grown, especially those with high water needs, such as rice, or with high value, such as fruit and wine grapes
- flexibility, being used at different times according to crop needs; for example, during planting and growing or close to harvest time.

**FIGURE 1** Irrigation allows for pasture to be grown in times of drought. Compare the irrigated with the non-irrigated paddocks.

## 12.9.2 Environmental impacts of irrigation

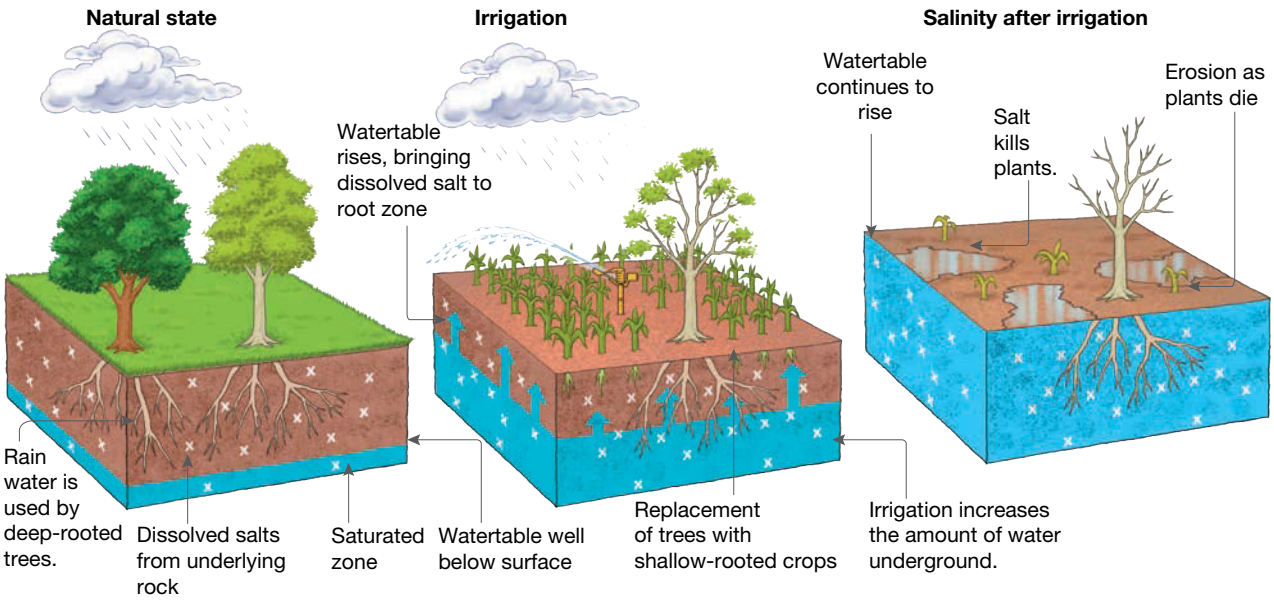
While irrigation has resulted in increased food production and greater food security, it has also created major changes to the biomes where it is used. Irrigation changes the natural environment by extracting water from rivers and lakes and through the building of structures to store, transfer and dispose of water. The topography, or shape of the land, is often changed too, such as when terraces are built for paddy fields. In addition, irrigation water is often applied to the land in much larger quantities than naturally occurs, which can lead to changes in soil composition, and **waterlogging** and salinity problems.

### How does irrigation create salinity problems?

Overwatering of shallow-rooted crops adds excess water to the **watertable**, causing it to rise (see **FIGURE 2**).

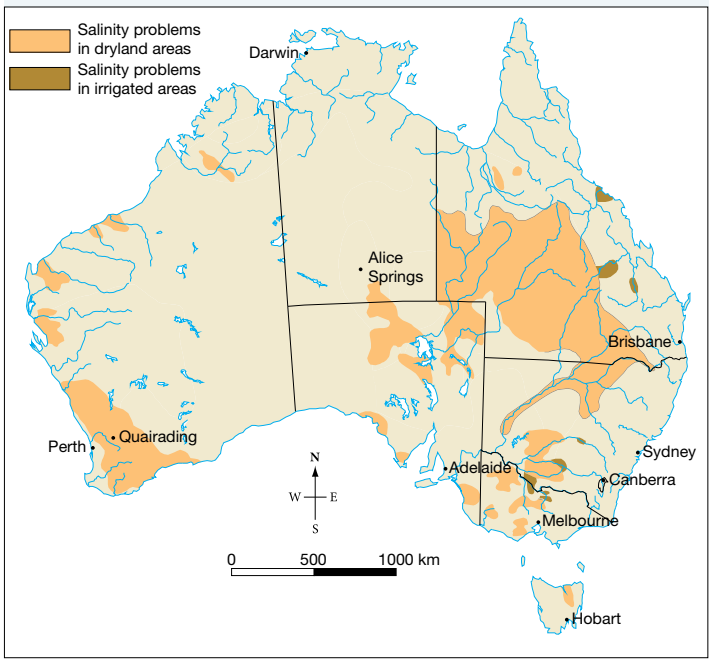
If the subsoils are naturally salty, much of this salt can be drawn to the surface. Most crops and pasture will not grow in salty soils, so the land becomes useless for farming. Land that is affected by salinity is also more prone to wind and water erosion.

**FIGURE 2** The development of irrigation salinity




Globally, some 62 million hectares of land (an area the size of France) has been lost due to such issues. Salinity is also a major cause of land degradation in Australia (see **FIGURE 3**).

**FIGURE 3** The distribution of salinity in Australia




***Source:*** Spatial Vision

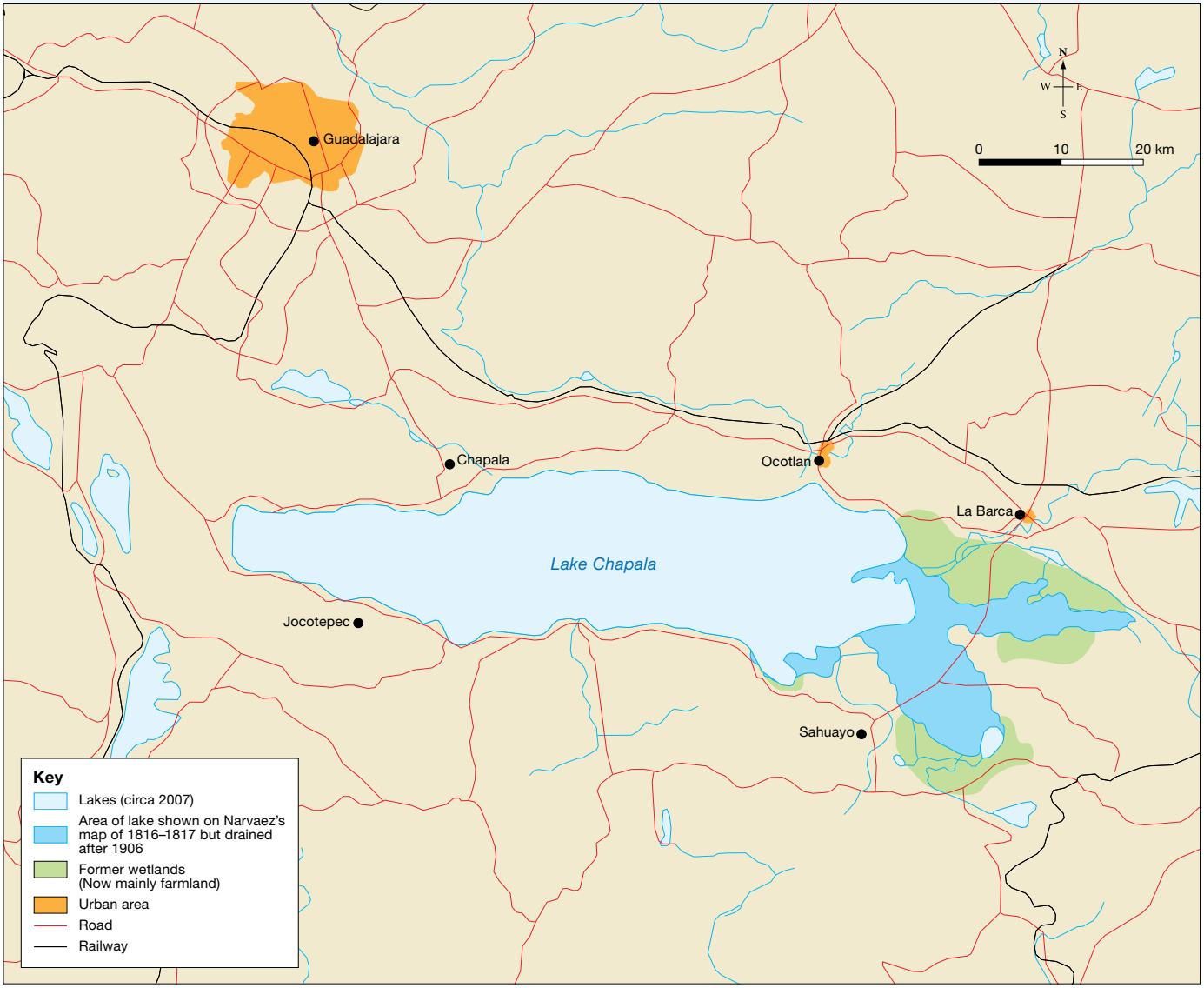
## 12.9.3 Impacts of diverting and extracting water

As population increases, so too does demand for water. Moreover, there are always competing demands for water from the domestic, industrial and environmental sectors. For countries that have growing populations and limited water resources, water deficits and food insecurity are a growing concern. In many places in the world, water is becoming increasingly scarce. Consequently, the development of water resources is becoming more expensive and, in some cases, environmentally destructive.

For thousands of years, farmers have diverted water from rivers, lakes and wetlands for watering crops and pastures in dry areas. Large-scale irrigation schemes can effectively 'water' our deserts but, if too much water is used, wetlands can dry out, rivers cease to flow and lakes and underground **aquifers** shrink. It is estimated that between three and six times more water is held in reservoirs around the world than exists in natural rivers. It is possible that the level of water extraction will nearly double by 2050.

Lake Chapala, Mexico's largest lake (see **FIGURE 4**), is shrinking. The amount of water lost through irrigation and domestic use, combined with high evaporation rates, has seen the volume of the lake decrease by 50 per cent.

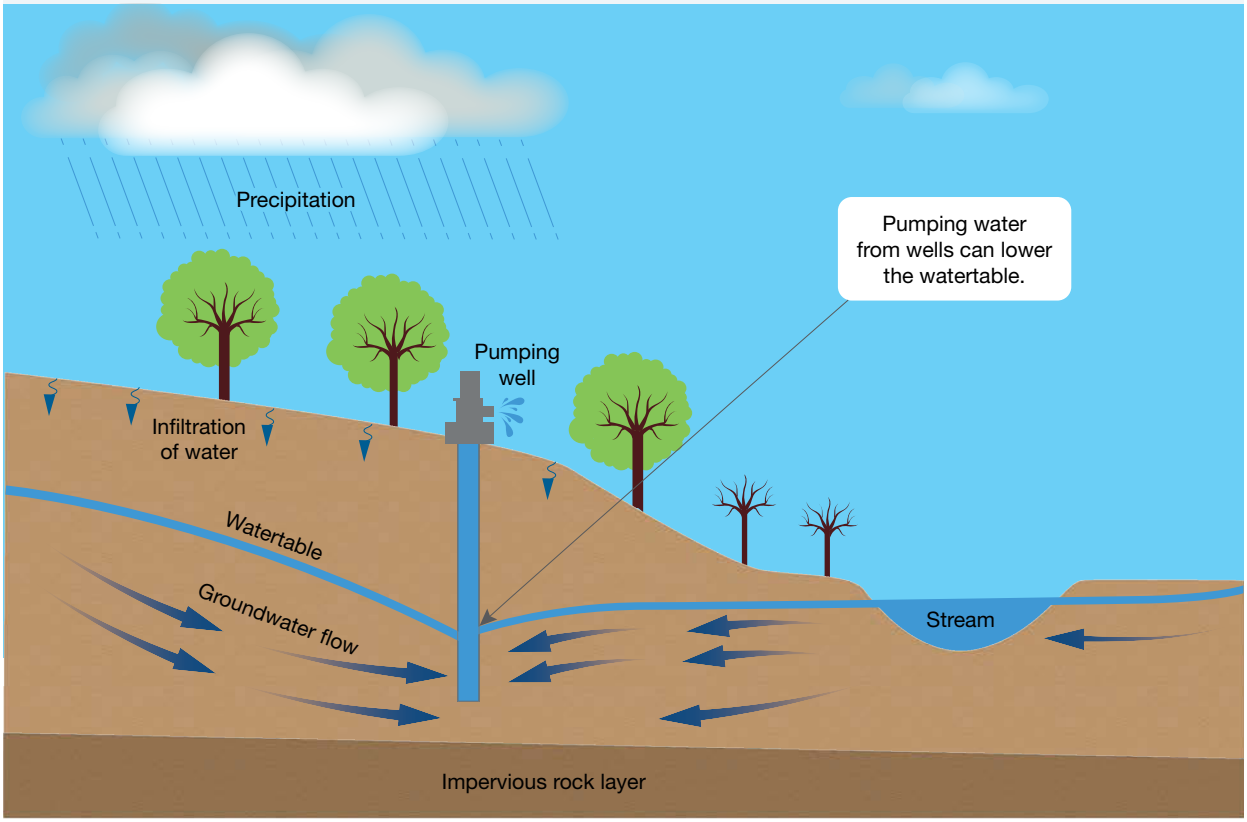
**FIGURE 4** Map of Lake Chapala, Mexico. Note the area of land drained for farmland.




***Source:*** Data from Tony Burton. All rights reserved. Map drawn by Spatial Vision.

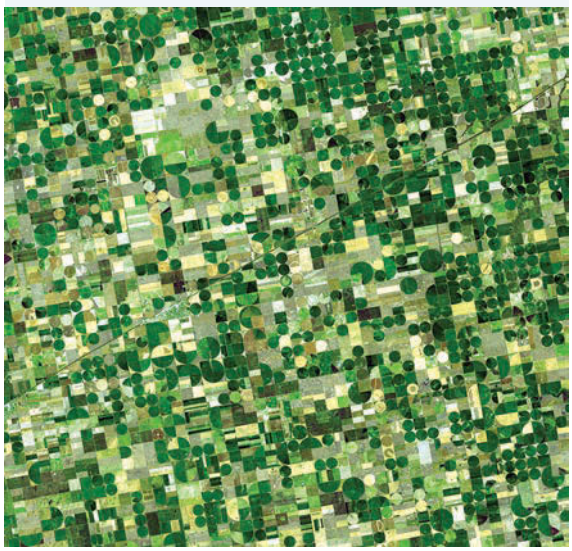
As surface water resources become fully exploited, people turn to underground water sources. Improvements in technology have also enabled farmers to pump water from aquifers deep underground (see **FIGURE 5**).

**FIGURE 5** Diagram showing the use of groundwater as a water source for farming




Groundwater levels do not respond to changes in the weather as rapidly as rivers and lakes do. If the water is removed unsustainably (at a rate that is faster than the rate of replenishment by rainfall, run-off or underground flow), then watertables fall. Water extraction then becomes harder and more expensive. Water stored in aquifers can take thousands of years to replenish. Over-extraction of groundwater can result in wells running dry, reduced stream flow, and even land subsidence (sinking).

**FIGURE 6** Irrigated cropland relies heavily on water from the Ogallala Aquifer.



The High Plains region of the central United States is the leading irrigation area in the western hemisphere, producing over $20 billion worth of food and fibre per year (see **FIGURE 6**). In all, 5.5 million hectares of semi-arid land is irrigated using water pumped from the huge Ogallala Aquifer (see **FIGURE 7**). Since large-scale irrigation was developed in the 1940s, groundwater levels have dropped by more than 30 metres. Pesticides and other pollutants from farming have also infiltrated the groundwater. Scientists estimate that the aquifer will be 69 per cent depleted by 2060 and it would take more than 6000 years for it to refill naturally.

**FIGURE 7** The size of the Ogallala Aquifer in the central United States

***Source:*** USGS

## 12.9 INQUIRY ACTIVITIES

1. (a) Investigate methods used in Australia to reduce the ***environmental*** effects of salinity.
   (b) Using **FIGURE 2** as a model, create a similar sketch depicting the development of irrigation salinity. Based on your research findings, annotate your drawing with suggestions for how to reduce the effects of irrigation salinity. **Classifying, organising, constructing**
2. Research the Aral Sea in Asia and write a report outlining:
   - location
   - the issue of over-extraction of water
   - impacts of overuse.

   Include a location map and labelled photographs in your report. **Examining, analysing, interpreting**

## 12.9 EXERCISES

**Geographical skills key: GS1** Remembering and understanding **GS2** Describing and explaining **GS3** Comparing and contrasting **GS4** Classifying, organising, constructing **GS5** Examining, analysing, interpreting **GS6** Evaluating, predicting, proposing

### 12.9 Exercise 1: Check your understanding

1. **GS1** List the different types of water resources that can be used to supply water for food production.
2. **GS1** What is meant by the term *waterlogging*?
3. **GS1** What percentage of the world's fresh water is consumed by irrigation?
4. **GS2** What ***changes*** to the ***environment*** are needed in order to irrigate a large region?
5. **GS1** Apart from irrigation, what would be the other main uses of water?
6. **GS2** Study the **FIGURE 3** map, which shows the distribution of salinity in Australia.
   (a) Estimate the approximate percentage of each state affected by salinity.
   (b) Why do you think dryland salinity covers a larger area than irrigation salinity?
7. **GS2** Study **FIGURE 5**. Explain how pumping groundwater can lower watertables.
8. **GS3** Compare the advantages and disadvantages of using groundwater and surface water for farming.
9. **GS1** Identify one natural and one human factor that have contributed to the ***change*** in water levels in Lake Chapala.

### 12.9 Exercise 2: Apply your understanding

1. **GS5** Soil salinity was not a problem when Indigenous Australian peoples were the land's sole caretakers. What does this suggest about land management practices in this country since 1788?
2. **GS6** Has irrigation been a success or failure? Write a paragraph expressing your viewpoint.
3. **GS5** Refer to **FIGURE 7**. With the use of the ***scale*** bar, work out the approximate area covered by the Ogallala Aquifer.
4. **GS6** If the Ogallala Aquifer was to run dangerously low, and irrigation was no longer possible, what would be the short-term and long-term consequences?
5. **GS6** What are some of the likely effects of draining wetlands for farmland, as has occurred around Lake Chapala, Mexico?
6. **GS6** Select one of the examples shown in this subtopic and consider what steps water managers could take to reduce the impact of ***unsustainable*** water use in the region.

Try these questions in learnON for instant, corrective feedback. Go to www.jacplus.com.au.

# 12.10 Diminishing global biodiversity

## 12.10.1 The loss of biodiversity

The last few centuries have seen the greatest rate of species extinction in the history of the planet (see **FIGURE 1**). The population of most species is decreasing, and genetic diversity is declining, especially among species that are cultivated for human use. Six of the world's most important land biomes have now had more than 50 per cent of their area converted to agriculture (see **FIGURE 2**).

In those places where there has been very little industrial-scale farming, a huge variety of crops are still grown. In Peru, for example, over 3000 different potatoes are still cultivated. Elsewhere, biodiversity as well as agricultural biodiversity (biodiversity that is specifically related to food items) is in decline. In Europe, 50 per cent of all breeds of domestic animals have become extinct, and in the United States, 6000 of the original 7000 varieties of apple no longer exist. How has this happened?

- Industrial-scale farming and new high-yielding, genetically uniform crops replace thousands of different traditional species. Two new rice varieties in the Philippines account for 98 per cent of cropland.
- Converting natural habitats to cropland and other uses replaces systems that are rich in biodiversity with monoculture systems that are poor in diversity (see **FIGURE 3**).
- Uniform crops are vulnerable to pests and diseases, which then require large inputs of chemicals that ultimately pollute the soil and water. Traditional ecosystems have many natural enemies that combat pest species.
- The introduction of modern breeds of animals has displaced indigenous breeds. In the space of 30 years, India has lost 50 per cent of its native goat breeds, 30 per cent of sheep breeds and 20 per cent of indigenous cattle breeds.

**FIGURE 1** Extinctions per thousand species per millennium

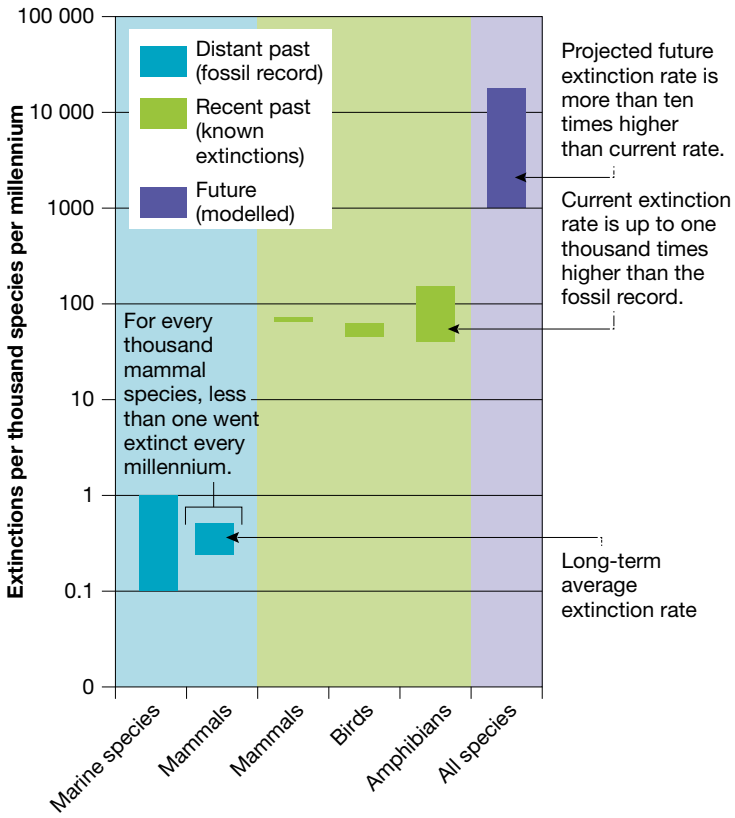



**FIGURE 2** Percentage of biomes converted to agriculture over time

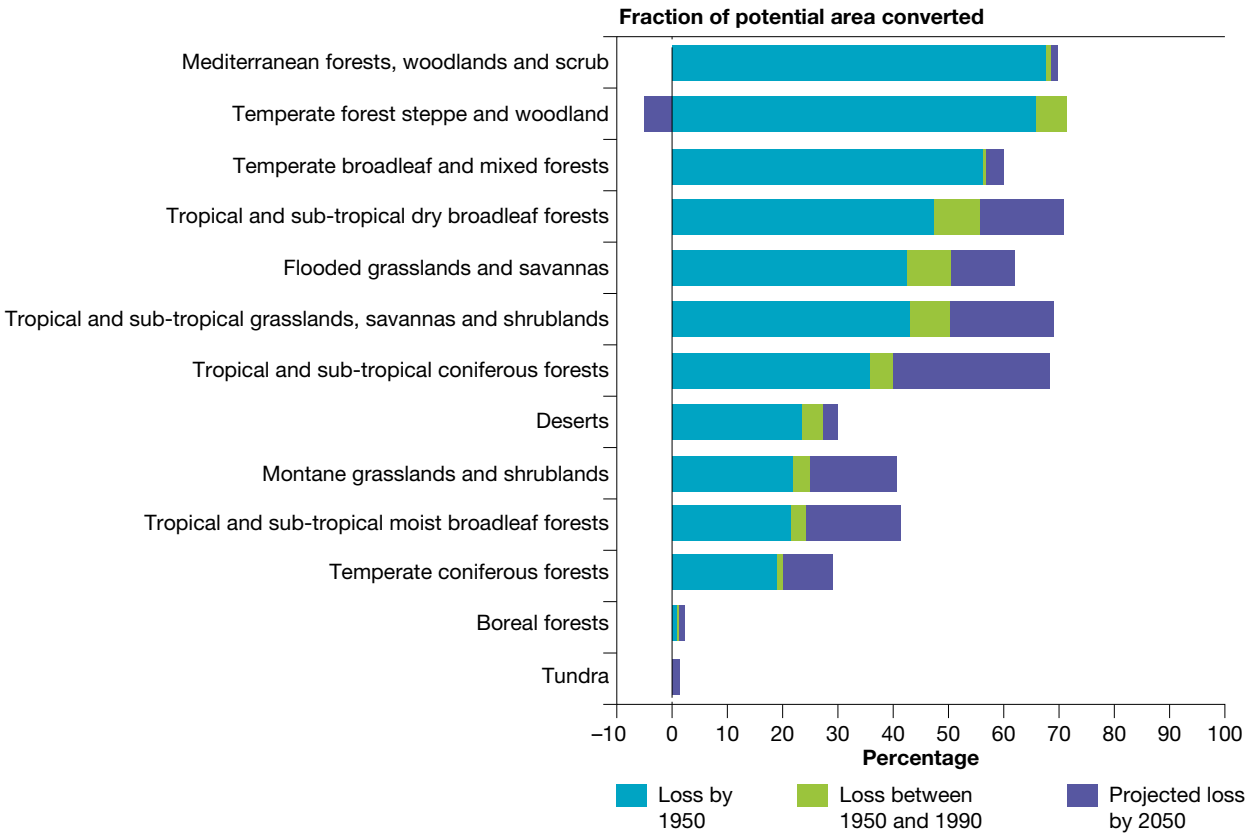
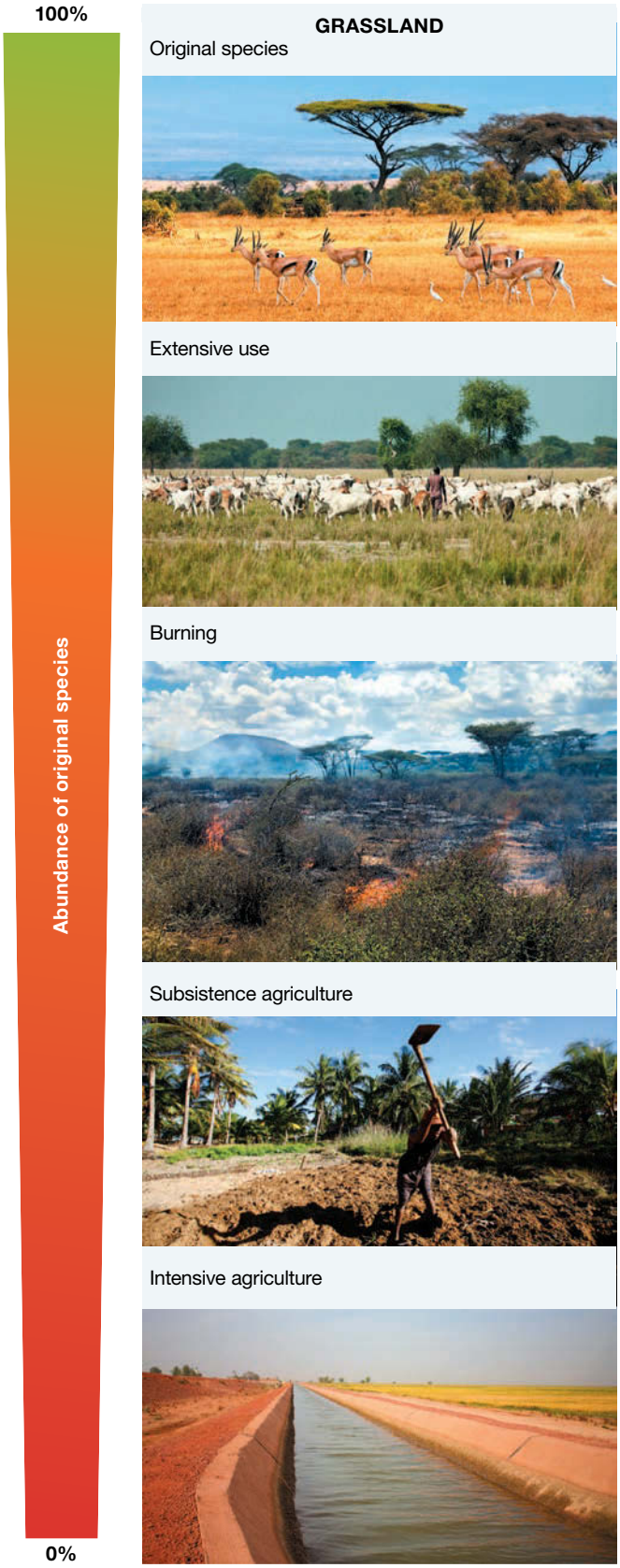


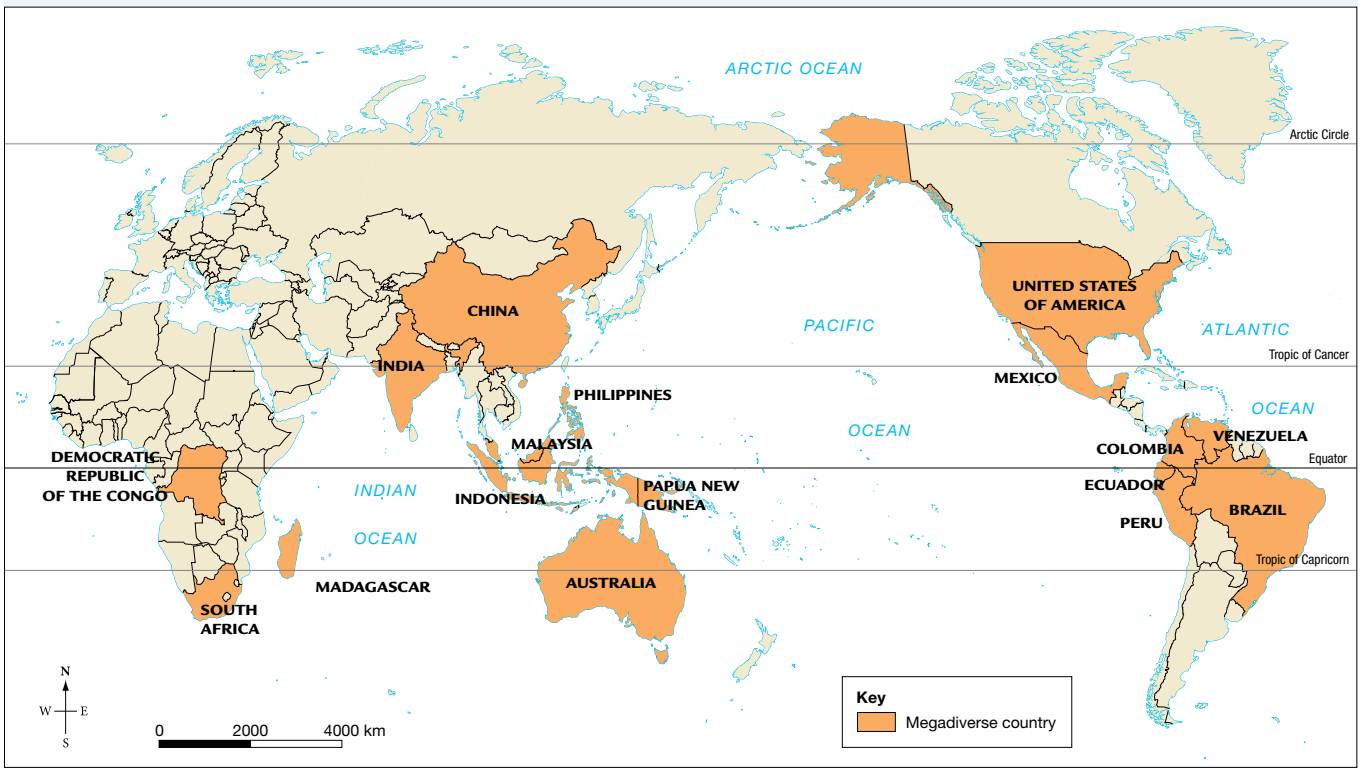
**FIGURE 3** Changes to percentage of original species according to changes in biomes for food production



## 12.10.2 Australia's biodiversity

Australia has a high number of **endemic** species, and 7 per cent of the world's total species of plants, animals and micro-organisms. This makes Australia one of only 17 countries in the world that are classified as megadiverse — having high levels of biodiversity. These 17 nations combined contain 75 per cent of the Earth's total biodiversity (see **FIGURE 4**). Australia's unique biodiversity is due to its 140 million years of geographic isolation. However, Australia has experienced the largest documented decline in biodiversity of any continent over the past 200 years. It is thought that 48 plant species and 50 species of animals (27 mammal species and 23 bird species) are now extinct.

**FIGURE 4** Distribution of megadiverse countries




***Source:*** Spatial Vision

### 12.10 INQUIRY ACTIVITY

Investigate the issue of whaling and the conflicting viewpoints held by Australia and Japan.

**a.** What were the factors (reasons) involved in:
- (i) Australia's decision to ban whaling
- (ii) Japan's decision to continue whaling?

**b.** How would you suggest the two countries could come to a resolution? **Examining, analysing, interpreting [Ethical Capability]**

## 12.10 EXERCISES

**Geographical skills key: GS1** Remembering and understanding **GS2** Describing and explaining **GS3** Comparing and contrasting **GS4** Classifying, organising, constructing **GS5** Examining, analysing, interpreting **GS6** Evaluating, predicting, proposing

### 12.10 Exercise 1: Check your understanding

1. **GS1** Describe the ways in which human activities can lead to a loss of biodiversity.
2. **GS1** What is a megadiverse country?
3. **GS1** Why is Australia considered a megadiverse country?
4. **GS2** Study **FIGURE 2**.
   (a) Which three biomes have seen the greatest percentage ***change*** in areas converted to agriculture? Use figures in your answer.
   (b) Suggest why these three have had the most ***change***.
5. **GS2** Study the information in **FIGURE 3**. Describe the ***changes*** to the grassland biome as seen over time.

### 12.10 Exercise 2: Apply your understanding

1. **GS5** In what ways would the Indigenous Australian peoples' practice of rotational land occupation have helped maintain biodiversity before European occupation?
2. **GS2** Does it matter that we have fewer species of apples or goats? Explain your view with reference to what you have learned in this subtopic.
3. **GS5** Suggest reasons that genetically modified crops have been developed and used in food production.
4. **GS3** Suggest how the environmental impacts of a traditional small-***scale*** rice paddy farm might compare with a large-***scale*** producer of genetically modified rice. (You might like to refer to subtopic 11.8.)
5. **GS6** Do you think it will be possible, in the future, for Australia to maintain its megadiverse status? What actions might contribute to this?

Try these questions in learnON for instant, corrective feedback. Go to www.jacplus.com.au.

# 12.11 Does farming cause global warming?

## 12.11.1 The connection of farming to global warming

Agriculture and climate change are interconnected processes, both of which take place on a global scale. Global warming will cause changes to what can be grown and where. At the same time, however, many of our agricultural practices may in fact contribute to global warming.

The term 'global warming' generally refers to the warming of the planet that is caused by increased emissions of **greenhouse gases** as a result of human activity. The human activity of food production can contribute to global warming in two ways.

- Grazing animals and flooded rice paddies produce the greenhouse gas methane. Livestock are thought to be responsible for 35 per cent of the world's methane output. The next largest sources, in order, are oil and gas, landfill, rice paddies and wastewater treatment systems.
- Food production changes the surface of the Earth, which then alters the planet's ability to absorb or reflect heat and light. Large-scale deforestation and desertification can significantly alter a region's microclimate. Around 80 per cent of global deforestation is caused by clearing the land for grazing, slash-and-burn farming and cropping.

## 12.11.2 The biggest polluters

Cows emit large quantities of methane through belching and flatulence (caused by digestive gases). The gas is produced by bacteria digesting grass in one of the four stomachs that cows have. It has been estimated that one cow could produce somewhere between 100 and 500 litres of methane per day (see **FIGURE 1**). This amount is similar to the pollution produced by one car in one day. When you consider there are over 1.5 billion cows in the world, this equates to a lot of gas. Scientists today are working on 'fuel-efficient cows' — cows that convert feed more efficiently into milk rather than methane.

**FIGURE 1** Argentine scientists have strapped plastic tanks to the backs of cows to assess how much methane they produce.

**FIGURE 2** A cartoonist's view of livestock and global warming

Rice farming is one of the biggest sources of human-produced methane, averaging between 50 and 100 million tonnes per year. The gas is produced in the warm, waterlogged soils of the rice paddies (see **FIGURE 3**).

**FIGURE 3** Methane is released from rice paddies.

The practice of **factory farming**, in which a very high number of animals are concentrated in the one place, produces an unmanageable amount of waste (see **FIGURE 4**). On a sustainable farm, animal manure can be used as a natural fertiliser, but on a factory farm the large quantity becomes a source of methane, because the waste is often mixed with water and stored in large ponds or lagoons. An additional problem can occur if these ponds leak, as they create soil and water pollution. The use of nitrogen-based fertilisers on farms also releases nitrous oxide, another greenhouse gas.

**FIGURE 4** Factory farming produces large quantities of waste products.

## 12.11.3 Deforestation's connection to global warming

Trees are 50 per cent carbon, so when they are burned or felled to create land for farming, the $CO_2$ they store is released back into the atmosphere. Research suggests that the loss of tropical rainforests alone accounts for 8 per cent of global carbon dioxide emissions, similar to those of the USA. Forests also act as carbon sinks, the most effective way of storing carbon. Large areas of cleared land absorb more heat than native vegetation, which can lead to changes in local weather conditions.

### 12.11 INQUIRY ACTIVITIES

1. Research the sources of methane gas and find out what percentage each contributes to world methane output. Present your information in a pie or bar graph. Is the biggest source natural or human?
   **Examining, analysing, interpreting**
2. If one cow produces the equivalent of 16 kWh of energy per day, how many cows would be needed to power your own home per day? You will need to check your household electricity bill.
   **Examining, analysing, interpreting**
3. How might climate ***change*** affect agriculture? Do some online research to investigate some of the possible effects of climate ***change*** on food production. **Examining, analysing, interpreting**

### 12.11 EXERCISES

**Geographical skills key: GS1** Remembering and understanding **GS2** Describing and explaining **GS3** Comparing and contrasting **GS4** Classifying, organising, constructing **GS5** Examining, analysing, interpreting **GS6** Evaluating, predicting, proposing

#### 12.11 Exercise 1: Check your understanding

1. **GS1** What are three greenhouse gases?
2. **GS1** What are two ways in which deforestation can contribute to ***changes*** in greenhouse gases?
3. **GS1** What is the biggest global emitter of methane: livestock, cars or rice paddies?
4. **GS2** Is factory farming a ***sustainable*** form of food production? Give reasons for your answer.
5. **GS2** The building of large-***scale*** dams and subsequent flooding of forests in the Amazon is also contributing to increases in greenhouse gas emissions. What is the reason for this?

#### 12.11 Exercise 2: Apply your understanding

1. **GS2** Why do we have factory farming?
2. **GS3** Study **FIGURE 4**.
   (a) How does factory farming differ from traditional farming methods? Create a table with two columns, one headed 'Key features of a traditional dairy farm' and the other 'Key features of a factory farm'. List the features of both styles of farming and then compare your lists.
   (b) Write a paragraph summarising the similarities and differences between the two methods.
3. **GS6** Suggest some ideas for reducing agriculture's contribution to global warming.
4. **GS6** Agriculture and climate ***change*** are ***interconnected*** processes. Suggest possible ways that increased temperatures and increased frequency of storms could impact on food production in Australia.
5. **GS2** Explain how deforestation can ***change*** the microclimate, especially temperatures and moisture levels, of a region. (*Note:* A microclimate is a local set of atmospheric conditions that differ from those in the surrounding areas.)

Try these questions in learnON for instant, corrective feedback. Go to www.jacplus.com.au.

# 12.12 Thinking Big research project: Fished out! PowerPoint

online only

## SCENARIO

For an upcoming 'Biomes and food security' conference, you have been invited to give a presentation on a current issue relating to food security — in this case, overfishing — and to outline some of the responses that consider economic, social and environmental factors. You will need to conduct some background research and then produce a PowerPoint presentation to highlight the threat that overfishing represents to the world's food security.

### Select your learnON format to access:

- the full project scenario
- details of the project task
- resources to guide your project work
- an assessment rubric.

### on Resources

**ProjectsPLUS** Thinking Big research project: Fished out! PowerPoint (pro-0190)

# 12.13 Review

online only

### 12.13.1 Key knowledge summary

Use this dot point summary to review the content covered in this topic.

### 12.13.2 Reflection

Reflect on your learning using the activities and resources provided.

### on Resources

**eWorkbook** Reflection (doc-31718)
Crossword (doc-31719)

**Interactivity** The impacts of global food production crossword (int-7646)

## KEY TERMS

**aquaculture** the farming of aquatic plants and aquatic animals such as fish, crustaceans and molluscs
**aquifer** a body of permeable rock below the Earth's surface, which contains water, known as groundwater
**biophysical environment** the natural environment, made up of the Earth's four spheres — the atmosphere, biosphere, lithosphere and hydrosphere
**deforestation** clearing forests to make way for housing or agricultural development
**degradation** deterioration in the quality of land and water resources caused by excessive exploitation

**endemic** describes species that occur naturally in only one region
**erosion** the wearing down of rocks and soils on the Earth's surface by the action of water, ice, wind, waves, glaciers and other processes
**factory farming** the raising of livestock in confinement, in large numbers, for profit
**greenhouse gases** any of the gases that absorb solar radiation and are responsible for the greenhouse effect. These include water vapour, carbon dioxide, methane, nitrous oxide and various fluorinated gases.
**groundwater** water that exists in pores and spaces in the Earth's rock layers, usually from rainfall slowly filtering through over a long period of time
**humus** an organic substance in the soil that is formed by the decomposition of leaves and other plant and animal material
**irrigation** the supply of water by artificial means to agricultural areas
**kenaf** a plant in the hibiscus family that has long fibres; useful for making paper, rope and coarse cloth
**old-growth forests** natural forests that have developed over a long period of time, generally at least 120 years, and have had minimal unnatural disturbance such as logging or clearing
**plantation** an area in which trees or other large crops have been planted for commercial purposes
**pulp** the fibrous material extracted from wood or other plant material to be used for making paper
**salinity** the presence of salt on the surface of the land, in soil or rocks, or dissolved in rivers and groundwater
**waterlogging** saturation of the soil with groundwater such that it hinders plant growth
**watertable** the surface of the groundwater, below which all pores in the soils and rock layers are saturated with water

# 12.4 SkillBuilder: GIS — deconstructing a map

## 12.4.1 Tell me

### What is GIS?

A geographical information system (GIS) is a storage system for information or data, which is stored as numbers, words or pictures. The data has the location attached so that it may be viewed as a map or as an image. GIS can process huge amounts of information to produce maps that would take a long time to draw by hand. Specialised computer programs produce maps from the data.

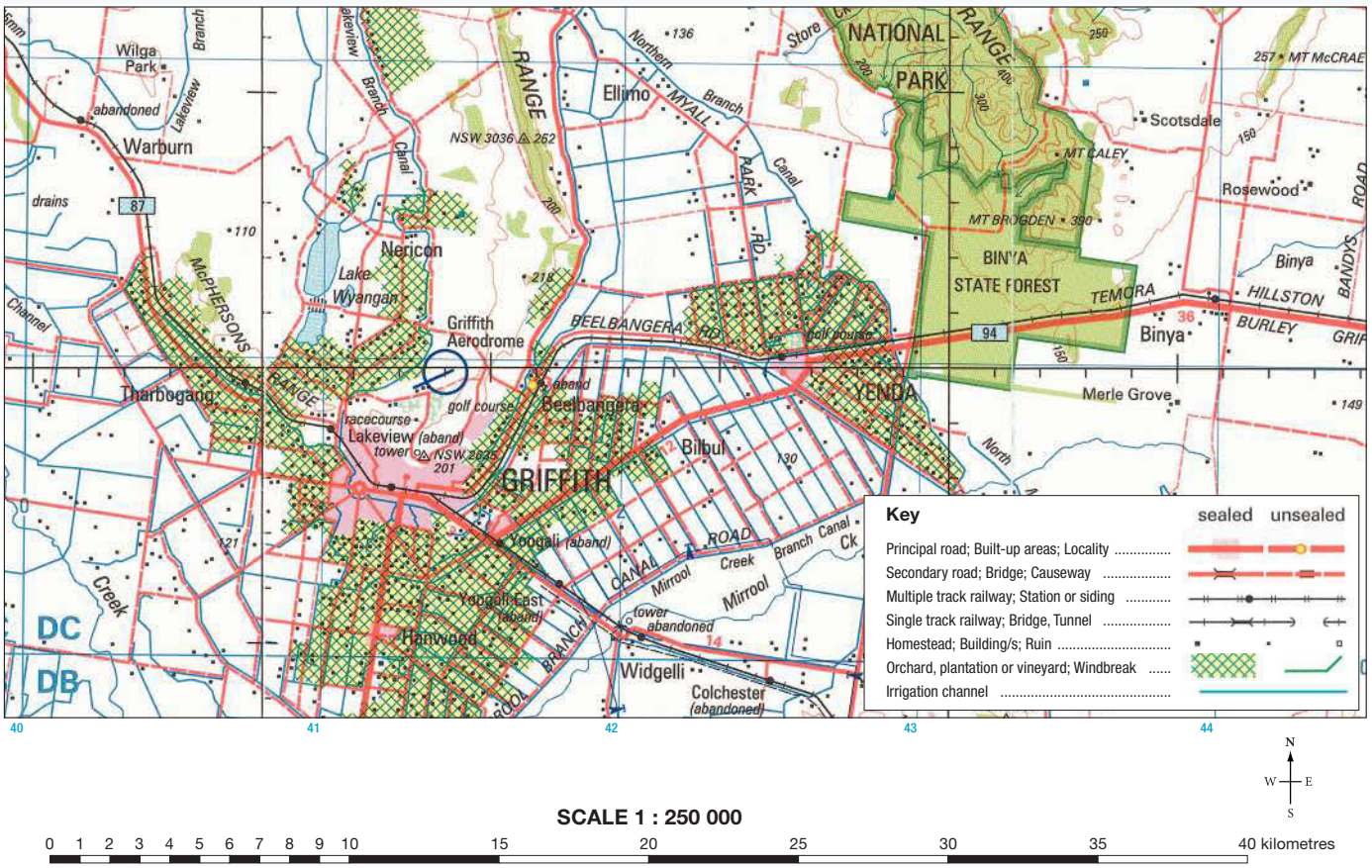
In this SkillBuilder, map layers will be created in a similar way to that used by cartographers and GIS specialists when making digital maps, but with much simpler tools and processes.

### How is GIS useful?

Analysing large amounts of information using a computer is much faster than doing it manually and provides a much deeper understanding of the information. GIS allows multiple series of information to be displayed in a succession of map layers. The spatial distribution of the data and the relationship to other data may be compared. GIS is used in many professions wherever maps are required, such as in urban planning, logistics, resource management, policing and public health.

A GIS stores data in three ways: as points, lines or polygons (called vector data); as tables (called tabular data); and as pixels in an image (called raster data). A satellite image, for example, would be called a raster image in GIS.

**FIGURE 1** Example of a section of a topographic map: Griffith, New South Wales




***Source:*** © Geoscience Australia

A GIS program:

- stores similar information together
- stores data attached to points, lines and polygons in separate files
- stores the location of each point, line or polygon digitally
- includes tables of data in which each row is linked to a location and each column stores information as numbers or words
- includes information about the source of the data — known as metadata.

A breakdown of maps such as a GIS:

- traces each set of point, line and polygon data onto three pieces of tracing paper
- uses appropriate colours for the features
- layers the features, with points on top, lines underneath and polygons on the bottom
- includes BOLTSS.

**FIGURE 2** Example of a satellite image (called a raster image in GIS). This shows a section of the area that appears in **FIGURE 1**.

***Source:*** © Geoscience Australia

## 12.4.2 Show me

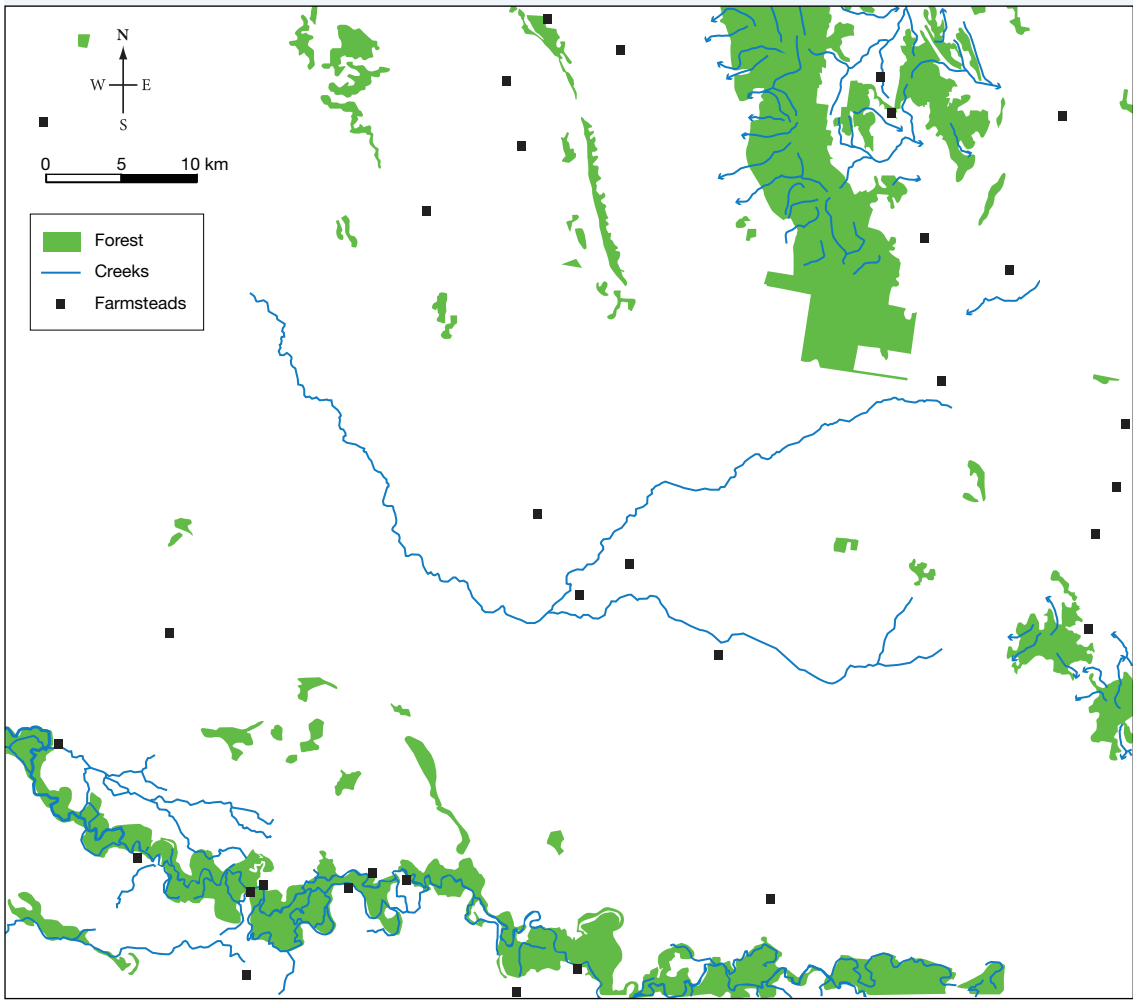
### How to deconstruct maps to build a simple GIS

**You will need:**

- a topographic map
- three pieces of tracing paper
- coloured pencils.

**Model**

**FIGURE 3** Completed simple GIS map showing farmsteads, rivers, creeks and forests around Griffith



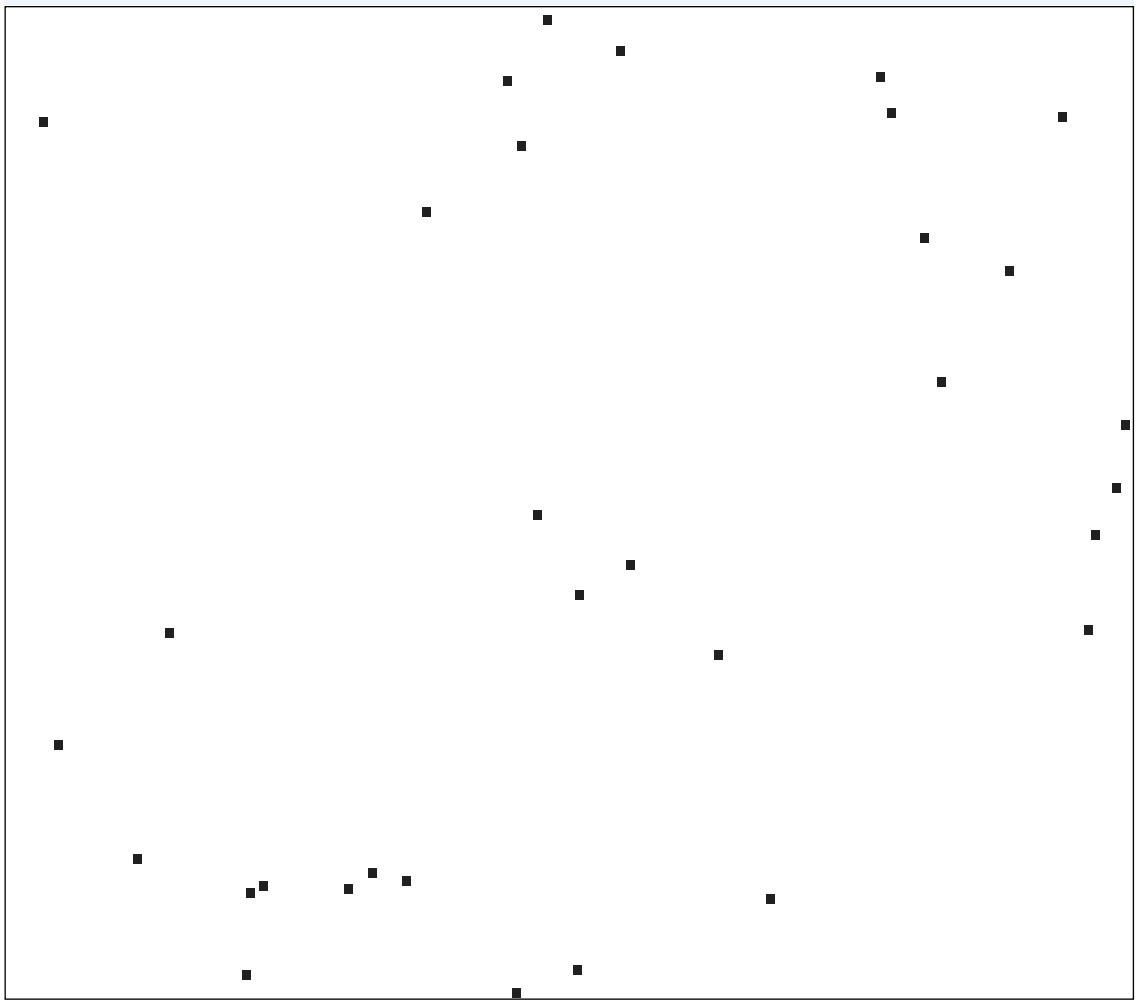
## Procedure

### Step 1

Point features on the map have a location that may be defined using either a grid reference or latitude and longitude. The map of Griffith shown in **FIGURE 1** (**Topographic map of Griffith, New South Wales** digital document in the Resources tab) has many point features, such as spot elevation (height), bores, wells, buildings, gates and stock grids.

Overlay one piece of tracing paper on the topographic map and, using an appropriate colour, mark the homesteads (or farmsteads) as point data on the tracing paper.

**FIGURE 4** Point features are marked on the first layer of tracing paper.

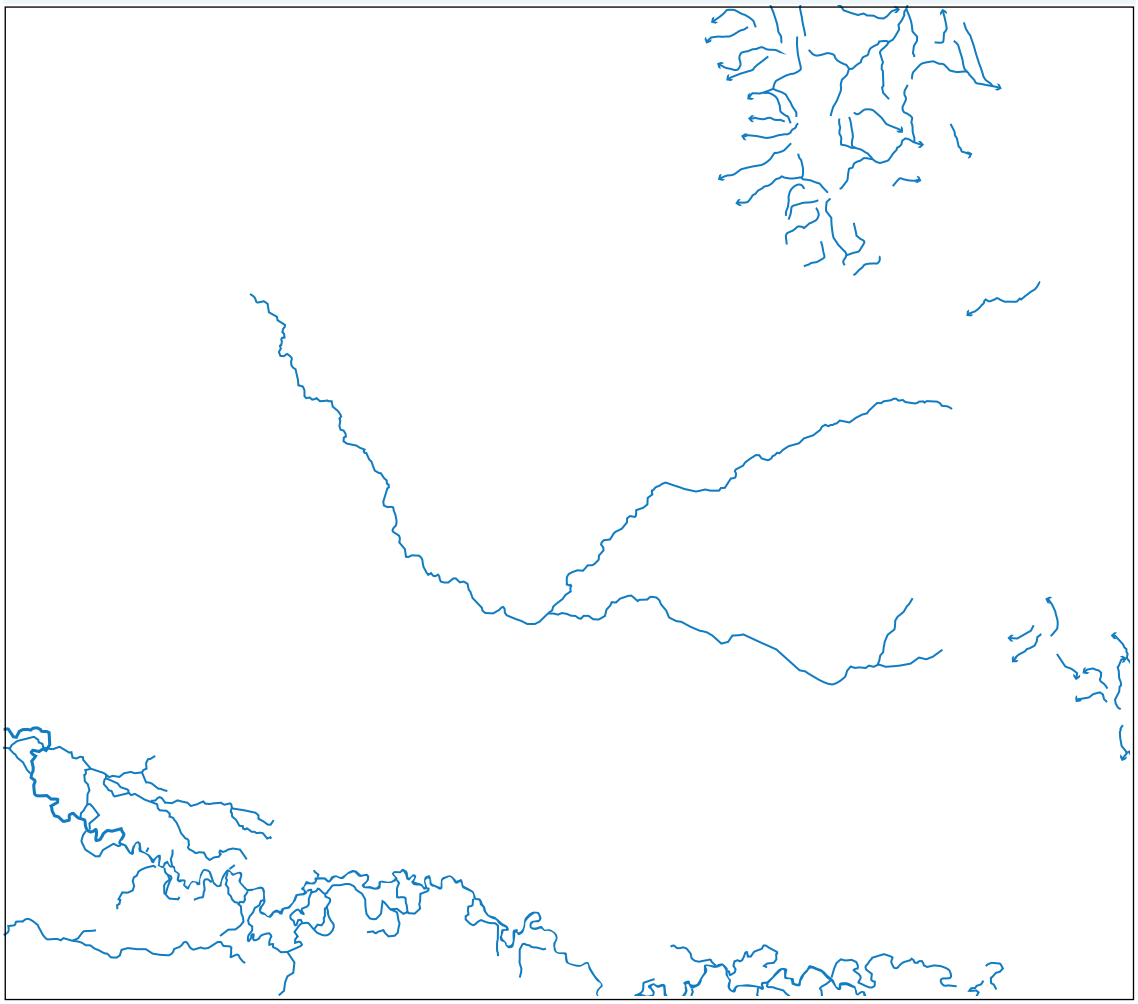


### Step 2

Line features on the map may be straight or winding. Their location is determined by joining multiple points. **FIGURE 1** has many line features, such as roads, railway lines, rivers and creeks, irrigation channels and power lines.

Overlay a second piece of tracing paper on the topographic map and, with an appropriate colour, trace the rivers and creeks (line features).

**FIGURE 5** Line features of rivers and creeks are traced onto a second piece of tracing paper.



### Step 3

A polygon is a shape that has many sides. Its location on the map is determined by joining multiple points. **FIGURE 1** has many polygon features, such as orchards, vineyards, national parks, lagoons, swamps and forested areas.

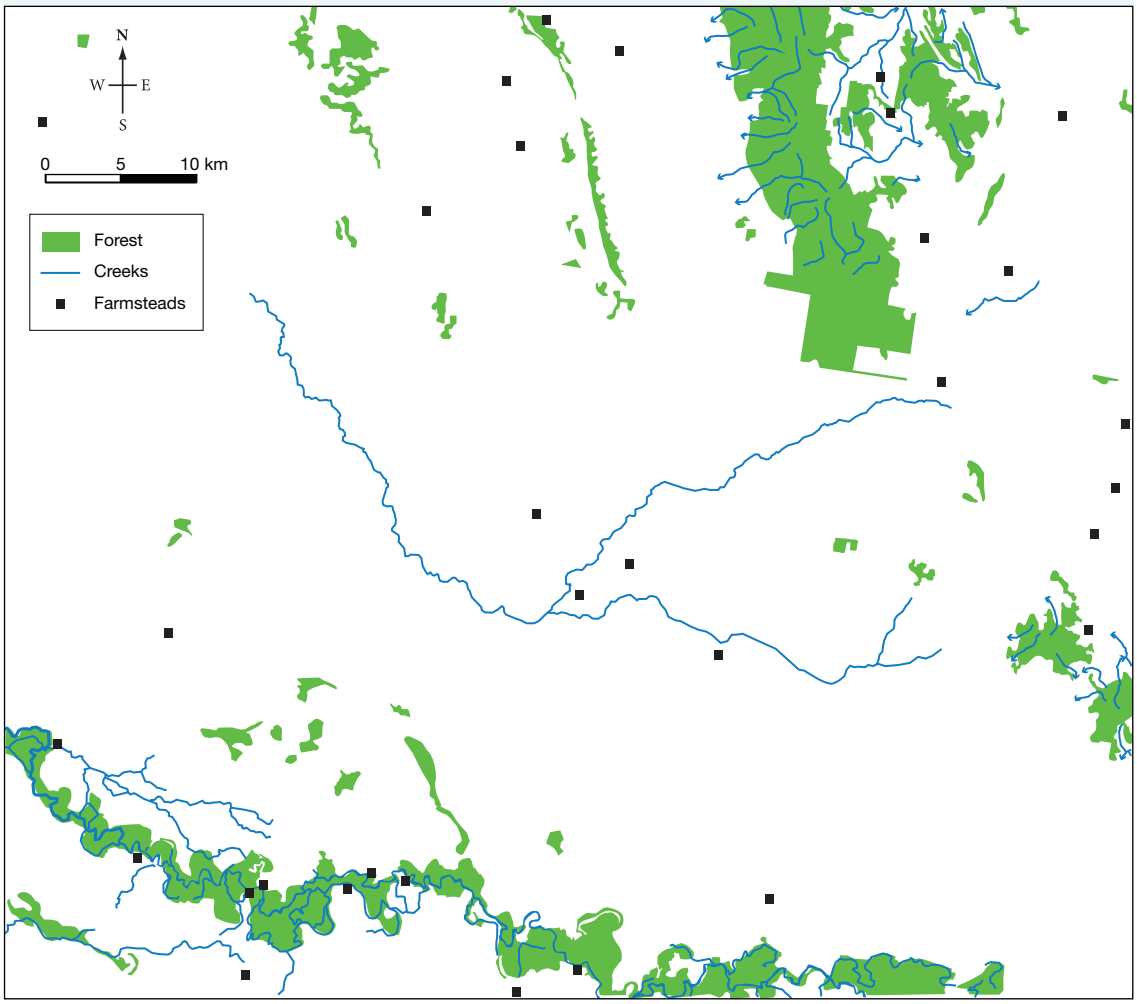
Overlay a third piece of tracing paper on the topographic map and, with an appropriate colour, trace the forests (polygon data).

**FIGURE 6** The polygon data of forests are traced onto a third piece of tracing paper.

### Step 4

Place the three tracing-paper layers in the following order: point features on top, line features underneath, and polygon features at the bottom. Provide BOLTSS for your map. In GIS, the finished map would be called a layout.

**FIGURE 7** The three layers of tracing paper are now combined, and BOLTSS is added. This simple GIS overlay map shows farmsteads, rivers, creeks and forest areas in Griffith area.




## on Resources

**Digital doc** Topographic map of Griffith, New South Wales (doc-11566)
**Video eLesson** GIS — deconstructing a map (eles-1730)
**Interactivity** GIS — deconstructing a map (int-3348)

## 12.4.3 Let me do it

Complete the following activities to practise this skill.

### 12.4 ACTIVITIES

1. Use the **FIGURE 1** map of Griffith provided in the Resources tab. Choose one point feature, one line feature and one polygon feature and create three tracing-paper overlays. Organise the layers appropriately and add BOLTSS to your map. Use the checklist to ensure you cover all aspects of the task.
2. Based on what you have learned in this SkillBuilder, apply your skills to answer the following questions.
   (a) What is the name of the district through which the Murrumbidgee River flows?
   (b) The original biome for this area is likely to have been forest. What has happened to this biome and how would you describe the distribution of forest in the area today?
   (c) Compare the number of creeks in the map in **FIGURE 1** with the number of channels. What is the purpose of the many channels and canals?
   (d) **FIGURE 1** shows a part of Australia that has undergone ***change***. Using Google Earth and the map, identify the area where there has been the least ***change*** and the area where there has been the most ***change***. Explain your choice.
   (e) This area is an example of intensive farming. What does this mean? Provide at least one piece of evidence from both the map in **FIGURE 1** and the satellite image in **FIGURE 2** (or Google Earth) to support this statement.
   (f) Maps and satellite photographs show different ways of recording information. Identify two pieces of information visible in **FIGURE 2** (or Google Earth) that are not shown on the **FIGURE 1** map.

Checklist

I have:

- traced each set of point, line and polygon data onto a separate piece of tracing paper
- used appropriate colours for the features
- layered the features, with points on top, lines underneath and polygons on the bottom
- included BOLTSS.

# 12.7 SkillBuilder: Interpreting a geographical cartoon

## 12.7.1 Tell me

### What are geographical cartoons?

Geographical cartoons are humorous or satirical drawings on topical geographical issues, social trends and events. A cartoon conveys the artist's perspective on a topic, generally simplifying the issue.

### How are cartoons useful?

Cartoons promote an interest in a topic or issue, and encourage discussion and debate. The cartoonist's message about a geographical topic is evident. Our feelings, attitudes and values are expressed in our response to the cartoon. Your response to geographical cartoons encourages discussion and evaluation of alternative responses as you take in other people's viewpoints and perspectives.

Cartoons are useful for:

- showing the key points of a geographical topic
- exaggerating the key points of an issue
- encouraging a response to an issue, whether in agreement or disagreement with the cartoonist
- presenting information, an issue, or a viewpoint in an interesting way.

A good interpretation of a cartoon:

- recognises the issue
- analyses the components of the cartoon
- identifies the cartoonist's personal opinion or message
- allows a personal response to the geographical topic.

## 12.7.2 Show me

### How to interpret a cartoon

#### You will need:

- a geographical cartoon.

#### Model

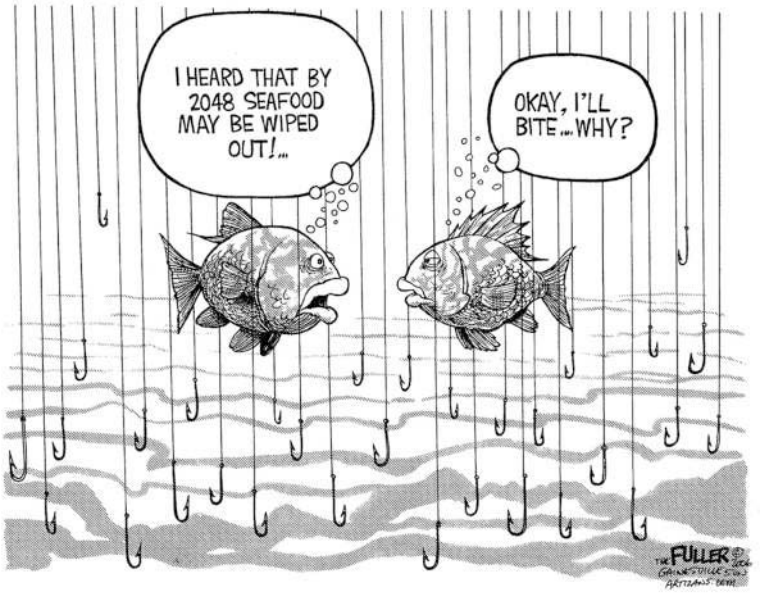
The cartoon shown in **FIGURE 1** is about overfishing our oceans. The cartoonist suggests that by 2048 there will be no more fish left in the oceans. It is not clear why the cartoonist chose this date (perhaps it's just a random date well into the future). The cartoon uses exaggeration, as there will be fish, but the quantities may not make it economical to fish using the techniques currently available. The string of hooks in this cartoon is also unrealistic, as this is not the way commercial fishing is undertaken. Our wider perspective on the topic tells us that actual fishing techniques are trawling and purse-seine netting to maximise the catch at any one time. The cartoon plays on the word *bite*. It can mean (a) that a fish bites a hook or (b) that someone reacts or responds to something. Thus, the second fish reacts to the first fish's statement and asks the question *why*, but it might also bite one of the many hooks that surround it. The answer to the *why* question is obvious to the audience — the fish will be caught because it will be impossible to avoid capture. This cartoon makes us think about the issue of taking fish from the ocean, and it questions the sustainability of the fishing industry — too many people are fishing for a limited resource.

#### Procedure

#### Step 1

Take the time to study the cartoon and carefully look for the overall idea. Next, focus on the artistic work of the cartoonist and any subtleties that have been included. Consider different relative sizes of parts of the drawing, as well as any wording or attitudes expressed in the image. **FIGURE 1** is about overfishing our oceans. In this case, the subtleties are in the words of the fish — what are the fish really saying?

**FIGURE 1** Cartoon on overfishing




## Step 2

Consider the overarching issue: in this case, overfishing. What is your general knowledge of the topic? In Geography classes, when you are given a cartoon, you know that it relates to the topic you are studying. If you are viewing a cartoon from elsewhere, then you have to think through the issue being portrayed. Things to look for in a cartoon include the following.

- *Symbolism* — conveying ideas in a concise manner through the use of symbols. In **FIGURE 1**, the large number of hooks suggests overfishing.
- *Stereotyping* — our fixed mental picture of something. In **FIGURE 1**, the fish are drawn in a stereotypical way. Be wary of stereotyping in a cartoon that involves people.
- *Caricatures* — overemphasis or distortion of physical features. In **FIGURE 1**, the fish have large eyes and mouths to draw our attention to their conversation and to give them human qualities.
- *Visual metaphors* — the artist's means of helping us understand the topic. In **FIGURE 1**, the large number of hooks and the use of the word *bite* suggest the fish will be caught.
- *Exaggeration or distortion* — for example, making things appear larger, smaller or greater in number than they really are. The number of fishing hooks is an exaggeration or distortion of commercial fishing techniques.
- *Humour* — the use of visual or verbal jokes or wit to make the viewer smile or laugh. Irony and satire are commonly used.
- *Perspective* — the point of view of the cartoonist. In **FIGURE 1**, it is evident that the cartoonist believes that most fish will be gone by 2048, a date well into the future.
- *Captions* — text-based content that adds to the visual content. In **FIGURE 1**, both of the fish have speech bubbles in which they discuss the sustainability of the fishing industry. (A speech bubble usually has a pointed end, like this , but because they are fish and cannot actually talk, the cartoonist has used 'thought bubbles', like this .)

## Step 3

Now systematically approach an analysis of the cartoon. Answer the following three questions.

- What issue does the cartoon convey? In **FIGURE 1**, the issue is overfishing.
- What geographical concepts are related to the issue in the cartoon? In **FIGURE 1**, the concepts of environment (the ocean), space (global), change (commercial fishing causing a decline in fish

numbers), scale (global), interconnection (fishing techniques and human demand decreasing fish resources) and sustainability (the future) can be mentioned.
- What are the geographical implications of the cartoon? The cartoon in **FIGURE 1** implies that the future of the fishing industry could be at risk.

### Step 4

Complete your writing with a concluding statement on how you feel about the topic of the cartoon. The text in the Model section of this subtopic states: 'This cartoon makes us think about the issue of taking fish from the ocean, and it questions the sustainability of the fishing industry — too many people are fishing for a limited resource.'

**on** Resources

**Video eLesson** Interpreting a geographical cartoon (eles-1731)
**Interactivity** Interpreting a geographical cartoon (int-3349)

## 12.7.3 Let me do it

Complete the following activities to practise this skill.

### 12.7 ACTIVITIES

1. Using the steps outlined in the Show me section, write a paragraph analysing the geographical issue portrayed in the **FIGURE 2** cartoon. Use the checklist to ensure you cover all aspects of the task.
2. Based on what you have learned in this SkillBuilder, apply your skills to answer the following questions.
   (a) Why is the fishing trawler drawn so small?
   (b) Has the trawler caught many fish? Explain your answer.
   (c) Explain the discussion between the two fish.
   (d) What message do you think is being conveyed in this cartoon?
   (e) How does this cartoon make you feel?

**FIGURE 2** Unsustainable fishing

Checklist

I have:
- recognised the issue
- analysed the components of the cartoon
- identified the cartoonist's personal opinion or message
- stated my personal response on the geographical topic.

# 12.12 Thinking Big research project: Fished out! PowerPoint

## Scenario

Overfishing is one of the largest human-caused ecological threats to the world's food supply. An average person now eats 20 kilograms of fish each year, which is more than twice the amount consumed 50 years ago. Combined with a global population that has quadrupled in the same time period, the result is that 60 per cent of fishing waters are fully fished out and 30 per cent of commercially fished waters are overfished. Globally, fish accounts for 17 per cent of all animal protein consumed and the fishing industry provides employment for more than 60 million people, especially in developing countries where 97 per cent of the world's fisherfolk live. Not only are we threatening an important food source, we are also causing damage to marine ecosystems and people's livelihoods. Progress is being made in some fishing grounds, with commitment from fishers, governments, scientists and the Marine Stewardship Council to establish science-based standards for environmentally responsible and sustainable fishing.

## Task

A conference has been organised for secondary Geography students studying biomes and food security. You have been invited to give a presentation on a current issue relating to food security, in this case overfishing, and to outline some of the responses that take into account economic, social and environmental factors.

Following the guidelines provided in the **Process** section, conduct some background research and then produce a PowerPoint presentation to highlight the threat that overfishing presents to the world's food security. Your presentation should cover the following points:

- a brief explanation and details of the global scale of overfishing (include data)

- details of factors (a minimum of three) that have contributed to overfishing; for example, improvements in technology, lack of regulations and international laws, the open sea, illegal fishing, factory ships etc.
- some of the impacts of overfishing on both the environment and people
- a discussion of two responses that could contribute to a more sustainable approach to fishing and the social, economic and environmental implications of each. Is one more likely to be more effective? Why?

## Process

- Open the ProjectsPLUS application in the Resources for this topic. Click on the **Start new project** button to enter the project due date and set up members in your project group if you wish to work collaboratively. You can present your PowerPoint either individually or with a partner, but you may work with a partner or in groups during the research phase, to enable information sharing and to help grow your ideas through collaborative discussion. Save your settings and the project will be launched.
- Navigate to the **Research forum**, where you will find starter topics loaded to guide your research. You can add further topics to the research forum if you wish.
- Use the weblinks in the **Media centre**, along with your own research to find information. Add your research notes to the relevant topic pages in the Research forum. Remember to record details of your sources so you can create a resources list (bibliography) at the end of your PowerPoint. When you have completed your research, you can print out the **Research report** in the Research forum to easily view all the information you have gathered, if you wish.

- You should also search for suitable images to support your presentation. These should include a minimum of one map, one graph and three images. You might create your own graph using data that you find during your research. All images must have a source detailed beneath them.
- When you have gathered all your information, use your research notes to identify and write concise points that you can use on your PowerPoint slides.
- Set up your PowerPoint, adding a slide for each point, and include your images where appropriate. Remember not to use too much text on any one slide, and to choose an appropriate size and style of text that can be easily read by people in your audience.
- Your final slide should be a bibliography detailing your reference material.
- Review your completed PowerPoint, checking spelling and grammar thoroughly.
- Ensure that you have completed all elements of the task and, when you are satisfied with your work, present your conference presentation to your teacher and class.

**on** Resources

**ProjectsPLUS** Thinking Big research project: Fished out! PowerPoint (pro-0190)

# 12.13 Review

## 12.13.1 Key knowledge summary

### 12.2 Food production's effect on biomes

- Earth is made up of four interconnected spheres: the atmosphere, hydrosphere, lithosphere and biosphere.
- Natural events and human activities can create changes to these spheres.
- New technologies and improvements in farming methods have increased our rate of food production but have also caused loss of biodiversity and unsustainable degradation of land and water.

### 12.3 Changing our forest biome

- Forest biomes provide resources for a wide range of goods and services, and they support wide biodiversity.
- The need for farmland and forest products has seen large-scale clearing of the world's forests.
- Deforestation creates a range of environmental impacts, examples of which can be seen in the Amazon rainforest.

### 12.5 Paper profits, global losses?

- Biomes provide not only food but also products for manufacturing, such as fibre for paper products.
- Global consumption of paper products continues to rise; societies in more developed countries are very dependent on paper.
- The clearing of forest biomes, manufacturing of paper products and the disposal of these products all have environmental impacts.
- Changes are taking place to reduce these impacts and alternatives to wood pulp are being explored.

### 12.6 Depleting our bountiful ocean biome

- Fish is an important source of food for over one billion people around the world.
- Improvements in technology have enabled larger quantities of fish to be captured, processed and stored at greater distances from the coast.
- A 'boom and bust' mentality has seen large-scale overfishing and the decline in fish species.
- Aquaculture is now outstripping wild fish capture as an important supplier of fish and fish products.
- Aquaculture, if poorly managed, can create environmental change.

### 12.8 Losing the land

- Land that is poorly managed or overworked is susceptible to degradation. Erosion, salinity and pest invasions are all causes of land degradation.
- Land degradation can result from both natural and human causes and can lead to a loss of productivity.
- There is a strong interconnection between land degradation and food insecurity.

### 12.9 The effects of farmland irrigation

- Food production and security is linked to water availability.
- Irrigation is the biggest user of water in the world, consuming 70 per cent of freshwater resources.
- Irrigation can contribute to an increase in type, yield and the seasonality of food production.
- However, poorly managed irrigation has environmental costs, such as soil salinity and waterlogging.
- Diversion of surface water and extraction of underground water need to be carried out in a sustainable manner, or watertables will fall and groundwater sources will run dry.

### 12.10 Diminishing global biodiversity

- Globally, there is a decline in the number and population of most species.
- Changes in agriculture, large-scale changes to habitats and modern breeding of plants and animals all contribute to a loss of biodiversity.

- Australia is considered a megadiverse country, with one of the highest levels of biodiversity in the world.

### 12.11 Does farming cause global warming?

- Food production can contribute to global warming.
- Methane, an important greenhouse gas, is a by-product of farming, especially in rice and cattle farming.
- Deforestation also contributes to global warming through the release of carbon.

## 12.13.2 Reflection

Complete the following to reflect on your learning.

### 12.13 ACTIVITIES

Revisit the inquiry question posed in the Overview:

**Our planet works hard to feed the ever-growing human population ... but at what cost?**

1. Now that you have completed this topic, what is your view on the question? Discuss with a partner. Has your learning in this topic changed your view? If so, how?
2. Write a paragraph in response to the inquiry question, outlining your views.

### on Resources

**eWorkbook** Reflection (doc-31718)
Crossword (doc-31719)

**Interactivity** The impacts of global food production crossword (int-7646)

### KEY TERMS

**aquaculture** the farming of aquatic plants and aquatic animals such as fish, crustaceans and molluscs
**aquifer** a body of permeable rock below the Earth's surface, which contains water, known as groundwater
**biophysical environment** the natural environment, made up of the Earth's four spheres — the atmosphere, biosphere, lithosphere and hydrosphere
**deforestation** clearing forests to make way for housing or agricultural development
**degradation** deterioration in the quality of land and water resources caused by excessive exploitation
**endemic** describes species that occur naturally in only one region
**erosion** the wearing down of rocks and soils on the Earth's surface by the action of water, ice, wind, waves, glaciers and other processes
**factory farming** the raising of livestock in confinement, in large numbers, for profit
**greenhouse gases** any of the gases that absorb solar radiation and are responsible for the greenhouse effect. These include water vapour, carbon dioxide, methane, nitrous oxide and various fluorinated gases.
**groundwater** water that exists in pores and spaces in the Earth's rock layers, usually from rainfall slowly filtering through over a long period of time
**humus** an organic substance in the soil that is formed by the decomposition of leaves and other plant and animal material
**irrigation** the supply of water by artificial means to agricultural areas
**kenaf** a plant in the hibiscus family that has long fibres; useful for making paper, rope and coarse cloth
**old-growth forests** natural forests that have developed over a long period of time, generally at least 120 years, and have had minimal unnatural disturbance such as logging or clearing
**plantation** an area in which trees or other large crops have been planted for commercial purposes
**pulp** the fibrous material extracted from wood or other plant material to be used for making paper
**salinity** the presence of salt on the surface of the land, in soil or rocks, or dissolved in rivers and groundwater
**waterlogging** saturation of the soil with groundwater such that it hinders plant growth
**watertable** the surface of the groundwater, below which all pores in the soils and rock layers are saturated with water

# 13 Challenges to food security

## 13.1 Overview

The world produces enough food to feed everyone. So why do hundreds of millions of people go hungry every day?

### 13.1.1 Introduction

For these children, in a tent camp for people displaced by flooding in northern India, the only kind of food security comes in the form of aid. One in nine people in the world, or around 850 million, will go to bed hungry tonight. What is preventing everyone getting enough to eat? And if this is the current situation, what will happen in the future, with our population set to rise to nearly 10 billion by 2050? How can we ensure food security for all the people of our ever-growing world population?

### Resources

**eWorkbook** Customisable worksheets for this topic

**Video eLesson** Food for thought (eles-1720)

### LEARNING SEQUENCE


**13.1** Overview
**13.2** Global food security
**13.3** **SkillBuilder:** Constructing and describing complex choropleth maps online only
**13.4** Impacts of land loss on food security
**13.5** **SkillBuilder:** Interpreting satellite images to show change over time online only
**13.6** Water — a vital part of the picture
**13.7** Climate change challenges for food security
**13.8** Managing food wastage
**13.9** **Thinking Big research project:** Famine crisis report online only
**13.10** **Review** online only


To access a pre-test and starter questions and receive immediate, **corrective feedback** and **sample responses** to every question, select your learnON format at www.jacplus.com.au.

# 13.2 Global food security

## 13.2.1 What is food security?

Very few Australians, by choice, would go to bed at night hungry. We live in a country where there is a plentiful supply and wide range of food items available. Our relatively high standard of living enables most of us to afford to purchase, store and prepare food, or even dine out. Most of us are secure in the knowledge that there will be food available at the next mealtime.

According to the United Nations Food and Agriculture Organization, 'Food security exists when all people, at all times, have physical and economic access to enough safe and nutritious food to meet their dietary needs and food preferences for an active and healthy lifestyle.'

Food security for you, as a student, means that your family either grows its own food, has sufficient income to purchase food, or is able to barter or swap food. Similarly, food security for a country means that it is able to grow sufficient food, or it has enough wealth to import food, or it combines the two. Not all people in the world are able to achieve this. Further, access to a wide variety of foods varies from place to place. For example, consider the range of foods available in the two markets in **FIGURES 1(a)** and **(b)**.

**FIGURE 1** Fresh produce market in (a) a developed country and (b) a developing country

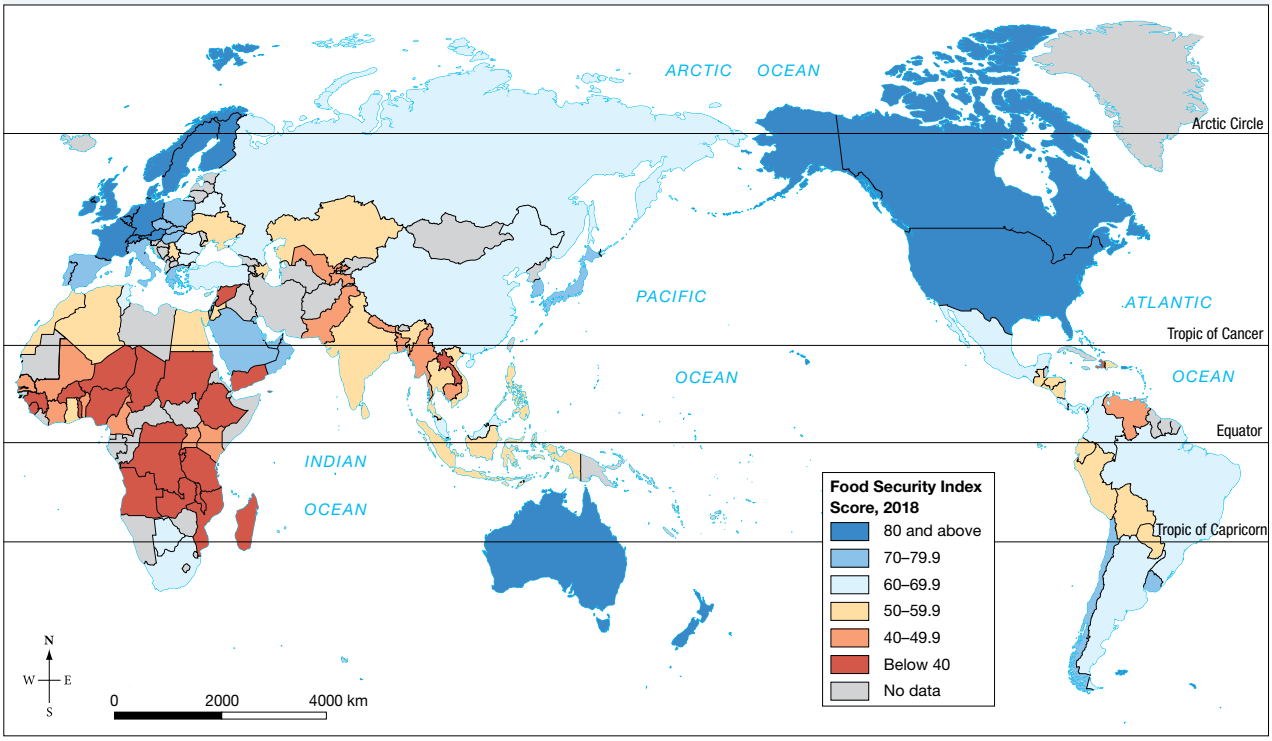
## 13.2.2 Who has food security?

The **FIGURE 2** map shows the countries of the world, scored according to the Global Food Security Index. This is based on a range of 12 different **indicators**, including the:

- affordability of food
- accessibility of food
- nutritional value of food
- safety of food
- nutritional and health status of the population.

Countries that have a high rating on the index are able to produce more food than they require, so they can export their surplus, or they are able to afford to import all of their food needs, as is the case for Singapore.

**FIGURE 2** The Food Security Index, 2018




***Source:*** © 2019 The Economist Intelligence Unit Limited, data from Global Food Security Index. Map drawn by Spatial Vision.

In Australia, we produce three times as much food as we consume. We are a major exporter of both fresh and processed food, and can trade competitively in cereals, oil seeds, beef, lamb, sugar and dairy products. Ninety per cent of our food is grown here in Australia. Of the remaining 10 per cent that we import, many foods are either processed or out of season in Australia; oranges are an example. Global trade is an important component of food security because it is almost impossible to exactly match food production to food demands.

As a country, Australia does not have a problem feeding its population, but it has a humanitarian interest in the food security of developing nations. As a major food producer, Australia does face future challenges. There is declining growth in agricultural productivity, the threat of climate change, and increasing competition for land and water.

## 13.2.3 Who is at risk of food insecurity?

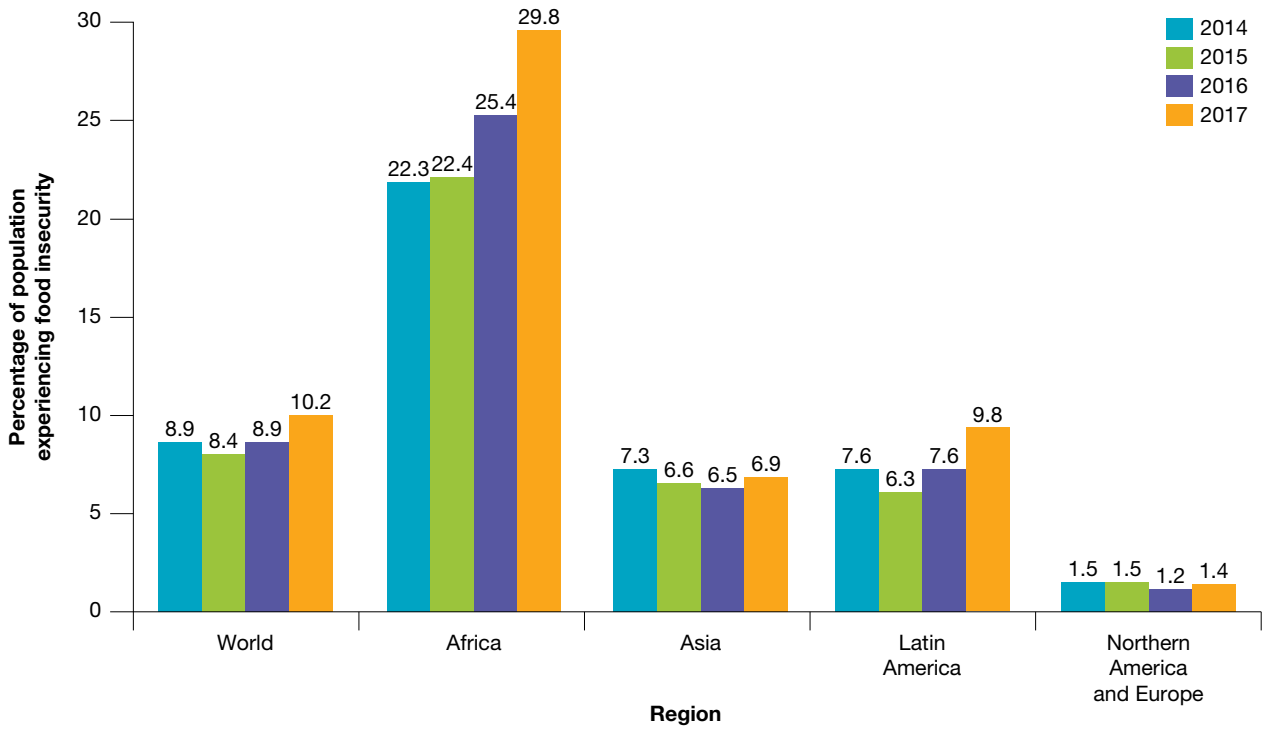
**FIGURE 2** also shows those countries that have a low Food Security Index score. It is estimated that more than 850 million people — one in every nine people in the world — are **undernourished**, with diets that are minimal or below the level of sustenance. Poor diet and limited access to food create large-scale food insecurity in many parts of Africa and southern Asia. People who do not have a regular and healthy diet often have shortened life expectancy and an increased risk of disease. Children are especially vulnerable to poor diet, and their growth, weight, and physical and mental development suffer. India is home to 24 per cent of the world's **malnourished** and 30 per cent (46.6 million) of the world's children under five with stunted growth due to poor and inadequate diets.

Paradoxically there is also an interconnection between food insecurity and obesity. When fresh food is scarce or expensive, people will choose cheaper food that is often high in kilojoules but low in nutrients. This is quite common in urban areas of middle- and high-income countries. Of the world's population of over 7.7 billion, two billion are now overweight — a condition that contributes to significant health issues such as diabetes and heart disease.

## 13.2.4 Why is there food insecurity?

Global food production now provides one-third more calories than are needed to feed the entire world. Since the beginning of this century there has been an increase in production from 2716 to 2904 calories per person per day. Increases from 2083 to 2358 calories have also occurred in the least developed countries. There is, however, unequal access to **arable** land, technology, education and employment opportunities. Improvements in food production and economic development have not always occurred in those places experiencing rapid growth in population. Food is redistributed around the world via trade and aid but neither is a long-term or large-scale solution to food insecurity. Regional variations still occur in the distribution of hunger, as can be seen in **FIGURE 3**. Since 2014, severe food insecurity has actually risen in Africa, Latin America, and the world as a whole.

**FIGURE 3** Regional food insecurity, 2014–2017



Some of the reasons for food insecurity include:

- poverty
- population growth
- weak economy and/or political systems
- conflict
- natural disasters such as drought.

## 13.2 INQUIRY ACTIVITIES

1. Research and find out the causes and effects of one of the conditions caused by dietary deficiency, such as deficiency in iron, vitamin A or vitamin C. **Examining, analysing, interpreting**
2. Select one of the ***places*** mapped in **FIGURE 2** as being at extreme risk of food insecurity. Find out the main factors that contribute to its food insecurity. **Examining, analysing, interpreting**
3. **GS2** Refer to a map of conflict in your atlas or online. Is there an ***interconnection*** between those countries that have a high or extreme risk of food insecurity and those countries that are experiencing conflict? Include country names in your answer. **Examining, analysing, interpreting**

## 13.2 EXERCISES

**Geographical skills key: GS1** Remembering and understanding **GS2** Describing and explaining **GS3** Comparing and contrasting **GS4** Classifying, organising, constructing **GS5** Examining, analysing, interpreting **GS6** Evaluating, predicting, proposing

### 13.2 Exercise 1: Check your understanding

1. **GS1** What is meant by the term *food security*?
2. **GS3** Compare the two photographs in **FIGURES 1(a)** and **1(b)**.
   (a) What are the similarities and differences between the two markets?
   (b) Do you think all food groups would be available in both markets? Why or why not?
3. **GS4** Refer to **FIGURE 2**.
   (a) List five examples of countries, from different regions of the world, that are considered to have low risk of food insecurity.
   (b) Would you classify these countries as developing or developed?
4. **GS2** What does it mean to live in a country with low risk of food insecurity?
5. **GS2** The Food Security Index was based on evaluating five different indicators. Why do you think indicators such as accessibility and safety were included?
6. **GS1** What factors make people vulnerable to food insecurity?
7. **GS1** What is the difference between undernutrition and malnutrition?
8. **GS2** Explain how conflict can lead to food insecurity.

### 13.2 Exercise 2: Apply your understanding

1. **GS6** How do you think climate ***change*** might affect Australia's food security?
2. **GS6** What natural or human events could disrupt our food security?
3. **GS3** Refer to **FIGURE 3**.
   (a) With the use of dates and percentages, describe the main trend in food security throughout the world for 2014–2017.
   (b) Compare the trends in food security for Africa and North America/Europe over time. Use figures in your answer.
4. **GS6** Develop five steps you think would reduce a country's risk of food insecurity. Give reasons for your choices.
5. **GS6** How can Australia best help another country that is at high risk of having insufficient food for its people?
6. **GS6** At the turn of the twentieth century, the total worldwide spending on agricultural research was US$23 billion, compared with US$1.5 trillion on weapons. Do we have our priorities right? Write a short 'letter to the editor' outlining your view.

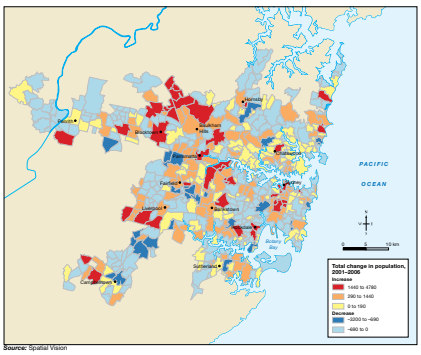
Try these questions in learnON for instant, corrective feedback. Go to www.jacplus.com.au.

# 13.3 SkillBuilder: Constructing and describing complex choropleth maps

online only

### What is a complex choropleth map?

A complex choropleth map is a map that is shaded or coloured to show the average density or concentration of a particular feature or variable, and it shows an area in detail.

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- an activity to allow you to practise the skill (Let me do it)
- questions to consolidate your understanding of the skill.

**on Resources**

**Video eLesson** Constructing and describing complex choropleth maps (eles-1732)

**Interactivity** Constructing and describing complex choropleth maps (int-3350)

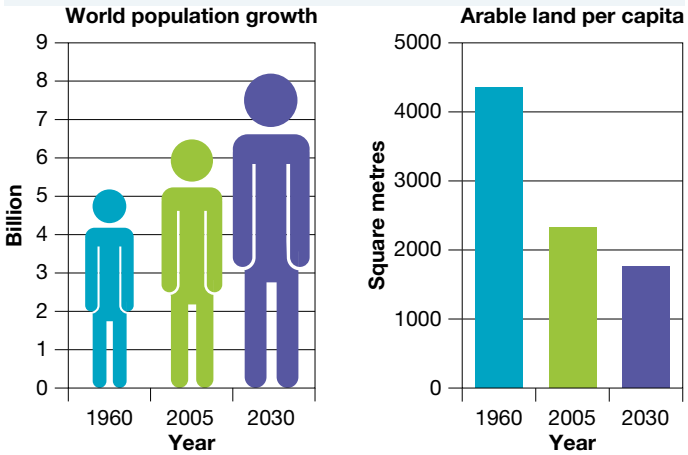
# 13.4 Impacts of land loss on food security

## 13.4.1 How is land lost?

Land is absolutely essential for food production, and the world has more than enough arable land to meet future demands for food. Nevertheless, we need to find a balance between competing demands for this finite resource.

The loss of productive land has two main causes. First, there is the degradation of land quality through such things as erosion, **desertification** and salinity. Second, there is the competition for land from non-food crops, such as biofuels, and from expanding urban areas. As **FIGURE 1** shows, the growth in world population is inversely proportional to the amount of arable land available. This does not even take into consideration the land that is degraded and no longer suitable for growing food.

**FIGURE 1** Comparison of world population growth and arable land per capita



## Land degradation

Although there have been significant improvements in crop yields, seeds, fertilisers and irrigation, they have come at a cost. Environmental degradation of water and land resources places future food production at risk.

The main forms of land degradation are:

- erosion by wind and water
- salinity
- pest invasion
- loss of biodiversity
- desertification.

Land degradation occurs in all food-producing biomes across the globe. Some degradation occurs naturally; for example, a heavy rainstorm can easily wash away topsoil. However, the most extensive degradation is caused by overcultivation, overgrazing, overwatering, overloading with chemicals and overclearing (see **FIGURE 2**). More than 75 per cent of the planet's land is considered degraded, impacting on the lives of more than 3 billion people. In China, erosion affects over 40 per cent of the land area; up to 10 million hectares are contaminated by pollutants.

**FIGURE 2** Land degradation caused by deforestation in Madagascar

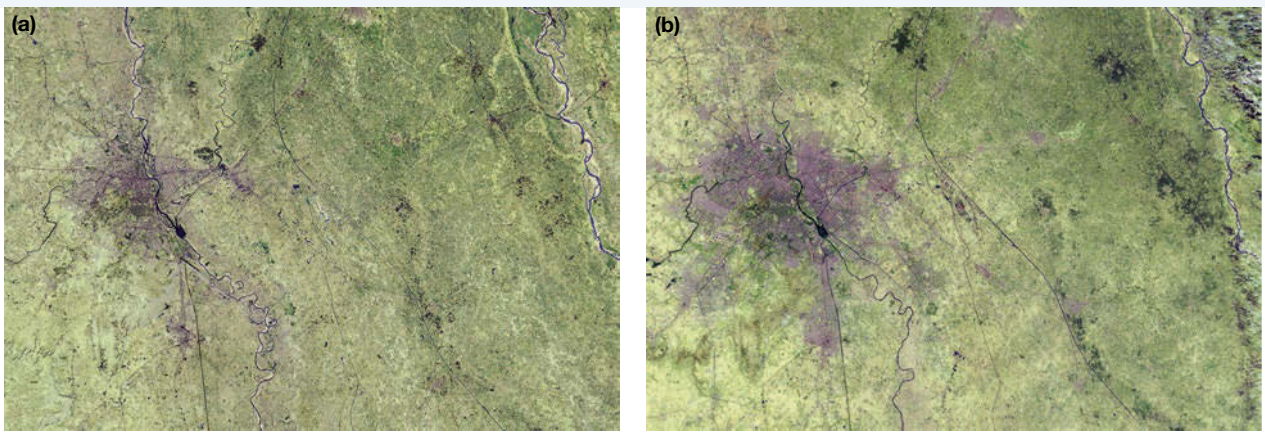
## Competition for land

There has been a growing global trend to convert valuable cropland to other uses. Urban growth, industrialisation and energy production all require land. Melbourne currently produces enough food to supply 41 per cent its needs. With an estimated population of 7–8 million and the consequent growth in city size by the year 2050, the city will need 60 per cent more food. The capacity of current farmland will provide only 18 per cent of the city's needs.

## Creeping cities

Cities tend to develop in places that are agriculturally productive. However, as they expand, they encroach on valuable farmland. Approximately 3 per cent of the world's land areas are urbanised, but this is expected to increase to 4–5 per cent by 2050.

**FIGURE 3** Satellite image of New Delhi, India, in (a) 1989 and (b) 2018 — the expansion of the city has taken over valuable arable land.



## Growing fuel

Traditionally, the main forms of biofuel have been wood and charcoal. Almost 90 per cent of the wood harvested in Africa and 40 per cent of that harvested in Asia is used for heating and cooking. Today, people are seeking more renewable energy sources and they want to reduce $CO_2$ emissions associated with deforestation, so there is greater demand for alternative energy sources. Consequently, the use of agricultural crops to produce biofuels is increasing. Ethanol (mostly used as a substitute for petrol) is extracted from crops such as corn, sugar cane and cassava. Biodiesel is derived from plantation crops such as palm oil, soya beans and **jatropha**. The growth of the biofuel industry has the potential to threaten future food security by:

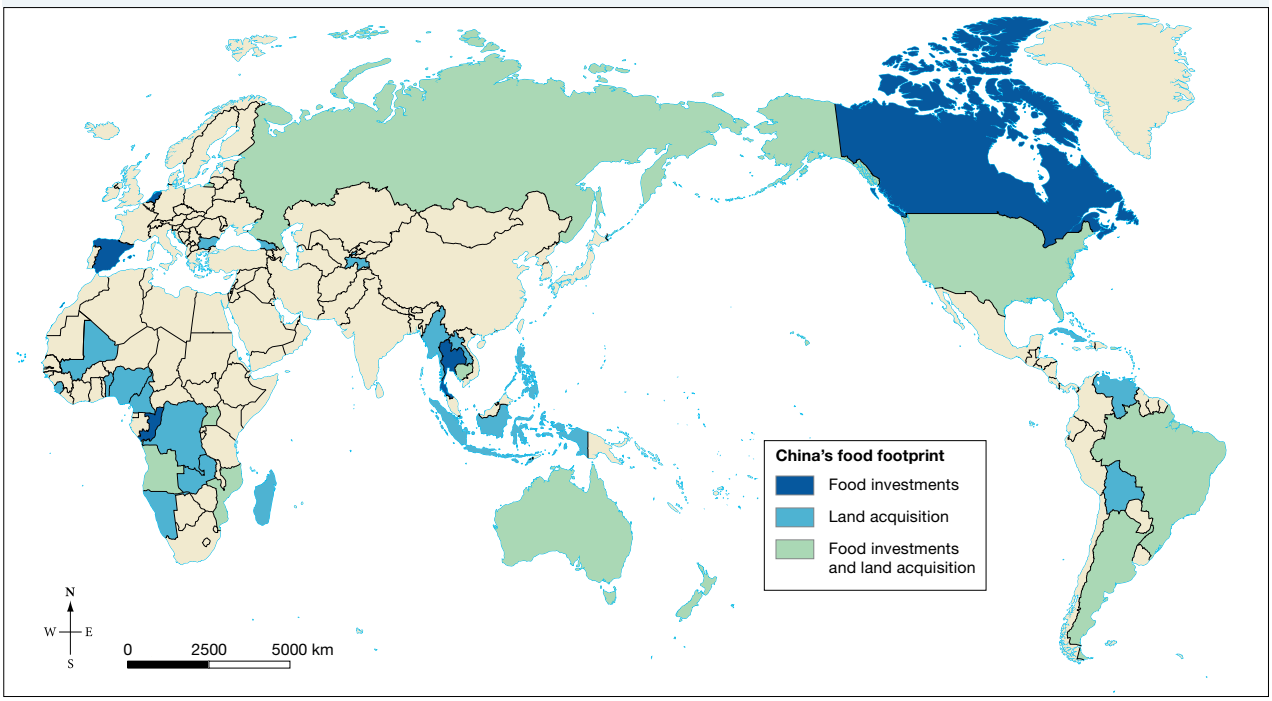
- changing food crops to fuel crops, so less food is produced and crops have to be grown on **marginal land** rather than arable land
- increasing prices, which makes staple foods too expensive for people to purchase
- forcing disadvantaged groups, such as women and the landless poor, to compete against the might of the biofuel industry.

## Land grabs

A growing challenge to world food security is the purchase or lease of land, largely in developing nations, by resource-poor but wealthier nations. Large-scale 'land grabs', as they are known, have the potential to improve production and yields but at the same time there is growing concern over the loss of land rights and food security for local populations.

Since 2000, foreign investors have acquired over 26 million hectares around the world to produce food crops and biofuels. **FIGURE 4** shows the extent of China's expansion into other countries with investments in land and agricultural businesses.

**FIGURE 4** Global map of China's land and food footprint




***Source:*** The Heritage Foundation, GRAIN.org, Bloomberg. Map drawn by Spatial Vision.

Forty-two per cent of global acquisitions have occurred in Africa, examples of which can be seen in **FIGURE 5**. Africa's appeal is based on the fact that the continent accounts for 60 per cent of the world's arable land and yet most countries within it currently achieve less than 25 per cent of their potential yield.

**FIGURE 5** Examples of land grabs in Africa

**CHINA**
**Mozambique —** $800 million invested to improve rice production
**Democratic Republic of Congo —** 2.8 million ha for biofuel production
**Tanzania —** 300 ha for rice farming
**Zambia —** 1.2 million ha for biofuel production

**EGYPT**
**Sudan —** Land acquired to grow 2 million tons of wheat annually

**GERMANY**
**Ethiopia —** 13 000 ha for biofuel production

**INDIA**
**Ethiopia —** $4 billion invested to produce flowers and foodstuffs

**JORDAN**
**Sudan —** 24 000 ha for crops and livestock

**LIBYA**
**Mali —** 101 000 ha for rice farming

**QATAR**
**Kenya —** 40 000 ha farmland
**Sudan —** Investment in agriculture

**SAUDI ARABIA**
**Sudan —** 918 million ha for foodstuffs
**Tanzania —** 506 000 ha for food production

**SOUTH AFRICA**
**Republic of Congo —** 10 million ha acquired

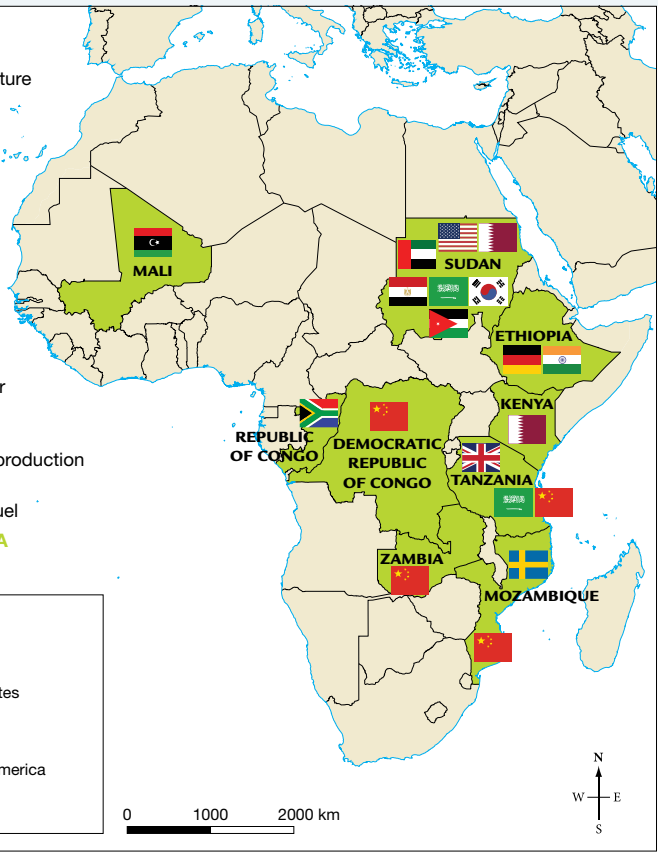
**SOUTH KOREA**
**Sudan —** 688 000 ha of wheat fields

**SWEDEN**
**Mozambique —** 101 000 ha for biofuel production

**UNITED ARAB EMIRATES**
**Sudan —** 376 000 ha for food production

**UNITED KINGDOM**
**Tanzania —** 45 000 ha for biofuel

**UNITED STATES OF AMERICA**
**Sudan —** 405 000 ha acquired




**Overseas country leasing or owning land**

China, Egypt, Germany, India, Jordan, Libya, Qatar, Saudi Arabia, South Africa, South Korea, Sweden, United Arab Emirates, United Kingdom, United States of America

***Source:*** Food and Agriculture Organization, International Food Policy Research Institute

The rise of land grabs came about as a result of the 'triple-F' crisis — food, fuel and finance.

- *Food crisis:* massive increases in world food prices in 2007–08 emphasised the need for those countries heavily reliant on importing food, such as Saudi Arabia and China, to improve their food security by obtaining land in other countries to produce food to meet their own needs.
- *Fuel crisis:* rising and fluctuating oil prices in 2007–09 created an incentive for countries to acquire land to produce their own biofuels (see **FIGURE 5**).
- *Financial crisis:* the global financial crisis in 2008 saw organisations switch from investing in stocks and shares to land in overseas countries, especially land that could be used to generate food and fuel crops.

## The risk to food security

Investors in farmland are, understandably, seeking large expanses of land that has fertile soils and good rainfall or access to irrigation water. In many instances, land that is purchased is already occupied and used by small-scale farmers, often women who rarely benefit from any compensation. Prices for land can be much lower and there is frequently corruption, with much money going to local and government officials. People can also be forced off their land by governments keen to make deals with wealthy governments and corporations. Many land grabs have neglected the social, economic and environmental impacts of the deals.

With the purchase of land can come the right to withdraw the water linked to it and this can deny local people access to water for fishing, farming and watering animals. Withdrawal of water can reduce flow downstream. The Niger River, West Africa's largest river, flows through three countries and sustains over 100 million people, so any large-scale water reductions create significant impact to downstream environments and people.

Not all farmland grab projects have been successful. At least 17.5 million hectares of foreign-controlled land have failed. There are a number of interconnected reasons, including: a lack of understanding of local conditions; natural disasters; failed accounting; and, increasingly, challenges from local communities that have been displaced. When projects collapse, communities rarely get their lands back or are compensated for their loss. Promises of new schools, health clinics, infrastructure and jobs simply disappear.

It has been estimated that the land taken up by foreign investors for biofuel projects could feed as many as 190 to 370 million people, or even more, if yields were raised to the level of industrialised western farming. In addition to these human costs, there are important concerns about environmental risks that are associated with monoculture farming and the loss of biodiversity in the region.

### DISCUSS

'Land grabs are the solution to establishing a country's food security.' Provide an argument for this viewpoint and an argument against this viewpoint. Ensure that your argument is supported with evidence and is logical.

**[Critical and Creative Thinking Capability]**

### on Resources

**Google Earth** New Delhi

## 13.4 EXERCISES

**Geographical skills key: GS1** Remembering and understanding **GS2** Describing and explaining **GS3** Comparing and contrasting **GS4** Classifying, organising, constructing **GS5** Examining, analysing, interpreting **GS6** Evaluating, predicting, proposing

### 13.4 Exercise 1: Check your understanding

1. **GS1** What are the two main ways that productive farmland can be lost?
2. **GS1** Why is the use of corn as a biofuel a threat to food security?
3. **GS1** What is meant by the term *land grab*?
4. **GS2** Refer to **FIGURE 1**.
   (a) Describe the ***changes*** in population growth and the arable land per person between 1960 and 2030, making use of figures.
   (b) What do these graphs suggest about food security?
5. **GS3** Compare the advantages and disadvantages in developing and developed nations of using traditional biofuels, such as wood and charcoal, instead of oil and gas.

### 13.4 Exercise 2: Apply your understanding

1. **GS2** What is *jatropha*? What are the benefits of growing this rather than corn and other biofuels?
2. **GS6** Do you think Australia will need to purchase farmland overseas? Give reasons for your answer.
3. **GS6** Are land grabs the most effective solution for establishing a country's food security? Outline your view.
4. **GS6** Refer to **FIGURE 4**.
   (a) Describe the distribution of countries in which China has acquired land.
   (b) Suggest reasons why China might invest in food production and land in Australia.
5. **GS5** Refer to **FIGURE 5**. What do you notice about the use of land in Africa that is being acquired by foreign countries?

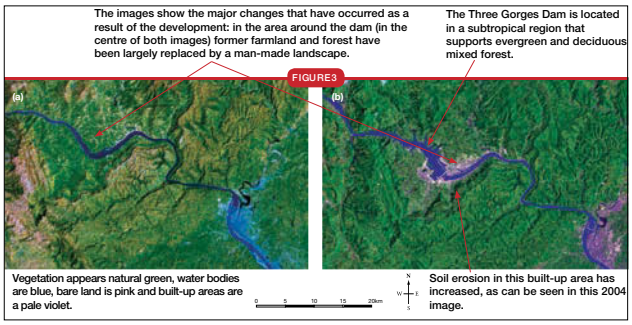
Try these questions in learnON for instant, corrective feedback. Go to www.jacplus.com.au.

# 13.5 SkillBuilder: Interpreting satellite images to show change over time

online only

### What is a satellite image?

A satellite image is an image taken from a satellite orbiting the Earth. Satellite images allow us to see very large areas — much larger than those that can be visualised using vertical aerial photography.

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- questions to consolidate your understanding of the skill.

**on Resources**

**Video eLesson** Interpreting satellite images to show change over time (eles-1733)

**Interactivity** Interpreting satellite images to show change over time (int-3351)

# 13.6 Water — a vital part of the picture

## 13.6.1 Why are we running low on water?

There is no substitute for water. Without water there is no food, and agriculture already consumes 70 per cent of the world's fresh water. Every type of food production — cropping, grazing and processing — requires water. Thus, a lack of water is possibly the most limiting factor for increasing food production in future.

To feed an additional two billion people by 2050, the world will need to generate more food and use more water. The two main concerns that threaten future water security are water quantity and water quality.

In theory, the world has enough water; it is just not available where we want it or when we want it, and it is not easy to move from place to place. We already use the most accessible surface water, and now we are looking for it beneath our feet. Underground **aquifers** hold 100 times more water than surface rivers and lakes. However, groundwater is not always used at a sustainable rate, with extraction exceeding natural recharge, or filling. This occurs in many of the world's major food-producing places, in countries such as the United States, China and India.

Water insecurity is connected with food insecurity. **FIGURE 2** shows the predicted number of people who will face **water stress** and water scarcity in the future. A more complex view is seen in **FIGURE 3**, which shows an interconnection between increased demand for water and predicted climate change, population increase and greater industrialisation in the 2050s.

**FIGURE 1** Water scarcity is a serious threat to food security.

**FIGURE 2** People facing water stress and water scarcity

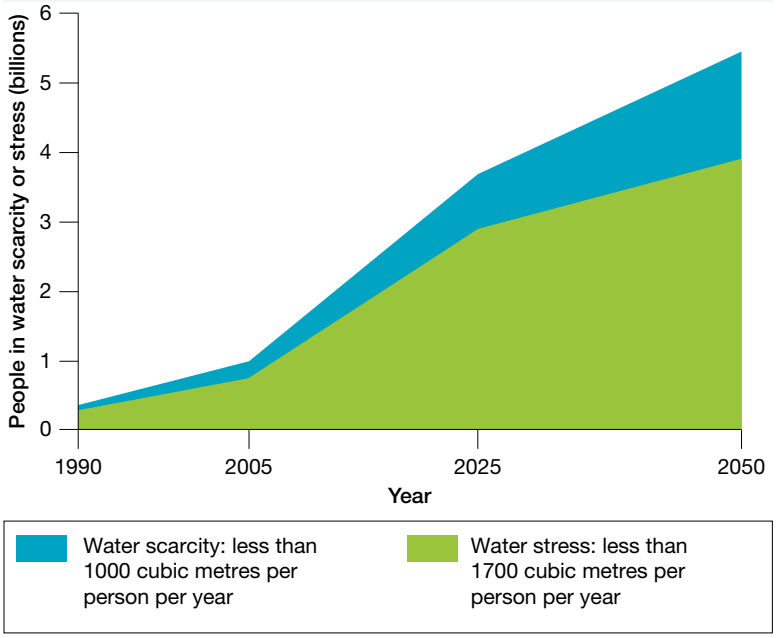
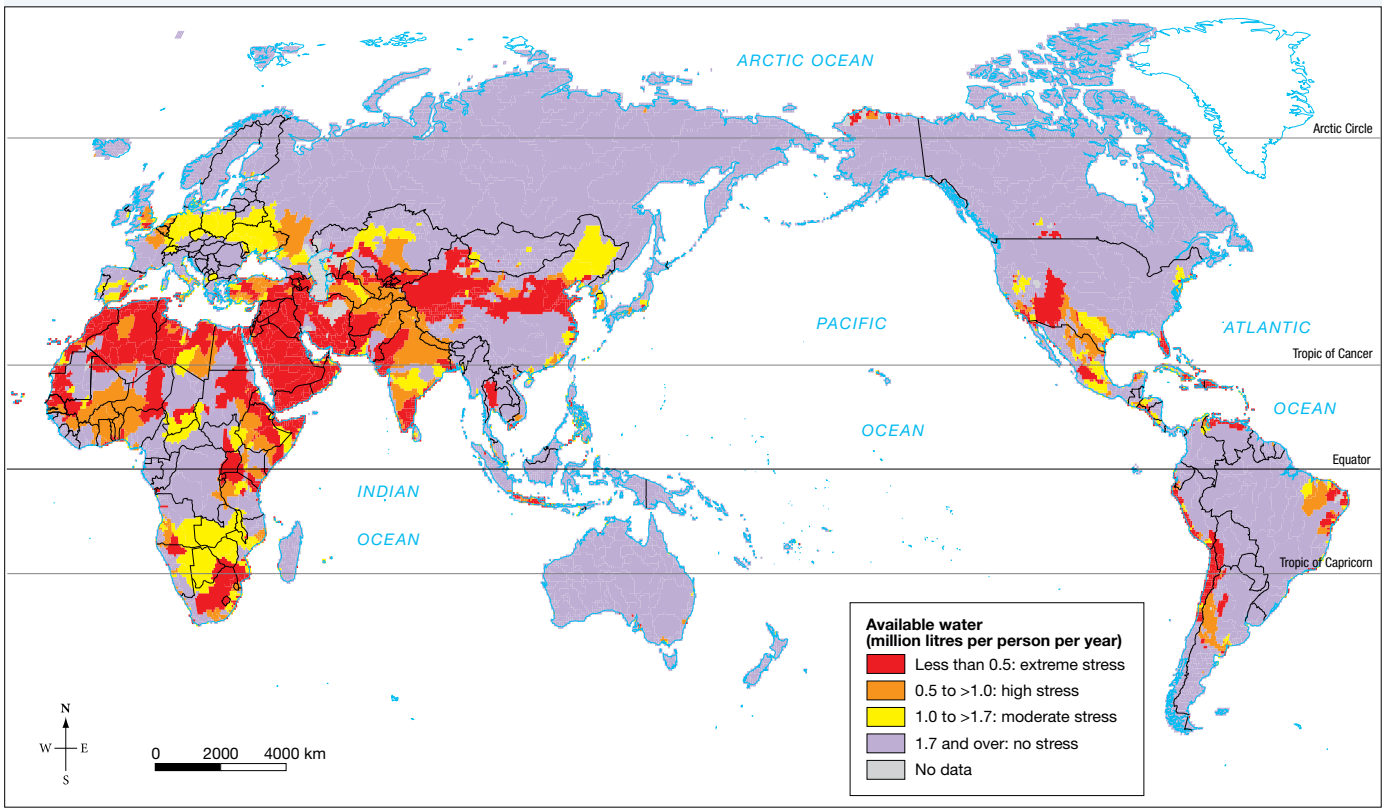



**FIGURE 3** How water availability may change with temperature, population and industrialisation increase, 2050s




***Source:*** Spatial Vision

When water availability drops below 1.5 million litres per person per year, a country needs to start importing food; this makes the country vulnerable to changes in global prices. Developing countries that experience water stress cannot afford to import food. They are also more vulnerable to environmental disasters. In developing countries 70 per cent of food emergencies are brought on by drought.

The main causes of the growing water shortage are outlined below.

- *Food production*. It is estimated that an additional 6000 cubic kilometres of fresh water will be needed for irrigation to meet future food demand. Changes in diet, especially increased meat consumption, require more water to grow the crops and pasture that feed the animals. A typical meat eater's diet requires double the amount of water that a vegetarian diet requires.
- *Growth of urban and industrial demand*. Water for farming is diverted to urban populations, and productive land is converted to urban use.
- *Poor farming practices*. Water is wasted through inefficient irrigation methods and cultivating water-hungry crops such as rice. Poorly maintained irrigation infrastructure, such as pipes, canals and pumps, creates leakage.
- *Over-extraction*. Improved technology and cheaper, more available energy have enabled us to pump more groundwater from deeper aquifers. This is not always done at a sustainable rate, so as water is removed, less is available to refill lakes, rivers and wetlands.
- *Poor management*. Governments often price water cheaply, so irrigation schemes use water unsustainably. Some countries may have available water but lack the money to develop irrigation schemes.

## 13.6.2 Why is water quality deteriorating?

Agriculture is a major contributor to water pollution. Excess nutrients, pesticides, sediment and other pollutants can run off farmland or leach into soils, groundwater, streams and lakes. Excessive irrigation can cause waterlogging or soil salinity. This salty water not only poisons the soil but also drains into river systems. Industrial waste, untreated sewage and urban run-off also pollute water that may be used to irrigate farmland. Food that is irrigated with polluted water can actually pass on diseases and other medical problems, such as heavy-metal poisoning, to people. Pollution is an important contributor to the scarcity of clean, **potable** water.

### on Resources

**Interactivity** The last drop (int-3328)

**Weblinks** Water use

Water availability

### 13.6 EXERCISES

**Geographical skills key: GS1** Remembering and understanding **GS2** Describing and explaining **GS3** Comparing and contrasting **GS4** Classifying, organising, constructing **GS5** Examining, analysing, interpreting **GS6** Evaluating, predicting, proposing

#### 13.6 Exercise 1: Check your understanding

1. **GS2** Examine **FIGURE 2**.
   (a) Describe the projected ***changes*** in the number of people affected by water stress between 1990 and 2050. Use figures in your description.
   (b) How do these ***changes*** compare with figures for water scarcity?
2. **GS2** If a country has an average of 0.5 to <1.0 million litres of water per person per year, is it considered to be water stressed? Why?
3. **GS1** Why is agriculture both a contributor to and a victim of water pollution?
4. **GS2** Refer to **FIGURE 3**.
   (a) Describe those ***places*** in the world that are predicted to be in high to extreme water stress in the 2050s.
   (b) How could you explain why ***places*** like Eastern Europe could face water scarcity?
5. **GS2** Why would underground aquifers be able to hold more water than surface rivers and lakes?

### 13.6 Exercise 2: Apply your understanding

1. **GS6** What do you think water managers could do to help prevent water scarcity affecting future food security?
2. **GS6** Suggest one natural and two human activities/events that could cause a decline in the quality or potability of a water resource.
3. **GS6** Suggest reasons why groundwater is often used for food production at an unsustainable rate.
4. **GS5** Suggest an argument that would help convince people to reduce their meat consumption as a means of reducing our water needs.
5. **GS6** Governments are often accused of pricing water too cheaply. What ***changes*** might your family need to implement if the cost of household water was to more than double?

Try these questions in learnON for instant, corrective feedback. Go to www.jacplus.com.au.

# 13.7 Climate change challenges for food security

## 13.7.1 How will food security be affected by climate change?

The impacts of climate change on future world food security are a case of give and take. Some regions of the world will benefit from increases in temperature and rainfall, while others will face the threat of greater climatic uncertainty, lower rainfall and more frequent drought. In either case, food production will be affected.

Agriculture is important for food security, because it provides people with food to survive. It is also the main source of employment and income for 26 per cent of the world's workforce. In heavily populated countries in Asia, between 40 and 50 per cent of the workforce is engaged in food production, and this figure increases to an average of 54 per cent in sub-Saharan Africa.

It is difficult to predict the likely impacts of climate change, because there are many environmental and human factors involved (see **FIGURE 1**), as well as different predictions from scientists (see **FIGURE 2**).

**FIGURE 1** Possible impacts of climate change on food production

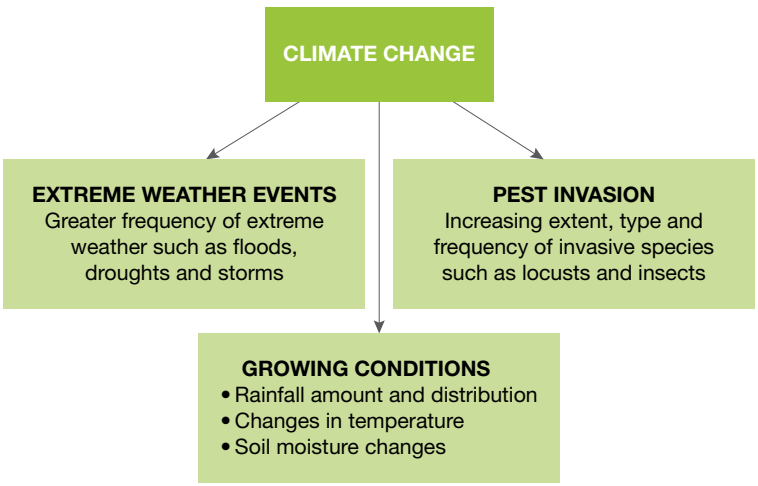
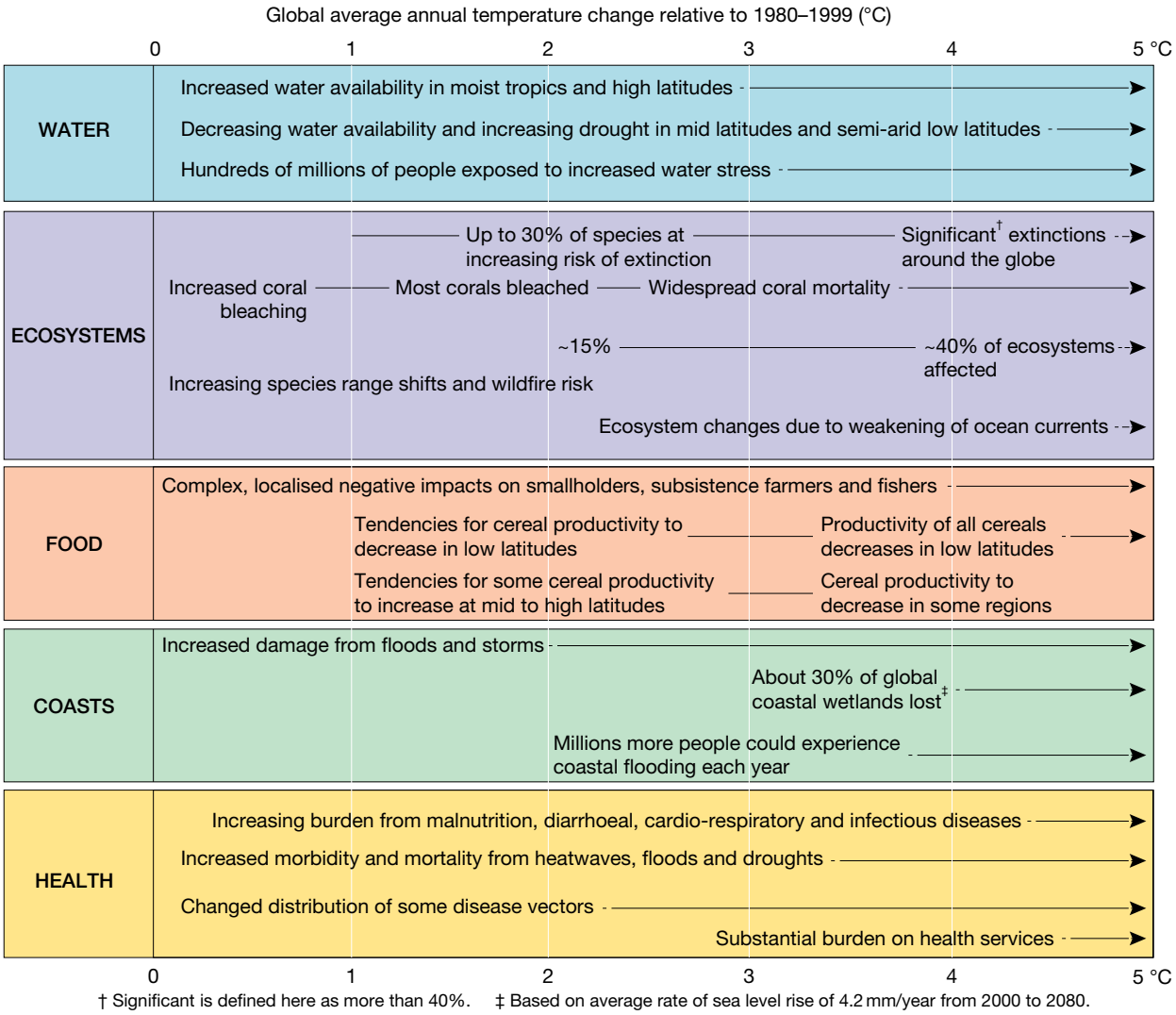


**FIGURE 2** Projected consequences of climate change




† Significant is defined here as more than 40%. ‡ Based on average rate of sea level rise of 4.2 mm/year from 2000 to 2080.

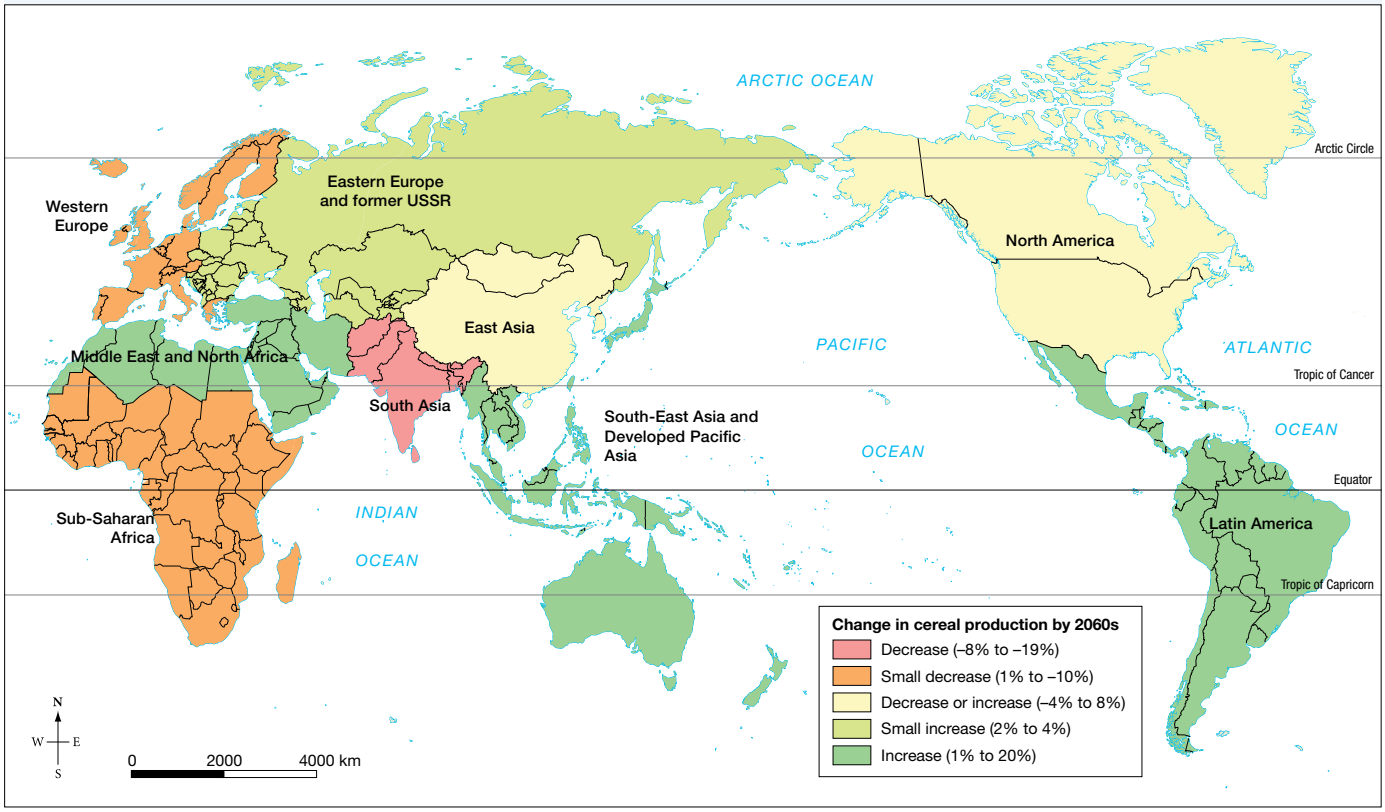
There is a wide range of possible impacts of climate change. Sea-level rises may cause flooding and the loss of productive land in low-lying coastal areas, such as the Bangladesh and Nile River deltas. Changes in temperatures and rainfall may cause an increase in pests and plant diseases. However, agriculture is adaptable. Crops can be planted and harvested at different times, and new types of seeds and plants, or more tolerant species, can be used. Low-lying land may be lost, but higher elevations, such as mountain slopes, may become more suitable. The loss in productivity in some places may be balanced by increased production in other places. **FIGURE 3** demonstrates the effects of climate change on cereal crops, while **FIGURE 4** shows the range of potential impacts across Europe.

Essentially, hundreds of millions of people are at risk of increased food insecurity if they have to become more dependent on imported food. This will be evident in the poorer countries of Asia and sub-Saharan Africa, where agriculture dominates the economy. There is also a risk of greater numbers of **environmental refugees** or people fleeing places of food insecurity.

**DISCUSS**

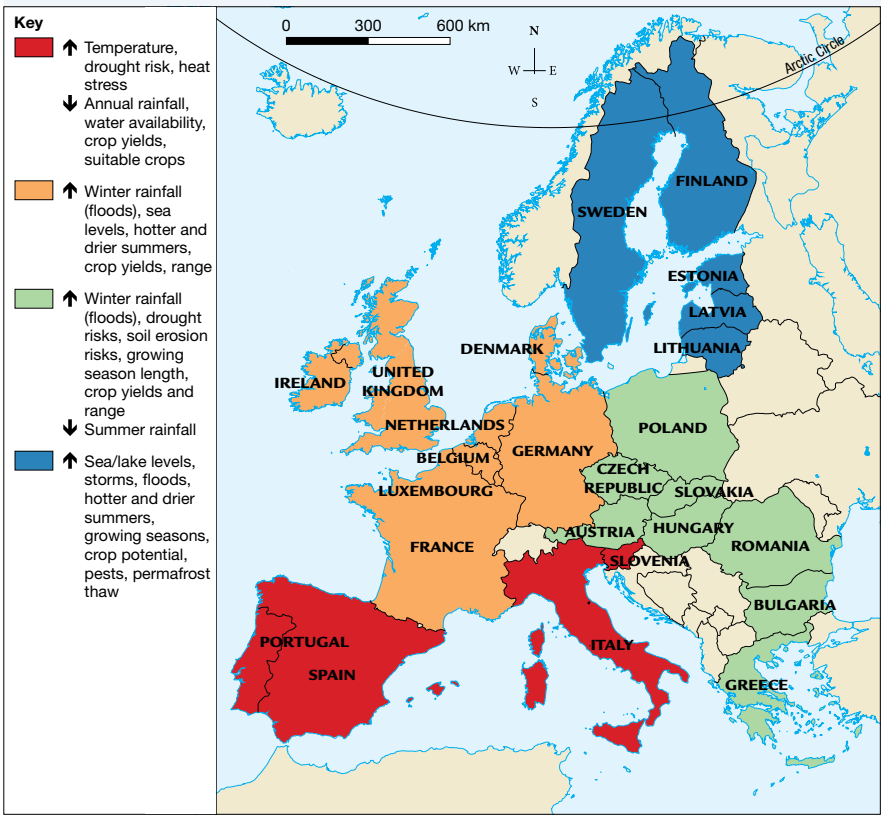
Should food be shared more equitably around the world? How might this be achieved? **[Ethical Capability]**

**FIGURE 3** Predictions of the effects of climate change on cereal crops




***Source:*** Spatial Vision

**FIGURE 4** Examples of potential consequences of climate change in selected European countries




***Source:*** Spatial Vision

## Resources

**Weblink** How to feed the world in 2050

## 13.7 INQUIRY ACTIVITIES

1. Research potential impacts of climate ***change*** on Australia. Create an annotated map to illustrate your findings. **Classifying, organising, constructing**
2. Use the **How to feed the world in 2050** weblink in the Resources tab to find out more about the impact of climate ***change*** on food security. **Examining, analysing, interpreting**

## 13.7 EXERCISES

**Geographical skills key: GS1** Remembering and understanding **GS2** Describing and explaining **GS3** Comparing and contrasting **GS4** Classifying, organising, constructing **GS5** Examining, analysing, interpreting **GS6** Evaluating, predicting, proposing

### 13.7 Exercise 1: Check your understanding

1. **GS2** Describe the ***interconnection*** between ***environmental*** refugees and climate ***change***.
2. **GS2** Explain how the impacts of climate ***change*** may be a benefit to food production in a particular ***place***.
3. **GS2** How would an increase in extreme weather events impact on food production?
4. **GS2** How might technologies such as glasshouses and irrigation help reduce the impacts of global warming?
5. **GS2** Why are the impacts of climate ***change*** likely to be felt more in those countries with a high percentage of their population in the agricultural workforce?

### 13.7 Exercise 2: Apply your understanding

1. **GS6** How might a country such as Australia best prepare its food production systems to cope with potential ***changes*** in climate?
2. **GS5** Refer to **FIGURE 2** and decide whether the following statements are true or false.
   (a) If temperatures increase by 3 °C, crop yields around the equator would rise.
   (b) ***Changes*** in extreme weather events are unlikely unless temperatures increase by at least 1 °C.
   (c) Food insecurity will be felt greatly in developing regions if temperatures rise more than 4 °C.
   (d) ***Places*** that are likely to experience decreasing crop yields will be found in the higher latitudes.
3. **GS5** Refer to **FIGURE 3**.
   (a) Which ***places*** have the potential to be grain exporters and which ***places*** are likely to become dependent on grain imports? Use data in your answer.
   (b) What are the economic and social implications of this for countries in these regions?
4. **GS5** Refer to **FIGURE 4**.
   (a) Which countries of Europe will benefit from climate ***change*** in terms of food production and which countries are likely to suffer negative outcomes?
   (b) Would increased irrigation be a ***sustainable*** solution to growing food in Spain? Explain your answer.
5. **GS4** Refer to **FIGURE 3** to complete the table below, classifying each of the following countries according to their predicted ***change*** to cereal production: Bangladesh, Brazil, England, Germany, Indonesia, Mexico, South Africa, South Korea.

| Decrease (–8% to –19%) | Small decrease (1% to –10%) | Decrease or increase (–4% to 8%) | Small increase (2% to 4%) | Increase (1% to 20%) |
|---|---|---|---|---|
| | | | | |

Try these questions in learnON for instant, corrective feedback. Go to www.jacplus.com.au.

# 13.8 Managing food wastage

## 13.8.1 What is the link between waste and food security?

What food have you thrown out today? Across the world, one-third of all food produced is wasted. Each year, around 1.6 million tonnes of food, worth up to $1.2 trillion, is dumped while more than 850 million people remain undernourished. According to the United Nations' Food and Agriculture Organization, one-quarter of the food wasted each year could feed all of the world's hungry people.

To meet the growing demand for food by the middle of this century, it has been calculated that the world will need to produce as much food as has been produced over the past 8000 years. Although the world does produce sufficient food for everyone, distribution and affordability prevent it from getting to everyone who needs it. However, dealing with food wastage could certainly help to reduce food vulnerability.

**FIGURE 1** Surplus tomatoes dumped in Tenerife, Canary Islands

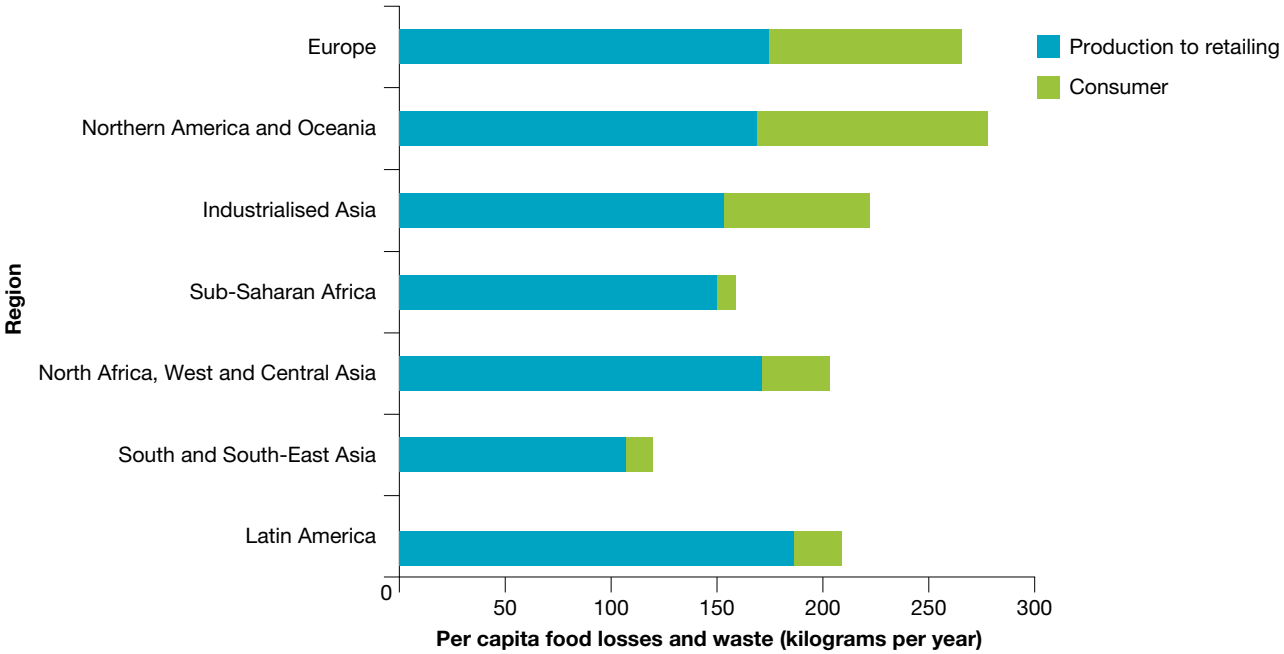
Food wastage also represents a waste of the resources used in production, such as land, fertiliser and energy. Waste can increase prices, making food less affordable. The World Bank has calculated that in sub-Saharan Africa, a region prone to food insecurity, a reduction of only one per cent wastage could save $40 million per year, with most of this saving going to the farmers.

A consequence of food wastage is the need to dispose of the waste, usually by dumping or burning. Food waste now contributes 8 per cent of global greenhouse gas emissions.

## 13.8.2 Where and why is food being wasted?

Food waste exists in all countries, regardless of their levels of development, although the causes of wastage vary. **FIGURE 2** shows the breakdown of food wastage on a regional basis.

**FIGURE 2** World food losses per region




In developing nations, food losses are mostly related to a lack of food-chain infrastructure and a poor knowledge of, or investment in, storage technologies on farms. Other causes of waste are: lack of refrigeration; limited or non-existent road and rail networks to deliver food to markets; and a shortage of processing and packaging facilities. In India, up to 40 per cent of fresh food is lost due to a lack of cold storage in wholesale and retail outlets. Over one-third of the rice harvest in South-East Asia can be destroyed by pests or spoilage.

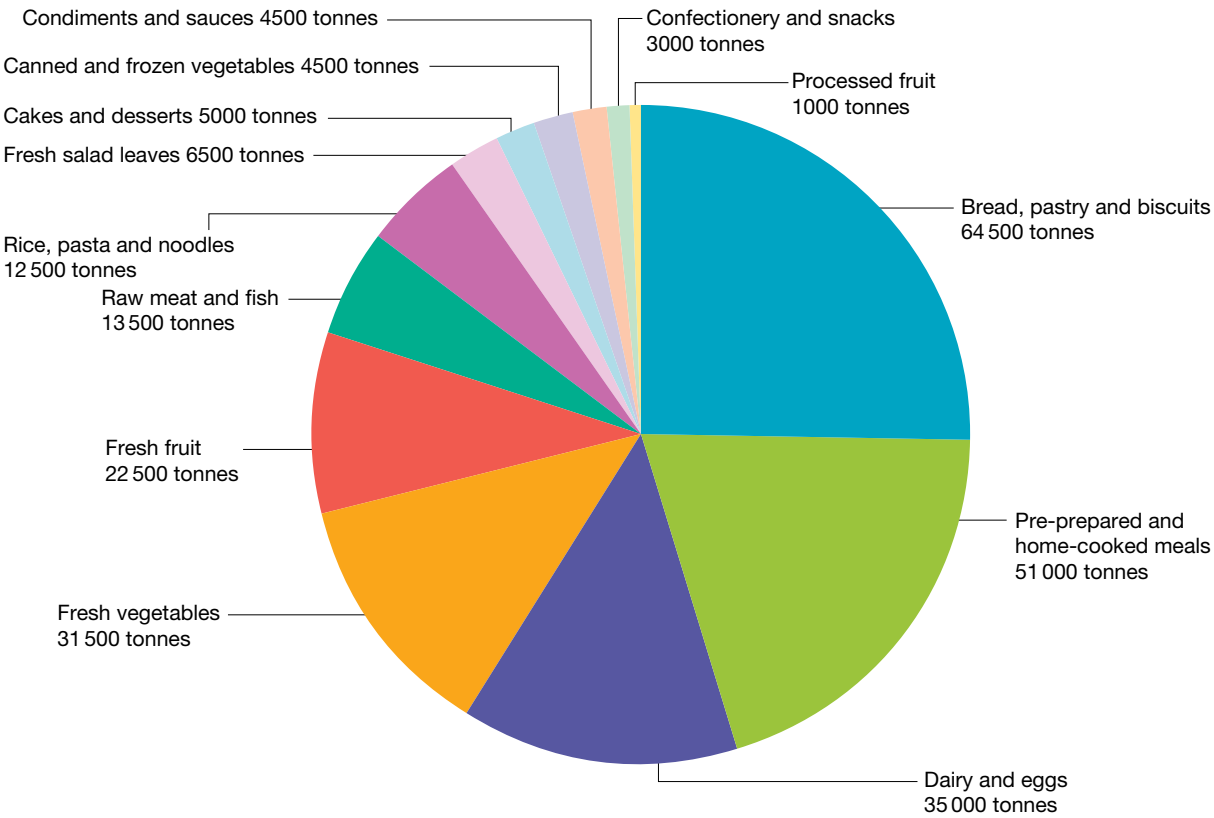
In contrast, in the developed world, food waste is more evident at the retail and home stages of the food chain. In this case, food is relatively cheap so there is little incentive to avoid waste. Consumers are used to purchasing food that is visually appealing and unblemished, so retailers end up throwing out perfectly edible, if slightly damaged, food. More and more people rely on 'use by' dates, so despite the food still being suitable to eat, it is discarded. Waste is also a part of the growing culture of 'supersize' or 'buy one get one free' advertising. Further waste can occur if the discarded food is sent to landfill when it could be used for animal feed or even compost.

### What is wasted in Australia?

Australia produces enough food for 60 million people, and this enables us to trade the surplus. Yet each person wastes an average of 361 kg of food each year. This costs the economy $20 billion annually. At the same time, four million Australians have experienced some form of food insecurity in the past year. This means that around 18 per cent of the population have not had enough food for themselves and their family, or could not afford to purchase food at some stage over the twelve-month period.

Within Victoria, food wastage costs $5.4 billion annually. The average household throws away $42 worth of food per week. **FIGURE 3** shows the composition of the 255 000 tonnes of food thrown into rubbish bins in Victoria each year.

**FIGURE 3** Household food waste in Victoria, per year




## 13.8.3 What can be done about food waste?

Reducing global food waste is a part of the new Sustainable Development Goals, a set of targets designed to develop a more sustainable future for the world. The specific target is to cut per capita food waste by 50 per cent by 2030. If this can be achieved, food security will be improved, greenhouse gases can be reduced, and valuable land and water resources will not be wasted.

Here is a snapshot of what is happening around the world:

- Farmers in Ghana are trialling a new phone app that shows farmers, food transporters and traders the fastest route to market, which reduces food spoilage. In addition, the app can identify illegal roadblocks set up to take bribes from drivers.
- In France, an estimated 10 million tonnes of food is wasted each year. A new law now compels restaurants to provide containers in which customers can take home uneaten food. Shops are also banned from destroying food products, and supermarkets must give away unsold food that has reached its use-by date, for distribution to charities. By 2020, all Parisian households should have a biowaste recycling bin for food scraps. Waste will be collected and converted into fertiliser or biofuels.
- Seoul in South Korea has taken a different approach in an effort to reduce its food waste by 20 per cent. It is trialling a program whereby people are charged according to the weight of the garbage they produce. The more kilograms generated, the higher the bill. In South Korea 95 per cent of food waste is recycled into compost, animal feed or fuel. Landfilling of food waste is banned.
- Australia has now set a target to reduce the amount of food waste by 50 per cent by 2030. Much of this will come from supporting food rescue operations such as Second Bite and Foodbank Australia (see subtopic 14.7). These organisations collect and redistribute surplus food. Foodbank provides relief to 710 000 Australians every month, 26 per cent of whom are under 19 years old.

## 13.8 INQUIRY ACTIVITIES

1. In groups, and wearing disposable gloves, conduct a survey of the school rubbish bins after lunch. You may need to lay out newspaper onto which you can tip the contents of the bins. Some groups could also deal with food litter around the grounds.
   (a) Construct a table so that you can record the different food types, such as fruit, cakes, biscuits and so on.
   (b) Collate your results with the other groups in your class, and then graph your data.
   (c) Write a summary of your findings. What food types were most and least represented and why?
   (d) If your school has a canteen, ask the manager to address the class and talk about issues such as wastage, use-by dates and health department regulations.
   (e) You could also do a home bin audit and follow the same procedure. **Examining, analysing, interpreting**
2. Visit a local food store, such as a supermarket, fresh food market, greengrocer or butcher. Interview a staff member and find out what happens to their food waste. Report back to the class.
   **Examining, analysing, interpreting**
3. Design a poster or short animation to inform other school members about the issue of food waste.
   **Classifying, organising, constructing**

## 13.8 EXERCISES

**Geographical skills key: GS1** Remembering and understanding **GS2** Describing and explaining **GS3** Comparing and contrasting **GS4** Classifying, organising, constructing **GS5** Examining, analysing, interpreting **GS6** Evaluating, predicting, proposing

### 13.8 Exercise 1: Check your understanding

1. **GS2** Why is food waste a global problem?
2. **GS2** Explain the ***interconnection*** between food waste and global warming.
3. **GS2** Suggest ways in which food can be wasted or spoiled between production and retailing (between the farm gate and the supermarket).
4. **GS2** Why is there more food wasted by retailers and in homes in developed countries than in developing countries?
5. **GS6** In an effort to reduce food wastage, Woolworths and Coles supermarkets have established, respectively, 'The Odd Bunch' and 'I'm perfect' programs, through which bags of misshapen fruit and vegetables are sold at a reduced price. How effective do you think these programs might be? Explain your view.

### 13.8 Exercise 2: Apply your understanding

1. **GS6** Write a letter to the local newspaper voicing your thoughts on food wastage.
2. **GS5** Refer to **FIGURE 2**. Which regions of the world are shown to waste the greatest amount of food in the production-to-retailing and consumer sectors? Use data in your answer.
3. **GS5** Refer to **FIGURE 3**.
   (a) What are the three largest categories of food wasted?
   (b) Estimate the total amount that is wasted in these three groups.
   (c) Suggest reasons why these are the largest groupings.
4. **GS3** Consider South Korea's and Australia's plans to reduce food waste.
   (a) In table form, use a dot point summary to compare the strengths and weaknesses of the plans.
   (b) Which of the two plans do you think will be most effective, and why?
5. **GS6** Goal 12 of the United Nations Sustainable Development Goals aims to 'by 2030, halve per capita global food waste at the retail and consumer levels and reduce food losses along production and supply chains ...'. Do you think this is possible? Why or why not?

Try these questions in learnON for instant, corrective feedback. Go to www.jacplus.com.au.

# 13.9 Thinking Big research project: Famine crisis report

online only

## SCENARIO

As a world-leading specialist in food security, the United Nations (UN) has asked you to write a report that will assist them in organising a response to a famine. You will need to present your report to a famine taskforce panel at the UN headquarters in New York.

### Select your learnON format to access:

- the full project scenario
- details of the project task
- resources to guide your project work
- an assessment rubric.

### on Resources

**ProjectsPLUS** Thinking Big research project: Famine crisis report (pro-0191)

# 13.10 Review

online only

### 13.10.1 Key knowledge summary

Use this dot point summary to review the content covered in this topic.

### 13.10.2 Reflection

Reflect on your learning using the activities and resources provided.

### on Resources

**eWorkbook** Reflection (doc-31720)
Crossword (doc-31721)
**Interactivity** Challenges to food security crossword (int-7647)

## KEY TERMS

**aquifer** a body of permeable rock below the Earth's surface, which contains water, known as groundwater
**arable** describes land that can be used for growing crops
**desertification** the transformation of arable land into desert, which can result from climate change or from human practices such as deforestation and overgrazing
**environmental refugees** people who are forced to flee their home region due to environmental changes (such as drought, desertification, sea-level rise or monsoons) that affect their wellbeing or livelihood
**indicator** something that provides a pointer, especially to a trend
**jatropha** any plant of the genus *Jatropha*, but especially *Jatropha curcas*, which is used as a biofuel

**malnourished** describes someone who is not getting the right amount of the vitamins, minerals and other nutrients to maintain healthy tissues and organ function
**marginal land** describes agricultural land that is on the margin of cultivated zones and is at the lower limits of being arable
**potable** drinkable; safe to drink
**undernourished** describes someone who is not getting enough calories in their diet; that is, not enough to eat
**water stress** situation that occurs when water demand exceeds the amount available or when poor quality restricts its use

# 13.3 SkillBuilder: Constructing and describing complex choropleth maps

## 13.3.1 Tell me

### What is a complex choropleth map?

A complex choropleth map is a map that is shaded or coloured to show the average density or concentration of a particular feature or variable, and it shows an area in detail. The collector areas of data are smaller, so they show the mapped information more precisely. The key or legend shows the value of each shading or colouring. The most dense or highest concentration is usually the darkest shade. The least dense or lowest concentration is usually the lightest shade. Average values are attached to the colour shadings in the key or legend. In constructing your own choropleth map, you need to determine the values that relate to each shade within a colour range.

### How are complex choropleth maps useful?

A complex choropleth map is used to show values in a pictorial way. It allows the viewer to quickly identify where the values are highest (darkest) and lowest (lightest) and to note any patterns over space. However, the information is based on averages, and precise data is not given for a particular place or region within the map. Areas can contain within them wide variations from the average value mapped.

Complex choropleth maps are useful for showing:

- the distribution of a feature across a city or country
- the extent of a feature across a region
- patterns, which are indicated by the changing colours of the map
- conglomerations of data in specific locations.

A good complex choropleth map:

- uses a base map
- has clearly determined values for each colour
- uses shades within a colour spectrum
- is neatly coloured
- includes a clear title.

A good description of a complex choropleth map:

- looks for a pattern and subtleties within a broad pattern
- notes any anomalies
- uses quantities
- refers to the title and legend.

## 13.3.2 Show me

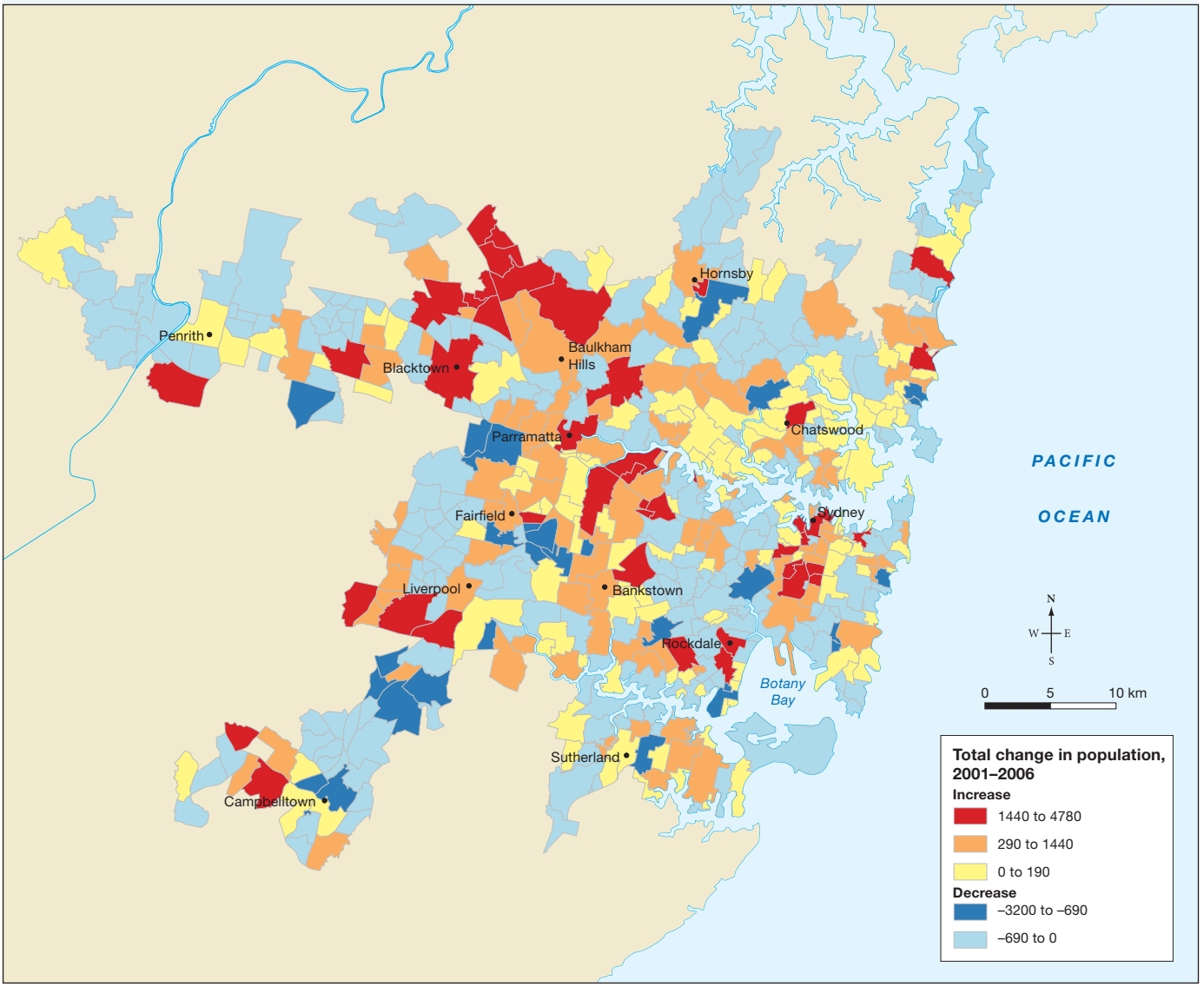
### How to construct and describe a complex choropleth map

**You will need:**

- a set of data specific to a range of places
- a base map to match the places
- coloured pencils with a range of shades
- a ruler.

## Model

**FIGURE 1** Population change in Sydney, 2001–06




***Source:*** Spatial Vision

The change in Sydney's population between 2001 and 2006 was very uneven. The areas of greatest increase (1440 to 4780) are scattered across the city, with most found on the urban fringes.

Most areas that experienced the greatest increase are clustered together — for example, around Baulkham Hills, Blacktown and Parramatta in the west and north-west, and Liverpool and Campbelltown in the south-west. There are relatively few census areas that show minimal increase (0 to 290 people).

The areas of greatest decrease (–3200 to –690) are also scattered across the city. Most of these decreases are found on the urban fringes, especially in the west and south-west of Sydney, between Liverpool and Campbelltown.

The areas with the smallest change (0 to 290 increase) tend to be found in areas about 5 to 15 kilometres from the city. Clusters are found on the north shore around Chatswood, north-east and south-east of Parramatta, and around Penrith.

The most common kind of change is moderate decline (–690 to 0). Clusters of this change are found around Penrith and Botany Bay, north and south-east of Hornsby, and north of Campbelltown.

## Procedure

### Constructing a choropleth map

#### Step 1

Select a set of data to map, and ensure that you have a base map to match the area. In **FIGURE 1**, the ABS data is based on small regions across Sydney, and the base map shows the boundaries of those regions. The ABS website will provide you with the names of these areas.

#### Step 2

Look at the range of data you have to plot. In **FIGURE 1**, there are positive and negative numbers to consider, but this is not always the case. You should try to divide the data into approximately five categories — too many categories will spread the data too thinly, while too few categories will show few variations in the data. For each category, select a colour shade where the darkest colour represents the greatest value and the lightest colour represents the lowest value. Create a key on the base map.

#### Step 3

Now very carefully colour all areas on the base map with the highest value. It is a good idea to go through the list of data and colour-code each place before you begin.

#### Step 4

Check that the geographical conventions are complete: border, orientation, legend, title, scale and source.

### Describing a choropleth map

#### Step 5

To interpret the colours, you need to comment on where the deepest or most intense colours occur. Can you discuss the map by areas? For example, in **FIGURE 1** the areas of greatest change (1440 to 4780 people), represented by a deeper colour, are scattered across the city but are most likely to be found on the urban fringes, indicating the growth of the city's boundaries.

#### Step 6

To further interpret the colours, you need to comment on where the lightest or least intense colours occur. Can you discuss the map by areas? For example, in **FIGURE 1** most of the areas that have shown only moderate increase (0 to 290) are found 5 to 15 kilometres from the city.

#### Step 7

To identify a subtle change, you need to look for a change of colour within an area that is predominantly one colour. In **FIGURE 1**, in the middle of the northern area of 1440 to 4780 increase, there are two census areas that show 290 to 1440 increase.

#### Step 8

Are there any coloured areas that stand out from the rest? That is, is there a colour among a mass of other colours that isn't expected? This is called an anomaly, and needs to be discussed. Identify the place that is different from the surrounding places. For example, there are no areas of 1440 to 4780 increase in the Sutherland Shire, south of the river that flows into Botany Bay.

## on Resources

| | |
|---|---|
| **Digital document** | Blackline master: Map of Africa (doc-12012) |
| **Video eLesson** | Constructing and describing complex choropleth maps (eles-1732) |
| **Interactivity** | Constructing and describing complex choropleth maps (int-3350) |

## 13.3.3 Let me do it

Complete the following activities to practise this skill.

### 13.3 ACTIVITIES

1. Use the data from **TABLE 1** and a base map of Africa (use the **Blackline master: Map of Africa** digital document in the Resources tab) to construct a choropleth map, then describe what is shown on your map. Use the checklist to ensure you cover all aspects of the task.

**TABLE 1** Official development assistance to agriculture in sub-Saharan Africa, 2010

| Country | US$ million | Country | US$ million |
|---|---|---|---|
| Angola | 27 | Madagascar | 19 |
| Benin | 21 | Malawi | 79 |
| Botswana | 1 | Mali | 223 |
| Burkina Faso | 71 | Mauritania | 11 |
| Burundi | 96 | Mauritius | 0 |
| Cameroon | 62 | Mozambique | 72 |
| Cape Verde | 3 | Namibia | 14 |
| Central African Republic | 3 | Niger | 43 |
| Chad | 9 | Nigeria | 69 |
| Comoros | 2 | Rwanda | 68 |
| Congo | 1 | Sao Tome and Principe | 3 |
| Cote d'Ivoire | 93 | Senegal | 256 |
| Democratic Republic of Congo | 100 | Seychelles | 1 |
| Eritrea | 13 | Sierra Leone | 75 |
| Ethiopia | 222 | Somalia | 1 |
| Gabon | 28 | South Africa | 20 |
| Gambia | 15 | Sudan | 145 |
| Ghana | 126 | Swaziland | 6 |
| Guinea | 8 | Togo | 36 |
| Guinea-Bissau | 10 | Uganda | 198 |
| Kenya | 323 | United Republic of Tanzania | 132 |
| Lesotho | 0 | Zambia | 36 |
| Liberia | 36 | Zimbabwe | 81 |

***Source:*** Food and Agriculture Organization of the United Nations, 2012, FAO, *The State of Food and Agriculture 2012*, http://www.fao.org/docrep/017/i3028e/i3028e.pdf

**2.** Based on what you have learned in this SkillBuilder, apply your skills to answer the following questions.

(a) Which regions of sub-Saharan Africa receive the most agricultural assistance?

(b) Which regions of sub-Saharan Africa receive the least agricultural assistance?

(c) Which countries within southern Africa (south of 10°S) received quite different agricultural aid from that of their neighbours?

(d) Are there any parts of the region that you think should receive more aid? Can you think of a reason why aid might not be going to these countries?

(e) Will aid make a difference to the food production figures produced in 10 years' time? Explain your answer.

Checklist

In drawing a complex choropleth map, I have:

- used a base map
- included clearly determined values for each colour
- used shades within a colour spectrum
- coloured neatly
- included a clear title.

In describing a complex choropleth map, I have:

- looked for patterns and subtleties within a broad pattern
- noted the anomalies
- used quantities
- referred to the title and legend.

# 13.5 SkillBuilder: Interpreting satellite images to show change over time

## 13.5.1 Tell me

### What is a satellite image?

A satellite image is an image taken from a satellite orbiting the Earth. Satellite images allow us to see very large areas — much larger than those that can be visualised using vertical aerial photography. A satellite image often does not use the natural colours that we expect. This is referred to as using false colours, and these are applied in the computer processing of the images in order to highlight spatial patterns more clearly.

### How is a satellite image useful?

A satellite image is useful because its size allows us to see trends and patterns, interconnections and relationships. Cartographers are able to increase the intensity of colours and use false colours to distinguish one feature from another. Satellite images are enhanced photography. Comparing satellite images can provide information about change over time. You will gain a lot of information from a satellite image that cannot be gained from a topographic map or aerial photograph, so your knowledge of an environment is enhanced.

Satellite images are useful for:

- identifying changes in heat patterns from different surfaces
- assessing vegetation modifications
- identifying urban sprawl
- tracking data across international boundaries.

A good interpretation of a satellite image:

- translates the false colours
- identifies patterns
- makes logical inferences
- uses distance and direction to locate places.

## 13.5.2 Show me

### How to interpret satellite images to show change over time

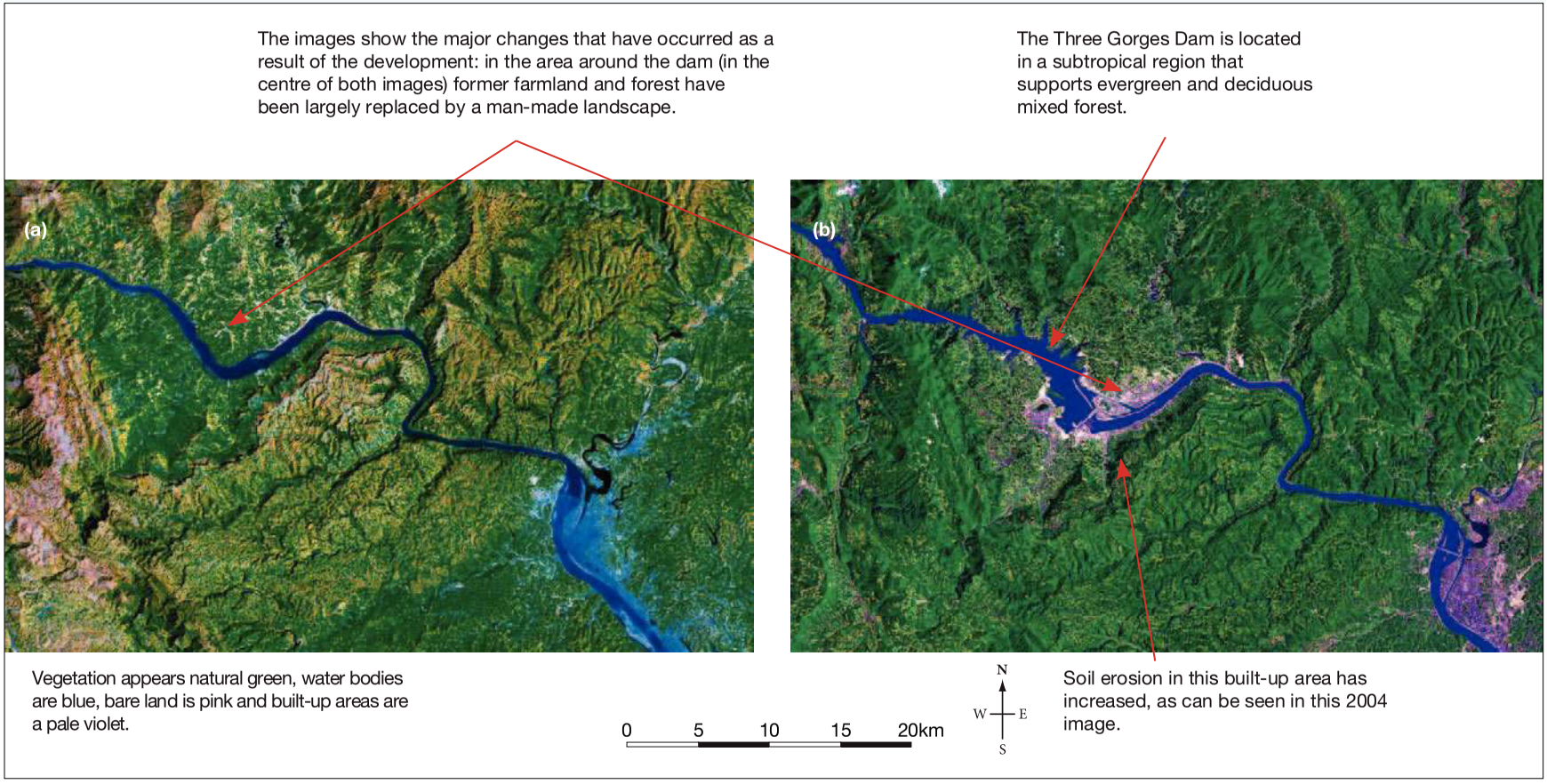
#### You will need:

- two satellite images of the same place, taken at different times
- an atlas.

#### Model

The Yangtze River in 1987 was a natural river running through a deep gorge. In the satellite image from 1987 (**FIGURE 1a**), the area is surrounded by high, barren hills and areas of dense subtropical forest (natural green). By 2004 (**FIGURE 1b**), the Three Gorges Dam wall (pale violet) had been built across the river. The water (blue) filled behind the two-kilometre dam wall and spread across the gorge floor, flooding back up the river about eight kilometres. New urban areas (pale violet) developed east and west of the dam wall on both sides of the river. In the 17 years since the first satellite image was taken, a town has developed on the low-lying land in the south-east, covering an area of about 36 square kilometres.

**FIGURE 1** Change over time around the Yangtze River, China: (a) in 1987 and (b) in 2004, after the building of the Three Gorges Dam




***Source:*** Geoscience Australia

## Procedure

### Step 1

Determine the dates for the satellite images. Consider the time span between the images. In **FIGURE 1**, the time span is 17 years. Check that the satellite images are at the same scale. Note that in **FIGURE 1**, the 1987 and 2004 images show slightly different areas, but at the same scale. The central area of interest is covered by both images.

### Step 2

Study the satellite images carefully, identifying the key features of the place. In satellite imagery, true colours are not always used. It is helpful to learn the colours commonly used in false-colour imagery.

**TABLE 1** Colours commonly used in false-colour satellite imagery

| Colour | Ground feature |
|---|---|
| Green | Vegetation |
| Dark blue | Water — the deeper the water, the darker the colour |
| Bright blue to mauve/grey | Housing and industrial areas |
| White to cream | Beaches and sands |
| Yellow | Barren areas, heavily grazed or fallow land |
| Pink to red | Recent plant growth, suburban parklands |
| Red | Flourishing vegetation, including forests (mangroves appearing brown) |

In the description in **FIGURE 1**, the colours have been included to help you see the patterns evident in the satellite images.

### Step 3

To interpret the colours, you need to comment on where the various colours appear. Use compass directions, scale or features identifiable on the satellite image, such as roads and rivers, to help reference the place that you are discussing. For example, the text above **FIGURE 1** says 'The water (blue) filled behind the two-kilometre dam wall'.

### Step 4

Use the same feature in each of the satellite images as a reference point for identifying change. It may be the road system, a railway line passing across the region, a river flowing through the area or a town established in the earliest dated image. For example, in **FIGURE 1** the Yangtze River is a key feature that allows you to identify points by using the bends in the river as a reference point.

### Step 5

It may be possible to make inferences from the satellite image. You may be able to see changes in topography, and these may relate to changes in land use. For example, in 1987 the area of the present-day dam was surrounded by high, barren hills and areas of dense subtropical forest; by 2004 a human-constructed landscape surrounded the dam.

### on Resources

**Video eLesson** Interpreting satellite images to show change over time (eles-1733)

**Interactivity** Interpreting satellite images to show change over time (int-3351)

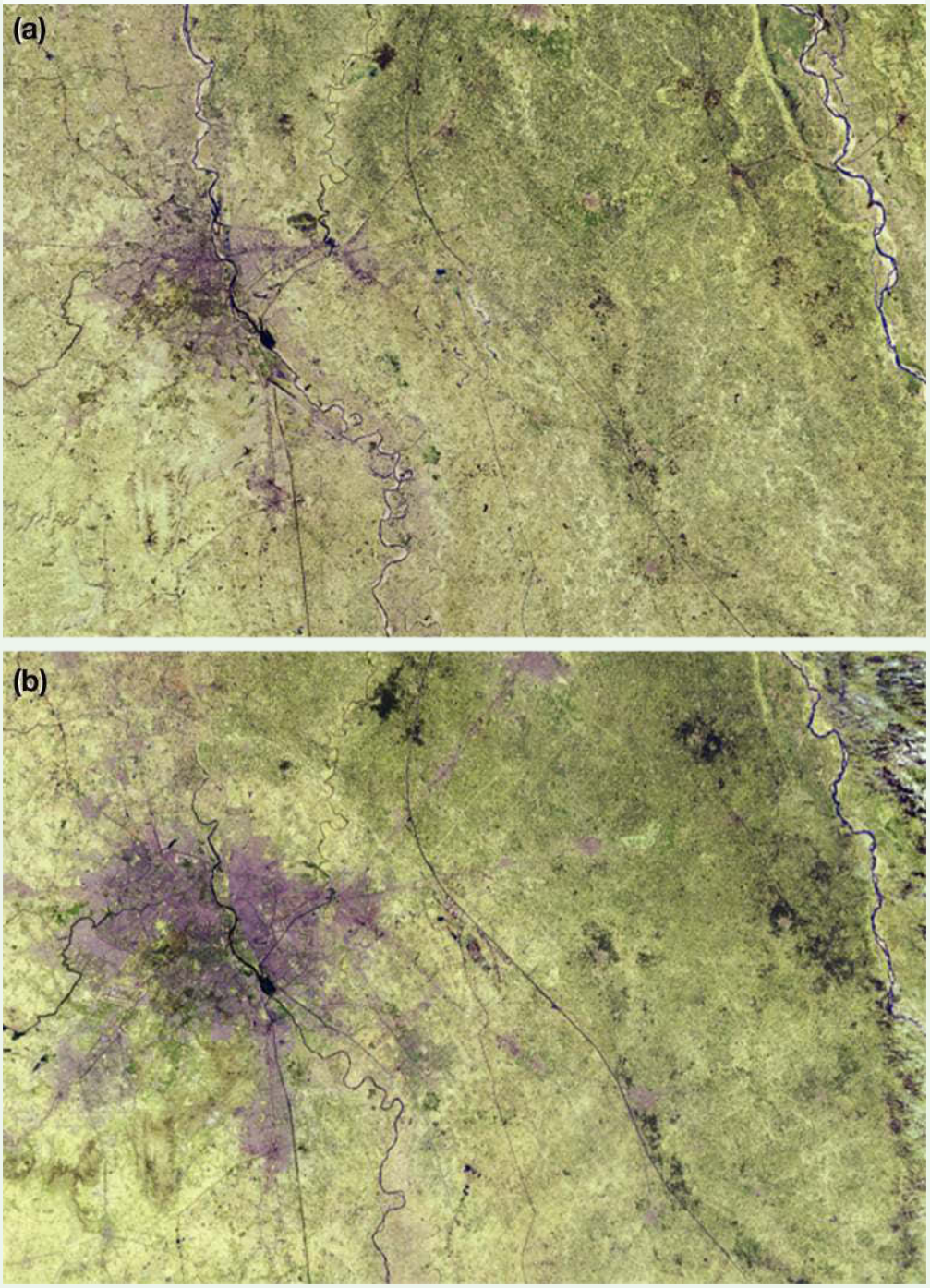
## 13.5.3 Let me do it

Complete the following activities to practise this skill.

### 13.5 ACTIVITIES

1. Refer to the satellite images of New Delhi in 1989 and 2018 shown in **FIGURES 2(a)** and **(b)**. Write a description of the ***change*** that has occurred over time to the boundaries of New Delhi. Use the checklist to ensure you cover all aspects of the task.

**FIGURE 2** New Delhi, India in (a) 1989 and (b) 2018



**2.** Based on what you have learned in this SkillBuilder, apply your skills to answer the following questions.
(a) Is New Delhi a growing or declining city? Explain your answer.
(b) How has the vegetation cover of the area ***changed***?
(c) How has the road pattern ***changed***?
(d) Why do you think New Delhi has not expanded into the south-east corner of the satellite image?
(e) How has the growth of New Delhi affected food security in the area?

Checklist

I have:

- translated the false colours
- identified patterns
- made logical inferences
- used distance and direction to locate ***places***.

# 13.9 Thinking Big research project: Famine crisis report

## Scenario

The United Nations (UN) has asked you, a world-leading specialist in food security, to write a report that will assist them in organising a response to a famine. You will need to present your report to a famine taskforce panel at the UN headquarters in New York.

### Background brief

While many countries across the globe face food insecurity, it is rare for a country or region to be officially declared in famine, the worst form of food insecurity. By definition, a famine is an extreme crisis of access to adequate food, resulting in widespread malnutrition and loss of life due to starvation and infectious disease. While the number of famines is on the decline, the twentieth century saw more than 70 million people die from famine across the globe.

There are three key indicators that the United Nations uses to identify and declare a famine:

1. Twenty per cent of the population experiences an acute shortage of food, eating only small amounts of one or two of the twelve food groups (usually grains) and cannot access four litres of safe water per person per day.
2. More than 30 per cent of children are acutely malnourished.
3. Within the community, two adults or four children out of every 10 000 are dying of malnutrition and disease each day.

People who are experiencing famine have lost the means of earning an income and have few, if any, resources to sustain themselves. In general, there is no one cause of famine; rather, it is a series of overlapping factors including climate extremes, crop failures, poor governance and, most importantly, conflict. Conflicts, such as civil wars, can prevent people from producing food, create large-scale movement of people fleeing the fighting, and prevent aid from reaching people. Often governments do not have the resources, planning or will to deal with the issue and international assistance is needed.

## Task

Following the guidelines provided in the **Process** section, conduct research into and prepare a report explaining the situation in relation to a famine crisis. This could be a current famine, or one that has occurred in recent years. Your research report should allow you to fully explain the famine situation to the UN, and help them to formulate a response. Your report and presentation to the UN should include:

- a brief snapshot of the country, including details on population, life expectancy, GDP and one or two other relevant features
- a location map that shows the region/country suffering from the famine
- data on the number of people affected, death rates and other relevant statistics
- details of short-term and long-term impacts of the famine

- a table that describes three different types of responses to famine in general, and that suggests possible advantages and disadvantages of each response
- a recommendation as to the ways in which the UN can assist the people and the country experiencing the famine, and how the country can improve its food security in the future
- a reference list detailing your information sources.

You may wish to prepare a PowerPoint presentation to present key aspects of your research and your recommendations.

## Process

- Open the ProjectsPLUS application in the Resources for this topic. Click on the **Start new project** button to enter the project due date and set up members in your project group to allow you to work collaboratively. Save your settings and the project will be launched.
- Navigate to the **Research forum**, where you will find topics loaded under the headings below to guide your research. You can add further topics to the research forum if you wish.
- Use the weblinks in the **Media centre**, along with your own research, to find information and make notes of relevant details under each of the research topic headings.
- Complete the tasks under each of the following subheadings (these are the topics in the Research forum) to develop your report.

### Background information

- Use the internet and a reliable website such as the World Health Organization or Oxfam to identify a current famine or one that has occurred in the past few years.
- Provide a brief snapshot of the country affected, including details on population, life expectancy, GDP and one or two other relevant features. Websites of organisations such as the CIA or World Bank provide data. (You might like to use similar data from Australia as a comparison.)
- Create a location map to show the region/country suffering from the famine. Ensure you apply BOLTSS to your map. Additional maps can be included to show greater detail.

### What are the factors contributing to the famine?

- Describe the factors that have caused the famine and, if possible, which factors were particularly important.
- Refer to a minimum of three references (include these in a bibliography at the end of your report) to identify the range of factors that have contributed to the famine. You may like to classify these as political, economic, social or environmental.

### What are the impacts of this famine?

- Describe the impacts of the famine. Try to identify what might be short-term and long-term impacts of the famine.
- Newspaper articles and magazines such as *National Geographic* should provide you with data on the number of people affected, regions affected, death rates and other relevant material. Are there refugee camps involved? What about the spread of infectious diseases?
- Images can be included and should be referred to in your text (for example, 'refer to **FIGURE 1**'). You should also include captions that explain the images.
- What is likely to happen over the next few years as the country recovers from the famine? You might be able to predict different scenarios.

### What are the responses to the famine?

- In your research try to find out what is being done about the famine. You can look at this at the national scale (government of the country affected) and the international scale (organisations such as WHO, UNICEF, UN World Food Programme, World Vision, CARE, Red Cross and other countries that might be donating money, food or expertise).
- Create a table that describes three different types of response to famine in general. This might need you to look at other recent famines and how they were dealt with, or investigate what steps organisations such as World Vision take in assisting people experiencing famine. For each response suggest possible advantages and disadvantages.

### Recommendations

- From your study of this disaster, suggest ways that the UN can assist the people and country experiencing the famine. For ideas, you may wish to research how the UN has responded to other famines. As you are the expert, recommend how you think the country could improve its food security in the future.
- Prioritise the top 2 or 3 actions and justify their importance.
- Write up your report using the task subheadings as a guideline. Include specific data, where possible.
- Review your finished report, checking for spelling, grammar, completed map(s), tables and bibliography.
- If you are preparing a PowerPoint presentation, select key information, maps, images etc. to create your slides.
- If you wish to keep a copy of your project research, print out the **Research report** in the Research forum.
- Ensure you have completed all elements of the task and, when you are satisfied, submit or present your assignment to your teacher for assessment.

on Resources

**ProjectsPLUS** Thinking Big research project: Famine crisis report (pro-0191)

# 13.10 Review

## 13.10.1 Key knowledge summary

### 13.2 Global food security

- *Food security* means having a sufficiently healthy and reliable daily diet.
- The proportion of people who have food security is not distributed evenly around the world.
- People who do not have food security suffer from illnesses and a shorter life expectancy.
- There are several interconnected reasons for global food insecurity.

### 13.4 Impacts of land loss on food security

- The global loss of productive land essentially comes from either land degradation and/or competition from other land uses.
- The main types of land degradation are erosion, salinity, desertification, pest invasion and loss of biodiversity.
- Fertile farmland is often converted to urban land as cities expand.
- Many countries now aim to improve their food security by investing in land and agricultural businesses in other countries, but there can be social, economic and environmental impacts.

### 13.6 Water — a vital part of the picture

- To provide a growing world population with food security there needs to be water security as well; both quantity and quality are important.
- There is an interconnection between increasing demand for water, population growth and climate change predictions.
- A number of economic, political and social factors contribute to growing water shortages.

### 13.7 Climate change challenges for food security

- Climate change will create both positive and negative impacts on the environment, societies, food production and food security.
- Farming in many places of the world will benefit from changes in climatic patterns while other places may suffer from changed climate conditions.
- People living in countries that are ill equipped to cope with changing climatic conditions run the risk of food insecurity and the possibility of becoming environmental refugees.

### 13.8 Managing food wastage

- There is sufficient food being produced to feed the world's population. However, it is unevenly distributed, unaffordable and wasted.
- Food wastage occurs everywhere, but more is wasted in developed countries, especially in the retail and home sectors.
- A number of different countries including Australia are trialling new methods to reduce people's food waste.

## 13.10.2 Reflection

Complete the following to reflect on your learning.

### 13.10 ACTIVITIES

Revisit the inquiry question posed in the Overview:

**The world produces enough food to feed everyone. So why do hundreds of millions of people go hungry every day?**

1. Now that you have completed this topic, what is your view on the question? Discuss with a partner. Has your learning in this topic changed your view? If so, how?
2. Write a paragraph in response to the inquiry question, outlining your views.

## on Resources

**eWorkbook** Reflection (doc-31720)
Crossword (doc-31721)

**Interactivity** Challenges to food security crossword (int-7647)

## KEY TERMS

**aquifer** a body of permeable rock below the Earth's surface, which contains water, known as groundwater
**arable** describes land that can be used for growing crops
**desertification** the transformation of arable land into desert, which can result from climate change or from human practices such as deforestation and overgrazing
**environmental refugees** people who are forced to flee their home region due to environmental changes (such as drought, desertification, sea-level rise or monsoons) that affect their wellbeing or livelihood
**indicator** something that provides a pointer, especially to a trend
**jatropha** any plant of the genus *Jatropha*, but especially *Jatropha curcas*, which is used as a biofuel
**malnourished** describes someone who is not getting the right amount of the vitamins, minerals and other nutrients to maintain healthy tissues and organ function
**marginal land** describes agricultural land that is on the margin of cultivated zones and is at the lower limits of being arable
**potable** drinkable; safe to drink
**undernourished** describes someone who is not getting enough calories in their diet; that is, not enough to eat
**water stress** situation that occurs when water demand exceeds the amount available or when poor quality restricts its use

# 14 Meeting our future global food needs

## 14.1 Overview

Will there come a time when we don't have enough food to feed everyone?

### 14.1.1 Introduction

Currently we produce enough food to adequately feed everyone in the world. However, it is estimated that approximately one in every nine people (around 820 million) are going hungry. The world's population is expected to grow by another two billion people in the next 30 years. If we want to stop the number of hungry people from increasing, we will need improvements in food production, new sources of food, better aid programs, and different attitudes to food consumption and waste.

**on Resources**

**eWorkbook** Customisable worksheets for this topic

**Video eLesson** Future food (eles-1721)

**LEARNING SEQUENCE**


**14.1** Overview
**14.2** Can we feed the future world population?
**14.3** Improving food production
**14.4** Global food aid
**14.5** **SkillBuilder:** Constructing a box scattergram online only
**14.6** **SkillBuilder:** Constructing and describing proportional circles on maps online only
**14.7** Do Australians need food aid?
**14.8** The effects of dietary changes on food supply
**14.9** Urban farms to feed urban populations
**14.10** **Thinking Big research project:** Community garden design online only
**14.11** **Review** online only


To access a pre-test and starter questions and receive immediate, **corrective feedback** and **sample responses** to every question, select your learnON format at www.jacplus.com.au.

# 14.2 Can we feed the future world population?

## 14.2.1 The prevalence and impacts of hunger

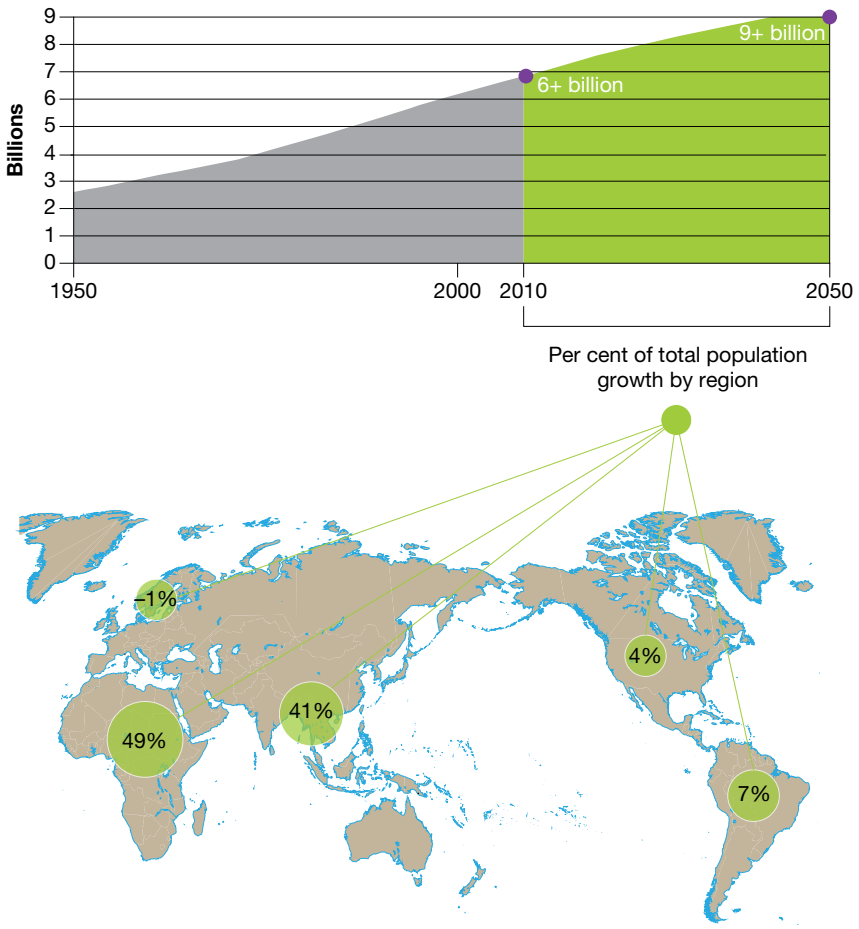
According to the World Health Organization, over 1.9 billion adults in the world are overweight, while 821 million go hungry each day. What can we do to change this imbalance and ensure equal, sustainable access to food for people across the globe?

The impact of hunger on people cannot be overstated. Hunger kills more people each year than malaria, AIDS and tuberculosis combined. It is estimated that we will need to produce between 70 and 100 per cent more food in order to feed future populations. New ideas, knowledge and techniques will be needed if we do not want millions more people to suffer malnourishment, starvation and vulnerability to disease. The challenge, though, is to do this in a way that is also sustainable. Population growth and limited supplies of arable land will affect how much food can be produced.

## 14.2.2 Challenges to food production

The distribution of the world's population and the availability of arable land per person is uneven. Regions with the fastest-growing future populations (see **FIGURE 1**) are also those where there is limited arable land per person.

**FIGURE 1** Global population growth and percentage of total population growth by region, 2010–50




***Source:*** Redrawn from an image by Global Harvest Initiative (*2011 GAP Report®: Measuring Global Agricultural Productivity*), data from the United Nations

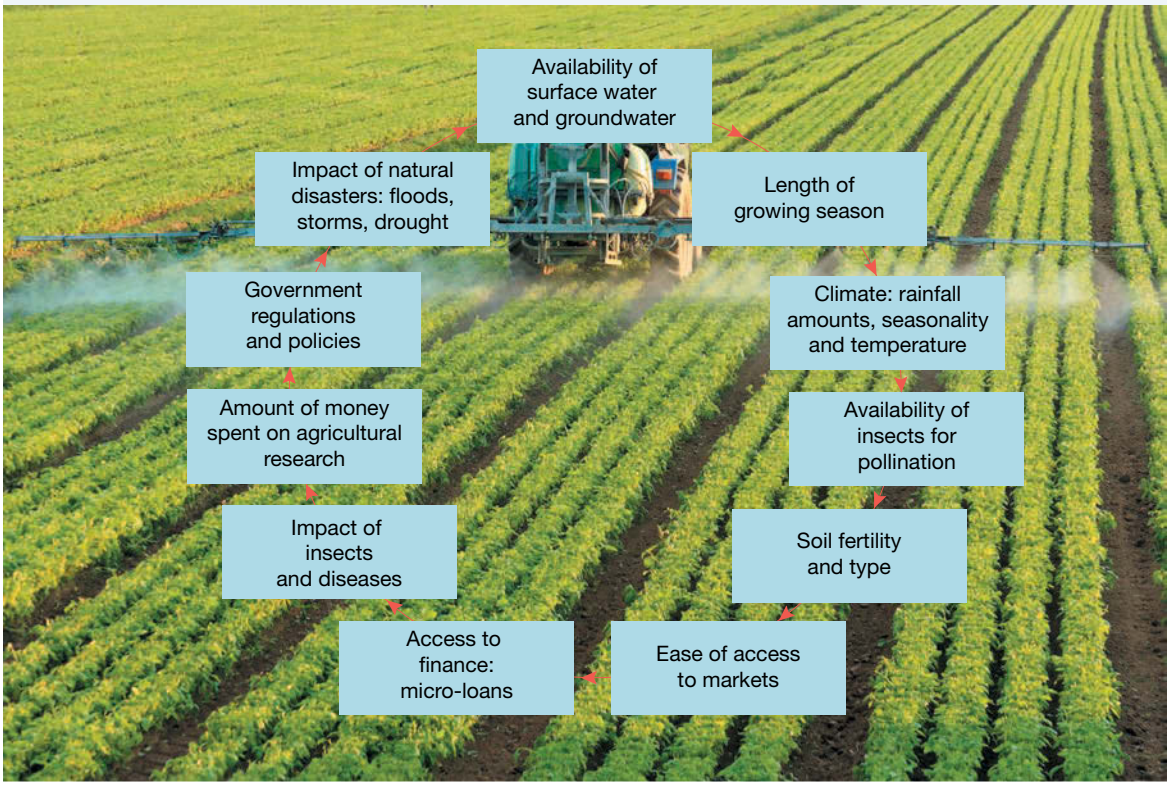
One solution to feeding people who live in crowded spaces, such as Asia, or in environmentally challenging spaces, such as sub-Saharan Africa, is to increase the amount of trade in food products. This will involve moving food from places with crop surpluses (North America, Australia and Europe) to regions that are crowded or less productive. This means there will be an increase in the interconnection between some countries.

Preventing hunger on a global scale is important, but action also needs to be taken on a local scale. Over 70 per cent of the world's poor live in rural areas; improving their lives would create greater food security. If poor farmers can produce more food, they can feed themselves and provide for local markets. Improved infrastructure, such as roads in rural regions, would enable them to transport their produce to market and increase their incomes.

## Factors affecting food production

Farming is a complex activity, and farmers around the world face many challenges in producing enough food to feed themselves and to create surpluses they can sell to increase their incomes. Some of these are outlined in **FIGURE 2**.

**FIGURE 2** Factors affecting farming yields




As urban areas grow, the amount of available arable land decreases. According to the United Nations Food and Agriculture Organization (FAO), the world has an extra 2.8 billion hectares of unused potential farmland. This is almost twice as much as is currently farmed. However, only a fraction of this extra land is realistically available for agricultural expansion, owing to inaccessibility and the need to preserve forest cover and land for infrastructure.

As mentioned, the growing populations of the future will be found in places where expansion of land for agriculture is already limited. Consequently, increased food production will need to come from better use of current agricultural areas, better use of technology, and new ways of thinking about food production and approaches to farming. One such example is the Ord River irrigation scheme in the East Kimberley region of Western Australia, which is transforming this semi-arid region and providing food in huge quantities for our Asian neighbours.

**FIGURE 3** The Ord River Irrigation Scheme has alllowed great expansion of the available farming area in the region.

## 14.2 INQUIRY ACTIVITY

As well as affecting people's health, a shortage of food can have social and political effects. Undertake research into the series of food riots that occurred in a number of countries around the world in 2015.

**a.** Where did these riots occur?
**b.** What were the causes of these riots?
**c.** Why might governments need to prevent this situation from occurring again?

**Examining, analysing, interpreting**

## 14.2 EXERCISES

**Geographical skills key: GS1** Remembering and understanding **GS2** Describing and explaining **GS3** Comparing and contrasting **GS4** Classifying, organising, constructing **GS5** Examining, analysing, interpreting **GS6** Evaluating, predicting, proposing

### 14.2 Exercise 1: Check your understanding

1. **GS1** How much more food is it estimated that we will need to produce in order to feed future populations?
2. **GS2** Explain why hunger is such a serious issue.
3. **GS1** What is the relationship between areas with fast-growing populations and the amount of arable land per person?
4. **GS1** What proportion of the world's poor live in rural areas?
5. **GS1** What may need to happen to ensure there is enough food in the future for people who live in ***places*** with growing populations and limited arable land?

### 14.2 Exercise 2: Apply your understanding

1. **GS5** Examine **FIGURE 1**.
   (a) Which region is predicted to decrease in population by 2050?
   (b) Which two continents are expected to have the greatest increase in population?
   (c) What is the predicted world population in 2050?
2. **GS6** Lack of food has caused people to leave their homes and move to cities in search of employment and food. Predict the ***places*** of the world where this is most likely to happen.
3. **GS2** How does a growing world population put pressure on food supplies?
4. **GS4** Classify the factors affecting farming yields as either ***environmental,*** economic, or social/political.
5. **GS6** Choose four of the factors affecting farming yields and suggest how these factors impact production levels.

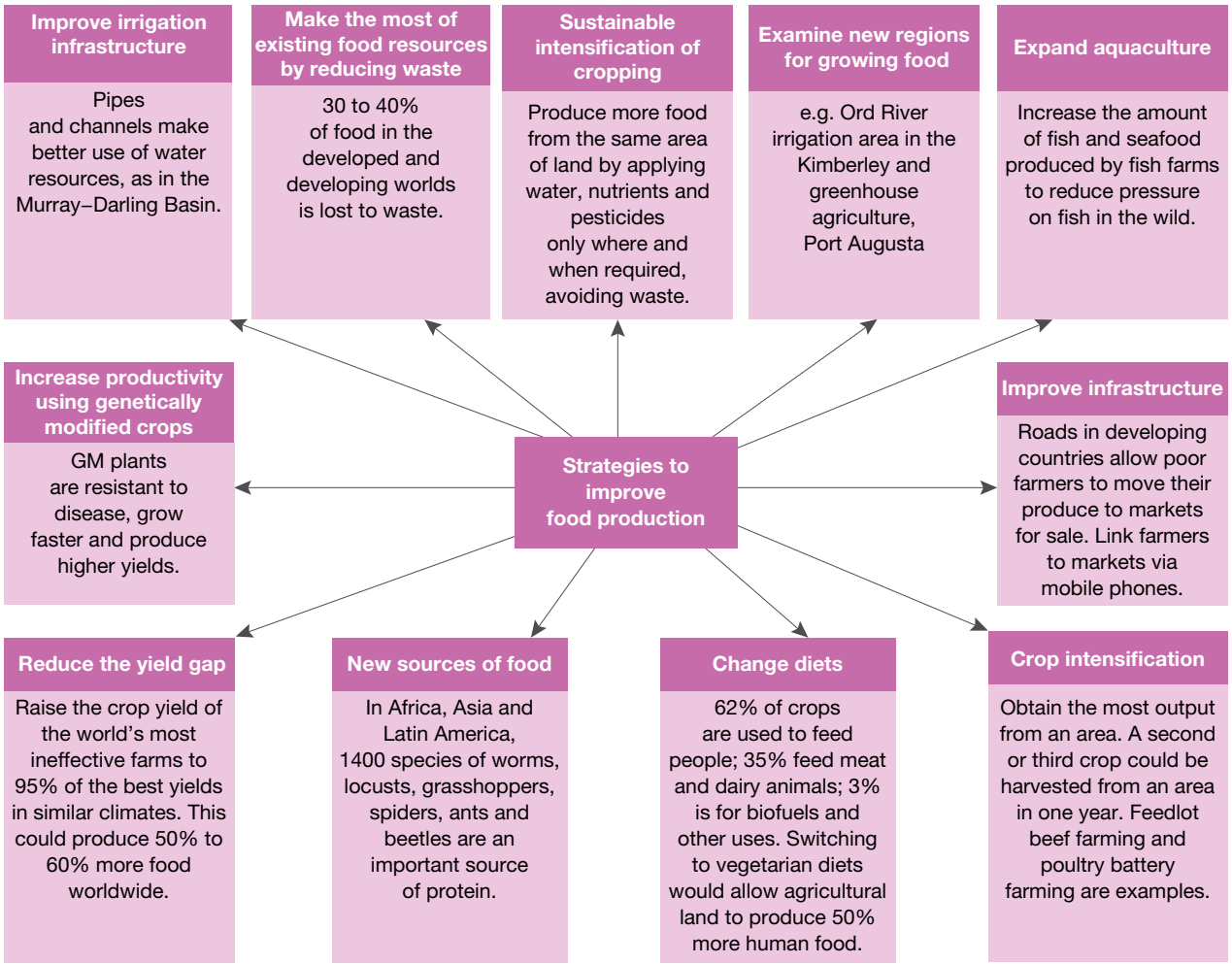
Try these questions in learnON for instant, corrective feedback. Go to www.jacplus.com.au.

# 14.3 Improving food production

## 14.3.1 Finding ways of producing more

There are many strategies that can be used to create greater efficiencies and increased food production. **FIGURE 1** summarises some of these.

**FIGURE 1** Strategies for improving food production

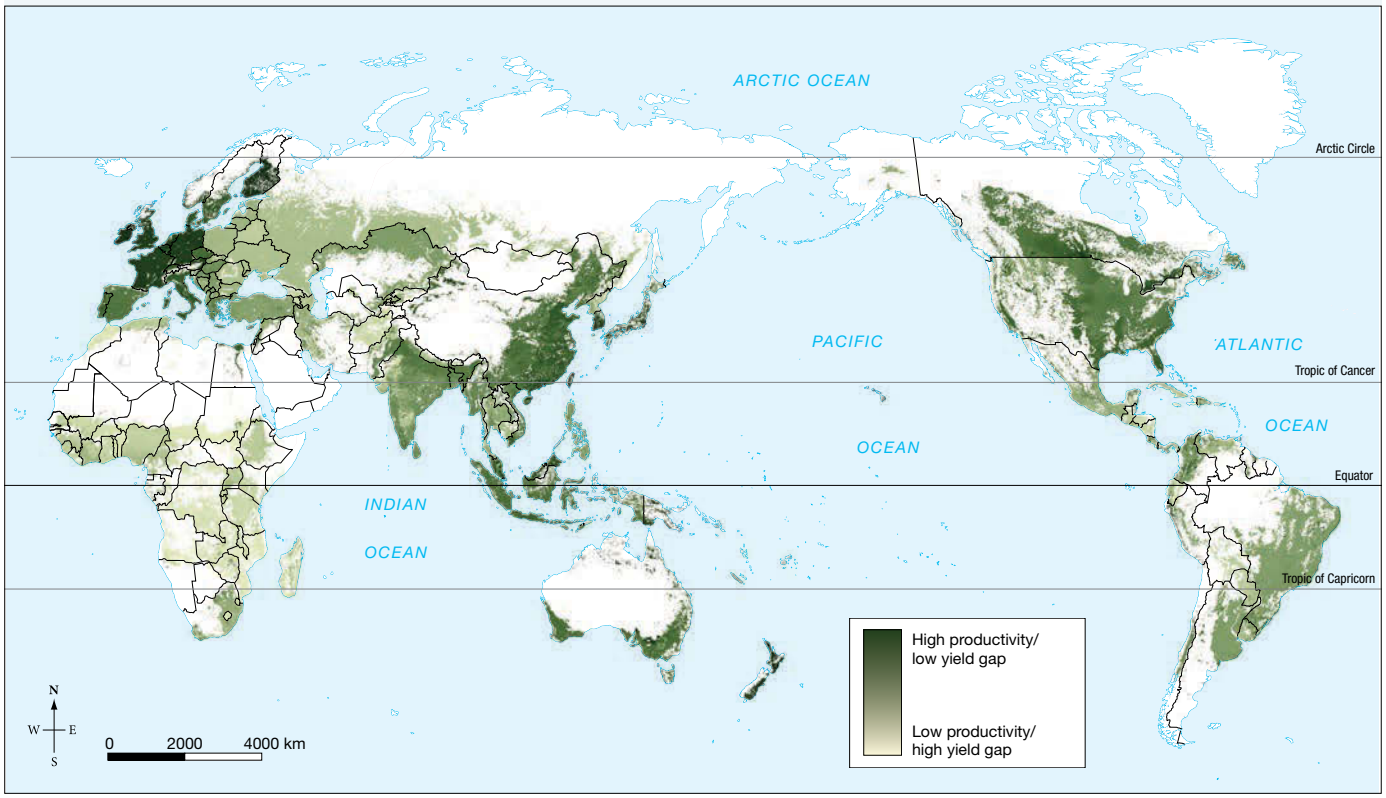



The strategy that is likely to be the most important in increasing future crop production is the reduction of the **yield gap**. This means that farmers who are currently less productive will need to implement farming methods that will lead to increased yields so that their outputs are closer to those of more productive farmers. There is a serious yield gap in more than 157 countries (see **FIGURE 2**). If this gap could be closed, larger amounts of food would be available without the need for more land. There are wide geographic variations in crop and livestock productivity. Brazil, Indonesia, China and India have all made great progress in increasing their agricultural output. Much of the increase has been achieved through more efficient use of water and fertilisers.

The use of **genetically modified** (GM) foods has increased, and this has also increased crop yields. However, there is some opposition to GM crops because of concerns about:

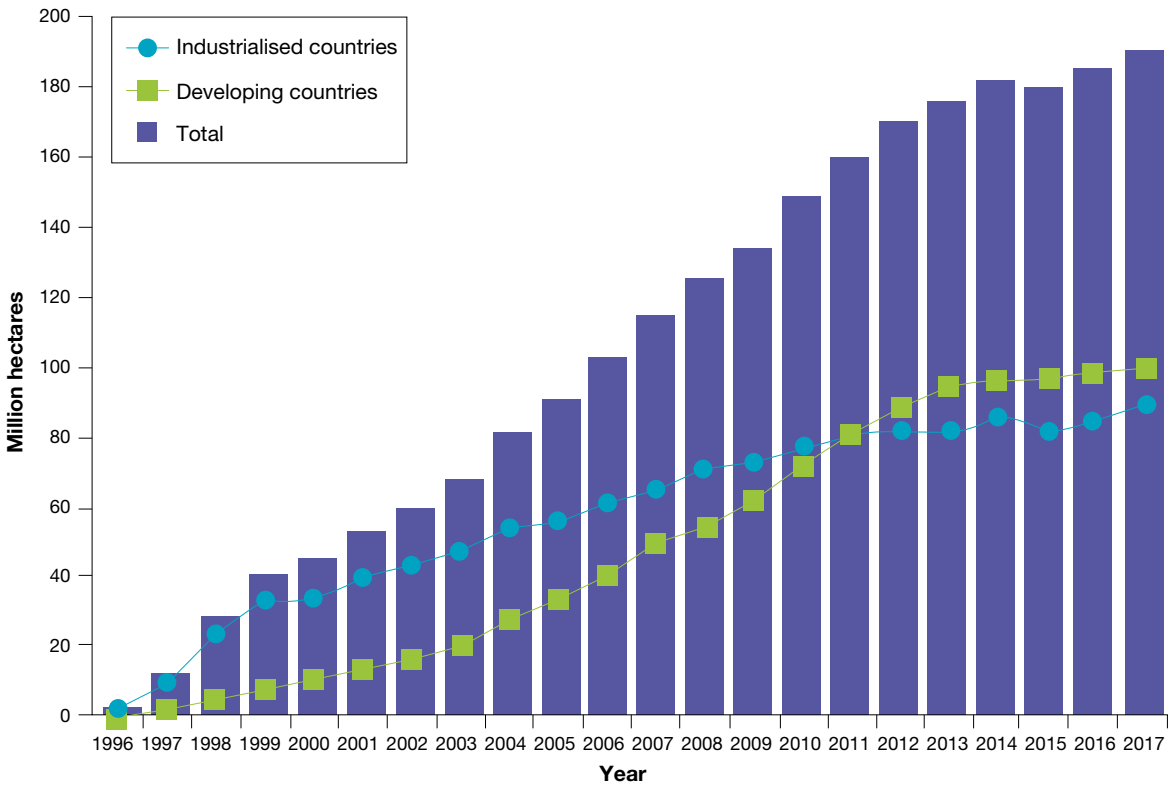
- loss of seed varieties
- potential risks to the environment and people's health
- the fact that large companies hold the copyright to the seeds of GM plants that are food sources.

**FIGURE 2** Yield gap for a combination of major crops, 2015




***Source:*** Food and Agriculture Organization of the United Nations

**FIGURE 3** Global area of genetically modified crops in industrialised and developing countries 1996–2017



## 14.3.2 Innovative solutions

Because agriculture uses around 70 per cent of the planet's increasingly scarce freshwater resources, any method that can produce food without needing fresh water at all is a great advance.

Port Augusta is located in a hot, arid region of South Australia, and is not normally associated with agriculture. However, one company, Sundrop Farms, is using this region's abundant renewable resources of sunlight and sea water to produce high-quality, pesticide-free vegetables, including tomatoes, capsicums and cucumbers, and it does so all year round.

In 2016, a 20-hectare greenhouse was opened, powered by a 115 m solar tower with 23 000 mirrors. The mirrors concentrate the sun's energy and the collected heat creates steam to drive electricity production, heat the greenhouse, and desalinate sea water from the Spencer Gulf, producing up to one million litres of fresh water a day for crop irrigation.

The greenhouse aims to satisfy approximately 10 per cent of Australia's truss tomato demand and its sustainably farmed produce is already being sold at Coles supermarkets.

It is hoped that this type of technology can be used in many more places in Australia and around the world that have hot, arid climates previously considered unsuitable for horticulture. The technology has the potential to supply millions of people with healthy food in a sustainable manner while also using minimal fossil fuel resources.

**FIGURE 4** The world's first Sundrop Farm is situated in Port Augusta, South Australia.

Australian farmers see technology as a means of decreasing production costs and increasing crop production. Additional technologies in Australian agriculture include the following.

- Robots are being tested to determine whether they can be used in complex jobs such as watering or harvesting. This would be of advantage in the horticultural sector, which is the third largest sector in agriculture, with an export trade worth $2.2 billion in 2017–18.
- Technology such as satellite positioning is being used to determine the optimal amounts of fertiliser to use on crop farms, which could increase profitability by as much as 14 per cent.
- Robots and an unmanned air vehicle have passed field tests at an almond farm in Mildura, Victoria. They are fitted with vision, laser, radar and conductivity sensors — including GPS and thermal sensors.

## Resources

**Interactivity** More, or less, food (int-3329)
**Weblink** Vertical farming

### 14.3 INQUIRY ACTIVITY

Use the **Vertical farming** weblink in the Resources tab to watch a video clip on this topic.

**a.** What is being suggested about ***environmentally sustainable*** farming in the future?
**b.** Draw a diagram to show what a future vertical farm might look like.
**c.** How might vertical farms help to feed future populations? **Examining, analysing, interpreting**

### 14.3 EXERCISES

**Geographical skills key: GS1** Remembering and understanding **GS2** Describing and explaining **GS3** Comparing and contrasting **GS4** Classifying, organising, constructing **GS5** Examining, analysing, interpreting **GS6** Evaluating, predicting, proposing

#### 14.3 Exercise 1: Check your understanding

1. **GS1** What is meant by the term *yield gap* and why is it important that this gap be narrowed?
2. **GS1** List three different strategies, other than closing the yield gap, for improving food production.
3. **GS1** What is meant by the term *genetically modified* (GM)?
4. **GS2** Explain the advantages and disadvantages of locating the large greenhouse near Port Augusta.
5. **GS2** Select one of the strategies outlined in **FIGURE 1** that can be used to improve food production. Explain this strategy in your own words and outline some of the strengths and weaknesses of this strategy.

#### 14.3 Exercise 2: Apply your understanding

1. **GS5** Study **FIGURE 2**.
   (a) Which ***places*** have the highest yield gaps?
   (b) Which ***places*** have the lowest yield gaps?
2. **GS5** Examine **FIGURE 3**. What ***changes*** have there been in the production of genetically modified foods in (a) industrialised countries and (b) developing countries? Use the data from the graph to support your answer.
3. **GS6** Predict what the impact might be on people and ***places*** if the greenhouse method of farming shown in **FIGURE 4** were to become more readily available. What might be the effects on ***places*** where the yield gap is large compared to ***places*** that are currently more productive?
4. **GS4** Annotate key aspects of the Port Augusta landscape (greenhouses, solar collector, sandy soil, flat and barren landscape) shown in the photograph in **FIGURE 4**.
5. **GS6** Many Australian cities have large housing estates on their outskirts. This land was often used for market gardens or farmland. What impact might the loss of this productive land have on the price of food?
6. **GS6** Some areas of Australia that are currently national parks or marine parks may be sought after as agricultural land in the future. Outline your views on this.

Try these questions in learnON for instant, corrective feedback. Go to www.jacplus.com.au.

# 14.4 Global food aid

## 14.4.1 Who needs food aid and how is it delivered?

Food aid is food, money, goods and services given by wealthier, more developed nations to less developed nations for the specific purpose of helping those in need.

People who need food aid include:

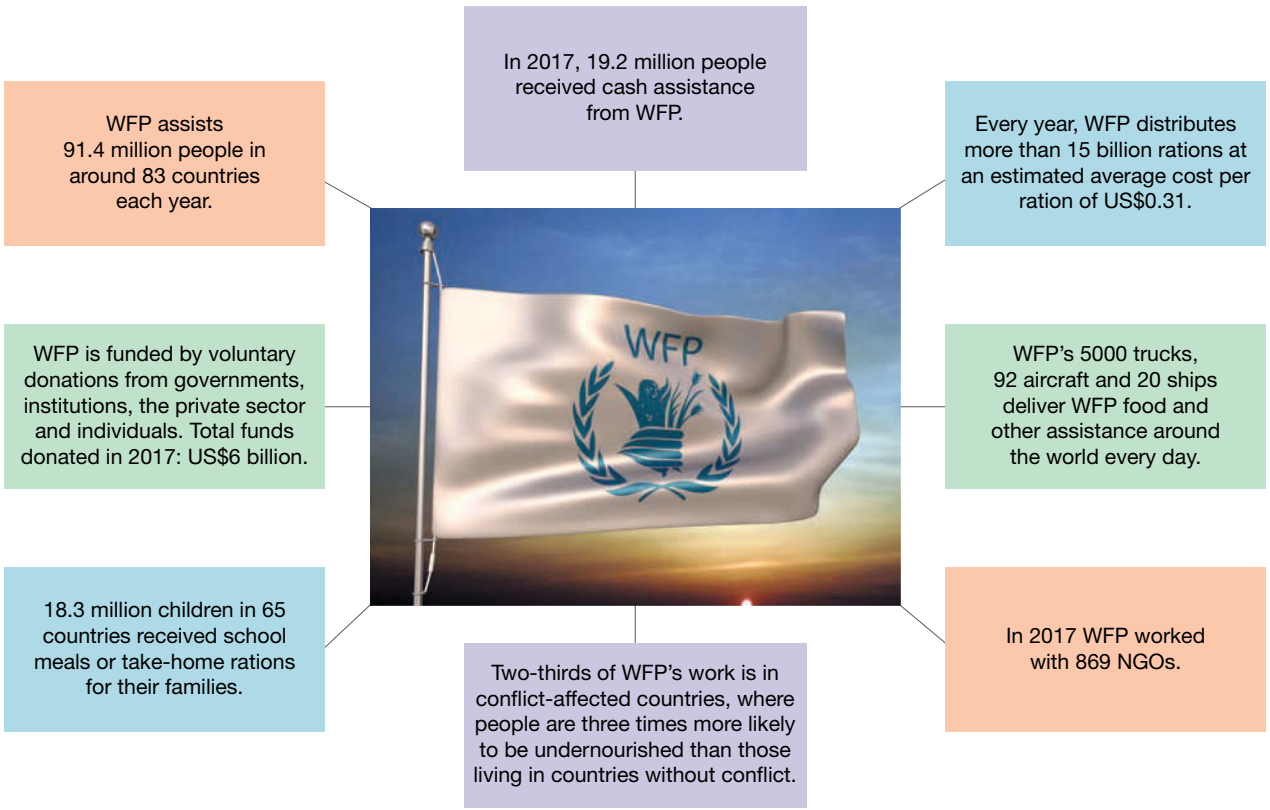
- poor people who cannot buy food even if it is available, as they are often trapped in a cycle of hunger and poverty
- people who have fled violence or civil conflict
- people devastated by natural disasters.

There are three general categories of food aid:

1. Program food aid, which is organised between national governments and provides resources that offer budgetary support to countries in need
2. Project food aid, which is targeted at specific areas or groups and provides support for disaster prevention activities and poverty alleviation measures
3. Relief (crisis or emergency) food aid, which assists victims of man-made and natural disasters

The United Nations World Food Programme (WFP) is a voluntary arm of the United Nations. It reaches more than 80 million people, in more than 92 countries, with food assistance after disasters and conflicts. The WFP provides different types of food aid to people after natural disasters such as cyclones, floods and earthquakes. Some relief aid is provided in the short term as emergency food. Project food relief is often required over lengthy periods, typically after civil war or prolonged drought.

**FIGURE 1** How the WFP works




Natural and **anthropogenic** disasters are the drivers of hunger and malnutrition. The WFP works to prevent, mitigate and prepare for such disasters. In 2018, the WFP worked on five major humanitarian disasters. In the Kasai region of the Democratic Republic of the Congo, over 7.7 million people are at risk of not having access to enough nutritious food. In Borne, Yobe and Adamawa in north-east Nigeria almost 3 million people are facing hunger. Since South Sudan gained independence in 2011, approximately 60 per cent of the population has suffered from the effects of famine. The WFP is assisting with these crises and also providing support for people affected by hunger caused by civil war in Syria and Yemen. Overall, the WFP's disaster response has helped more than 80 million people worldwide.

## 14.4.2 Who gives food aid?

The major donor countries to the WFP in 2018 are shown in **TABLE 1**.

**TABLE 1** Major funding contributors to the WFP in 2018 (US$)

| All donors and funding sources | | |
|---|---|---|
| 1 | USA | 2 541 479 166 |
| 2 | European Commission | 1 113 106 906 |
| 3 | Germany | 849 141 329 |
| 4 | United Kingdom | 617 188 873 |
| 5 | Saudi Arabia | 247 907 959 |
| 6 | United Arab Emirates | 226 215 581 |
| 7 | Canada | 222 172 109 |
| 8 | UN Other Funds and Agencies (excl. CERF) | 151 703 536 |
| 9 | Sweden | 148 185 097 |
| 10 | UN CERF | 138 632 047 |

Figures current as at 28 April 2019

## 14.4.3 CASE STUDY: Plumpy'Nut — a short-term solution to malnutrition

In 2005 a revolutionary approach to treating malnutrition was released. This is a ready-to-use therapeutic food (RUTF) called Plumpy'Nut. It is a sweet, edible paste made of peanut butter, vegetable oils, powdered milk, sugar, vitamins and minerals.

Its advantages are that it:

- is easy to prepare
- is cheap (a sachet costs about $2.50, including shipping costs)
- needs no cooking, refrigeration or added water
- has a shelf life of two years.

Children suffering from malnutrition can be fed at home without having to go to hospital. It is specially formulated to help malnourished children regain body weight quickly, because malnutrition leads to stunting of growth, brain impairment, frailty and attention deficit disorder in children under two years of age.

Plumpy'Nut is not a miracle cure for hunger or malnutrition; it only treats extreme food deprivation, mainly associated with famines and conflicts. It is not designed to reduce chronic hunger resulting from long-term poor diets or malnutrition. Since its introduction, Plumpy'Nut has lowered mortality rates during famines in Malawi, Niger and Somalia.

**FIGURE 2** Plumpy'Nut benefits children.

Most of the world's peanuts are grown in developing countries, where allergies to them are relatively uncommon. Manufacturing plants have been established in a dozen developing countries, including Mali, Niger and Ethiopia. These factories provide employment and ensure ease of access when needed. The patent for Plumpy'Nut is owned by the French company Nutriset. Nutriset has worked with UNICEF to save the lives of millions of children with this simple solution to childhood hunger.

## 14.4.4 CASE STUDY: Cash vouchers and school feeding programs

Where food is available but people simply cannot afford to buy it, aid is given by the WFP in the form of cash vouchers, which can be exchanged for food and other essential commodities. They allow recipients greater choice in the types of food and other commodities they can obtain. Cash has benefits for local economies because the money is spent within the community. Recently, cash voucher programs have been enhanced through the use of mobile phones, which have been used to provide instant payments to both beneficiaries and the shopkeepers who honour vouchers.

Another program provides schoolchildren with either full meals (breakfast and/or lunch) or nutritional snacks, such as high-energy biscuits. In some cases, school meals are provided alongside take-home rations that benefit the whole family and provide an added incentive for sending children to school. In 2017, the WFP provided meals to 18.3 million school students.

Australia has funded school feeding programs in Bangladesh, Myanmar, Laos and Cambodia, which have had strong positive impacts on both the children and the wider community. School rates of enrolment have increased and regular attendance has improved. Households have also benefited through a reduced need to purchase food. In 2017–18, Australia provided over $108 million to the WFP. This included $38 million in core funding, $2 million to provide school meals and $68 million towards disaster relief.

### DISCUSS

Discuss the issues that may arise as a consequence of a country deciding to slash its overseas food aid program by half. **[Ethical Capability]**

### on Resources

**Weblink** World Food Programme

### 14.4 INQUIRY ACTIVITIES

1. Select a major donor of food aid from **TABLE 1**. Research the main population characteristics of this country, such as life expectancy, literacy levels and death rates. Discuss your findings in class.
   **Examining, analysing, interpreting**
2. Use the **World Food Programme** weblink in the Resources tab to learn about the WFP's involvement in Syria and surrounding ***places*** since 2012. What action is the WFP taking there and why?
   **Examining, analysing, interpreting**
3. Draw a poster or advertisement to inform Australians about Plumpy'Nut and its uses and impacts.
   **Classifying, organising, constructing**

## 14.4 EXERCISES

**Geographical skills key: GS1** Remembering and understanding **GS2** Describing and explaining **GS3** Comparing and contrasting **GS4** Classifying, organising, constructing **GS5** Examining, analysing, interpreting **GS6** Evaluating, predicting, proposing

### 14.4 Exercise 1: Check your understanding

1. **GS1** Refer to **FIGURE 1**. How many countries receive WFP assistance each year?
2. **GS1** Refer to **FIGURE 1**. Where does the majority of the WFP's work take place? Why is this so?
3. **GS1** How much did Australia contribute to the WFP in 2017–18, and how was this distributed?
4. **GS2** Explain why the WFP is so active in school feeding and emergency aid programs.
5. **GS2** Refer to the case study 'Cash vouchers and school feeding programs'. List the advantages and disadvantages of cash vouchers.

### 14.4 Exercise 2: Apply your understanding

1. **GS6** How might food aid ***change*** when a donor country experiences a major economic downturn?
2. **GS6** Predict the likely consequences for children who suffer from malnutrition. Present your information in an appropriate diagram.
3. **GS6** Should Australia's food aid commitment be increased? Write a letter to your federal member of parliament, outlining your views on increasing Australia's food aid contribution.
4. **GS2** Suggest advantages and disadvantages of using Plumpy'Nut or other RUTFs to treat childhood malnutrition in developing countries.
5. **GS5** In 2018, how much more did the USA contribute to the WFP than the next highest single country donor? Suggest reasons as to why this might be so.

Try these questions in learnON for instant, corrective feedback. Go to www.jacplus.com.au.

# 14.5 SkillBuilder: Constructing a box scattergram

online only

## What is a box scattergram?

A box scattergram is a table with columns and rows, which displays the relationship between two sets of data that have been mapped. The distribution becomes clear, although in a generalised way, as there are usually only four to five categories of data.

| | Aid received per person (US$) | | | |
|---|---|---|---|---|
| Hunger level (% undernourished) | No data | Less than 20 | 20–99 | Over 100 |
| 35+ | | | | • Congo<br>• Mozambique |
| 25–34 | | | • Chad<br>• Angola | |
| 15–24 | | | | |
| 5–14 | | • Nigeria | • Niger | |
| Less than 5 | | • South Africa<br>• Algeria<br>• Libya | | |
| No data | | | | • Mauritania |

### Select your learnON format to access:

- an overview of the skill and its application in Geography (Tell me)
- a video and a step-by-step process to explain the skill (Show me)
- an activity and interactivity for you to practise the skill (Let me do it)
- questions to consolidate your understanding of the skill.

### on Resources

**Video eLesson** Constructing a box scattergram (eles-1734)

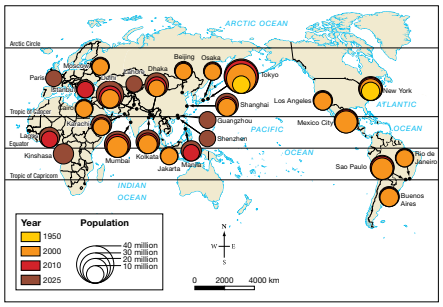
**Interactivity** Constructing a box scattergram (int-3352)

# 14.6 SkillBuilder: Constructing and describing proportional circles on maps

online only

## What are proportional circle maps?

Proportional circle maps are maps that incorporate circles, drawn to scale, to represent data for particular places. Different-sized circles on a map reflect different values or amounts of the particular factor being studied.




### Select your learnON format to access:

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- a video and a step-by-step process to explain the skill (Show me)
- an activity and interactivity for you to practise the skill (Let me do it)
- questions to consolidate your understanding of the skill.

### on Resources

**Video eLesson** Constructing and describing proportional circles on maps (eles-1735)

**Interactivity** Constructing and describing proportional circles on maps (int-3353)

# 14.7 Do Australians need food aid?

## 14.7.1 Who is in need?

In 2018, over 3 million people, or 13.2 per cent of Australians, were living below the internationally accepted poverty line. This included almost 739 000 children, or 17.3 per cent of the total Australian child population. The prices of essentials — food, health, education, housing, utilities and transport — have climbed so much in recent years that people who were already struggling are now unable to cope. They may need food aid. The economic climate has seen people turning to charity who in the past would never have dreamed of seeking such support. It is not just traditionally vulnerable groups, such as the homeless, who are seeking food relief; it is also the aged, single parents and the 'working poor'.

In 2018 it was reported that:

- one in eight Australian adults were living in poverty
- one in six Australian children were living in poverty
- many people were living up to $135 per week below the poverty line
- most people (53 per cent) facing poverty were receiving Newstart, Youth Allowance or other government allowance payments
- the biggest threat to household finances were housing costs, including rent
- women made up 52 per cent of adults living under the poverty line.

For many people, charity food agencies are a vital source for their daily food needs. Programs such as the School Breakfast Clubs, managed by Foodbank Victoria in partnership with the Victorian government, provide free, nutritious breakfasts to children who might otherwise start their day without food. Other charities such as OzHarvest, The Big Umbrella, Fareshare and SecondBite work to redistribute food that would otherwise go to waste, providing millions of meals for the many thousands of people who through economic disadvantage may be unable to regularly provide for their own needs.

## 14.7.2 CASE STUDY: SecondBite

SecondBite rescues and redistributes food to agencies that service people in need. Food is donated directly from farms, as well as from wholesalers, markets, supermarkets and caterers.

SecondBite was founded in Victoria in 2005. Run by just three volunteers, in that year they redistributed 600 kg of food. Since these humble beginnings, SecondBite has grown dramatically. It is now a national organisation, operating with over 85 staff and partnering with more than 1300 community food programs to deliver food and meals to people in need. In the 2015–16 financial year alone, SecondBite rescued and redistributed, free of charge, enough food to provide 20 million meals.

**FIGURE 1** SecondBite redistributes food to agencies that assist people in need.

## 14.7.3 CASE STUDY: APY lands food security plan

In September 2011, Indigenous Australian peoples in South Australia's far north faced food insecurity. Shops in the Anangu Pitjantjatjara Yankunytjatjara (APY) lands were reasonably well stocked, but people were undernourished because of the high cost of freighted fresh food. Essential foods in remote community stores were more than double the price of those in Adelaide. To alleviate the situation, the Red Cross and the South Australian government sent pallets of food to aid impoverished people living in the APY lands.

A government-developed food security plan for the area was established in 2011, with a focus on implementing improvements to food supply (through measures such as improved freight efficiency, stores management, cold storage upgrades and provision of generators for more reliable power supply), community education in choosing and preparing nutritious foods, and an arid lands horticulture project to develop capacity to produce fresh food within the region.

Since 2014, food security measures within the region have largely been driven by non-governmental organisations (NGOs) and the Mai Wiru Regional Stores Council Aboriginal Corporation, which coordinates and manages a number of the community stores within the region and uses store profits to fund various community projects. Improvements have been made, but the challenges of providing affordable, healthy fresh food to remote areas such as the APY lands are ongoing.

**FIGURE 2** Indigenous communities living in remote areas face challenges to food security due to the cost of transporting and storing fresh food.

## 14.7.4 CASE STUDY: Meals on Wheels

As Australia's population ages (see **FIGURES 3** and **4**), the services of groups such as Meals on Wheels may also be in greater demand. In 1997, the **median age** was 34 years, but this is projected to be 44–46 years in 2050. In 1997, people aged 65 years and over comprised 12 per cent of the population, and this is projected to rise to 24–26 per cent in 2050.

**FIGURE 3** Australia's population pyramid, 2016

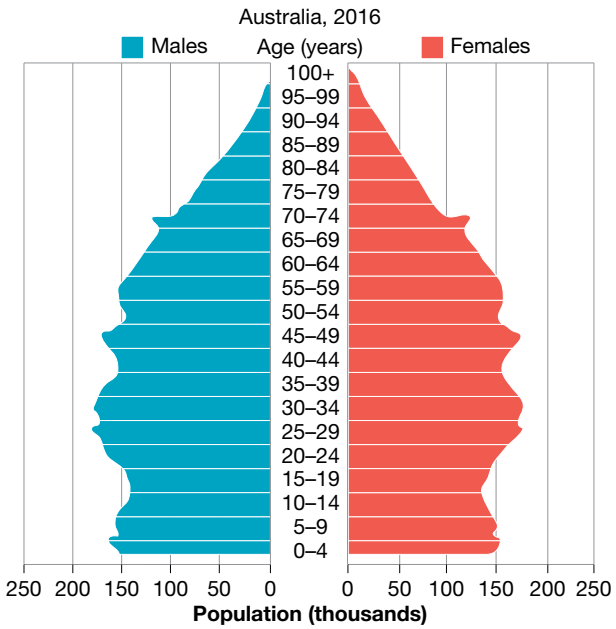
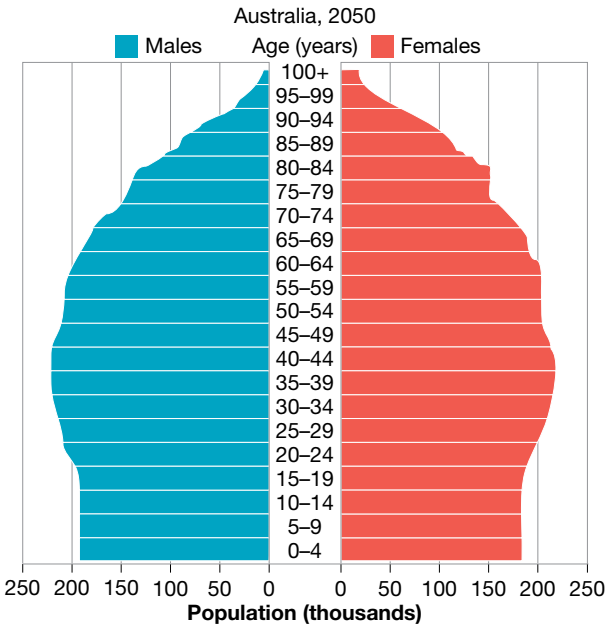



**FIGURE 4** Australia's projected population pyramid, 2050




Meals on Wheels began in the United Kingdom during World War II, and in Australia (Melbourne) in 1952. Through delivering nutritious, relatively inexpensive meals, (a three-course meal generally costs between $7 and $10), Meals on Wheels plays an important role in helping older people and those living with a disability to live independently. Around 15 million meals are served annually to more than 50 000 people across the nation. In addition to providing vital nourishment to those who may have difficulty in preparing their own meals at particular stages of life, the social interaction provided by these regular visits is another important aspect of this service.

## on Resources

**Weblink** Australian poverty

## 14.7 INQUIRY ACTIVITIES

1. Conduct your own research into a local organisation that provides food aid. Use a PowerPoint presentation to detail your findings. **Examining, analysing, interpreting**
2. Use the **Australian poverty** weblink in the Resources tab to discover other aspects of poverty in Australia. **Examining, analysing, interpreting**

## 14.7 EXERCISES

**Geographical skills key: GS1** Remembering and understanding **GS2** Describing and explaining **GS3** Comparing and contrasting **GS4** Classifying, organising, constructing **GS5** Examining, analysing, interpreting **GS6** Evaluating, predicting, proposing

### 14.7 Exercise 1: Check your understanding

1. **GS1** Examine **FIGURES 3** and **4**.
   (a) How many Australians were over 65 years of age in 2016?
   (b) How many are expected to be over 65 years in 2050?
2. **GS1** How many people were living in poverty in Australia in 2018?
3. **GS1** SecondBite redistributes enough food to provide how many meals each year?

4. **GS2** Explain the importance of volunteers in food redistribution.
5. **GS2** Explain how Australia's size could lead to food shortage in some ***places***.

### 14.7 Exercise 2: Apply your understanding

1. **GS2** Explain why there might be difficulties with access to food in 2050 if 25 per cent of the population is over 65.
2. **GS6** Predict whether Meals on Wheels will experience an increase or decrease in its future clientele. Apart from the ageing population, what other factors might ***change*** the demand for services such as SecondBite or Meals on Wheels in future?
3. **GS6** What would be your family's reaction if the cost of food doubled because of freight costs? What steps could improve the situation in outback areas?
4. **GS6** Have your attitudes to redistributing food ***changed*** as a result of your reading and class discussion? Explain.
5. **GS6** 'When bills have to be paid, food becomes a **discretionary item**.' (Food Bank Australia 2011.) If household bills have to be paid before buying food, what are the likely consequences for families and organisations supplying food aid?

Try these questions in learnON for instant, corrective feedback. Go to www.jacplus.com.au.

# 14.8 The effects of dietary changes on food supply

## 14.8.1 How have diets changed?

The human diet has changed throughout history, and continues to change today. Since the 1960s, the total calories per day consumed globally, together with the proportion of the diet comprised of animal products, oils and sweeteners have increased. These food types are typically found in higher amounts in the **Western-style diet** eaten by much of the population of developed countries. **FIGURE 1** shows the changing global diet, as recorded in a study of dietary trends from 1961 to 2009. **TABLE 1** presents the data for each food category.

Since 1960, diets around the world have become more similar and larger in terms of calories, protein, fat and food weight. While animal products, oils and sweeteners have long been a feature of the diet in developed countries, they are increasingly becoming part of the diet in developing countries also. These trends are predicted to continue along with these countries' economic development (see **FIGURE 2**). This is especially the case in countries such as India and China, where the standard of living is rising and people can increasingly afford access to a wider variety of foods.

**FIGURE 1** Changes to global diet 1961–2009

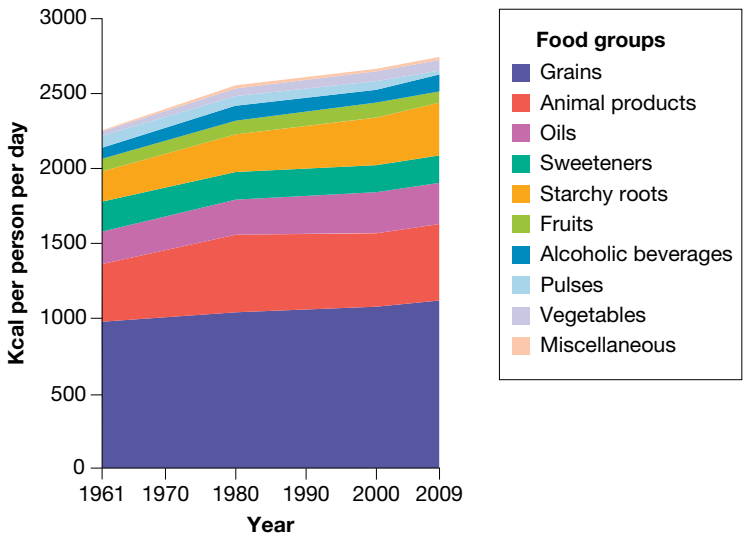


**TABLE 1** Global diet calories per person per day, by food category, 1961–2009

| Food category | 1961 | 1980 | 2000 | 2009 |
|---|---|---|---|---|
| **Grains** | 976 | 1042 | 1077 | 1118 |
| **Animal products** | 383 | 473 | 488 | 508 |
| **Sweeteners** | 220 | 275 | 277 | 281 |
| **Starchy roots** | 214 | 184 | 180 | 178 |
| **Oils** | 186 | 255 | 316 | 349 |
| **Fruits** | 85.6 | 94.8 | 101 | 104 |
| **Alcoholic beverages** | 79.3 | 93.6 | 85 | 88.2 |
| **Pulses** | 63.4 | 61.3 | 58.9 | 64.9 |
| **Vegetables** | 31.8 | 40.7 | 53 | 55.4 |
| **Miscellaneous** | 0.8 | 3.4 | 5.8 | 9.1 |
| **Total calories per day** | 2239.9 | 2522.8 | 2641.7 | 2755.6 |

**FIGURE 2** Changing diets in developing countries

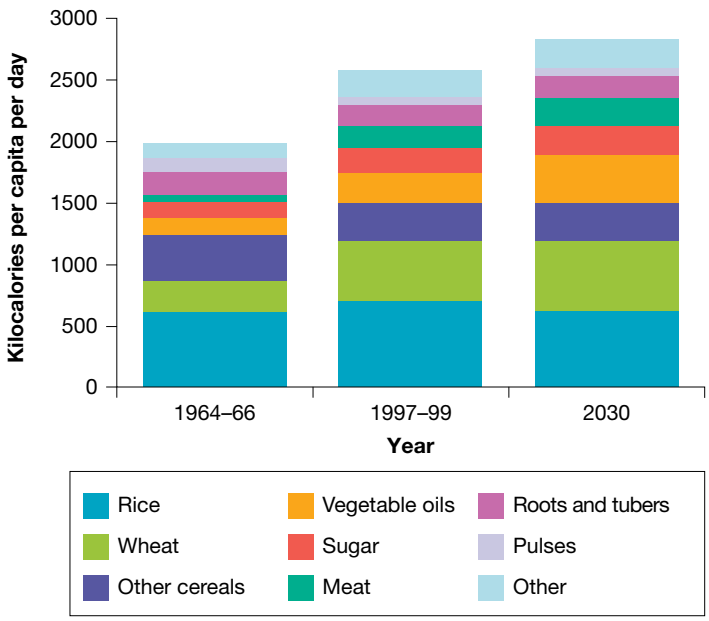
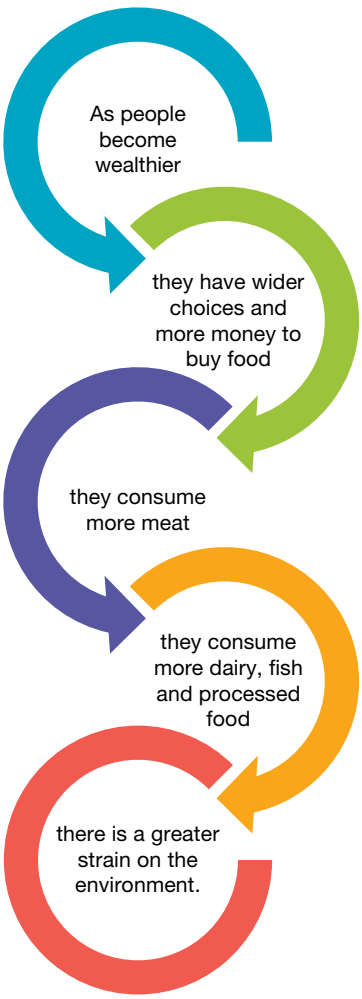



**FIGURE 3** Impacts of economic growth and dietary change

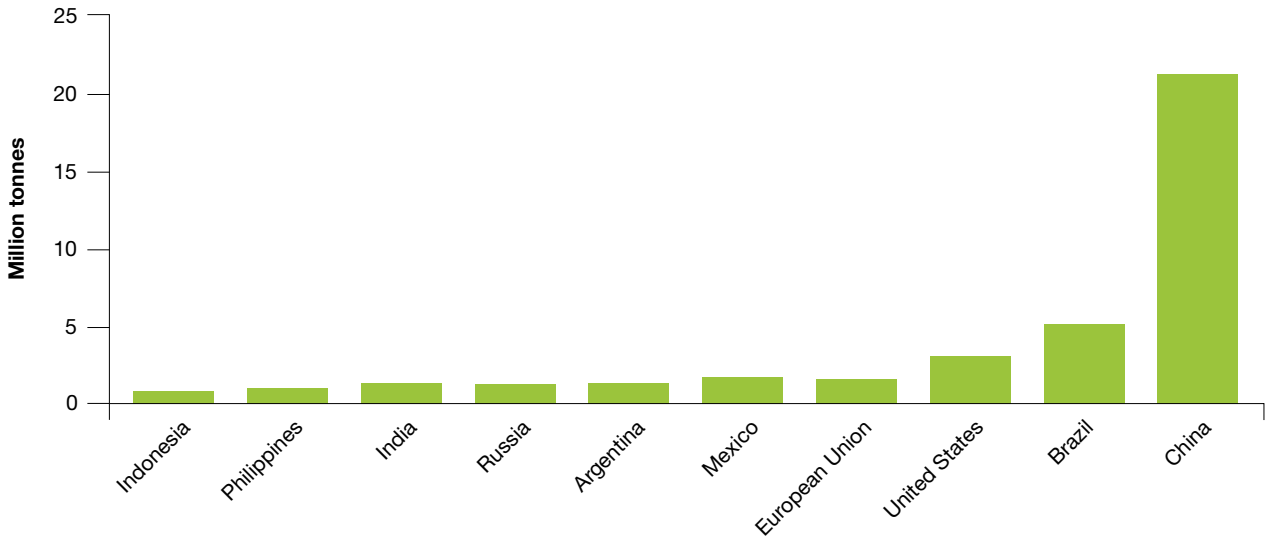



## Changing diets in Asia

For centuries, the typical Chinese diet was rice and vegetables, supplemented by fish and small amounts of other meat. Rice is a valuable source of protein, but as people's incomes grow, per capita rice consumption is expected to decline and consumption of protein via meat sources is expected to increase accordingly.

Australians and Americans are the world's highest consumers of meat, eating an average of around 300 grams per person per day — significantly more than the global average of around 115 grams per person. In 1962, the average Chinese person ate just 4 kilograms of meat per year. By 2015, this figure was closer to 80 kilograms (around 220 grams per day) and rising (see **FIGURE 4**).

**FIGURE 4** Expected growth in meat consumption, 2011–2021




## 14.8.2 Can Australia be a food bowl for Asia?

The countries of the Asian region are home to more than half the world's population. With significant economic growth occurring throughout much of the area, and over four billion people to be fed, Asia presents unparalleled opportunities for Australian farmers and the Australian economy. As Asian societies become more affluent, higher standards of living give rise to expectations of greater access to goods. Australia is well placed to provide many of these, including a wide variety of foods and quality fibres such as wool and cotton.

With a reputation for utilising 'clean and green' agricultural systems, coupled with our geographic proximity, Australian farmers are ideally placed to capitalise on the economic opportunities that the fast-developing Asian region presents.

'We have the potential for a new golden era of Australian agriculture, given the rise of Asia,' our prime minister said in 2012. The challenge for Australian farmers will be in meeting this booming global need for food and fibre by increasing production at a time when we have decreasing arable land, less water and fewer people working in agriculture.

## 14.8.3 How can dietary change enable sustainable food production?

One-third of the world's grain crop is fed to animals to produce meat. From a sustainability perspective, this can be considered wasteful, as the amount of grain used to feed a cow for the purposes of meat production is 11 times what would be needed to adequately feed a person with grain alone. Similarly, while 1500 litres of water are needed to produce 1 kilogram of cereal, 15 000 litres are needed to produce 1 kilogram of meat.

Meeting the needs of future populations is not just the responsibility of farmers and producers. We as consumers can also contribute. Attitudes may need to change towards how and what we eat.

- If we are to feed nine billion people sustainably in 2050, it is unlikely we'll be eating a meat-rich, Western-style diet.
- The world produces enough food to feed 10 billion people. However, a significant portion of our crops is used to feed animals or is used as biofuel to produce energy.
- A switch to a diet containing more plant material would allow land currently used to produce animal feed to instead grow crops to feed humans. Although such a huge change is unlikely, even a small shift can have an impact.

- The Meatless Monday campaign encourages people to go without meat for one day per week. This small change would benefit human health and the health of the planet. Meat production requires a large amount of land, water and energy. Cattle are also the largest source of methane gas, which is one of the main contributors to greenhouse gases.
- It is estimated that there are more than 20 000 edible plants that we do not currently eat. Exploring ways of developing and introducing these into our diets may provide additional, sustainable food sources for future generations. One example of an 'old food' that has become increasingly popular in the modern diet is quinoa (pronounced *keen-wah*). A crop from South America, quinoa was used over 4000 years ago by the Incas. It has high nutritional value and grows in a wide variety of climatic conditions. Another advantage of the crop is that all parts of it can be eaten. Peru and Bolivia supply 99 per cent of the world's quinoa demand, and many other countries are now investigating its suitability for their locations.

Increasing consumption of fruits and vegetables, whole grains, legumes and nuts, and limiting intake from animal sources, fats and sugars will not only have health benefits for individuals but will also benefit the planet, as more land and water resources can be directed to sustainable food crop development.

### DISCUSS

'A Western-style diet is going to be unsustainable in the future.' Provide one argument for and one argument against this statement. **[Critical and Creative Thinking Capability]**

### on Resources

**Interactivity** What are we eating? (int-3331)

## 14.8 INQUIRY ACTIVITIES

1. How has our diet ***changed*** over time? Ask your parents, grandparents, and/or other adults you know to describe foods and cooking methods from when they were young. Summarise your findings and share with the class. **Examining, analysing, interpreting**
2. A United Nations report stated that 'As ***changing*** the eating habits of the world's population will be difficult and slow to achieve, a long campaign must be envisioned, along with incentives to meat producers and consumers to ***change*** their production and dietary patterns. Healthy eating is not just important for the individual but for the planet as a whole.' Design a television commercial to promote a Meatless Monday campaign. **Classifying, organising, constructing**

## 14.8 EXERCISES

**Geographical skills key: GS1** Remembering and understanding **GS2** Describing and explaining **GS3** Comparing and contrasting **GS4** Classifying, organising, constructing **GS5** Examining, analysing, interpreting **GS6** Evaluating, predicting, proposing

### 14.8 Exercise 1: Check your understanding

1. **GS2** Refer to **FIGURE 1**.
   (a) Which food category makes up the greatest part of people's diets?
   (b) Which category is the second-largest component?
2. **GS2** Study **TABLE 1**. Between 1961 and 2009, how much has the total daily calorie consumption increased?
3. **GS2** Refer to **FIGURE 2**. What crops are people in developing countries eating more of? Which crops are they eating less of?
4. **GS5** Refer to **FIGURE 3**. What is the ***connection*** between diet and economic development?
5. **GS2** Why have people's diets ***changed*** over time?

### 14.8 Exercise 2: Apply your understanding

1. **GS6** Predict what the consumption of meat in China and the United States might be in 2050. What did you base your prediction on?
2. **GS6** Predict where your foods might come from in 2050. Could aquaponics or vertical farming be a source of your future food?
3. **GS5** Refer to **FIGURE 4**.
   (a) By how much is the meat consumption in the United States expected to increase in the ten-year period from 2011 to 2021?
   (b) Compare the increase expected in meat consumption in the US with that expected in China. What might account for this difference?
4. **GS6** What might be some of the issues confronting Australia as it attempts to become the 'food bowl of Asia'? What advantages does Australia have in this attempt? How might a farmer react to this suggestion?
5. **GS2** Explain the ***interconnection*** between food and family traditions and celebrations.

Try these questions in learnON for instant, corrective feedback. Go to www.jacplus.com.au.

# 14.9 Urban farms to feed urban populations

## 14.9.1 What are the advantages of urban farming?

Farming is usually associated with rural areas, but a growing trend in food production is urban farming. This involves the growing of plants and raising of animals within and around cities, often in unused spaces — even the rooftops of buildings.

In many industrialised countries, it takes over four times more energy to move food from the farm to the plate than is used in the farming practice itself. Properly managed, urban agriculture can turn urban waste (from humans and animals) and urban waste water into resources, rather than sources of serious pollution. In 2000, about 15 to 20 per cent of the world's food supply came from urban gardens; in 2018, more than 800 million people practised urban agriculture, contributing to over 20 per cent of all global agricultural production.

Benefits of urban farming include:

- increasing the amount, variety and freshness of vegetables and meat available to people in cities through sustainable production methods
- improving community spirit through community participation, often including disadvantaged people
- incorporating exercise and a better diet into people's lives, leading to improved physical and mental health
- using urban waste water as a resource for irrigation, rather than allowing it to become a source of serious pollution
- reducing the percentage of income people spend on food.

Urban farming could become more important with rapid urbanisation. With the developing countries in Africa, Asia and Latin America expected to be home to 75 per cent of all urban dwellers, they will face the problems of providing enough food and disposing of urban waste.

## 14.9.2 CASE STUDY: Kolkata sewage ponds

The East Kolkata wetlands in India (see **FIGURE 1**) cover 12 500 hectares and contain sewage farms, pig farms, vegetable fields, rice paddies and over 300 fishponds. With a population of more than 14 million, the **urban agglomeration** of Kolkata produces huge volumes of sewage daily. The wetlands system treats this sewage, and the nutrients contained in the waste water then sustain the fishponds and agriculture. About

one-third of the city's daily fish supplies come from the wetlands, which are the world's largest system for converting waste into consumable products. The wetlands are also a protected **Ramsar site** for migratory birds. However, the area is now under pressure from urban growth and from the subsequent increase in waste that it needs to treat.

**FIGURE 1** Catching fish in the Kolkata wetland system fishponds

## 14.9.3 CASE STUDY: Container fish farming

On a smaller scale, a German company has developed a sustainable form of aquaculture that can be used in small spaces in cities. It is called **aquaponics**. Fish swim in large tanks in a recycled shipping container (see **FIGURE 2**). Electric pumps move the fish-waste-filled, ammonia-rich water into a **hydroponic** vegetable garden in a greenhouse mounted above the tank. The fish waste fertilises tomatoes, salad leaves and herbs growing in the greenhouse, and the plants purify the water, which is returned to the tanks.

These structures can be set up almost anywhere, such as on rooftops and in car parks, and the sustainably produced fresh vegetables and fish can be delivered to nearby city markets and shops, reducing the distance that the products must travel. Farmers only need to feed the fish and keep the fish-tank water topped up to sustain the efficient aquaponic system.

**FIGURE 2** Urban farming — fish and agriculture

## on Resources

**Weblinks** Urban aquaponics
Vertical farming

**Google Earth** Kolkata

## 14.9 INQUIRY ACTIVITIES

1. Use the **Urban aquaponics** weblink in the Resources tab to outline the advantages of aquaponics.
**Examining, analysing, interpreting**
2. Use the **Vertical farming** weblink in the Resources tab to help you understand vertical farming.
   (a) Draw an annotated diagram to illustrate vertical farming.
   (b) Research an urban farming project in a city. Present your findings in a PowerPoint presentation.
**Classifying, organising, constructing**

## 14.9 EXERCISES

**Geographical skills key: GS1** Remembering and understanding **GS2** Describing and explaining **GS3** Comparing and contrasting **GS4** Classifying, organising, constructing **GS5** Examining, analysing, interpreting **GS6** Evaluating, predicting, proposing

### 14.9 Exercise 1: Check your understanding

1. **GS1** What are the main features of urban farming?
2. **GS1** What functions do the East Kolkata wetlands perform?
3. **GS1** How do communities benefit from urban farms?
4. **GS2** What is hydroponic gardening?
5. **GS2** Outline how an aquaponic gardening system works.

### 14.9 Exercise 2: Apply your understanding

1. **GS6** Consider the idea of vertical farming.
   (a) Predict the ***places*** in the world likely to have vertical farms.
   (b) Explain why you selected these ***places***.
2. **GS6** Think about urban farming. Could urban farms encourage agricultural tourism? Explain your view.
3. **GS6** Write a letter to the minister for planning, suggesting that urban farming ***spaces*** should be included in every new urban development.
4. **GS5** Suggest what the advantages and disadvantages might be of producing food on the rooftop ***spaces*** of city buildings. What factors might influence the types of food that could be produced on rooftops?
5. **GS5** When investigating urban farms and people's gardening activities in Denver, United States, researchers found that:
   - people's community pride improved
   - graffiti and vandalism decreased
   - gardeners felt a greater ***connection*** with their local ***place***.

   Are these worthwhile results from urban farming? Explain.

Try these questions in learnON for instant, corrective feedback. Go to www.jacplus.com.au.

# 14.10 Thinking Big research project: Community garden design

online only

## SCENARIO

Urban sprawl affects food production areas. One solution is to create urban farms. You will design (and perhaps build!) a community garden for your school or neighbourhood, to produce fresh vegetables and fruit to sell locally or that might be used in your school canteen.

### Select your learnON format to access:

- the full project scenario
- details of the project task
- resources to guide your project work
- an assessment rubric.

### Resources

**ProjectsPLUS** Thinking Big research project: Community garden design (pro-0192)

# 14.11 Review

online only

## 14.11.1 Key knowledge summary

Use this dot point summary to review the content covered in this topic.

## 14.11.2 Reflection

Reflect on your learning using the activities and resources provided.

### on Resources

**eWorkbook** Reflection (doc-31722)
Crossword (doc-31723)

**Interactivity** Meeting our future global food needs crossword (int-7648)

## KEY TERMS

**anthropogenic** resulting from human activity (man-made)
**aquaponics** a sustainable food production system in which waste produced by fish or other aquatic animals supplies the nutrients for plants, which in turn purify the water
**discretionary item** an item that is bought out of choice, according to one's judgement
**genetically modified** describes seeds, crops or foods whose DNA has been altered by genetic engineering techniques
**hydroponic** describes a method of growing plants using mineral nutrients, in water, without soil
**median age** the age that is in the middle of a population's age range, dividing a population into two numerically equal groups
**Ramsar site** a wetland of international importance, as defined by the Ramsar Convention — an intergovernmental treaty on the protection and sustainable use of wetlands
**urban agglomeration** the extended built-up area of a place, including suburbs and continuous urban area
**Western-style diet** eating pattern common in developed countries, with high amounts of red meat, sugar, high-fat foods, refined grains, dairy products, high-sugar drinks and processed foods
**yield gap** the gap between a certain crop's average yield and its maximum potential yield

# 14.5 SkillBuilder: Constructing a box scattergram

## 14.5.1 Tell me

### What is a box scattergram?

A box scattergram is a table with columns and rows, which displays the relationship between two sets of data that have been mapped. The distribution becomes clear, although in a generalised way, as there are usually only four to five categories of data.

### How is a box scattergram useful?

Box scattergrams are a useful way of summarising data from maps. You are able to put the data into categories in a table (a series of boxes) and then, when analysing the information, you can discuss the different categories. Using box scattergrams is a technique that allows you to think carefully about features and see the relationships between data. You will find these useful when drawing together data that may initially seem quite complex.

Box scattergrams are useful for:

- summarising data shown on maps
- presenting data during an oral presentation
- planners conveying complex ideas and social differentiation between countries
- economists showing the interconnection between features.

A good box scattergram:

- is drawn as a table
- has appropriately labelled axes
- accurately displays two sets of mapped data
- includes a clear title.

## 14.5.2 Show me

### How to construct a box scattergram

#### You will need:

- two maps
- a ruler
- an atlas.

#### Procedure

You will need the two maps of data shown in **FIGURES 1** and **2**.

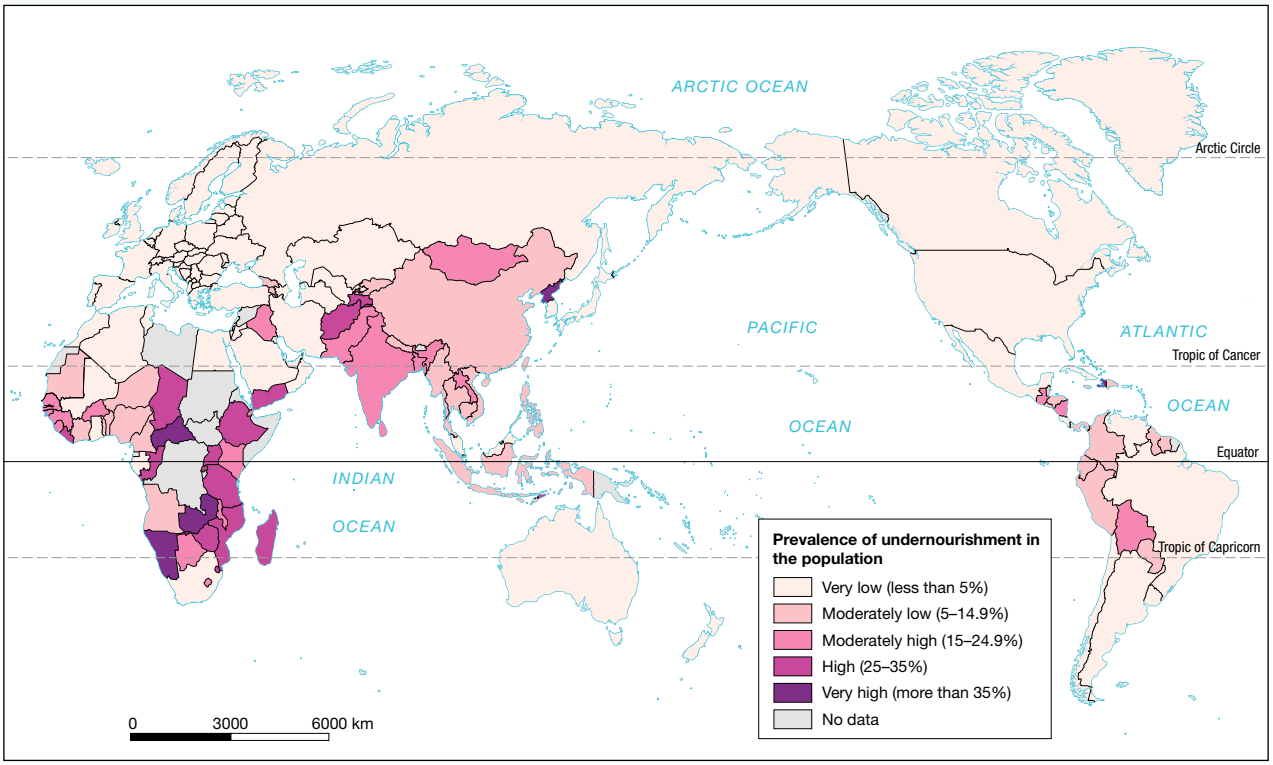
#### Step 1

Construct a table or series of boxes with enough spaces for all the titles, columns and rows and all the categories of the data shown in the legends of both maps. **FIGURE 1** has six categories and **FIGURE 2** has seven categories.

#### Step 2

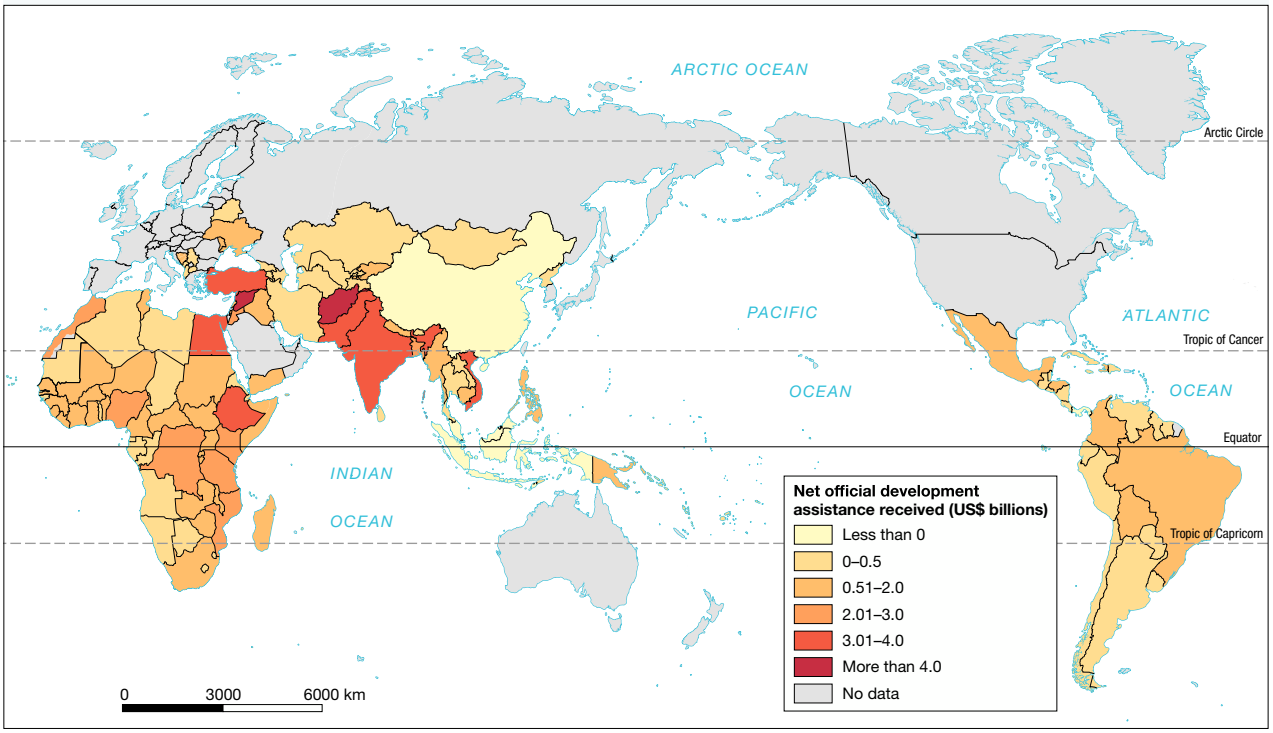
In the left-hand column, enter the title and units of measurement from **FIGURE 1**. **TABLE 1** shows this step. Place the lowest numbered category at the base of the column (in this case ‘No data’).

**FIGURE 1** World hunger map, 2015




***Source:*** World Food Programme, 'Hunger Map 2015'. © FAO.

**FIGURE 2** Net official development assistance and official aid received (current US$)




***Source:*** World Bank

**TABLE 1** Setting up a box scattergram

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Hunger level (% undernourished)** | | | | | | | |
| **More than 35** | | | | | | | |
| **25–35** | | | | | | | |
| **15–24.9** | | | | | | | |
| **5–14.9** | | | | | | | |
| **Less than 5** | | | | | | | |
| **No data** | | | | | | | |

### Step 3

In the header rows, enter the title and units of measurement from **FIGURE 2**. Place the lowest numbered category on the left-hand side (in this case 'No data'). This step is shown in **TABLE 2**.

**TABLE 2** A box scattergram layout

| | **Aid received (US$ billions)** | | | | | | |
|---|---|---|---|---|---|---|---|
| **Hunger level (% undernourished)** | **No data** | **Less than 0** | **0–0.5** | **0.51–2.0** | **2.01–3.0** | **3.01–4.0** | **More than 4.0** |
| **More than 35** | | | | | | | |
| **25–35** | | | | | | | |
| **15–24.9** | | | | | | | |
| **5–14.9** | | | | | | | |
| **Less than 5** | | | | | | | |
| **No data** | | | | | | | |

### Step 4

To plot the data, find the two categories for a place on the map and put the country name in the appropriate square of the table. Continue this with as many countries as necessary. The box scattergram in the **TABLE 3** model shows ten African countries.

### Step 5

Complete the box scattergram with a suitable title. For the **TABLE 3** model, the title would be 'Ten selected African countries, showing the relationship between undernourishment and international aid received'.

## Model

**TABLE 3** Ten selected African countries, showing the relationship between undernourishment and international aid received

| | Aid received (US$ billions) | | | | | | |
|---|---|---|---|---|---|---|---|
| **Hunger level (% undernourished)** | **No data** | **Less than 0** | **0–0.5** | **0.51–2.0** | **2.01–3.0** | **3.01–4.0** | **More than 4.0** |
| **More than 35** | | | Namibia | Zambia | | | |
| **25–34.9** | | | Chad | | Tanzania | Ethiopia | |
| **15–24.9** | | | Botswana | | | | |
| **5–14.9** | | | | | | | |
| **Less than 5** | | | Algeria | South Africa | | Egypt | |
| **No data** | | | | | Democratic Republic of the Congo | | |

### on Resources

**Video eLesson** Constructing a box scattergram (eles-1734)
**Interactivity** Constructing a box scattergram (int-3352)

## 14.5.3 Let me do it

Complete the following activities to practise this skill.

### 14.5 ACTIVITIES

1. Using the data in **FIGURES 1** and **2**, complete a box scattergram showing the distribution of hunger in the following Asian countries and the amount of aid received: Afghanistan, Bangladesh, Cambodia, China, India, Indonesia, Laos, Mongolia, Myanmar, Nepal, North Korea, Pakistan, Philippines, South Korea, Sri Lanka, Thailand, Vietnam. (You may need to use your Atlas to help you locate the countries on the maps.)
   Use the checklist to ensure you cover all aspects of the task.
2. Use your completed box scattergram to answer the following questions.
   (a) Which Asian countries have a hunger level of over 15 per cent but receive less than US$2 billion in aid?
   (b) Which countries receive less than US$0.5 billion in aid and experience hunger within their borders?
   (c) Why might some countries receive high levels of aid even though hunger is not a key problem there? Identify the countries that fit this category.
   (d) Some Asian countries have no difficulty in feeding their population and receive no aid. Name these countries and suggest why no aid is provided.

Checklist

I have:
- drawn a table
- labelled each axis appropriately
- shown two sets of mapped data accurately.

# 14.6 SkillBuilder: Constructing and describing proportional circles on maps

## 14.6.1 Tell me

### What are proportional circle maps?

Proportional circle maps are maps that incorporate circles, drawn to scale, to represent data for particular places.

### How are proportional circles useful?

Proportional circles are useful as they provide an immediate visual pattern, especially when the figures being handled are large. Different-sized circles on a map reflect different values or amounts of something. Proportional circles provide an easy way to interpret patterns, give an instant impression and allow us to compare data for different places. For example, you might use these to show population size, agricultural production of a specific crop, or endangered species.

Proportional circles are useful for:

- gaining a quick impression of varying amounts over space
- showing relationships on a map.

Some practical applications include:

- economists showing the level of production across a region
- tourism authorities showing the numbers of tourists in particular areas
- emergency management organisations showing the quantities of water moving through a catchment.

A good proportional circle map:

- is drawn in pencil, using a mathematical compass
- has circles that are accurately drawn according to the scale provided in the legend
- includes a key/legend to show the proportions of the circles
- has a title.

A good description of a proportional circle map:

- effectively communicates differences in values over space
- identifies places
- uses directions.

## 14.6.2 Show me

### How to draw and describe proportional circles on a map

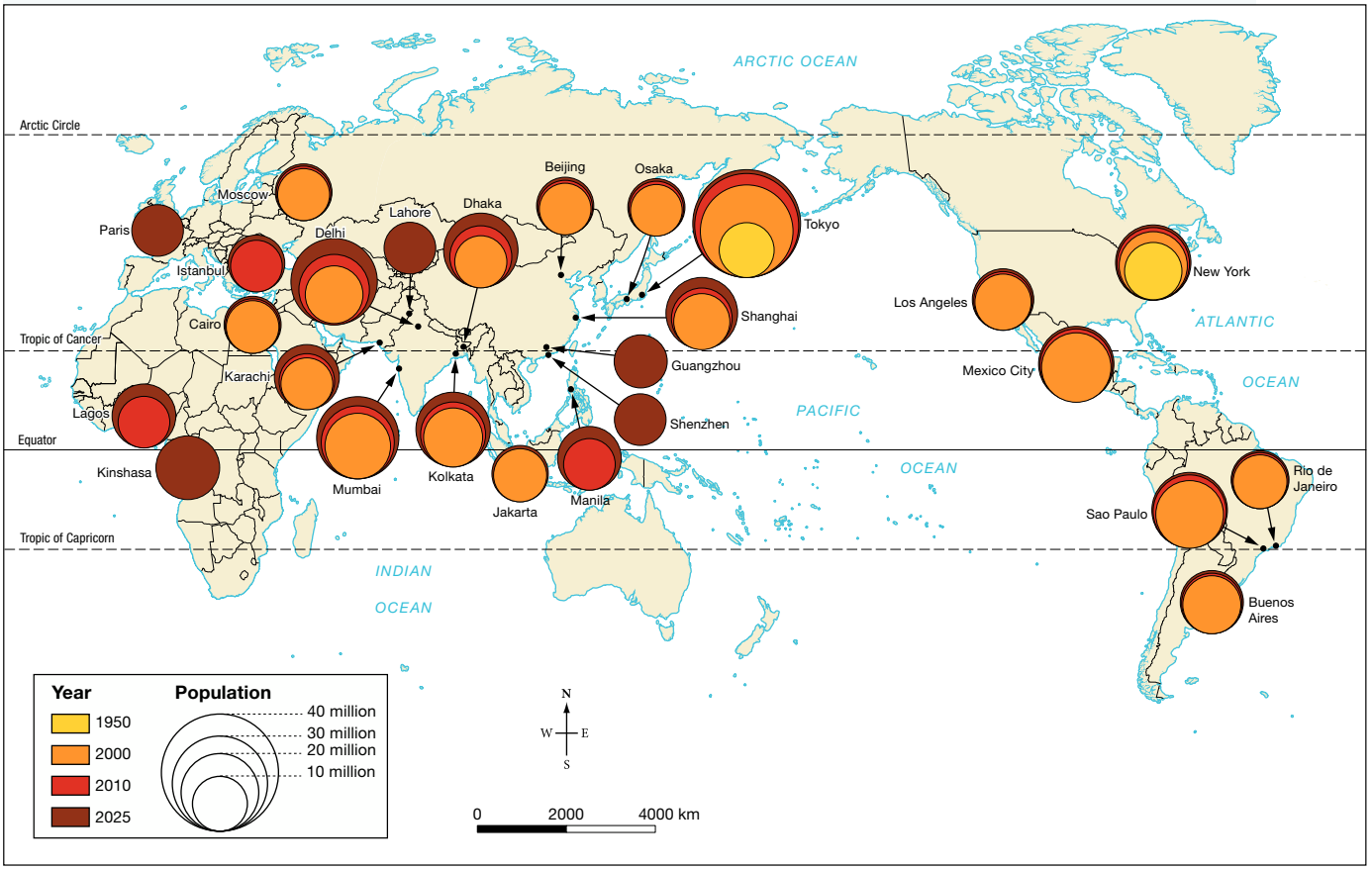
#### You will need:

- a base map
- a set of data
- a calculator
- a light-grey pencil
- a mathematical compass for drawing circles
- an atlas
- coloured pencils.

#### Model

The growth of megacities has been most noticeable across Asia, with 11 of the 18 megacities identified in 2000 located in that region. The only megacities in 1950 were Tokyo and New York, and by 2025 Tokyo is predicted to be the largest megacity. By 2025 Asia will have 14 megacities, with Lahore, Guangzhou and Shenzhen reaching megacity status between 2010 and 2025. In 2010, North America and South America each had three megacities, Africa had two and western Europe one. By 2025, Africa will have three megacities. Australia/Oceania had no cities of this size in 2000 and is not predicted to have any by 2025.

**FIGURE 1** Growth of megacities over time, 1950–2025 (projected)




***Source:*** Spatial Vision

## Procedure

### Constructing a proportional circle map

### Step 1

Study the data and decide how many categories or circle sizes you need in order to include the highest and the lowest values to be represented by the circles. You should have no more than five categories. The key in the **FIGURE 1** model has only four categories: 10, 20, 30 and 40 million. Notice, however, that there are more sizes shown on the map itself. We have to estimate what number, or value, those other sizes represent. For example, Tokyo's population in 2010 is around 35 million. Step 2 outlines how circle sizes are calculated.

### Step 2

Circle sizes should be appropriate for the base map you are using. They should not be too large or too small.

Take your data table and rank the values from highest to lowest. Work out the square root ($\sqrt{}$) of each value. **TABLE 1** shows the projected population data for megacities in 2025. As you can see, the largest figure is 6.09, for Tokyo, and the smallest is 3.24, for Lahore. These numbers give us the measurement of the radius of the proportional circles for our map. (*Note:* When working with population figures, you would leave off the 'millions' and work simply with the base number, e.g. '36' for 36 million, which would have a square root of 6, and therefore a circle radius measurement of 6 mm.)

**FIGURE 2** The radius of a circle

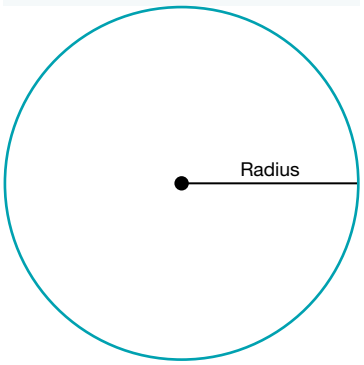


**TABLE 1** Projected megacity population, 2025 (millions)

| | 2025 | √ | | 2025 | √ |
|---|---|---|---|---|---|
| Tokyo | 37.1 | 6.09 | Kolkata | 17.3 | 4.16 |
| Delhi | 32.7 | 5.72 | Kinshasa | 16.9 | 4.11 |
| Shanghai | 29.4 | 5.42 | Guangzhou | 16.7 | 4.09 |
| Beijing | 26.5 | 5.15 | Buenos Aires | 16.5 | 4.06 |
| Mumbai | 25.2 | 5.02 | Istanbul | 16.0 | 4.00 |
| Dhaka | 24.3 | 4.93 | Manila | 15.2 | 3.90 |
| Mexico City | 22.9 | 4.79 | Rio de Janeiro | 13.8 | 3.71 |
| Sao Paulo | 22.9 | 4.79 | Los Angeles | 12.8 | 3.58 |
| Cairo | 22.4 | 4.73 | Jakarta | 12.6 | 3.55 |
| Karachi | 22.0 | 4.69 | Moscow | 12.4 | 3.52 |
| Osaka | 20.4 | 4.52 | Shenzhen | 12.1 | 3.48 |
| Lagos | 20.0 | 4.47 | Paris | 11.6 | 3.41 |
| New York | 19.3 | 4.39 | Lahore | 10.5 | 3.24 |

### Step 3

Construct a scaled group of circles as seen in the legend for **FIGURE 1**. To do this, allow one millimetre to represent one unit. Ensure your largest circle has a radius big enough to encompass the largest figure in your set of square root data. For example, the data for Tokyo's population has a square root of 6.09, so you would draw your largest circle with a radius of seven millimetres to ensure that the largest megacity, Tokyo, could be plotted with a radius of 6.09 mm.

Use a mathematical compass and ruler, and set the compass to seven millimetres. On your map base, draw a circle with a seven-millimetre radius. Your smallest circle would need a radius of three millimetres to include Lahore. All other data in the table will fit somewhere between these two sizes.

### Step 4

Map all the megacities on the base map according to these scaled proportional circles. Take care with the use of the mathematical compass to ensure that your circles are accurate and neat. Using an atlas as a reference, place circles as close as possible to the location they represent. You may use an arrow if there are too many circles near each other.

### Step 5

Complete the map with the geographical conventions of BOLTSS.

**Describing a proportional circle map**

### Step 6

To interpret your mapped data, you need to look for patterns. Where are the largest circles? Where are the smallest circles? Are there any groupings of circles? Are there any patterns that can be identified, such as radial, linear, clustered or sporadic?

## on Resources

**Video eLesson** Constructing and describing proportional circles on maps (eles-1735)

**Interactivity** Constructing and describing proportional circles on maps (int-3353)

## 14.6.3 Let me do it

Complete the following activities to practise this skill.

### 14.6 ACTIVITIES

1. Using the data on WFP funding contributors in **TABLE 2**, complete a proportional circles map to show the level of WFP funding across the world in 2018. Use the checklist for drawing proportional circles to ensure you cover all aspects of the task.

**TABLE 2** Selected funding contributors to the World Food Programme in 2018 (US$)

| | | | |
|---|---|---|---|
| United States of America | 2 541 479 166 | Italy | 35 421 720 |
| Germany | 849 141 329 | China | 32 644 030 |
| United Kingdom | 617 188 873 | Ireland | 28 191 994 |
| Saudi Arabia | 247 907 959 | France | 27 121 738 |
| Canada | 222 172 109 | Belgium | 16 053 224 |
| Sweden | 148 185 097 | Finland | 15 939 371 |
| Japan | 130 001 824 | Pakistan | 15 930 489 |
| Norway | 89 996 849 | Benin | 13 461 901 |
| Switzerland | 79 520 814 | Luxembourg | 11 153 437 |
| Netherlands | 71 558 728 | Burundi | 8 476 285 |
| Australia | 71 268 872 | New Zealand | 5 661 439 |
| Republic of Korea | 67 897 569 | South Sudan | 5 066 242 |
| Denmark | 55 940 285 | Brazil | 444 977 |
| Russian Federation | 44 882 539 | Colombia | 405 856 |

Figures current as at 28 April 2019

2. Describe the distribution pattern revealed by your map. Use the checklist for describing proportional circles to ensure you cover all aspects of the task.
3. Based on what you have learned in this SkillBuilder, apply your skills to answer the following questions.
   (a) On which continent are the countries that have made the greatest financial contribution to the WFP?
   (b) Which other region has a number of countries that have made significant contributions?
   (c) Describe the pattern of WFP contributions across the world.
   (d) Are there any countries that surprised you in their level of contribution to the WFP? Explain your answer.

Checklist

In drawing a map of proportional circles I have:

- drawn in pencil using a mathematical compass
- drawn circles that are accurate according to the ***scale*** provided in the legend
- included a key/legend to show the proportions of the circles
- included a title.

In describing a map of proportional circles, I have:

- effectively communicated differences in values or amounts of something over ***space***
- identified ***places***
- used directions.

# 14.10 Thinking Big research project: Community garden design

## Scenario

Australia's largest urban areas — Sydney, Melbourne and Brisbane — are continuing to show signs of urban sprawl. Urban sprawl inevitably affects food production as areas that were once farmland are transformed into housing and commercial developments. One strategy that can reduce the impacts of urban sprawl is the creation of urban farms. Urban farms can range in size, from small community gardens in our inner-city suburbs to large warehouses dedicated to horticulture in our outer suburbs. The best community gardens are small and provide just a moderate amount of fresh produce to the people who live in that area.

## Task

Your school may already have a small community farm or garden; your task is to research and design (and potentially build) a new, small community garden for your school or neighbourhood, to produce fresh vegetables and fruit to sell locally, or that might be used in your school canteen. Follow the steps outlined in the **Process** section to complete this task.

## Process

- Open the ProjectsPLUS application in the Resources for this topic. Click on the **Start new project** button to enter the project due date and set up your project group. Working in groups of four or five will allow you to share ideas and responsibilities for various aspects of the project. Save your settings and the project will be launched.
- Conduct some preliminary research into community gardening. Navigate to the **Research forum**, where you will find starter topics loaded to guide your research. You can add further topics to the Research forum if you wish. In the **Media centre** you will find an assessment rubric and some weblinks that will provide a starting point for your research.

- Complete the following:
  1. Identify the social and economic benefits of a small community garden.
  2. Identify and describe the features of the closest community garden to your school or home.
  3. Brainstorm the features of your garden.
     a. Which foods do you wish to grow?
     b. How much space will your garden take up?
     c. What equipment will you need and how much will this cost to set up?
     d. How do you plan to recoup the costs of the set-up?
  4. After looking at information online (use the weblinks in the Media centre as a starting point) and gardens close to your home or school, create an annotated diagram of what your garden will look like and what will be planted.
  5. Create an inventory of the equipment you will need. You can add images to your inventory for clarity and interest, if you wish.

6. Explain the potential social and economic benefits of your farm to your community. For example, you may be able to sell your produce to members of your community or provide fresh fruit or vegetables to your school restaurant or canteen.
7. OPTIONAL — Build your urban farm! If you have space, your class could combine the ideas and plans of each project group to create a community farm, providing a beneficial service to your school and wider community.

- Submit your completed design, inventory and outline of benefits to your teacher for assessment.

## Resources

**ProjectsPLUS** Thinking Big research project: Community garden design (pro-0192)

# 14.11 Review

## 14.11.1 Key knowledge summary

### 14.2 Can we feed the future world population?

- One in nine people on earth do not have enough to eat, while around a quarter of the population is overweight.
- Hunger kills more people each year than disease.
- The distribution of the world's arable land is uneven, and the fastest-growing parts of the world do not have enough land to grow sufficient food for this expanding population.
- Seventy per cent of the world's poorest people live in rural areas where trade is limited.
- Improving roads and other infrastructure would improve opportunities for trade.
- As urban areas grow, the amount of available arable land decreases.
- Farming yields are affected by a variety of factors, such as access to water, length of growing season, climate, soil types, access to finance and markets, impacts of insects and diseases, funds allocated to agricultural research, government regulations and policies, and the impact of weather events such as floods, storms and drought.
- Better use of current farming areas, better use of technology and more efficient methods of farming will improve food production.

### 14.3 Improving food production

- Strategies to improve food production include: reducing the yield gap, developing genetically modified (GM) crops, expanding aquaculture, improving infrastructure and developing sustainable intensification of cropping.
- There are some concerns over the use of GM crops, including health risks and loss of seed variety.
- In Australia, there is an experimental greenhouse farming facility at Port Augusta, which produces fresh vegetables; other developing technologies are also being tested for their application in improving efficiency in agricultural production.

### 14.4 Global food aid

- Food aid is food, money, goods and services given by wealthier, more developed nations to less developed nations for the specific purpose of helping those in need.
- The three broad types of food aid are program food aid, project food aid and relief food aid.
- The key organisation that provides food aid worldwide is the United Nations World Food Programme (WFP).
- The WFP reaches over 80 million people in more than 92 countries and supports those who are affected by natural disasters, conflict and the cycle of poverty.
- The largest donors to the WFP include the USA, Germany and the UK.
- In some cases, short-term methods of treating undernutrition need to be employed. One such method is the use of Plumpy'Nut, which has lowered mortality rates during famines in Malawi, Niger and Somalia.
- The WFP's school feeding program provides school breakfasts and lunches to children in schools; their cash vouchers allow recipients to obtain food and other essentials.

### 14.7 Do Australians need food aid?

- Over 3 million Australians live below the poverty line, including over 730 000 children.
- As the cost of living increases, food security is becoming a major issue in Australia.
- Housing costs including rent are the largest contributor to household poverty.
- For many people, programs provided by charity food agencies are a vital source of daily food needs.
- Indigenous communities in remote areas experience food security issues due to the cost of transporting and storing fresh food.

### 14.8 The effects of dietary changes on food supply

- The human diet has changed over time and continues to change; average calorie intake has increased significantly since the 1960s.
- Since 1960, diets around the world have become more similar and larger in terms of calories, protein, fat and food weight.
- Animal products, oils and sweeteners are increasingly becoming part of the diet in developing countries, just as they are in developed countries.
- As people's incomes grow in Asian nations such as China and India, per capita rice consumption is expected to decline and consumption of protein via meat sources is expected to increase accordingly.
- There is opportunity for Australia to become a significant food source for the growing nations of the Asian region.
- One-third of the world's grain crop is fed to animals to produce meat, and 15 000 litres of water are needed to produce 1 kilogram of meat. This is unsustainable. To help meet the future food needs of the world's population, changes to our diet will be necessary — away from animal sources and towards a plant-based diet.

### 14.9 Urban farms to feed urban populations

- In many locations across the world, urban farms are becoming more common.
- Over 800 million people practise urban agriculture, contributing to more than 20 per cent of global agricultural production.
- Benefits of urban farming include increased food freshness, reduced transportation costs, reuse of urban waste water and increased community spirit.
- With rapid urbanisation, urban farming will become increasingly important as a sustainable food source for growing populations.

## 14.11.2 Reflection

Complete the following to reflect on your learning.

### 14.11 ACTIVITIES

Revisit the inquiry question posed in the Overview:

**Will there come a time when we don't have enough food to feed everyone?**

1. Now that you have completed this topic, what is your view on the question? Discuss with a partner. Has your learning in this topic changed your view? If so, how?
2. Write a paragraph in response to the inquiry question, outlining your views.

### on Resources

**eWorkbook** Reflection (doc-31722)
Crossword (doc-31723)

**Interactivity** Meeting our future global food needs crossword (int-7648)

## KEY TERMS

**anthropogenic** resulting from human activity (man-made)
**aquaponics** a sustainable food production system in which waste produced by fish or other aquatic animals supplies the nutrients for plants, which in turn purify the water
**discretionary item** an item that is bought out of choice, according to one's judgement
**genetically modified** describes seeds, crops or foods whose DNA has been altered by genetic engineering techniques
**hydroponic** describes a method of growing plants using mineral nutrients, in water, without soil
**median age** the age that is in the middle of a population's age range, dividing a population into two numerically equal groups
**Ramsar site** a wetland of international importance, as defined by the Ramsar Convention — an intergovernmental treaty on the protection and sustainable use of wetlands
**urban agglomeration** the extended built-up area of a place, including suburbs and continuous urban area
**Western-style diet** eating pattern common in developed countries, with high amounts of red meat, sugar, high-fat foods, refined grains, dairy products, high-sugar drinks and processed foods
**yield gap** the gap between a certain crop's average yield and its maximum potential yield

# GEOGRAPHICAL INQUIRY: BIOMES AND FOOD SECURITY

## Scenario

Everyone in the world depends completely on the Earth's biomes for the services they provide — from our food and water supply to the regulation of our climate. Over the past 60 years, people have had a more rapid and more extensive impact on these biomes than during any other time in human history. Our demand for food, water, fibres, timber and fuel has driven these changes. The results have contributed to improvements in human wellbeing and economic development, but there has also been detrimental change to many of our major food-producing biomes.

## Task

Your team has been selected to create a website that not only grabs people's attention but also informs them of the importance of one particular biome as a producer of food, and the current threats to food production. Looking into the future, you will also suggest more sustainable ways of managing this biome.

## Process

Open the ProjectsPLUS application in the Resources for this topic. Click on the **Start new project** button to enter the project due date and set up your project group. Save your settings and the project will be launched.

- Watch the introductory project video to gain an overview of the task.
- You will need to research the characteristics of a biome and address the following four key inquiry questions:
  1. What is the biome and what are its characteristics and distribution across the world's spaces?
  2. How can we sustainably feed future populations using this biome?
  3. In what ways has food production changed this biome? Include examples and/or case studies.
  4. What are the main types of food production in this biome? How are foods produced?
- Navigate to the **Research forum** where you will find the above questions loaded as research topics. Each group should decide how to divide the workload so that each of the four inquiry questions is studied.
- In the **Media centre** you will find an assessment rubric, a website model and planning template, and some weblinks that will provide a useful starting point for your research.

### Collecting and recording your information and data

Once you have chosen your biome and divided the key questions among the team, it is time to start researching information. For your own key question, break it down into several minor questions that can become subheadings to form the structure of your research. As a group, check each person's research structure to ensure that it follows the inquiry sequence.

When researching, look for maps, graphs and images that support your key question or that of another team member. You should also look for data or statistics that you can show visually in the form of maps, diagrams or graphics.

### Analysing your information and data

Once you have researched and collected relevant information, you need to review it, ensure that you understand the material and then use it to answer your key questions. From maps and graphs, describe any patterns or trends that you identify. If using photographs, write clear annotations for each one, highlighting particular features.

Use the website model and planning template in the Media centre to help you build your website. Your website should have a home page and at least three link pages per topic. You might want to insert features such as ‘Amazing facts’ and ‘Did you know?’ into your interactive website. Remember the three-click rule in web design — you should be able to get anywhere within the website (including back to the homepage) with a maximum of three clicks.

### Communicating your findings

Use accessible website-building software to create your website. Remember that, when it comes to website design, ‘less is more’. Your mission is to engage and inform people about a topic they may never have thought about. You want people to take the time to navigate through your entire website.

Check your work thoroughly, ensuring you have used correct spelling and grammar. When satisfied with your work, launch your website for your teacher and class to explore!

### Resources

**ProjectsPLUS** Geographical inquiry: Biomes and food security (pro-0148)

# UNIT 2 GEOGRAPHIES OF INTERCONNECTION

Every text, call, purchase or trip we make connects us to information, other people and places. This interconnection is influenced by people's views or perceptions of these places. Our consumption of goods and services and our travel, recreational and cultural choices all have impacts on the environment. This has implications for future sustainability.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**17** Trade — a driving force for interconnection ..... 556

**18** Global ICT — connections, disparity and impacts ..... 583

## FIELDWORK INQUIRY: WHAT ARE THE EFFECTS OF TRAVEL IN THE LOCAL COMMUNITY?

online only

### Your task

Your team has been commissioned by the local council to compile a report evaluating the impacts of travel movements around a local school or traffic hotspot. You will need to collect, process and analyse suitable data and then devise a plan to better manage future traffic and pedestrian movement in the area.

Select your learnON format to access:

- an overview of the project task
- details of the inquiry process
- resources to guide your inquiry
- an assessment rubric.

### on Resources

**ProjectsPLUS** Fieldwork inquiry: What are the effects of travel in the local community? (pro-0149)

# 15 Connecting with our places

## 15.1 Overview

Exciting or dull, familiar or strange? How can the same place look and feel different for each person?

### 15.1.1 Introduction

Geography is the study of people and their connections with places. The way we interact with places is dynamic: we change places and places change us. In a world of nearly eight billion people, we have many different perceptions of what a place is like, how it is used and how it could be improved. More people are on the move, too. Their journeys may be on foot or by plane as they visit and interact with new places. With rapid developments in technology, some of those places may be imagined. What do our connections look like today, and how will they change tomorrow?

**on Resources**

**eWorkbook** Customisable worksheets for this topic

**Video eLesson** Making connections (eles-1722)

**LEARNING SEQUENCE**


**15.1** Overview
**15.2** 'Seeing' places
**15.3** **SkillBuilder:** Interpreting topological maps online only
**15.4** The meaning of 'land'
**15.5** Changing places
**15.6** Modes of accessing places
**15.7** Walking to connect
**15.8** **SkillBuilder:** Constructing and describing isoline maps online only
**15.9** Providing access to places for everyone
**15.10** Connecting with the world
**15.11** **Thinking Big research project:** Fieldwork — moving around our spaces online only
**15.12** **Review** online only


To access a pre-test and starter questions and receive immediate, **corrective feedback** and **sample responses** to every question, select your learnON format at www.jacplus.com.au.

# 15.2 'Seeing' places

## 15.2.1 Perceptions of places

People's **perceptions** of places are rarely the same. A person's view of a particular place or region is coloured by their own culture, experiences and values. The characteristics and significance of a place will be viewed differently by each individual, and our mental maps of the world can change daily as we have new experiences and gain new knowledge.

The biggest influences on the way we perceive places are age, gender, class, language, **ethnicity**, race, religion and values. How important a place is to us may be determined by whether we feel that place belongs to us or not, whether it is part of our tradition or history, or whether the place is totally unfamiliar.

A place can seem exciting, scary, interesting or boring depending on our experience, expectations or mood on a particular day. Our perceptions of places may also change over time according to climatic changes, conflict or economic shifts.

It is important to understand the factors that influence our perceptions of places and regions, as well as the impact that other groups and cultures have on our perceptions. If we can understand those influences, we may be able to avoid the dangers of **stereotypes** and appreciate the diversity that exists around us.

**FIGURE 1** The Kaaba in Mecca — sacred, interesting or crowded?

## 15.2.2 Mapping places

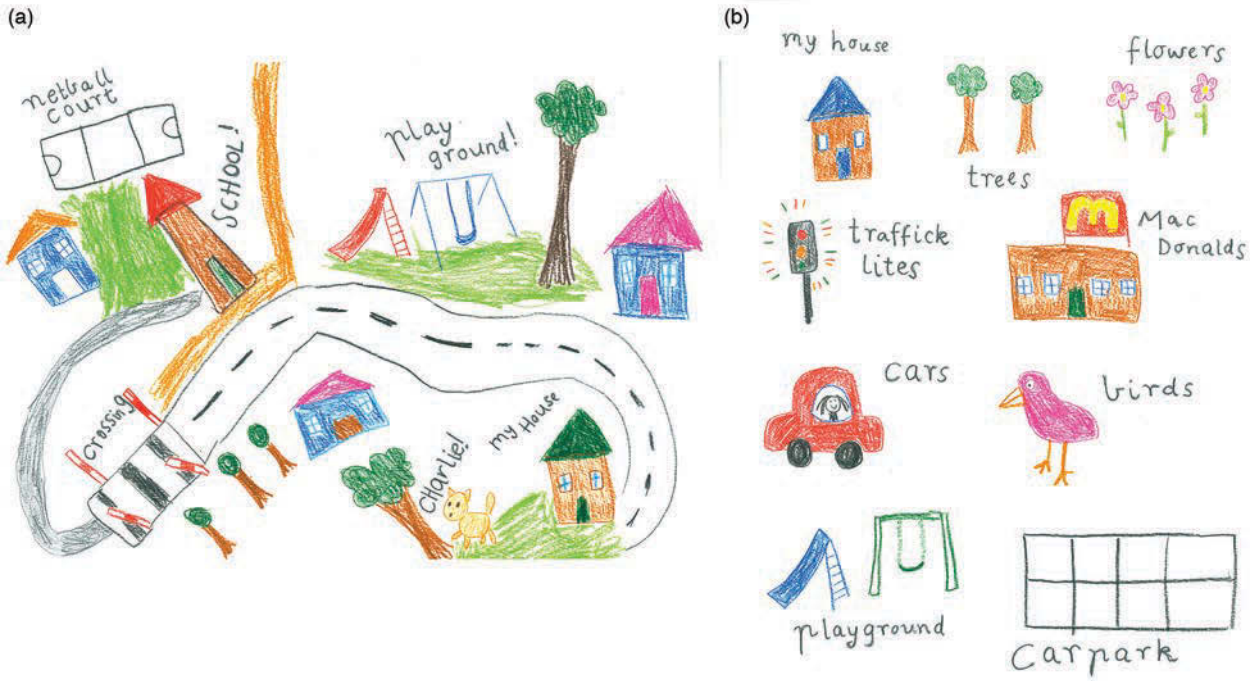
We all form an impression of our physical surroundings — even of places we have never actually been to. These are what geographers call our 'mental maps'.

Mental maps tell us how to order the space around us. There is no such thing as an accurate mental map, but people's mental maps of their immediate environment tend to be more realistic than those of places they have never visited. Think about some of the ways you use mental maps in your daily life. You may direct someone from point A to point B, telling them about landmarks they will see along the way. You may think about the quickest way to get to the city from a friend's house, imagining your route in your mind.

Our mental maps can help document our influences. Those who walk a lot may be more connected with their neighbourhood and surrounding environment, whereas those who drive will have a very different perspective in their mental map. In the 'Streets Ahead' study by VicHealth, children who walked to school drew pictures that included street names and friends' houses, and they were able to describe people and places in detail (see **FIGURE 2a**). Children who were driven to school tended to separate items from their environment, displaying them in distinct windows (see **FIGURE 2b**).

Mental maps of places we are unfamiliar with are heavily influenced by the media and stereotypical discussions. Travel helps to counteract the effects of the media and generally increases a person's knowledge of an area, providing them with a better understanding of what a place is really like.

**FIGURE 2** (a) Drawing by a child who walks to school (b) Drawing by a child who is driven to school




## on Resources

**Interactivity** My place (int-3332)

## 15.2 INQUIRY ACTIVITIES

1. Create a mental map of your journey to school on a blank sheet of A3 or A4 paper. Include as many annotations as you can, such as street names, landmarks, shop names and so on. Once you have finished, compare and contrast the ***scale***, size and accuracy of your mental map with a street directory or an ICT mapping tool. Write a paragraph that details some of the differences between your perception and reality.
   **Classifying, organising, constructing**
2. With your class, make a list of the places or landmarks in your community that you use on a regular basis. Each student should rate the importance of each on a scale of 1 to 3, with 3 being the most important. Collate the data to find out which ***places*** are most and least important to your class. Are the results as you expected? Do they match your own perceptions of how important ***places*** are, or do you have a different view from your classmates? Explain why there might be similarities or differences.
   **Classifying, organising, constructing**

## 15.2 EXERCISES

**Geographical skills key: GS1** Remembering and understanding **GS2** Describing and explaining **GS3** Comparing and contrasting **GS4** Classifying, organising, constructing **GS5** Examining, analysing, interpreting **GS6** Evaluating, predicting, proposing

### 15.2 Exercise 1: Check your understanding

1. **GS1** List the factors that may influence our perception of ***place***.
2. **GS2** From your list in question 1, which factor do you think is the most influential? Why?
3. **GS2** Why do you think the two children's maps shown in **FIGURE 2** are so different? What does it say about their ***interconnection*** with their ***environment***?
4. **GS2** What is the importance of a mental map?
5. **GS2** How does travel influence our mental maps?

### 15.2 Exercise 2: Apply your understanding

1. **GS6** How do you think the ***place*** in **FIGURE 1** is viewed by different groups? What kind of experiences or influences may affect their view? Try to provide at least three different possible perceptions for the image.
2. **GS6** The writer Henry Miller once said, 'One's destination is never a ***place***, but a new way of seeing things.' What does this quote mean to you, in light of your knowledge of various ***places***, your own travels, and what you have learned about perception?
3. **GS2** In what ways do you think your mental map is different for your route to secondary school to what it was for your route to primary school?
4. **GS2** Explain how a significant ***place*** you have been to (an ***environment*** or building) altered your sense of ***place***.
5. **GS6** Where would you like to travel? Why would you like to go there? What do you expect to see? Do you think the ***place*** will live up to your expectations?

Try these questions in learnON for instant, corrective feedback. Go to www.jacplus.com.au.

# 15.3 SkillBuilder: Interpreting topological maps

online only

## What is a topological map?

Topological maps are very simple maps, with only the most vital information included. These maps generally use pictures to identify places, are not drawn to scale and give no sense of distance. However, everything is correct in its interconnection to other points.

### Select your learnON format to access:

- an overview of the skill and its application in Geography (Tell me)
- a video and a step-by-step process to explain the skill (Show me)
- an activity and interactivity for you to practise the skill (Let me do it)
- questions to consolidate your understanding of the skill.

### on Resources

**Video eLesson** Interpreting topological maps (eles-1736)

**Interactivity** Interpreting topological maps (int-3354)

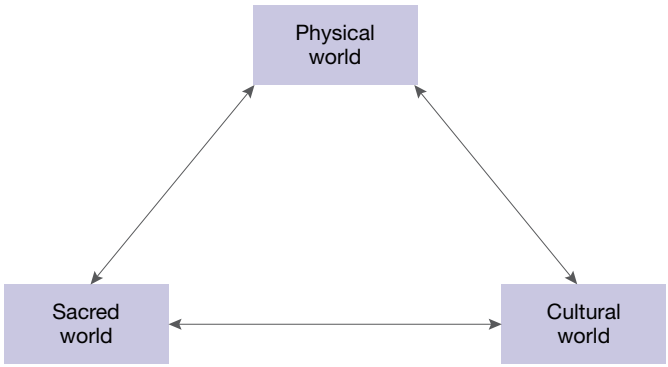
# 15.4 The meaning of 'land'

## 15.4.1 Why is land so important?

Land means different things to different people. A farmer sees land as a means of production and a source of income. A conservationist sees land as a priceless natural resource that must be protected. A property developer sees it as an area that can be divided, built upon and sold for a profit. To Indigenous Australians, land has traditionally been much more than that — it's been an enormously important part of people's culture.

Indigenous Australian peoples have been in Australia since the beginning of the Dreaming (estimated to be more than 60 000 years), adapting to survive and thrive in a changing environment. In traditional Indigenous Australian culture, the land is therefore at the core of people's wellbeing — a person's relationship with the land is one of interconnectedness across the physical, spiritual and cultural worlds (see **FIGURE 1**).

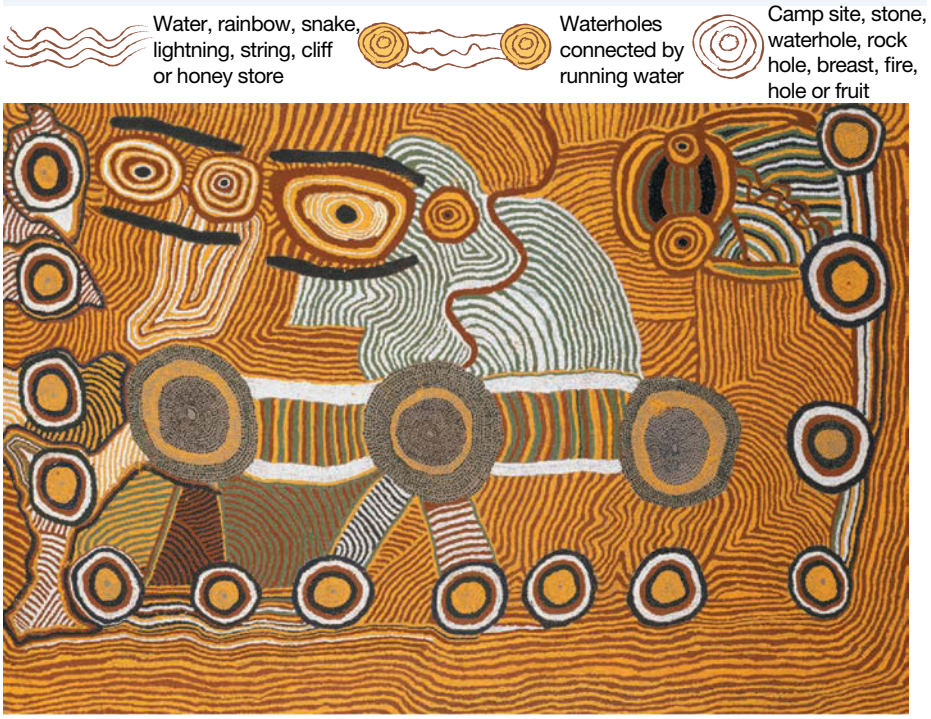
**FIGURE 1** A simplified view of Indigenous Australian peoples' relationship with the land




## 15.4.2 Indigenous Australian peoples' traditional perception of land

In Indigenous Australian culture, land is much more than the soil, rocks, hills and trees. The land, or country, represents the environment that has through history sustained Indigenous Australian peoples, their culture and way of life. Indigenous Australian peoples are diverse, made up of over 500 different groups, each with its own separate language (or dialect), laws, beliefs and customs. Language groups are made up of a number of communities, with each community belonging to a territory or traditional land. These places include features of the natural environment such as waterholes and hills, as well as distinct geographical boundaries such as rivers or mountain ranges. Natural features are often represented in Indigenous art (see **FIGURE 2**).

**FIGURE 2** A traditional Aboriginal dot painting depicting land at Kiwirrkura, 400 kilometres west of Alice Springs




***Source:*** © Donkeyman Lee Tjupurrula Kukatja (c.1921)–1994
**Tingari Dreaming at Walawala** (1989)
Synthetic polymer paint on canvas, 119.7 × 179.3 cm
Purchased from Admission Funds, 1989
National Gallery of Victoria, Melbourne
© Donkeyman Lee Tjupurrula/Licensed by VISCOPY 2013

It is the responsibility of each community to look after their country just as it looks after them. The environment holds rich meaning for Indigenous Australian peoples, whose Dreaming stories (for Aboriginal peoples) and legends (for Torres Strait Islander peoples) are present throughout the landscape, along with many sacred places for special ceremonies — men's and women's sacred sites (see **FIGURE 3**) — and resting places for ancestors that must be protected and conserved.

Each community has a **totem** that is a sign of its people's spiritual link to the land. A totem could be an animal, plant or geographical feature such as a weather pattern or rock formation. It is from this totem or land feature that an individual draws their spirituality, and they feel a special responsibility to protect it. Special ceremonies are performed at sacred places to show respect for, replenish and celebrate each totem.

## 15.4.3 Differing viewpoints on land

In traditional Indigenous Australian culture, people are custodians rather than owners of land, as the land has existed before and will exist long after its human occupants. It therefore cannot be bought or sold. The concept of property or land ownership that arrived with the Europeans contrasted greatly with the Indigenous view of place.

When the European colonies were established, many Indigenous Australian peoples were dispossessed of their land, and cultural practices were forcibly disrupted. In many cases, Indigenous communities were pushed onto marginal lands that were often not their own, not only creating conflict but severing their connection with the land from which they drew their sense of identity. However, even today among groups largely displaced from their traditional estates, that strong link to country is maintained through stories and a sense of place and spiritual connection.

James Price Point on Western Australia's Kimberley (see **FIGURE 3**) provides one illustration of these differences in viewpoint. The following are three very different views of the same area of land:

- unremarkable beach — Colin Barnett, former premier of Western Australia
- major heritage site — WA Department of Aboriginal Sites ('Major' is the Department's highest category.)
- secret Aboriginal men's business site — Goolarabooloo Aboriginal people.

When different people have vastly different views about a place, it can make the management of that land challenging.

**FIGURE 3** James Price Point, Western Australia

on Resources

**Google Earth** James Price Point, WA

## 15.4.4 Movement across and connection to the land today

Much like the international system of passports and visas to enter other countries, a similar process exists for Indigenous nations. Entry to another nation's or community's lands is by ceremony and negotiation, a practice still commonplace today, recognising the important relationship that Indigenous Australian peoples have with their country. The tradition of 'Welcome to Country' for visitors issues a shared commitment to

protect and preserve the land being visited. After being welcomed, those who walk on another's lands are expected to respect the traditional owners' rules and protocols.

The 2016 census showed that 79 per cent of Aboriginal and Torres Strait Islander peoples are living in Australia's urban environments; only 20 per cent live in rural areas. Many of those living in urban environments know the stories passed through generations, but not all have had the opportunity to visit their traditional lands to learn about and experience first-hand their people's particular connection to the land.

### DISCUSS

Brainstorm with other members of your class and construct a list of other examples of different cultural viewpoints on the same object, custom or ***place***. Consider such things as music, religious customs and foods.

**[Intercultural Capability]**

## 15.4 INQUIRY ACTIVITIES

1. Refer to **FIGURE 3** and conduct internet research to find out more about James Price Point and the conflict that developed over the proposed gas mining of the area.
   (a) Create a mind map that shows the various groups involved in the gas mining dispute. Beneath each group's name, list their interests in the site.
   (b) Consider the viewpoints about James Price Point quoted in this subtopic. How have these individuals or groups perceived the land in this ***place***?
   (c) The proposed project at James Price Point was cancelled in 2013. From your internet research, why do you think this happened? Share your findings with your classmates. Do they agree?

   **Examining, analysing, interpreting**
2. Given the strong ***interconnection*** to land, you may think that Indigenous Australians are opposed to land development. Although custodial responsibilities and care of the land are of utmost importance, many landowners strongly support economic development. As a class or in small groups, debate the arguments in favour of and against development of traditional lands. **Examining, analysing, interpreting**
3. Who are the traditional owners of the land on which you live? Have you witnessed a 'Welcome to Country' ceremony? Who performed the ceremony, and what was involved? (It may have included a speech, traditional dance or smoking ceremony.) **Describing and explaining**

## 15.4 EXERCISES

**Geographical skills key: GS1** Remembering and understanding **GS2** Describing and explaining **GS3** Comparing and contrasting **GS4** Classifying, organising, constructing **GS5** Examining, analysing, interpreting **GS6** Evaluating, predicting, proposing

### 15.4 Exercise 1: Check your understanding

1. **GS1** How do Indigenous Australian peoples perceive the land?
2. **GS2** What does land mean to you? Think about where you live or where you come from to help describe the ***interconnection*** you have with the land.
3. **GS1** With their connection to land, what responsibilities does each Indigenous clan have?
4. **GS1** How does each clan's totem connect them to the land?
5. **GS1** What is the difference in viewpoint between being a 'custodian' and being an 'owner' of the land?

### 15.4 Exercise 2: Apply your understanding

1. **GS5** Describe the natural features of the land depicted in the **FIGURE 2** artwork.
2. **GS2** The establishment of European colonies pushed Indigenous people onto marginal land. How did this ***change*** their relationship with the land?

3. **GS2** Why do you think the opening of the National Parliament is preceded by a 'Welcome to Country' ceremony?
4. **GS6** Most Indigenous Australians today are urban dwellers. Suggest how these people might connect with the land.
5. **GS5** In 2019 widening of the Western Highway near Ararat in Victoria was realigned in order to save two birthing trees. Why can this be seen as an important decision taken by the Major Road Projects Authority?

Try these questions in learnON for instant, corrective feedback. Go to www.jacplus.com.au.

# 15.5 Changing places

## 15.5.1 A chequered history

Places can change very slowly over time and space, or undergo rapid transformations. Melbourne's laneways are an excellent example of how a place once perceived as unsanitary and unsafe is now a thriving and popular part of a metropolis.

During the gold rushes of the 1850s, Melbourne's laneways were well used by people from all walks of life. Then, at the turn of the twentieth century, they began to take a turn for the worse. Criss-crossing the city, their main function was as a place for rubbish disposal. They were dark and dingy, and riddled with disease, crime, gambling houses and brothels. After two world wars, they became home to many immigrants who had nowhere else to live. The city had lost its shine.

Then, in the late twentieth century, something changed. Perhaps influenced by the regeneration that they had seen in European cities on their travels, people began to see the potential of Melbourne's neglected laneways. Small businesses such as art and craft galleries, fashion boutiques and music shops opened. Business owners leased cheap properties in the laneways, away from the main streets with their high rents. Public spaces were regenerated, adding to the city's landscape. Music and entertainment became a reason to go into the city at night.

People are living in the city again, and the CBD is now perceived as a desirable address — in 2017 its resident population was around 45 000, compared with only 700 in the 1980s. The laneways have been part of this revival.

### The laneways today

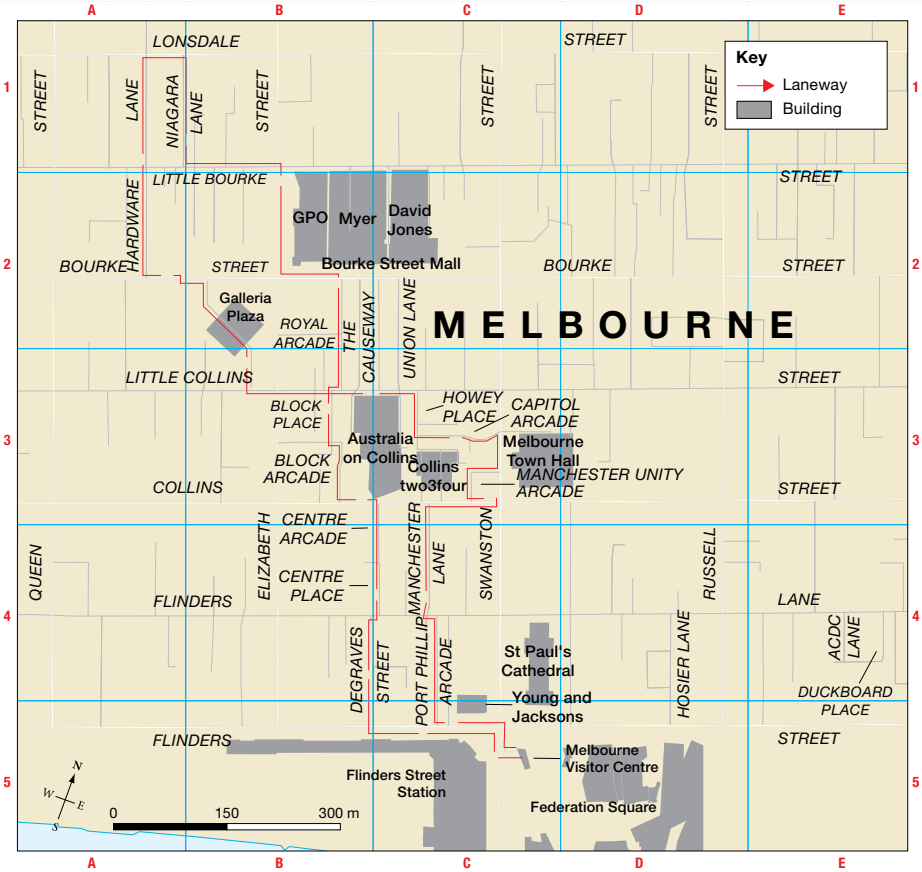
Better lighting, more cleaning and an increased number of people have all contributed to a change in the perception of Melbourne's laneways. **Street art** tours abound, and many laneway bars, cafés and restaurants are desirable places to see and be seen in. The laneways are one of Melbourne's biggest tourist drawcards, and are particularly famous for the vibrant and colourful street art that adorns their walls. Rather than simple **graffiti** or tagging, these are inspiring artworks from some of Australia's (and occasionally the world's) best street artists.

## 15.5.2 The laneway revival around Australia

The city of Brisbane has also undergone a transformation in the last few years. The Brisbane City Council has overseen the rejuvenation of some of the city's laneways from dingy, unappealing areas to pockets of discovery. Pocket parks have added greenery, and pop-up markets and pop-up restaurants have made the laneways flexible, vibrant spaces. Similarly, in Sydney, laneways have been transformed with art installations and greenery, while in Adelaide, the Laneways Master Plan 2016 has seen the renaissance of its laneways, which are now people-friendly avenues brimming with visitors, small bars and restaurants. The Market to Riverbank Link Project allows people to move, unimpeded and safe, from Adelaide Central Market to the Torrens River.

**FIGURE 1** (a) Centre Place, one of Melbourne's revitalised laneways (b) Street art in Duckboard Place, which adjoins ACDC Lane (c) Map of Melbourne's laneways and arcades (d) Named in 2004 as a tribute to iconic Australian rock band AC/DC, ACDC Lane is home to an array of street art and is a popular tourist attraction.

(c)




***Source:*** Spatial Vision

(d)

### 15.5 INQUIRY ACTIVITIES

1. What other areas in Melbourne, or your city, are now developing a laneway culture? How are they attempting to achieve this? In Melbourne, you may wish to investigate Richmond, the QV building or the Docklands precinct.
**Examining, analysing, interpreting**
2. Conduct fieldwork in your city's laneways or complete the Laneway Walk shown in the **FIGURE 1(c)** map. Are laneways ***sustainable spaces*** for people? Give a detailed personal response.
**Examining, analysing, interpreting**

### 15.5 EXERCISES

**Geographical skills key: GS1** Remembering and understanding **GS2** Describing and explaining **GS3** Comparing and contrasting **GS4** Classifying, organising, constructing **GS5** Examining, analysing, interpreting **GS6** Evaluating, predicting, proposing

#### 15.5 Exercise 1: Check your understanding

1. **GS2** Explain how the perception and uses of Melbourne's laneways have ***changed*** over time.
2. **GS2** How do laneways allow people to ***interconnect*** with the city?
3. **GS1** List three ***changes*** that have made Melbourne's laneways better connected to the city's residents.
4. **GS2** How is street art different to graffiti in the way it connects people with laneways?
5. **GS2** Describe the aspects of the laneways in **FIGURES 1(a)** and **(b)** that connect people to these ***places***.

#### 15.5 Exercise 2: Apply your understanding

1. **GS1** What economic factor helped regenerate Melbourne's laneways?
2. **GS6** Some aspects of laneways that can be improved are:
   - waste management and stormwater run-off
   - amenity and access
   - infrastructure, such as public lighting and road surfaces.

   (a) Can you think of any other ways in which laneways can be improved for public use?
   (b) Are there other ***spaces*** within a CBD ***environment*** that could be improved in order to provide new ***places*** for people to enjoy?
   (c) What would need to happen in order to make the ***places*** you identified in part (b) functional, safe and accessible?
3. **GS6** What ***changes*** do you think could be made to your neighbourhood shopping area to increase people's connection with this ***place***?
4. **GS6** What other uses could you propose for laneway ***spaces*** in addition to those outlined in this subtopic?
5. **GS6** What role in connecting people do you think laneways may hold in the future?

Try these questions in learnON for instant, corrective feedback. Go to www.jacplus.com.au.

# 15.6 Modes of accessing places

## 15.6.1 Connecting with public transport

Public transport provides a relatively low-cost way for people to interconnect with places, and can reduce traffic congestion and pollution. For students, it is often the only way to get around. Sometimes, however, it can seem like too much bother, perhaps because one service does not connect to another or because there are not enough services running, especially near your house.

Public transport use is considerably higher in capital cities than in other parts of Australia, partly because cities have relatively large populations and better public transport **infrastructure**.

### Our changing needs

With any population growth, governments at all levels must consider how they will meet changing transport needs. Technology developments have allowed us to make better decisions for our use of public transport. Many people now use the internet or an app to find the fastest way to get from A to B. Service quality,

frequency and infrastructure are generally the biggest concerns in the provision of a public transport system. However, the affordability of public transport is equally important, because many people depend upon public transport to access jobs, services, education and recreation.

## Different forms of public transport have different uses

Public Transport Victoria aims to deliver quality customer service and provide enhanced access across the range of public transport services throughout Melbourne and Victoria via its website, apps and other forms of social media.

Trains move large numbers of people over long distances at high speed in and out of the central business district (CBD). Greater traveller access is created by routes winding across the city; the fewer stops made by trains and the speed at which they can cover distance increases travellers' ability to connect with places. Melbourne's Metro Tunnel, scheduled for completion in 2025, aims to provide a **turn-up-and-go** experience and increased capacity on the network.

**FIGURE 1** Multiple lines facilitate the movement of many trains into and out of central Melbourne.

Trams operate only in areas of high population density, using relatively constant speed and infrequent stops to maximise access for middle-distance commuters.

Buses provide access where trains and trams do not go and 'infill' access for people by using a range of road levels. Buses are the most flexible of the services; they are able to change routes as there is no fixed rail system involved. Buses, and to some extent trams, ferry people to and from train stations, adjusting timetables and reorganising routes to match the train network.

**FIGURE 2** Trams take people from the city to suburbs such as Maribyrnong in Melbourne's north-west.

**FIGURE 3** Buses and trains interconnect at Ivanhoe station in Melbourne's inner north-east.

## 15.6.2 User perception of public transport

Conducted quarterly online, the Transport Opinion Survey gathers the views on public transport of 1000 adult Australians. In September 2018, 40 per cent of those surveyed said public transport was a top priority. Only 19 per cent of those surveyed thought Australia's transport systems would be better within a year; just 18 per cent felt that local public transport would be improved within a year; and 34 per cent of those surveyed thought the transport system they were using would be better in five years' time.

A study in the Netherlands revealed that people perceive that their travel time on public transport takes 2.3 times as long as driving a car to make the same journey. People also perceive a continuous journey (involving, say, only one train) as taking less time than a journey that involves transfers and waiting times, even if the second journey is actually shorter. People estimate the waiting time to be about two to three times longer than the actual time. So, a wait of 10 minutes is perceived as 20 to 30 minutes. Factors that influence this perception include:

- uncertainty about when the next bus or train will arrive
- weather conditions
- familiarity with the journey.

Given that travellers tend to consider non-vehicle travel time (walking, waiting, transferring) to be more difficult than in-vehicle travel time, this has consequences when trying to attract people to public transport. If people think their travel time by car is 60 minutes, they perceive their travel time by public transport for that same trip to be almost double: 117 minutes.

## 15.6.3 Active travel

Cycling and walking to get to work, to visit friends and for recreation have become mainstream modes of transport in the twenty-first century. In particular, in Melbourne's inner suburbs more than 30 per cent of those going to work now choose to use **active travel**.

**FIGURE 4** Shared pathways are common.

Melbourne's bicycle paths and trails continue to grow in number, providing increased access to places. **FIGURE 5** maps the 'spiderweb' of pathways around the Melbourne region.

**FIGURE 5** Melbourne's bike paths

***Source:*** Map courtesy the Bike Paths and Rail trail Guide (Victoria) http://www.bikepaths.com.au

To encourage active travel, railway stations — both new and old — are installing secure bicycle storage areas (called parkiteers; see **FIGURE 6**). Authorities are revising road layouts and regulations to provide a secure riding environment. Manufacturers are also designing electric bicycles to make access available to a wider range of people. Bicycles can be picked up at points within the CBD of many capital cities.

The choice to access places by public transport, active travel or vehicle keeps people connected and strengthens interconnection in a community.

**FIGURE 6** Signage at a railway station encouraging the use of parkiteers

## on Resources

**Interactivity** Off the rails (int-3333)

## 15.6 INQUIRY ACTIVITY

**a.** Choose a location on the other side of town. Using a rail, bus or other public transport provider website, find out how long it would take you to travel from your school or home to this point on:
(i) Monday morning at 9 am
(ii) Sunday evening at 6 pm.

**b.** What did you notice about the travel times? Were they different? Why do you think this is?

**c.** Create a map of your journey, using an appropriate key, to show rail, bus and other modes of transport used.

**Examining, analysing, interpreting**
**Classifying, organising, constructing**

## 15.6 EXERCISES

**Geographical skills key: GS1** Remembering and understanding **GS2** Describing and explaining **GS3** Comparing and contrasting **GS4** Classifying, organising, constructing **GS5** Examining, analysing, interpreting **GS6** Evaluating, predicting, proposing

### 15.6 Exercise 1: Check your understanding

1. **GS1** Why is public transport perceived by governments as being very important?
2. **GS1** Write a definition for the term *active travel*.

3. **GS2** Do you use public transport? Why or why not?
   (a) How interconnected is the ***place*** in which you live? What types of public transport are available to you? What distances do you need to travel to reach a bus stop or a train station?
   (b) What types of public transport are required for you to access your closest international airport?
   (c) How do you perceive the quality of your public transport? Consider accessibility, timeliness, cleanliness, comfort, ticketing, safety, convenience and information about the service. Explain you answer.
4. **GS2** Explain how each form of public transport provides access for different groups in our community. Consider students, workers, senior citizens, those with a disability and tourists. **FIGURES 1, 2** and **3** will provide some additional ideas.
5. **GS2** One of the most significant aspects of public transport is the ***interconnection*** between the different forms of transport. Why is ***interconnection*** important?

### 15.6 Exercise 2: Apply your understanding

1. **GS2** Why do people perceive movement by car as providing preferable connectivity compared to the use of public transport?
2. **GS2** How do you use technology in relation to your transport needs?
3. **GS5** Using **FIGURE 5**, describe the accessibility by bicycle of the following ***places*** to the Melbourne CBD:
   (a) Frankston
   (b) Altona
   (c) Epping.
4. **GS6** Suggest how the development of electric cars and Uber travel may ***change*** the way people ***interconnect***.
5. **GS6** There are frequent announcements by the Victorian government on developments in the public transport system. For each public transport type and for each form of active travel, suggest two ***changes*** that might occur in the next ten years. Compare your suggestions with those of others in your class.

Try these questions in learnON for instant, corrective feedback. Go to www.jacplus.com.au.

# 15.7 Walking to connect

## 15.7.1 The '20-minute neighbourhood'

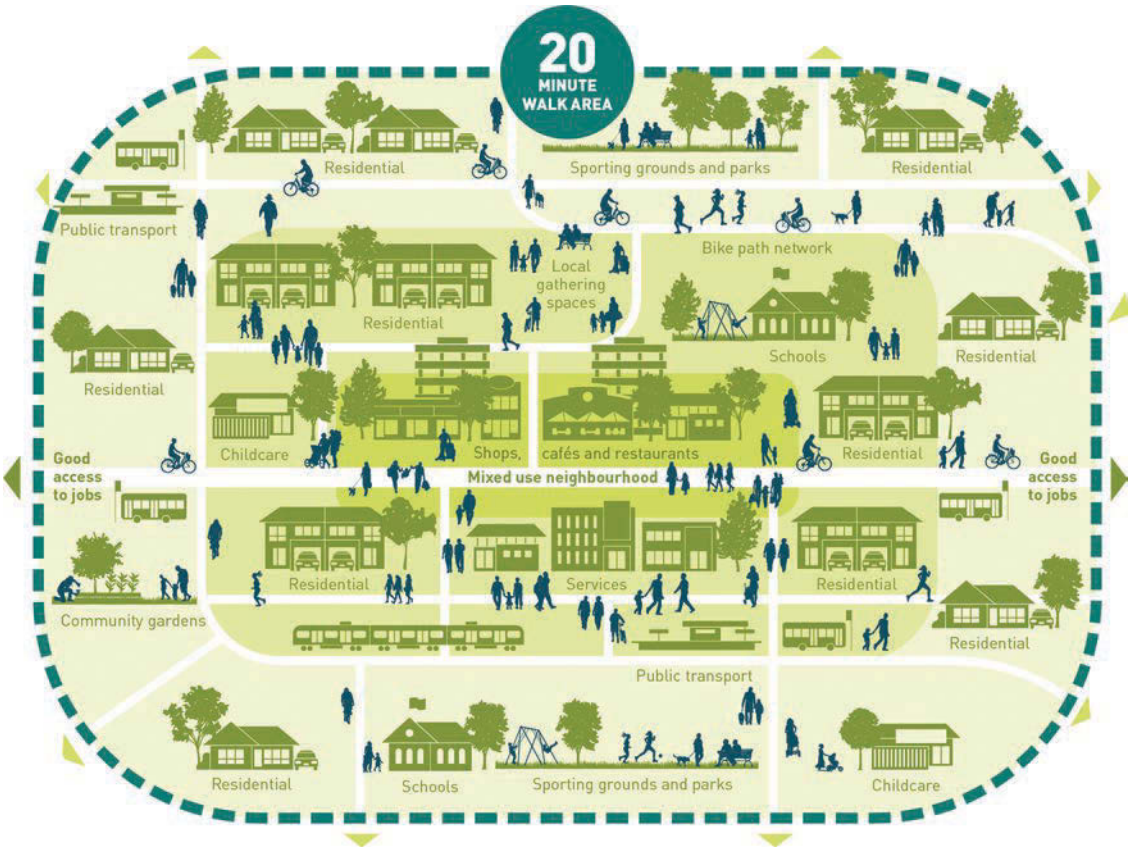
Urban planners around the world are focusing on human wellbeing as a key to the structure of new suburbs and revitalisation of existing suburbs. People's perceptions of what will make 'life good' and what makes a 'good place' to live in are being taken into account. Being connected to other places and people is a high priority.

The city of Melbourne is unique, with access to coastal areas, a mild climate, a range of topography, distinctive suburbs or places, considerable tree cover and well-designed buildings and streets. As part of 'Plan Melbourne 2017–2050', the concept of the '20-minute neighbourhood' is currently being implemented.

As **FIGURE 1** shows, the '20-minute neighbourhood' is about improving the liveability of a place. This means being able to walk around your neighbourhood and within 20 minutes being able to access your daily needs — for example transport, a medical clinic, primary schools. Factors that make a good neighbourhood walkable are:

- *a centre* — either as a street or public space
- *people* — enough people for businesses to be successful and for public transport frequency
- *mixed income and mixed use* — a range of housing types
- *parks and public space* — for people to gather and to play
- *pedestrian design* — foot access (cars parked off street)
- *schools and workplaces* — close enough to walk
- *complete streets* — suited to bicycles and walking, and allowing easy movement across the place.

**FIGURE 1** The components of the '20-minute neighbourhood' concept

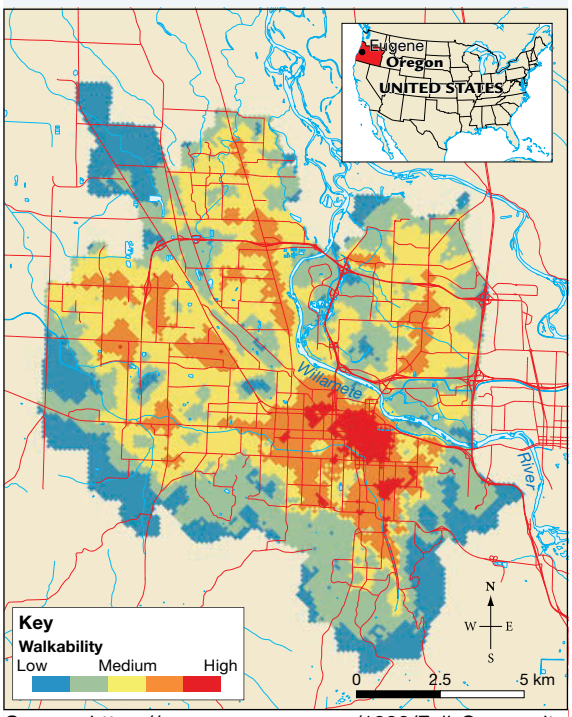



## 15.7.2 The importance of walkability

Walkability provides a range of benefits to any community. People's health has been shown to improve if they walk on a regular basis. In particular, the risk of heart disease and diabetes is reduced. When people walk regularly, they are often 2.5 to 4.5 kilograms lighter than they would otherwise be. There is a reduced environmental impact with fewer cars on the road: feet produce zero per cent carbon dioxide emissions! Communities benefit when people have more time available for involvement in community activities. Up to 10 per cent of a person's time spent in a community activity is lost when a car is used for just 10 minutes of commuting. Families also benefit financially, because a car is often the second largest household expense, and housing prices can increase by 20 per cent when located in places with a high walkability score.

In Eugene, Oregon, in the United States, areas closest to the centre of the city were shown to have a higher walkability rating than those on the rural–urban fringe (see **FIGURE 2**).

**FIGURE 2** Eugene, Oregon walkability ratings, with the most walkable areas shown in red




***Source:*** https://www.eugene-or.gov/1229/Full-Composite-Heat-Map

Key elements considered in the mapping and overlaying of Eugene shown in **FIGURE 2** were:

- *density* — the density of the population and the number of employees
- *destinations* — bus stops, shops, primary schools, corner stores, parks and other goods and services
- *distance* — intersection density, bicycle facilities, paths
- *aesthetics* — tree cover, road width, condition of properties along routes
- *safety and perceived safety* — traffic speed, path condition, signalled crossings
- *socioeconomics* — distribution of income, education, age and background.

## 15.7.3 Melbourne's accessible neighbourhoods

One US company developed the Walkability Index, which considers a range of features using the Eugene, Oregon experience. **TABLE 1** shows the rating scale by which places are categorised using the Walkability Index.

**TABLE 1** The classifications within the Walkability Index

| Walkability rating | Access to the neighbourhood | Tasks able to be completed |
|---|---|---|
| 90–100 | Walker's paradise | Daily errands do not require a car |
| 70–89 | Very walkable | Most errands done by foot |
| 50–69 | Somewhat walkable | Some errands done by foot |
| 25–49 | Car dependent | Most errands require a car |
| 0–24 | Car dependent | Almost all errands require a car |

Using this Walkability Index, in 2016 the suburbs of Melbourne that were classified as a walker's paradise (scoring 90–100 on the index rating) included Carlton, Fitzroy, Melbourne CBD, Albert Park, South Yarra, South Melbourne, Collingwood, Southbank and West Melbourne.

## 15.7.4 Accessible neighbourhoods of the future

Property developers across all major cities in Australia and the developed world have realised the importance of human wellbeing. New estates now focus on providing parklands (often with a water feature); local shopping centres; safe surroundings; foot and bicycle paths; and peaceful, clean, green environments. Advertising for these estates centres on building communities, with young families living an active lifestyle.

**FIGURE 3** Development of the Point Cook estate

***Source:*** Central Equity, Featherbrook Point Cook

Planners and developers in established suburbs are seeking to 'infill' the suburbs, creating and re-creating to form 'the 20-minute neighbourhood' around activity hubs and avoid further encroachment on farming land for urban development. The challenge is to have about a 70 per cent increase in housing and population being in the local area hubs. Community and transport infrastructure will need to be revised to achieve this target. In Melbourne, activity hub development can be found at Box Hill, Broadmeadows, Dandenong, Epping, Footscray, Fountain Gate/Narre Warren, Frankston, Ringwood and Sunshine.

**FIGURE 4** Box Hill is an important transport hub for trains, trams and buses. There are also a large shopping centre and public and private hospital services in the area. Significant infill development has been undertaken here, with numerous apartment buildings constructed along the major road that runs through the suburb.

## 15.7 INQUIRY ACTIVITIES

1. Draw a topological map (see subtopic 15.3) of the distances you have to travel from your home to the bus stop or train station, to school, to the shopping centre, to the park where you meet your friends, to a ***place*** for sporting activities, and to any other significant locations in your life. Discuss in class how teenagers perceive the distances travelled. **Classifying, organising, constructing**
2. Using the internet, search 'How Walk Score Works' and find:
   (a) the walkability rating for Australia's major cities. Comment on their scores.
   (b) the walkability rating for your ***place***/home. Can you explain why your ***place*** has been given its rating?
   (c) the walkability rating of a rural ***environment*** that you know. Explain why rural areas might be more car dependent. **Examining, analysing, interpreting**
3. On a map of Melbourne, find the suburbs with a high walkability rating. Describe the locations of these ***places***. **Examining, analysing, interpreting**
4. In a small group, draw a plan for a 20-minute neighbourhood that you would like to access and live in. Discuss and consider each group member's perception of which features make for wellbeing in a community. **Classifying, organising, constructing [Personal and Social Capability]**

## 15.7 EXERCISES

**Geographical skills key: GS1** Remembering and understanding **GS2** Describing and explaining **GS3** Comparing and contrasting **GS4** Classifying, organising, constructing **GS5** Examining, analysing, interpreting **GS6** Evaluating, predicting, proposing

### 15.7 Exercise 1: Check your understanding

1. **GS2** How do urban planners use connectivity to make people feel good?
2. **GS1** What is the purpose of a 20-minute neighbourhood?
3. **GS1** Recall and list the features of the 20-minute neighbourhood.
4. **GS2** Using **FIGURE 2**, describe the distribution of the different levels of walkability in Eugene, Oregon.
5. **GS1** What are the benefits of walking for connectivity?

### 15.7 Exercise 2: Apply your understanding

1. **GS6** Suggest factors that may influence the location of the high level of walkability in Eugene, Oregon.
2. **GS6** To avoid expansion of Eugene:
   (a) Suggest two areas of the city that the city planners and developers might be looking at to improve the level of access. Provide reasons for your choice.
   (b) Suggest a ***change*** that can be implemented in the short term, medium term and long term to improve access within the city.
3. **GS6** Many parents don't allow their children to walk to school any more. Make a list of the safety issues that parents perceive about access to school.
4. **GS6** Using **TABLE 1**, where would you rank your neighbourhood in terms of walkabiity? Suggest two ways in which your neighbourhood's walkability rating could be raised.
5. **GS6** The 'infill' of current neighbourhoods will make suburbs more connected. How can this be achieved in large cities?

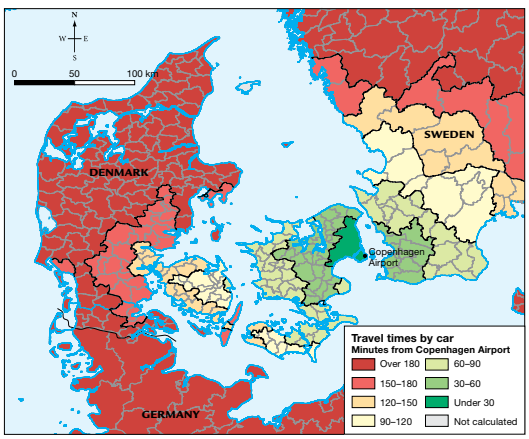
Try these questions in learnON for instant, corrective feedback. Go to www.jacplus.com.au.

# 15.8 SkillBuilder: Constructing and describing isoline maps

online only

## What is an isoline map?

An isoline map shows lines that join all the places with the same value. Isoline maps show gradual change in one type of data over a continuous area. Isolines do not cross or touch each other. The same difference is always shown between each isoline and the next over the entire map.




### Select your learnON format to access:

- an overview of the skill and its application in Geography (Tell me)
- a video and a step-by-step process to explain the skill (Show me)
- an activity and interactivity for you to practise the skill (Let me do it)
- questions to consolidate your understanding of the skill.

### on Resources

**Video eLesson** Constructing and describing isoline maps (eles-1737)

**Interactivity** Constructing and describing isoline maps (int-3355)

# 15.9 Providing access to places for everyone

## 15.9.1 The challenge of access in cities

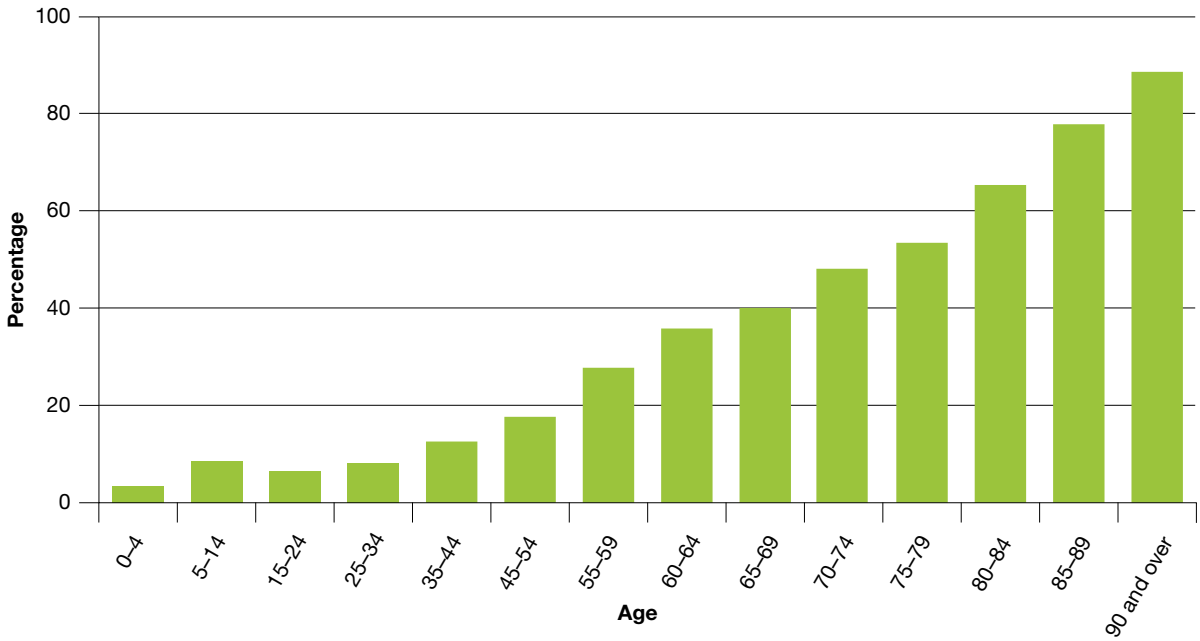
Many of us take it for granted that we can walk to the shops, hop on a bus and go to the city centre, or find out when the next train is departing. *Accessibility* refers to people living with a **disability** also having the same access to the physical environment, transportation, information and communication technologies, and other facilities and services. Everyone should feel connected with society, rather than separated from it.

Our cities can be a depressing obstacle course for millions of people. For those living with a disability, negotiating a flight of stairs, opening a door or even reaching a lift button can sometimes be impossible. Have you ever considered how difficult our cities can be for some of their citizens and visitors?

## 15.9.2 Providing equal access

One in five Australians have reported a disability. In Australia 51 per cent of people over 65 years and 12.5 per cent under 65 report a disability. A 2015 survey revealed that 36 per cent of Australian households include a person living with a disability. Equal access, particularly to transport, is essential for equality. Limiting transport can mean limiting people's opportunities.

**FIGURE 1** Percentage of Australians with a reported disability




A disability can take many forms, including:

- *walking disabilities* — cannot use stairs easily, moves slowly, needs wider spaces (due to crutches, for example)
- *manipulatory disabilities* — has difficulty in operating handles, vending or ticket machines
- *vision impairment* — has trouble distinguishing between road and pavement, identifying platform edges, knowing whether a lift has arrived at the correct floor, seeing signs or directions
- *hearing problems* — has difficulty hearing announcements about delays, cancellations or emergencies, or hearing an approaching vehicle
- *intellectual disabilities* — is challenged by being in an unfamiliar setting, or coping with cancellations or complex timetables

- *psychiatric disabilities* — experiences stress, anxiety or confusion in crowded situations or encounters with other travellers
- *wheelchair disabilities* — difficulty moving about when no ramps are available, when there are insufficient or badly designed parking spaces, or when there is not enough room to manoeuvre equipment.

There are additional (and sometimes less obvious) disabilities to consider, such as asthma, epilepsy, obesity and diabetes, and temporary disabilities that result from injuries. When considering transport disadvantage, we must also include elderly people, low-income earners, children and outer-urban dwellers, who experience this to some degree as well. Parents with prams or strollers may also be affected.

**FIGURE 2** Access for everyone, regardless of mobility, is essential.

## 15.9.3 A city for everyone

In 2019, the Dutch city of Breda won the European Union's Access City award — a prize for the most accessible European city for people with disabilities. The annual honour aims to award efforts to improve accessibility in the urban environment and to foster equal participation of people living with disabilities. People living with disabilities and their representative organisations were heavily involved in the planning process. Breda won the award for:

- its 'Breda for everyone' municipal website that was tested for its level of accessibility
- making its historic medieval city centre accessible to all, including tourists
- developing the accessibility of its museums, sports centres, theatres, community centres, shops and restaurants
- providing an accessibility fund to assist organisations to make changes to infrastructure
- its commitment to the inclusion of everyone.

Such measures benefit the entire community as well as the economy, because when everyone has access to places of work, people feel included and government social support systems are not overloaded.

## 15.9.4 Accessing our cities

Victoria is keen to have an inclusive environment for all. 'Absolutely Everyone', the Victorian state disability plan 2017–2020, has four pillars:

- inclusive communities
- health, housing and wellbeing
- fairness and safety
- contributing lives.

Regional cities in Victoria are also conscious of the need to cater for the disabled. The Rural Access Program undertook work in Ballarat to develop a **mobility** map that showed safe, accessible, easy and enjoyable ways to move and connect with the city.

### DISCUSS

Investigate your local area to discover to what extent people with disabilities have fair and equitable access to community facilities. (You might like to consider such things as car parking, public transport, access to buildings, ease of movement and safety.) **[Ethical Capability]**

**FIGURE 3** Providing mobility within the central business district of Ballarat

***Source:*** City of Ballarat

## 15.9 INQUIRY ACTIVITY

In small groups, devise a trail in a local ***environment*** for people with disabilities. You might choose your school or a local park, for example. You might also decide what types of disabilities you are planning for, and travel around the site considering the potential needs of the visitor. Consider the following:

- Where are hazards located?
- Which areas might the visitor find difficult to navigate?
- What ***places*** might be of interest to them?

Draw an annotated trail map (only for users who are not sight impaired) to highlight these various features. To empathise more fully with the needs of others, students could take it in turns to navigate their way around the designated site on crutches, in a wheelchair or blindfolded. **Classifying, organising, constructing**

## 15.9 EXERCISES

**Geographical skills key: GS1** Remembering and understanding **GS2** Describing and explaining **GS3** Comparing and contrasting **GS4** Classifying, organising, constructing **GS5** Examining, analysing, interpreting **GS6** Evaluating, predicting, proposing

### 15.9 Exercise 1: Check your understanding

1. **GS1** What are the various disabilities that may affect someone's access to public transport?
2. **GS2** Explain what you understand by the term *accessibility* regarding people living with a disability.
3. **GS5** Refer to **FIGURE 1**. Approximately what percentage of people with a reported disability are the same age as:
   (a) you
   (b) your parents
   (c) your grandparents?
   Use figures and percentages in your answer.
4. **GS1** What is the rate of disability within Australia's population? Did this figure surprise you? Explain.
5. **GS1** Why is the European Union's annual Access City Award important?

### 15.9 Exercise 2: Apply your understanding

1. **GS6** Explain what types of difficulties someone living with a disability may encounter while using public transport. Consider different types of disability and the challenges experienced.
2. **GS5** Using the **FIGURE 3** map of the Ballarat CBD, describe:
   - the accessibility level of Bridge Mall
   - movement around Centrelink
   - travel along Mair Street.
3. **GS6** How would you rank access in the Ballarat CBD? Explain your ranking.
4. **GS6** Rate your neighbourhood (with 5 being 'excellent' and 1 being 'poor') for its accessibility for people living with a disability. Suggest two ***changes*** that would improve movement for these members of your community.
5. **GS2** Explain how the four key pillars of Victoria's 'Absolutely Everyone' plan could ***change*** the lives of people living with a disability.

Try these questions in learnON for instant, corrective feedback. Go to www.jacplus.com.au.

# 15.10 Connecting with the world

## 15.10.1 How connected are we?

Our world is shrinking. We are more connected than ever before thanks to waterways that have drawn distant places together with improved shipping access, increased and cheaper flights and the digital age. These have brought the world closer to us.

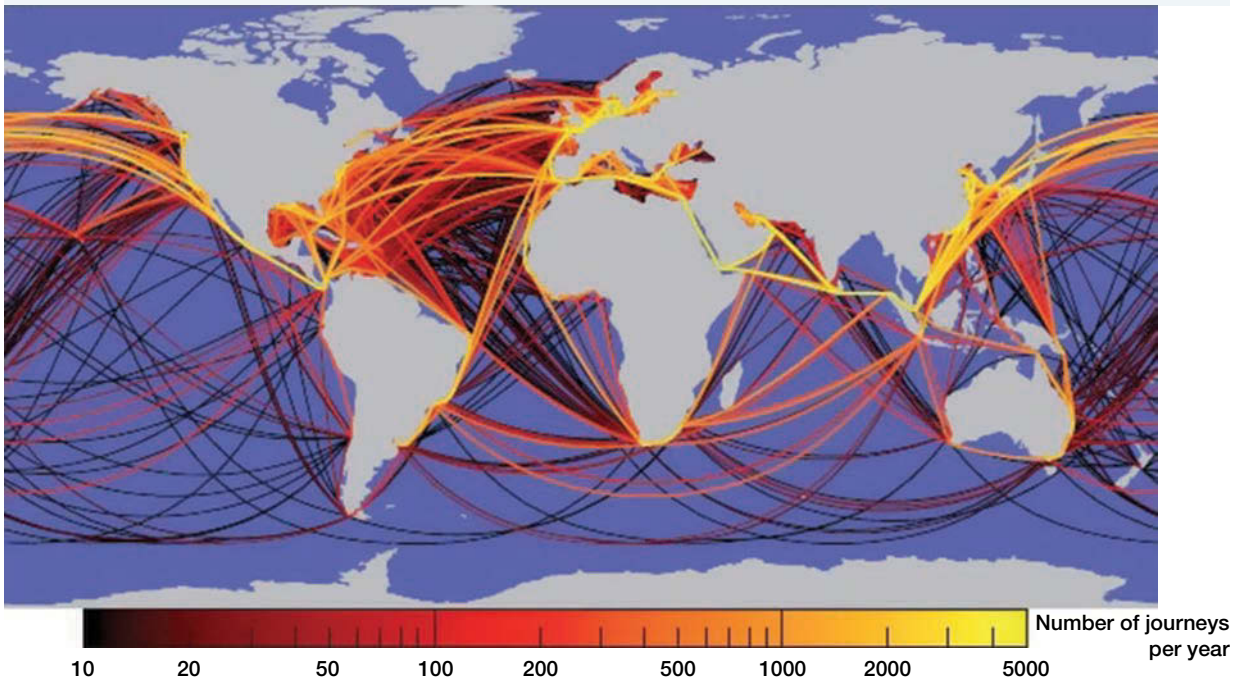
## 15.10.2 How do maritime highways connect places?

Technological developments have seen the reduction in time for a ship to travel the world. In 2015, the upgraded Panama Canal, which links the Pacific Ocean and the Atlantic Ocean, opened its new, larger locks to accommodate the super ships now plying the oceans. A second Suez Canal lane opened in 2015 and the original canal was deepened to provide access from the Mediterranean Sea to the Red Sea and Indian Ocean. The Straits of Malacca provide access for about 33 per cent of all European container ships accessing East Asia in response to the demand for raw materials and commodities, in particular in China.

Australia is no longer a sailing time of 6 months from the United Kingdom, as it once was; with faster, bigger ships, the distance can be covered in about 33 days. Reduced travel times and reduced costs are a boon for the export of Australian agricultural produce and mining resources, and for the import of products to improve our wellbeing, such as bulky, manufactured goods. Reduced transport costs have benefited global trade.

**FIGURE 1** Loading containers for global trade

**FIGURE 2** The density of major global cargo shipping routes




Cruise ships sail the coastlines of many countries and across local regions, taking tourists on affordable holidays to a variety of places on each voyage. In 2019 passenger numbers of around 30 million people demonstrated the increasing popularity of this mode of travel. Cruise ships continue to grow larger in size, with more berths and a greater range of on-board activities. Access to places has never been easier.

## 15.10.3 How do we connect through the air?

In 2018, 4.3 billion people flew safely on 38.1 million flights for the purposes of business, tourism or reconnection with relatives. **FIGURE 3** shows how the long-haul aeroplanes, such as the Airbus A380 with its wide body and double-deck carrying capacity of 853 passengers, hub in and out of key airports, leaving smaller jets to distribute passengers across a country using smaller airstrips. These large aeroplanes have reduced the time needed to access places; the Airbus 380 is able to access London from Melbourne in about 22 hours with one stop. Airlines are vying for technologically apt aircraft such as the Dreamliner, which flies long haul, non-stop to London from Perth, Western Australia, in under 17 hours. Constant monitoring of the success levels of routes sees frequent adjustments to schedules and discounts offered on flights. Australians are able to access the United States non-stop (Los Angeles, Dallas) with most flights less than A$1000 each way, and often discounted heavily too.

Air cargo flights also provide access for trade delivering perishable items quickly around the world. The Netherlands trades about 50 per cent of all cut flowers moved around the world. Asparagus from Victoria is sent to Japan, Singapore, Hong Kong, South Korea and Taiwan; it arrives in Japan by air 30 hours after being harvested. Australia imports by air freight high-value 'just-in-time' manufacturing components such as computer and machinery parts. Online shopping can see an order placed in Melbourne via a US site, with the product air-freighted from Hong Kong and delivered in three days!

Technological developments in transport will in the future continue to increase the interconnection of people around the world, making our connections easier, quicker and more frequent.

**FIGURE 3** Flight patterns vary according to the time of day.

### 15.10 INQUIRY ACTIVITY

Use the internet to search 'World traffic pattern over a 24-hour period' and watch major airlines hub into major cities over the course of one day.

**a.** What do you notice about the places being accessed?
**b.** Does access change between day and night?
**c.** Can you explain why international flights leave Australia late at night or early in the morning?

**Examining, analysing, interpreting**

## 15.10 EXERCISES

**Geographical skills key: GS1** Remembering and understanding **GS2** Describing and explaining **GS3** Comparing and contrasting **GS4** Classifying, organising, constructing **GS5** Examining, analysing, interpreting **GS6** Evaluating, predicting, proposing

### 15.10 Exercise 1: Check your understanding

1. **GS1** How has the opening of the waterways improved access to places for the cargo ships?
2. **GS2** What is the value of air travel for passengers?
3. **GS2** Refer to **FIGURE 2**. Describe the areas where cargo shipping routes are dense. Is there any connection with the developed world?
4. **GS2** Australia is circumnavigated by shipping routes. Can you explain why this might be?
5. **GS2** What do 'just-in-time' manufacturing components show about global connections?

### 15.10 Exercise 2: Apply your understanding

1. **GS6** Will Australia's perceived remoteness be further reduced by 2030? Suggest how this might be.
2. **GS2** Describe how a person can connect from Los Angeles, USA to Mildura, Victoria by air.
3. **GS6** International conflicts can have an impact on connecting goods for trade. How might a dispute in the Pacific Ocean affect Australian trade?
4. **GS2** Explain why cruise ship holidays have become so popular.
5. **GS2** Our world is shrinking. Explain this statement in relation to ***interconnections***.

Try these questions in learnON for instant, corrective feedback. Go to www.jacplus.com.au.

# 15.11 Thinking Big research project: Fieldwork — moving around our spaces

online only

## SCENARIO

You have been selected as part of a student task force to investigate the problems created by movement of students in and around the school canteen throughout the day. You will conduct fieldwork in the school grounds to assess student movement patterns, identify impacts and formulate possible solutions.

### Select your learnON format to access:

- the full project scenario
- details of the project task
- resources to guide your project work
- an assessment rubric

### on Resources

**projectsPLUS** Thinking Big research project: Fieldwork — moving around our spaces (pro-0193)

# 15.12 Review

online only

## 15.12.1 Key knowledge summary

Use this dot point summary to review the content covered in this topic.

## 15.12.2 Reflection

Reflect on your learning using the activities and resources provided.

### on Resources

**eWorkbook** Reflection (doc-31724)
Crossword (doc-31725)
**Interactivity** Connecting with our places crossword (int-7649)

## KEY TERMS

**active travel** making journeys via physically active means such as cycling or walking
**disability** a functional limitation in an individual, caused by physical, mental or sensory impairment
**ethnicity** cultural factors such as nationality, culture, ancestry, language and beliefs
**graffiti** the marking of another person's property without permission; it can include tags, stencils and murals
**infrastructure** the facilities, services and installations needed for a society to function, such as transportation and communications systems, water pipes and power lines
**mobility** the ability to move or be moved freely and easily
**perception** the process by which people translate sensory input into a view of the world around them
**stereotype** widely held but oversimplified idea of a type of person or thing
**street art** artistic work done with permission from both the person who owns the property on which the work is being done and the local council
**totem** an animal, plant, landscape feature or weather pattern that identifies an individual's connection to the land
**turn-up-and-go** frequent and regular transport service such that reference to a timetable is not required; e.g. users know that a train will run every 10 minutes

# 15.3 SkillBuilder: Interpreting topological maps

## 15.3.1 Tell me

### What is a topological map?

Topological maps are very simple maps, with only the most vital information included. These maps generally:

- use pictures to identify places
- are not drawn to scale
- give no sense of distance
- give general directions
- exaggerate the size of places
- do not show exact routes.

However, everything is correct in its interconnection to other points.

### How is a topological map useful?

A topological map is useful as a mental map to help you locate important features. Large areas can be drawn to show the viewer the important points. You could use these in class as summary maps of a topic, or as quick sketch maps to illustrate a point or to clarify something for another student.

They are also useful for:

- giving tourists a snapshot of where features are located
- quickly showing how to get to a place
- showing very large transport routes such as bus and train routes across a city
- planning international flights.

A good interpretation of a topological map:

- identifies and communicates key features
- clearly represents and communicates the data.

## 15.3.2 Show me

### How to use a topological map

#### You will need:

- a topological map.

#### Model

The topological map of central Paris shown in **FIGURE 1** is designed for people moving around Paris as tourists. It provides an indication of the major sites that tourists ought to visit, and allows them to see on which side of the river different monuments are found. For example, you would expect to find the Champs-Élysées and the Louvre on the same side of the river and quite close to each other. Major routes are given between monuments but these routes may not be the shortest distance, as there is no scale with the map. Thus, it is hard to judge the best way to get from the Eiffel Tower to Notre Dame Cathedral. The actual direction from one monument to the other is unlikely to be exact, because the lack of scale causes features to become distorted. This type of map, however, might help tourists plan their sightseeing, because it gives the user a general idea of where things are located. If going from the Eiffel Tower to the Arc de Triomphe, is it better to stroll along the river and up a major route?

#### Procedure

#### Step 1

Look all around the topological map and identify the key features being shown. In **FIGURE 1**, almost 30 major tourist attractions of Paris are shown as drawings of each place. Some drawings are larger than others to show the significance and the popularity of these places with tourists.

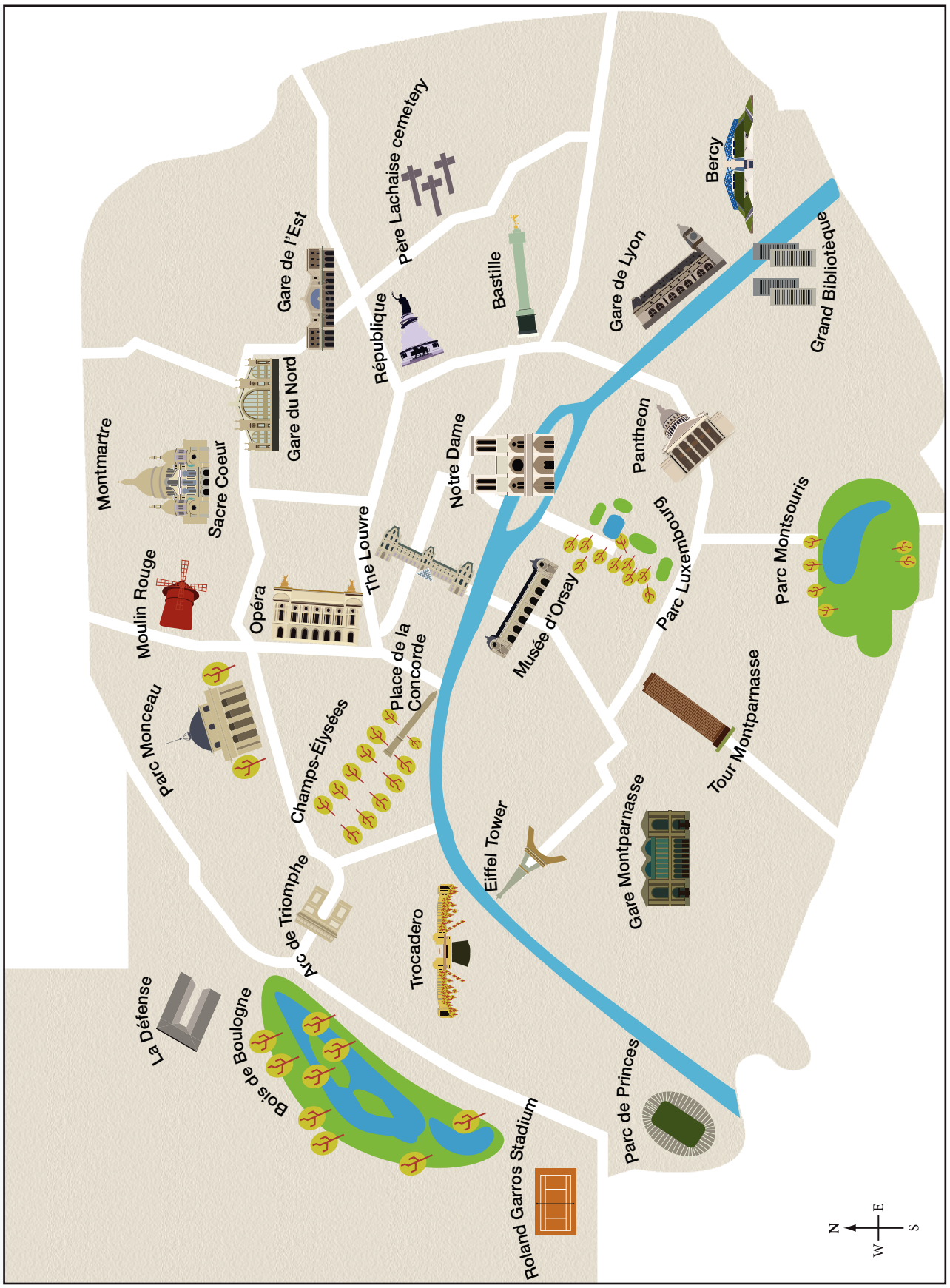



**FIGURE 1** A tourist map of Paris and its monuments

### Step 2

Think about the interconnection between features. On the map in **FIGURE 1**, the interconnection between the places is that each one is a Paris tourist attraction. Roads are shown, but these may not be the optimum route to travel. This pathway represents just one way to connect between the places.

### Step 3

Since there is no scale, could a tourist walk between all these places? Think about possible distances. Consider the distance from the airport to the city centre. A tourist may well have travelled this route and be able to give the map a sense of scale. Could you see all these monuments in a day? The answer to both questions is no. Interpreting a topological map gives a first impression, but it is not an accurate map. It may be useful for moving around an area, but it lacks detail.

**on** Resources

**Video eLesson** Interpreting topological maps (eles-1736)

**Interactivity** Interpreting topological maps (int-3354)

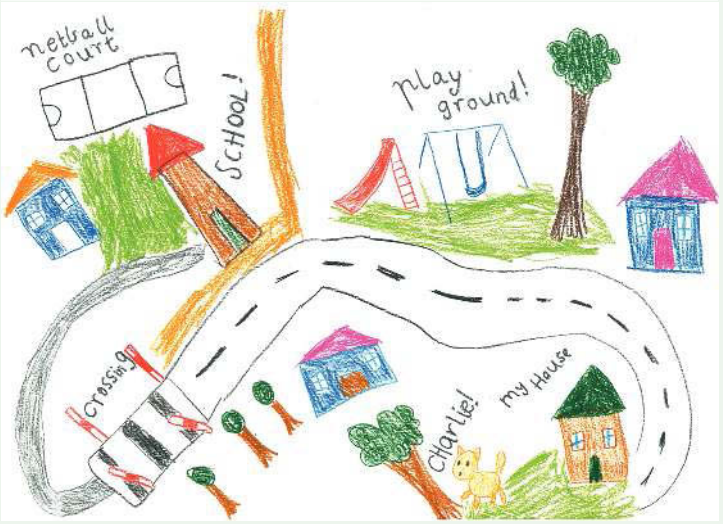
## 15.3.3 Let me do it

Complete the following activities to practise this skill.

### 15.3 ACTIVITIES

1. Using the child's map shown in **FIGURE 2(a)** from subtopic 15.2, describe the route the child takes from home to school. Use the checklist to ensure you cover all aspects of the task.

**FIGURE 2(a)** Drawing by a child who walks to school




2. Use your skill in understanding and interpreting topological maps to answer the following questions.
   (a) What is the purpose of this topological map?
   (b) Describe the pattern of houses along the route.
   (c) What symbols have been used to show the sporting area of the school grounds?
   (d) Why do you think this child drew the road at such a size and included the road markings?
   (e) Describe the ***environment*** along the route from home to school.

**Checklist**

I have:

- identified and communicated key features on the topological map
- clearly represented and communicated the information in the description.

# 15.8 SkillBuilder: Constructing and describing isoline maps

## 15.8.1 Tell me

### What is an isoline map?

An isoline map shows lines that join all the places with the same value. Isoline maps show gradual change in one type of data over a continuous area. Isolines do not cross or touch each other. The same difference is always shown between each isoline and the next over the entire map.

### Why is an isoline map useful?

Isoline maps are easy to understand, especially when coloured between the lines. These maps do not consider boundaries or borders, as the lines connect all places of the same value. Trends and gradual changes are easily identified. Some isoline maps can show change over time.

Isoline maps are useful for:

- showing data over large areas
- showing trends in data
- allowing you to identify and describe patterns
- comparing maps over different time periods.

Examples of isoline maps include daily weather maps (showing places with the same atmospheric pressure), topographic maps with contour lines, and global isotherm maps (places of equal mean surface temperature are connected; such maps are used when discussing climate change).

A good isoline map:

- has small dots for data presentation
- has dots joined with a fine line
- is drawn with pencil
- is coloured or shaded between the isolines
- uses BOLTSS.

A good description of an isoline map:

- identifies and communicates key features
- clearly represents and communicates the data.

## 15.8.2 Show me

### How to construct and describe an isoline map

#### You will need:

- a base map
- a set of data to plot
- a pencil
- an eraser
- an atlas (optional).

#### Procedure

**Constructing an isoline map**

#### Step 1

Select a set of data to map, and plot the relevant figure at each of the places listed. **FIGURE 1** is an example of this for travel times by car to Copenhagen airport.

**FIGURE 1** An isoline map showing places of equal travel time to Copenhagen airport by car

***Source:*** Spatial Vision

## Step 2

Select a value to use for intervals within the data set. In **FIGURE 1**, the interval was set at 30 minutes. Draw lines (isolines) joining places of the same value; in this example, that would be 30 minutes, 60 minutes, 90 minutes and so on. You may need to go between some points to show where you think the isoline would be; for example, the 60-minute isoline would pass between a place where the travel time is 50 minutes and another where the travel time is 70 minutes. Remember that isolines will not touch and will not cross at any point.

## Step 3

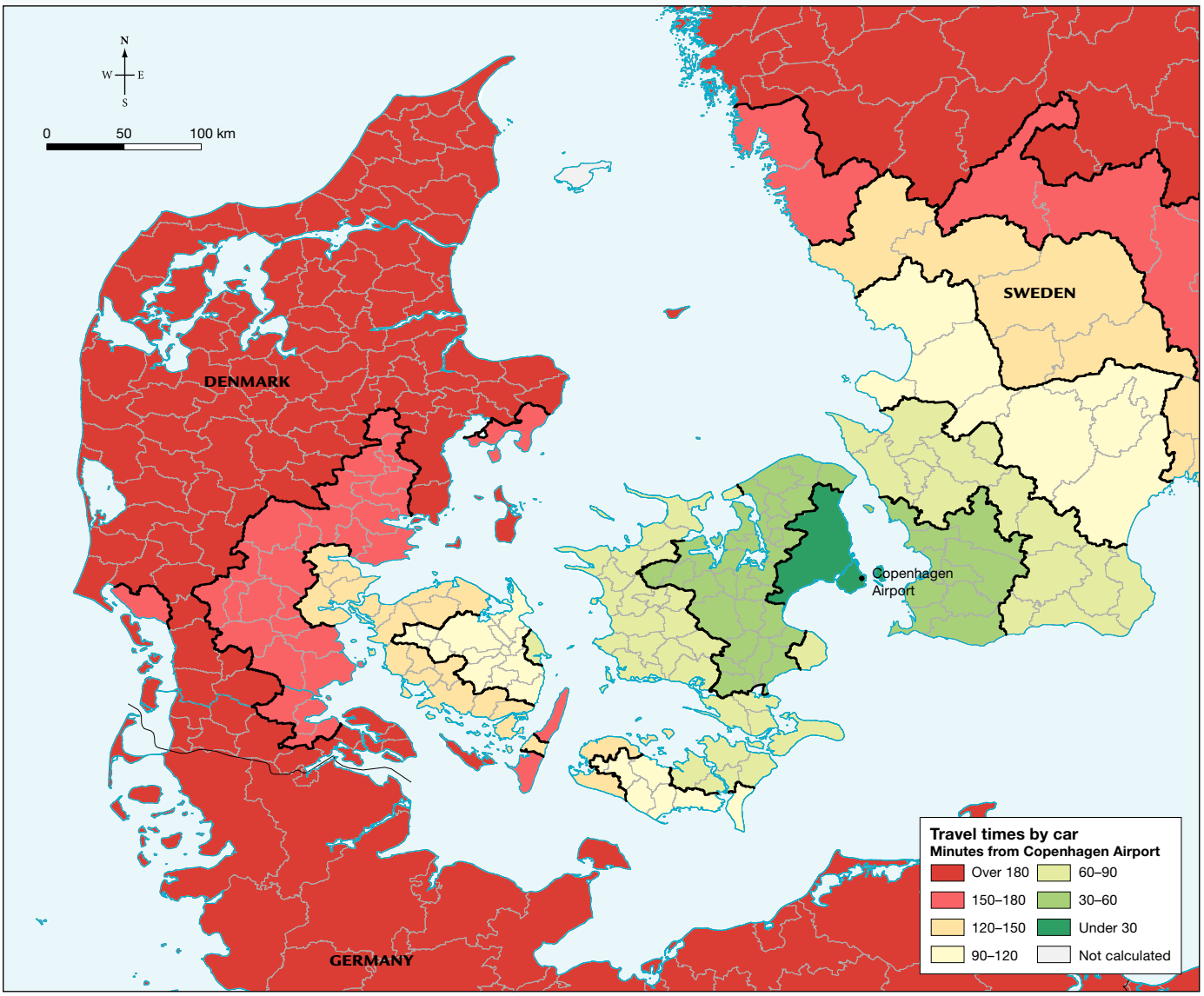
Create a legend for your map with a colour system that indicates a gradation of colour, where the lowest data is the lightest shade and the highest data is the darkest. Shade between the isolines according to the legend. **FIGURE 2** shows a completed coloured isoline map.

## Step 4

Don't forget to apply BOLTSS to your map.

## Model

**FIGURE 2** A coloured isoline map showing travel time to Copenhagen airport by car




***Source:*** Spatial Vision

### Interpreting an isoline map

#### Step 5

First, make sure you know what feature is being mapped by checking the map title or caption. In **FIGURE 2**, this feature is travel time by car to Copenhagen airport.

#### Step 6

Next, check the key/legend so that you understand the value of each isoline and the intervals used between them.

#### Step 7

Describe the areas where there are high or low data values that help to form a pattern. You may need to refer to an atlas to check the topography and establish whether any country borders are involved. In **FIGURE 2**, some of the data is from Sweden as people travel from there to Copenhagen, their nearest airport.

People living west of central Copenhagen travel similar distances to the airport in similar times (60–90 minutes) to those living in southern Sweden.

### Step 8

Look for any anomalies that may need explaining. For example, in **FIGURE 2** you can see that it takes 150–180 minutes to get to the airport from one island, suggesting that a ferry service is probably required to reach the road system by car.

### Model interpretation

The isoline maps in **FIGURES 1** and **2** show that it takes less than 30 minutes of travel time by car to reach Copenhagen airport in Denmark from places closest to the airport, even when it is on a different island or in a different country (Sweden). People living west of central Copenhagen travel similar distances to the airport in similar times (60–90 minutes) to those living in southern Sweden. This suggests that connections such as bridges and tunnels between islands and countries are provided, and cross-border movement is easy. From one island it takes 150–180 minutes to get to the airport, suggesting that a ferry service is probably required to reach the road system by car.

**on** Resources

| | |
|---|---|
| **eLesson** | Constructing and describing isoline maps (eles-1737) |
| **Interactivity** | Constructing and designing isoline maps (int-3355) |

## 15.8.3 Let me do it

Complete the following activities to practise this skill.

### 15.8 ACTIVITIES

1. Use the data in **TABLE 1** and base map provided in **FIGURE 3** to construct an isoline map of the travel times by bicycle throughout Copenhagen to the city centre. Use the following steps to help you.
   (a) Plot on the map the number of minutes it takes to travel from each ***place*** to Copenhagen city centre by writing the number of minutes by the dot beside each placename.
   (b) Draw a line (an isoline) connecting all the ***places*** from which it would take 30 minutes to travel to the centre of Copenhagen.
   (c) Draw in additional isolines at 5-minute intervals to show travel times to Copenhagen city centre.
   Use the checklist for constructing isoline maps to ensure you cover all aspects of the task.
2. Describe the pattern evident on your isoline map. Use the checklist for describing isoline maps to ensure you cover all aspects of the task.

**TABLE 1** Travel times by bicycle to Copenhagen city centre

| Suburb of Copenhagen | Travel time (minutes) |
|---|---|
| Albertslund | 45 |
| Ballerup | 48 |
| Brøndby | 40 |
| Frederiksberg | 25 |
| Furesø | 50 |
| Gentofte | 33 |
| Glostrup | 40 |
| Gladsaxe | 38 |

*(continued)*

**TABLE 1** Travel times by bicycle to Copenhagen city centre *(continued)*

| Suburb of Copenhagen | Travel time (minutes) |
|---|---|
| Herlev | 42 |
| Hvidovre | 34 |
| Ishøj | 55 |
| Lyngby–Taarbæk | 45 |
| Rødovre | 35 |
| Tårnby | 30 |

**FIGURE 3** A base map of the suburbs around Copenhagen city centre

***Source:*** Spatial Vision

**3.** Based on what you have learned in this SkillBuilder, apply your skills to answer the following questions.

(a) Is Copenhagen city centre more accessible to Furesø or Hvidovre by bicycle? Use figures in your answer.
(b) Does Tårnby or Brøndby provide easier bicycle access to the city? Quote the distances involved.
(c) From which direction would you have the greatest level of access to the city centre by bicycle? Use figures in your answer.
(d) Which part of the map would encourage cyclists to live in the area? Explain your answer using figures.
(e) In which area of the city would you prefer to live if you had to cycle to the city centre each day for work? Explain your answer, including figures.

### Checklist

In drawing an isoline map I have:

- plotted data using small dots
- joined the dots to create a fine isoline
- drawn using pencil
- coloured or shaded between the isolines
- completed my map with BOLTSS.

In describing an isoline map I have:

- identified and communicated key features
- clearly represented and communicated the data.

# 15.11 Thinking Big research project: Fieldwork — moving around our spaces

## Scenario

Often, students go about their school lives without a second thought for their surroundings. The following fieldwork activity encourages you to start thinking about different aspects of your environment and the impact that the daily movement of people has on these surroundings.

You have been selected as a member of a student task force to investigate the problems created by the movement of students in and around the school canteen throughout the day. You will conduct fieldwork in the school grounds to assess student movement patterns, identify impacts and formulate possible solutions.

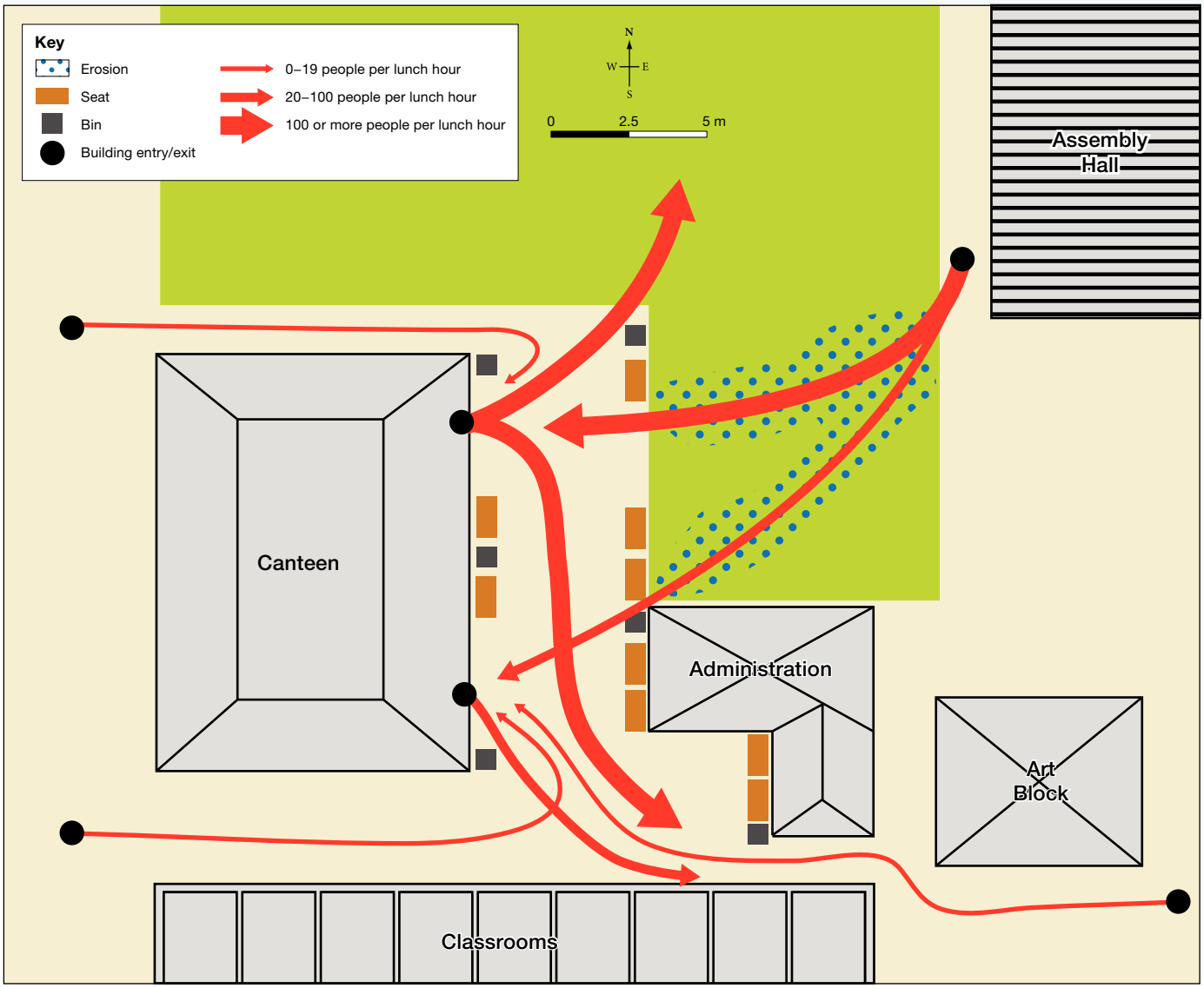
## Task

In small groups, you will conduct fieldwork, sharing tasks and using ICT tools where possible to document your findings and to prepare your final presentation. You may choose to share each task among the group or nominate group members to handle each section of the task. For example, one person might be responsible for all the mapping tasks and another for compiling the data. Your completed project should include the following elements:

- an annotated flow map of the area under study
- details of data collected, with graphs, diagrams and images, as appropriate, describing and summarising findings
- a report detailing problems identified and possible solutions — this could be presented as a PowerPoint presentation if you wish.

Follow the steps outlined in the **Process** section to complete this task.

**FIGURE 1** Sample flow map of school grounds




***Source:*** Spatial Vision

## Process

- Open the ProjectsPLUS application in the Resources for this topic. Click on the **Start new project** button to enter the project due date and set up your project group. Working in groups of four or five will allow you to share ideas and responsibility for various aspects of the project. (*Note:* You will need to ensure that you have enough people in your group to have one person posted at each entry/exit point in your school canteen.) Save your settings and the project will be launched.
- If you wish to, you can add topics to the **Research forum**, to organise your work and allow group members to view and comment on information collected. When you have completed your research, you can print out the **Research report** in the Research forum to easily view all the information you have gathered, if you wish. In the **Media centre** you will find an assessment rubric to guide your project development.

- Complete the following tasks:
  1. Create the base map of your intended area of study.
     - Using an available school map or satellite maps, create a map of the study area. (If a map is not available, you may need to measure and draw the area to create an accurate map.)
     - Include all entry and exit points for your canteen so that you can monitor foot traffic in and out of the area.
     - Create a key that includes as much detail as possible (such as bins, seating areas, pathways, grass, eroded areas).
  2. Over the course of a week, monitor the foot traffic to and from the canteen area at the morning break and lunchtime.
     - You could allocate each project group in the class one day to monitor, and then combine the week's data to be shared by all groups.
     - To count how many people move in and out of the area, station a member of your group at each entrance/exit point.
     - You may use a simple tally or 'clickers' to count entrances and exits.
  3. Once you have created the base map and collected the data, you will need to annotate your map with flow lines to represent the movement of people. (Refer to the **FIGURE 1** sample and the subtopic 17.10 SkillBuilder for more guidance.)
  4. Consider the question: What problems are created by the movement around your school grounds?
     - You can decide as a class which areas to focus your investigation on, or your teacher can advise you.
     - See **TABLE 1** for some ideas and to help you identify potential problems and their sources.

**TABLE 1** Problems and possible solutions related to movement of people

| Areas to investigate | Type of problem created | Likely cause of problem | Possible solutions |
|---|---|---|---|
| Eroded grass area on oval | Erosion, run-off | • Students taking shortcuts to canteen<br>• Poor placement of paths | |
| Litter left outside canteen at end of breaks | Pollution, eyesore | • Lazy students<br>• Lack of rubbish bins | |
| Queues that extend out of canteen, leaving students exposed to the weather | Cold, wet and hungry students | • Too many students approaching canteen at same time<br>• Inadequate space for queues | |

  5. To help you understand the trends in movement throughout the week, is there any other data you can gather to complement your investigation?
     - For example, when are whole-school events held (such as assembly), which result in large numbers approaching the canteen at the same time, rather than at staggered times?
     - Could you approach the canteen for some sales data throughout the week? (See **TABLE 2** for an example of the kind of data you might obtain.)
  6. Graph all data collected before attempting to analyse your findings.
  7. Complete your analysis of the data and the problems you identified, and think about ways to manage the situation. Consider the following questions.
     a. Which areas showed the most congestion? Why do you think this is the case?
     b. Did the location of congestion change according to the time of day? What factors might influence these changes?
     c. How does the movement of people affect the natural and human environment of your school grounds?

d. How do you propose to improve the current situation? What equipment, cooperation or support (or other factors) would be required in order to make these changes effective?
e. What changes could be made with (i) no cost, (ii) minimal cost and (iii) unlimited funding?

**TABLE 2** Canteen sales throughout a week

| Canteen sales | Snacks (drinks, ice creams, fruits etc.) | Cold and hot meals (sandwiches, salads, burgers etc.) |
|---|---|---|
| Monday | 93 | 177 |
| Tuesday | 89 | 158 |
| Wednesday | 80 | 166 |
| Thursday | 83 | 152 |
| Friday | 102 | 189 |

8. Develop a management plan.
   - Your completed map and supporting evidence will form part of your management plan document.
   - Annotate your map with detailed descriptions of practical solutions for some of the problems you have identified. Are your group's solutions cost effective?
   - Prepare a PowerPoint presentation or a report that may be shared with your school principal or grounds manager.
   - Ensure you complement your presentation with photographic evidence and data to support your contentions and solutions.

- Present your findings and plan to the class and submit your completed plan and map to your teacher for assessment.

## on Resources

**ProjectsPLUS** Thinking Big research project: Fieldwork — moving around our spaces (pro-0193)

# 15.12 Review

## 15.12.1 Key knowledge summary

### 15.2 'Seeing' places

- Peoples' perceptions of places vary.
- The biggest influences on the way we perceive places are age, gender, class, language, ethnicity, race, religion and values.
- Children can have very different perceptions of the same place.

### 15.4 The meaning of 'land'

- Land means different things to different people.
- In traditional Indigenous Australian culture, 'land' is a part of people's being — people's relationship with land is an interconnected one, across physical, spiritual and cultural worlds.
- Our understanding of land is not always the same as that in traditional Indigenous Australian culture.

### 15.5 Changing places

- Peoples' perceptions of places change over time.
- Places can change over time too.
- City laneways are an example of places that have changed and been perceived differently over time.

### 15.6 Modes of accessing places

- Public transport plays a vital role in connecting people and places.
- Active travel, such as cycling or walking, has become a mainstream mode of transport in today's modern life.
- Accessing places by public transport, active travel or vehicle keeps people connected and strengthens interconnection in the community.

### 15.7 Walking to connect

- Urban planners are focusing on human wellbeing as a key to the structure of suburbs.
- The '20-minute neighbourhood' concept in urban planning aims to achieve living spaces in which people can walk to access all the key requirements of daily life.

### 15.9 Providing access to places for everyone

- People with a disability make up a significant proportion of Australia's population.
- Accessibility for everyone is important.
- The need for respect and inclusion are driving cities to adapt infrastructure to improve access for all.

### 15.10 Connecting with the world

- Technological developments have seen the reduction in time taken to connect with distant places.
- Cruise ship travel has become increasingly popular.
- Air travel has become faster, more frequent and cheaper, making it an increasingly accessible way for people to connect with faraway places and people.

## 15.12.2 Reflection

Complete the following to reflect on your learning.

### 15.12 ACTIVITIES

Revisit the inquiry question posed in the Overview:

**Exciting or dull, familiar or strange? How can the same place look and feel different for each person?**

1. Now that you have completed this topic, what is your view on the question? Discuss with a partner. Has your learning in this topic changed your view? If so, how?
2. Write a paragraph in response to the inquiry question, outlining your views.

## on Resources

**eWorkbook** Reflection (doc-31724)
Crossword (doc-31725)
**Interactivity** Connecting with our places crossword (int-7649)

## KEY TERMS

**active travel** making journeys via physically active means, such as cycling or walking
**disability** a functional limitation in an individual, caused by physical, mental or sensory impairment
**ethnicity** cultural factors such as nationality, culture, ancestry, language and beliefs
**graffiti** the marking of another person's property without permission; it can include tags, stencils and murals
**infrastructure** the facilities, services and installations needed for a society to function, such as transportation and communications systems, water pipes and power lines
**mobility** the ability to move or be moved freely and easily
**perception** the process by which people translate sensory input into a view of the world around them
**stereotype** widely held but oversimplified idea of a type of person or thing
**street art** artistic work done with permission from both the person who owns the property on which the work is being done and the local council
**totem** an animal, plant, landscape feature or weather pattern that identifies an individual's connection to the land
**turn-up-and-go** frequent and regular transport service such that reference to a timetable is not required; for example, users know that a train will run every 10 minutes

# 16 Tourists on the move

## 16.1 Overview

Can a simple relaxing holiday really create jobs, support an economy or affect the environment?

### 16.1.1 Introduction

For Australians in the 1950s and 1960s, overseas travel was an exotic, time-consuming and expensive adventure that for many was simply beyond their reach. Fast forward to 2020 and nearly 60 per cent of the population now owns a passport. Whether at home or abroad, travel is an important part of modern life.

The World Tourism Organization estimates that by 2030, five million people will travel each day. Where will these people go and what will influence their choices? What impact will these choices have on the places they visit?

**on Resources**

**eWorkbook** Customisable worksheets for this topic

**Video eLesson** Moving around (eles-1723)

**LEARNING SEQUENCE**


16.1 Overview
16.2 The importance of tourism
16.3 Global tourism
16.4 **SkillBuilder:** Constructing and describing a doughnut chart online only
16.5 Australian tourism
16.6 **SkillBuilder:** Creating a survey online only
16.7 **SkillBuilder:** Describing divergence graphs online only
16.8 The impacts of tourism
16.9 Managing environmental impacts — eco-friendly tourism
16.10 Cultural tourism
16.11 Tourism and sport
16.12 **Thinking Big research project:** Design a 7-day cruise adventure online only
16.13 **Review** online only

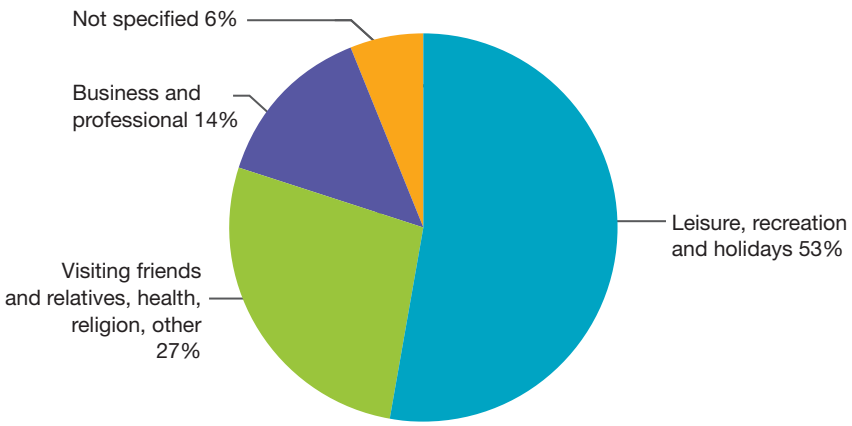

To access a pre-test and starter questions and receive immediate, **corrective feedback** and **sample responses** to every question, select your learnON format at www.jacplus.com.au.

# 16.2 The importance of tourism

## 16.2.1 Defining tourism

The World Tourism Organization defines tourism as the temporary movement of people away from the places where they normally work and live. This movement can be for business, leisure or cultural purposes (see **FIGURE 1**), and it involves a stay of more than 24 hours but less than one year.

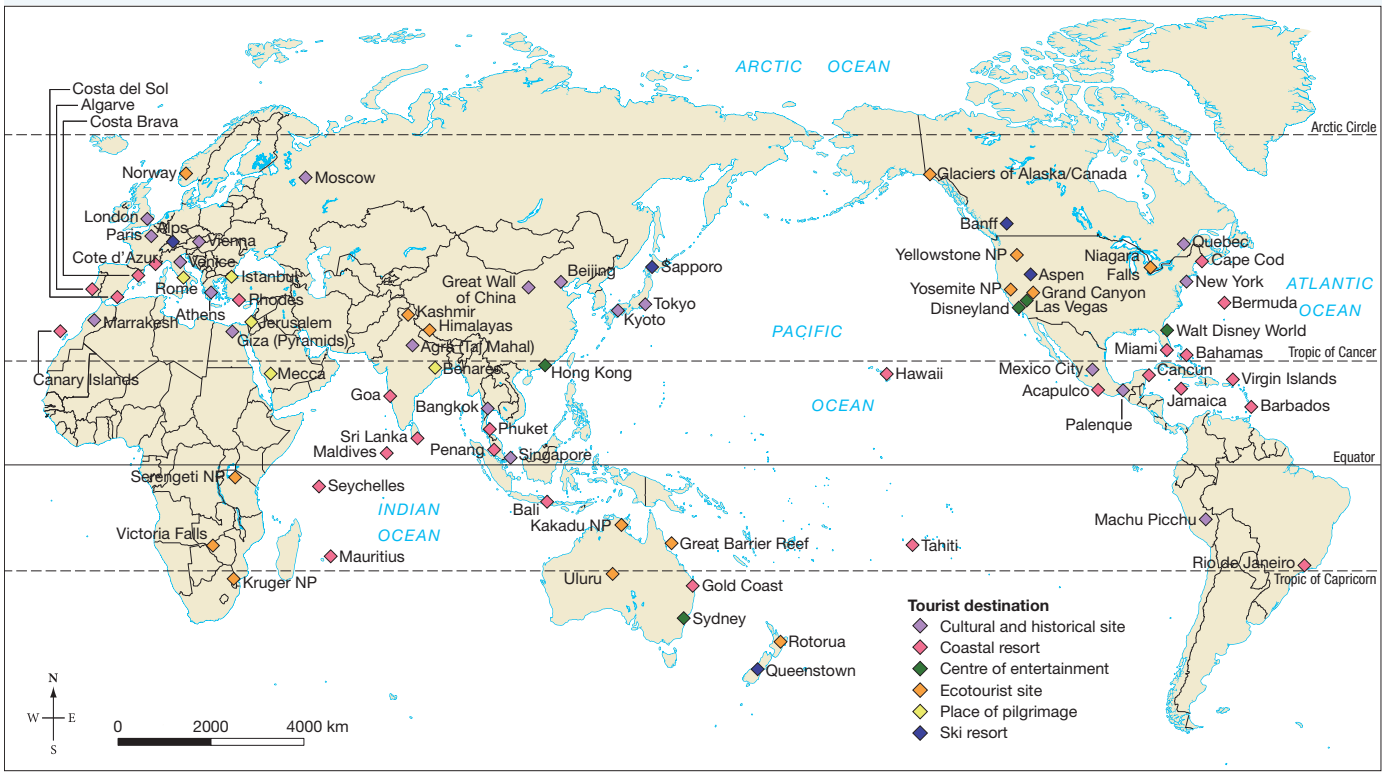
**FIGURE 1** Purpose of people's travel, 2017




### Types of tourist

People travelling for leisure have different interests, reasons for travel and preferred ways of approaching the travel experience. **FIGURE 2** illustrates the location of some of the different types of popular tourist destinations, and **FIGURE 3** identifies some of the key characteristics of different types of tourist, and how they like to travel.

**FIGURE 2** Types of tourist destinations




***Source:*** Spatial Vision

**FIGURE 3** Four kinds of tourist

| Organised mass tourist | Individual mass tourist |
|---|---|
| • Least adventurous<br>• Purchases a package with a fixed itinerary<br>• Does not venture from the hotel complex alone; is divorced from the local community<br>• Makes few decisions about the holiday | • Similar to the organised mass tourist and generally purchases a package<br>• Maintains some control over their itinerary<br>• Uses accommodation as a base and may take side tours or hire a car |

| The explorer | The drifter |
|---|---|
| • Arranges their own trip<br>• May go off the beaten track but still wants comfortable accommodation<br>• Is motivated to associate with local communities and may try to speak the local language | • Identifies with local community and may live and work within it<br>• Shuns contact with tourists and tourist hotspots<br>• Takes risks in seeking out new experiences, cultures and places |

## Medical tourism

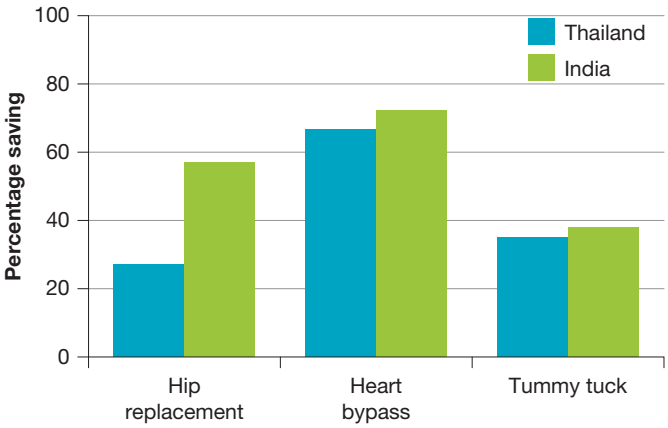
Medical tourism involves people travelling to overseas destinations for medical care and procedures. The low cost of travel, advances in technology and lengthy waiting lists caused by the increased demand for elective surgery are turning medical tourism into a multi-billion-dollar industry. In 2017, the global medical tourism market was valued at almost $54 billion, with this figure expected to rise to more than $140 billion by 2025.

While people once travelled overseas only for cosmetic procedures such as facelifts and 'tummy tucks', the range of services offered has expanded dramatically over recent years to include fertility treatments, complex heart surgery, and orthopaedic procedures, such as knee and hip replacements.

Countries all over the world are attracting patients for a variety of reasons. In some instances, it is the high standard of medical care or the outstanding reputation of a particular facility that attracts people, while for others it is the savings to be made and the opportunity to include a holiday and luxury accommodation as part of the package.

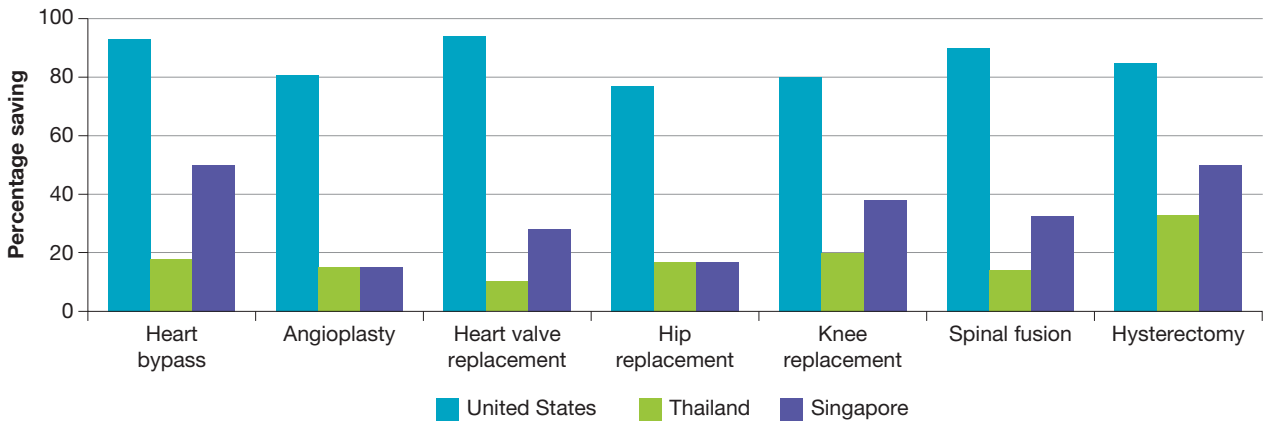
Asia is the market leader in the medical tourism industry, with Thailand and India vying for the number one spot. Thailand is slightly more expensive, but offers a better tourist experience and has a wider range of services available. India, on the other hand, is inexpensive and boasts state-of-the-art facilities staffed by Western medical staff, predominantly from the United States. **FIGURE 4** illustrates the savings to be made by having selected medical procedures carried out in Asia rather than in Australia. **FIGURE 5** shows the savings when a variety of procedures are undertaken in Malaysia compared to the United States, Thailand or Singapore. With medical tourism expected to add millions to Asian economies per year, it is not surprising that there has been a dramatic increase in the number of facilities to deliver these services.

**FIGURE 4** Cost savings that can be made by having medical treatment in Asia versus Australia




***Source:*** *Adapted from:* Cosmetic Surgeon India and Rowena Ryan/News.com.au

**FIGURE 5** Cost savings that can be made by having medical procedures carried out in Malaysia versus the United States, Thailand and Singapore



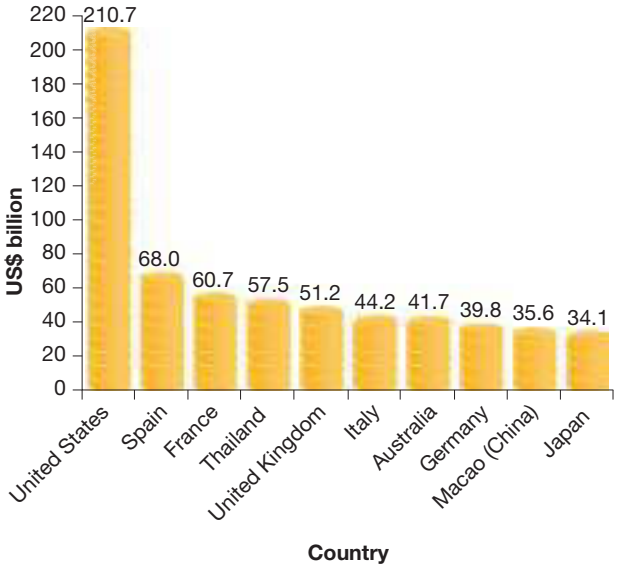

***Source:*** *Adapted from:* Cosmetic Surgeon India and Rowena Ryan/News.com.au

## 16.2.2 The economic importance of tourism

Tourism is one of the world's largest industries and, as such, an important component in world economies. One in ten jobs worldwide is linked either directly or indirectly to the tourism industry, and in 2017 tourists added US$7 trillion to the global economy. **FIGURE 6** shows the top ten tourism earners for 2017.

Globally, about 10 per cent of **gross domestic product** (GDP) is directly linked to the tourism industry; for many developing countries it is the primary source of income. Even when global economies are experiencing a downturn, people still travel. After natural disasters, countries rely on the return of the tourist dollar to help stimulate their economies.

**FIGURE 6** Tourism earnings, 2017




### 16.2 INQUIRY ACTIVITIES

1. What type of tourist are you? Make a sketch of yourself, similar to the one shown here. Annotate your cartoon to describe yourself as a tourist, using information in this subtopic to help you. Include information about your ideal holiday and explain why you appear as you do in your cartoon. **Classifying, organising, constructing**
2. Using your atlas as a primary source of information, select three ***places*** from different categories shown in **FIGURE 2** that you might like to visit.
   (a) Calculate the distance between them.
   (b) Explain how you would travel to each ***place***.
   (c) Explain what you might expect to see and do in each ***place***.
   (d) Work out how long it might take to visit each ***place***.
   (e) Describe each location using geographical concepts such as latitude and longitude, direction and ***scale***.
   (f) Explain why you have chosen each ***place***.

**Describing and explaining**
**Examining, analysing, interpreting**

### 16.2 EXERCISES

**Geographical skills key: GS1** Remembering and understanding **GS2** Describing and explaining **GS3** Comparing and contrasting **GS4** Classifying, organising, constructing **GS5** Examining, analysing, interpreting **GS6** Evaluating, predicting, proposing

#### 16.2 Exercise 1: Check your understanding

1. **GS1** What is a tourist?
2. **GS1** What are the two most common purposes of people's travel?
3. **GS1** What are the four different types of tourist? Describe the key characteristics of two of these types.
4. **GS2** What is the main reason for people travelling to Asia for medical procedures?
5. **GS1** Which country had the highest tourism earnings for 2017?

### 16.2 Exercise 2: Apply your understanding

1. **GS6** Tourism expenditure increased by 93 per cent between the years 2000 and 2010, from $475 billion to $918 billion. Using these figures as a guide, predict how much income might be generated through tourism by 2030.
2. **GS2** Tourism contributes both directly and indirectly to the creation of jobs. Using examples, explain the difference between direct and indirect contributions.
3. **GS2** Explain the term gross domestic product (GDP) and why tourism is an important component of GDP.
4. **GS6** Suggest a reason for the growth in medical tourism.
5. **GS2** Is a person who flies interstate to watch their football team a tourist? Explain.

Try these questions in learnON for instant, corrective feedback. Go to www.jacplus.com.au.

# 16.3 Global tourism

## 16.3.1 Who is travelling?

Over time, travel has become faster, easier, cheaper and safer. Economic growth in many parts of the world has ensured that many people now have more money to spend and can afford to travel. Annual leave entitlements provide people with time to travel. For example, in addition to the four weeks annual leave that is a standard condition for full-time employees in Australia, many Australians accumulate long-service leave, which is often spent on an extended overseas trip. It has also become common for young people to spend time seeing the world during a 'gap year' after finishing secondary school, and to travel before establishing a career and perhaps raising a family.

Many young travellers see backpacking as the optimum way to travel. Generally this group:

- is on a tight budget
- wants to mix with other young travellers and local communities
- has a flexible itinerary
- seeks adventure
- is prepared to work while on holiday to extend their stay.

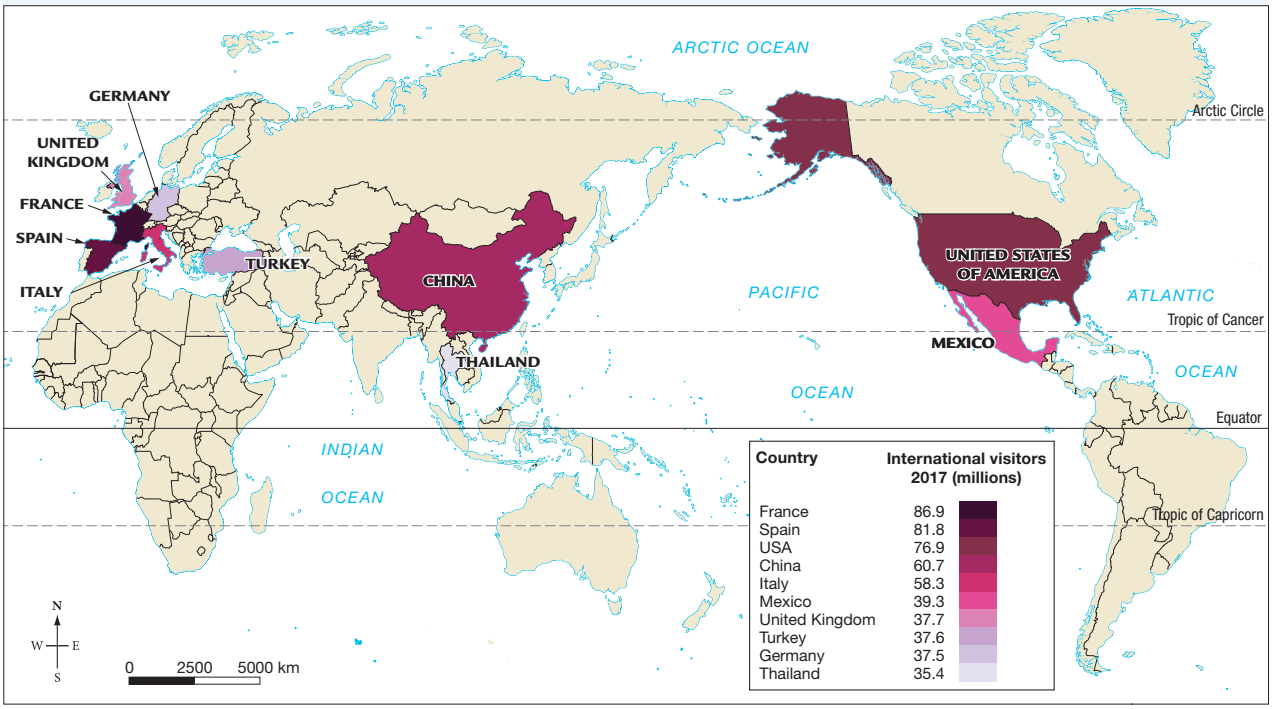
At the other end of the scale, there has also been a dramatic growth in **mature-aged** tourist movements. The number of older people in **developed** countries is growing. Some of these travellers have savings, access to superannuation funds, and the opportunity to retire early; thus, they have both the time and the money to travel.

**FIGURE 1** Backpackers tend to travel further and stay longer than other tourists.

## 16.3.2 Where do people go?

As each tourist enters or leaves a country, they are counted by that country's customs and immigration officials. This data is collected by the World Tourism Organization, and the results can be shown spatially. **FIGURE 2** shows the ten most popular tourist destination countries for 2017.

**FIGURE 2** World's top ten tourist destinations, 2017




***Source:*** Data from World Tourism Organization (UNWTO). Map drawn by Spatial Vision.

## Where do people stay?

Today, in addition to traditional accommodation such as hotels and backpacker hostels, tourists have a wide range of accommodation options, and their preferences will vary depending on a multitude of personal and economic factors. The rise of operators such as Airbnb means people can now choose to stay independently in an apartment or house, or perhaps in a guest room within someone else's own home. Staying with locals in their homes in cities, towns and villages across the globe provides an opportunity to experience the local culture in a more 'up close and personal' way. For many however, an established resort or hotel remains the preferred choice of accommodation.

When travelling overseas, most tourists give little thought to who owns the hotel or resort in which they are staying. **TABLE 1** lists the locations of various hotel chain headquarters, and shows that the corporate owners of many hotels are based in a country that is often not the one a tourist is visiting.

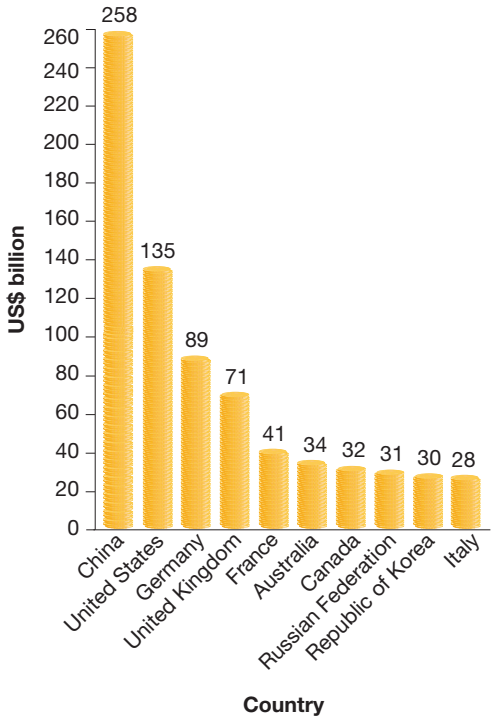
**TABLE 1** World's top ten hotel owners, 2018

| Company | Headquarters (country) | Total hotels | Number of countries |
|---|---|---|---|
| Wyndham Hotels & Resorts | USA | 8092 | 66 |
| Choice Hotels International | USA | 6429 | 35 |
| Marriott International | USA | 5974 | 127 |
| InterContinental Hotels Group | UK | 5070 | 100 |
| Hilton Worldwide | USA | 4727 | 104 |
| Accor Hotels | France | 4200 | 100 |
| Best Western Hotels | USA | 4196 | 100 |
| Jin Jiang International | China | 3090 | 67 |
| Home Inns | China | 3000 | 1 |
| Motel 6 | USA | 1330 | 2 |

## 16.3.3 Who spends the most?

**FIGURE 2** shows the countries that attract the most tourists, but which countries do these tourists come from, and how much do they spend? **FIGURE 3** shows the top ten countries in terms of the money they spend on international tourism, and offers an idea of the huge input into the economies of destination countries that the tourist dollar provides.

**FIGURE 3** World's top ten tourist spenders, 2017



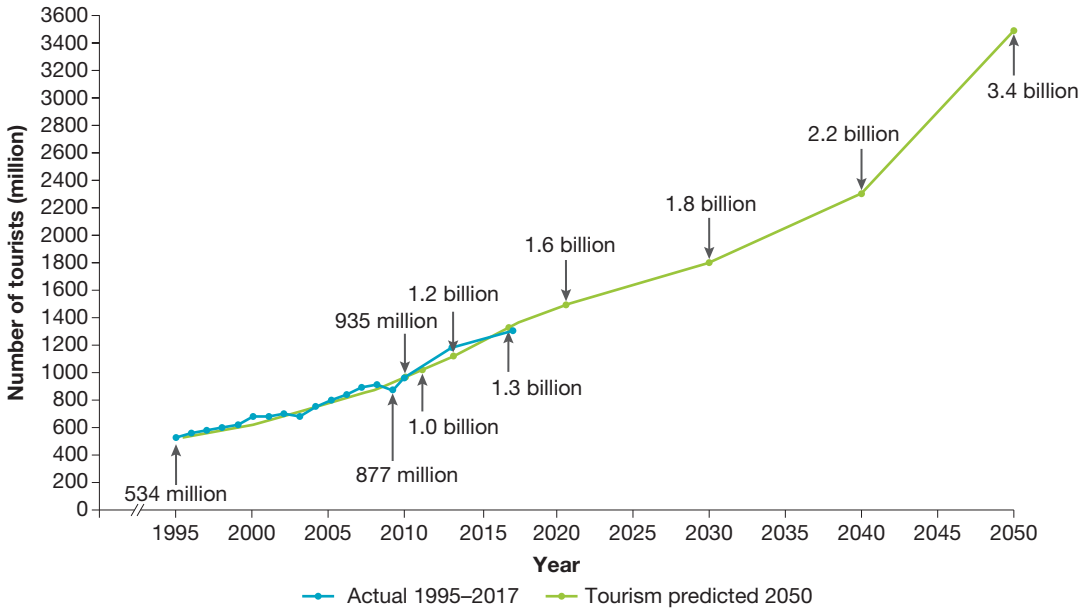

## 16.3.4 The growing future of tourism

Year after year, global tourism continues to increase. Advances in transport technology have reduced not only travel times but also cost, making travel increasingly accessible to more and more people.

- Today, you can fly from Australia to Europe in about 20 hours from the east coast, or under 17 hours flying nonstop from Perth. A similar journey by boat in the late 1940s took six weeks or more.
- Airline and tour companies offer a range of cut-price deals, and the increased number of competitors for the tourist dollar means that travel is more affordable.
- Improvements in transport and technology have increased our awareness and knowledge of the world around us and have sparked people's desire to see new places and experience different cultures.
- In general, the travelling public has more leisure time and more disposable income, making both domestic and international travel viable.

**FIGURE 4** shows the growth in tourist numbers from 1995 to 2017 and the projected growth through to 2050.

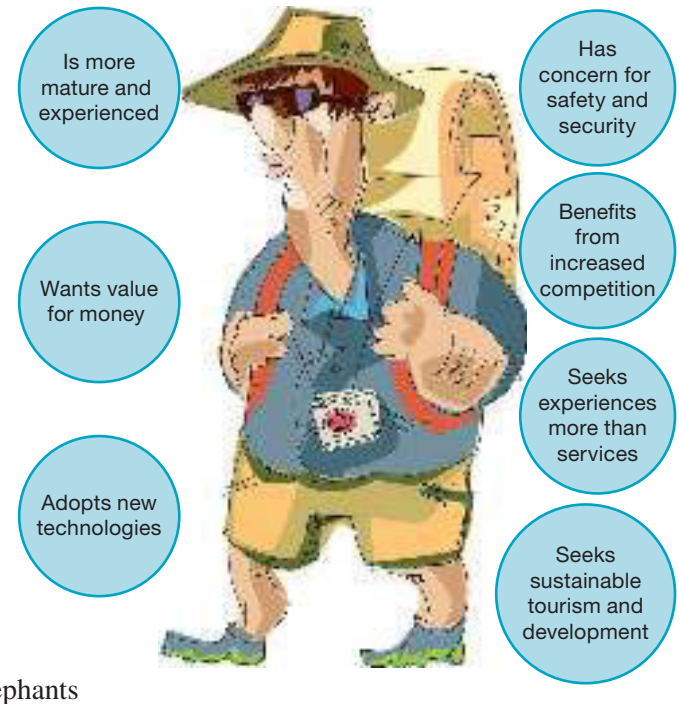
**FIGURE 4** Projected future growth in world tourism



## The evolving tourist

Improved living standards, increased leisure time and greater disposable incomes have all created opportunities for people to travel and experience new places and cultures. These factors are also shaping the tourist of the future (see **FIGURE 5**). Established and emerging tourist destinations will need to ensure that they meet the evolving needs of the tourist market, in order to continue to attract and benefit from the tourist dollar.

**FIGURE 5** Characteristics of the future tourist




## Growth areas for tourism

Predictions suggest that Africa and the Asia-Pacific region will be particular growth areas, attracting more and more tourists in the years to come.

In Africa, for instance, countries such as Kenya and Tanzania offer a different type of tourist experience. Kenya offers:

- relative safety
- beaches and a tropical climate
- safari parks and encounters with lions and elephants
- a unique cultural experience with the **Masai** people.

The influx of tourists to Kenya has led to the establishment of **national parks** to protect endangered wildlife and promote this aspect of the tourism experience. Money flowing into the region can be put towards development projects such as improved water quality and **infrastructure** such as water pipes, roads and airports.

The true challenge for the future, however, is to ensure that:

- money remains in the local economy rather than in the hands of developers, and is used to improve local services, not just tourist services
- the need of indigenous communities to farm the land is balanced with tourist development
- tourist numbers are controlled, to ensure that the environment is not damaged.

Such challenges, of course, are not unique to Kenya. Wherever in the world there is an increase in tourist numbers, there is a need for a sustainable approach, to ensure that the economic benefits of tourism do not come at the cost of a region's people and environment.

### on Resources

**Google Earth** Google Earth: Kenya

### Explore more with myWorldAtlas

Deepen your understanding of this topic with related case studies and questions.

- Investigate additional topics > Tourism > **World tourism**

## 16.3 INQUIRY ACTIVITIES

1. (a) On a blank outline map of the world, locate and label the capital cities of each of the top ten tourist destinations.
   (b) Plot a trip from your nearest capital city (e.g. for Victoria, Melbourne) to all ten of these ***places***, covering the shortest possible distance, and returning to your capital city. Use the ***scale*** on the map to estimate the distance travelled.
   (c) Calculate the time it might take to complete this journey. **Classifying, organising, constructing**
2. The three main types of tourist attraction are natural, cultural and event attractions. Use a dictionary to help you write your own definition of each term. For each of the countries shown in **FIGURE 2**, try to find an example of each type of attraction. Use the **FIGURE 2** map in subtopic 16.2 to help you.
   **Classifying, organising, constructing**

## 16.3 EXERCISES

**Geographical skills key: GS1** Remembering and understanding **GS2** Describing and explaining **GS3** Comparing and contrasting **GS4** Classifying, organising, constructing **GS5** Examining, analysing, interpreting **GS6** Evaluating, predicting, proposing

### 16.3 Exercise 1: Check your understanding

1. **GS2** Carefully study **FIGURES 2** and **3** and answer the following.
   (a) On which continents are the top ten destinations located?
   (b) Which continents are generating the most in tourism spending?
   (c) Describe the ***interconnection*** between destinations and tourism spending.
2. **GS3** What differences in travel needs are there between a mature-age tourist and a backpacker? With the aid of a Venn diagram, show the similarities and differences in the needs of these two groups of tourists.
3. **GS2** Explain why tourism is more accessible to the broader community than it was 100 years ago.
4. **GS2** Explain what national parks are and why they are established.
5. **GS1** How are international tourism numbers calculated?

### 16.3 Exercise 2: Apply your understanding

1. **GS6** Consider **FIGURE 4**, which shows future growth in world tourism.
   (a) How many global tourists are there predicted to be in 2050?
   (b) Which ***places*** do you think will be the most popular?
   (c) What impact do you think these increases will have on the ***environment***?
   (d) Will this result in small-scale or large-scale ***change***?
   (e) Do you think these numbers are ***sustainable***? Explain.
2. **GS2** With rapid growth in tourism, there is a need to ensure ***sustainability***.
   (a) Explain what you understand by the term ***sustainable*** *tourism.*
   (b) Describe an example of tourism that would be considered ***sustainable***.
   (c) Describe an example of tourism that would not be considered ***sustainable***. Suggest what ***changes*** might be needed to make it ***sustainable***.
3. **GS6** Asia and Africa are future growth areas for tourism; they are also home to many of the world's developing nations. Study **TABLE 1**, which shows hotel ownership. What impact might this ownership have on the countries in which these hotel chains are located?
4. **GS6** Consider the characteristics of the future tourist, shown in **FIGURE 5**. Suggest ways in which each of these characteristics might impact on the tourism choices they make. Which ***places*** and experiences might be more attractive to this traveller? Which might be less appealing?
5. **GS6** 'Tourists should be able to go where they like and do what they like without any restrictions.' Provide an argument both for and against this statement.

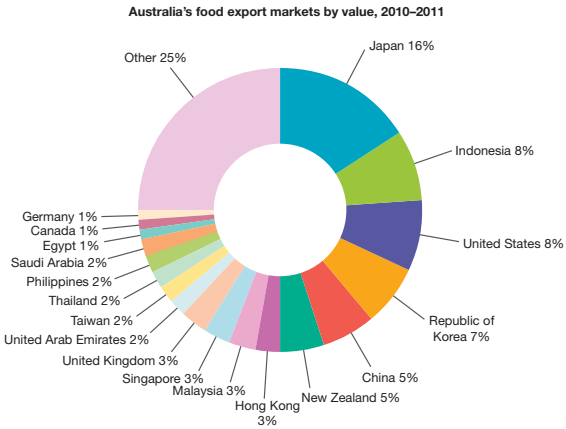
Try these questions in learnON for instant, corrective feedback. Go to www.jacplus.com.au.

# 16.4 SkillBuilder: Constructing and describing a doughnut chart

online only

## What is a doughnut chart?

A doughnut chart is a circular chart with a hole in the middle. Each part of the doughnut is divided as if it were a pie chart with a cut-out. The circle represents the total, or 100 per cent, of whatever is being looked at. The size of the segments is easily seen. Doughnut charts are a useful visual representation of data.




### Select your learnON format to access:

- an overview of the skill and its application in Geography (Tell me)
- a video and a step-by-step process to explain the skill (Show me)
- an activity and interactivity for you to practise the skill (Let me do it)
- questions to consolidate your understanding of the skill.

### on Resources

**Video eLesson** Constructing and describing a doughnut chart (eles-1738)

**Interactivity** Constructing and describing a doughnut chart (int-3356)

# 16.5 Australian tourism

## 16.5.1 Where in the world are Australians going?

In 2018, 11 million Australians travelled abroad, almost 7 per cent more than in 2017. Of these, some 1.4 million people travelled to New Zealand, making it our most popular tourist destination.

The buying power of the Australian dollar compared to other currencies means that a wide range of international destinations are more affordable than holidaying at home. Competition between airlines, choice of flights and package deals that include combinations of flights, accommodation, tours and meals are largely fuelling the international travel market. The option of children staying for free also makes overseas travel more attractive for families. While over a million people elect to holiday in Australia, for many their tourism dollar has greater buying power in destinations such as Indonesia and Thailand, where the cost of living is much lower than it is at home.

The opportunity to live and work overseas has also seen an increase in the number of people under 30 travelling abroad. The under-30s working visa has ensured that foreign travel is both appealing and affordable for this age group. This visa, which is available in more than 35 countries around the world, allows people aged between 18 and 30 to live and work in a country for up to 12 months. At any one time there are about one million Australians living and working overseas.

While the most popular tourist destination for Australians travelling abroad is New Zealand, the fastest expanding markets for Australian travellers are Indonesia and Japan.

## 16.5.2 Who comes here and why?

In 2018, 9.1 million tourists came to Australia at a rate of around 1000 per hour. They spent 274 million nights in the country and added $43.9 billion to the Australian economy. The states most visited by international tourists in 2018 were New South Wales, Queensland and Victoria, with Western Australia showing a significant increase in tourist numbers.

It is predicted that by 2050 Australia's tourism industry could grow to be worth $150 billion. In Australia, almost 826 000 jobs can be attributed either directly or indirectly to the tourism industry, representing around 8 per cent of the workforce.

As **FIGURE 1** shows, there are various reasons that people visit Australia, the most popular being simply to holiday. **FIGURE 2** shows the countries of origin of those who visit, and also shows where in the world Australians are travelling on their overseas journeys.

Australia is a land of contrasts, having a wide variety of both human and natural environments. The most popular tourist destinations are shown in **FIGURE 3**.

**FIGURE 1** Reasons for visiting Australia

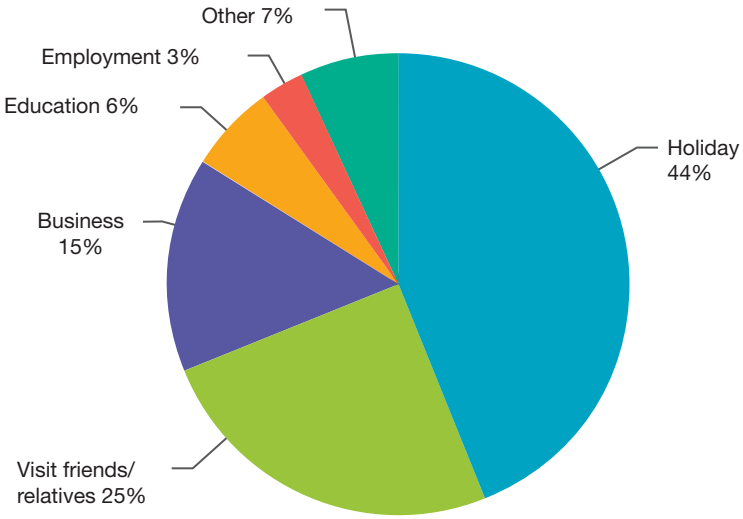
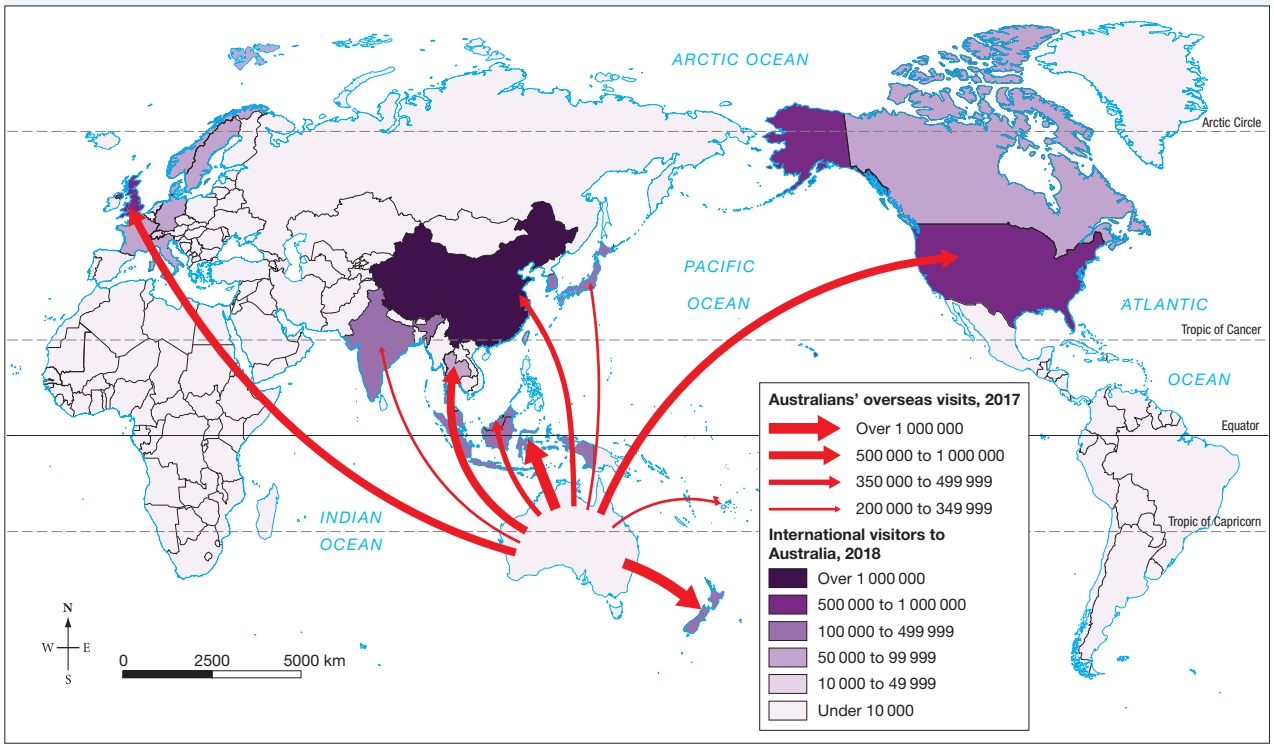
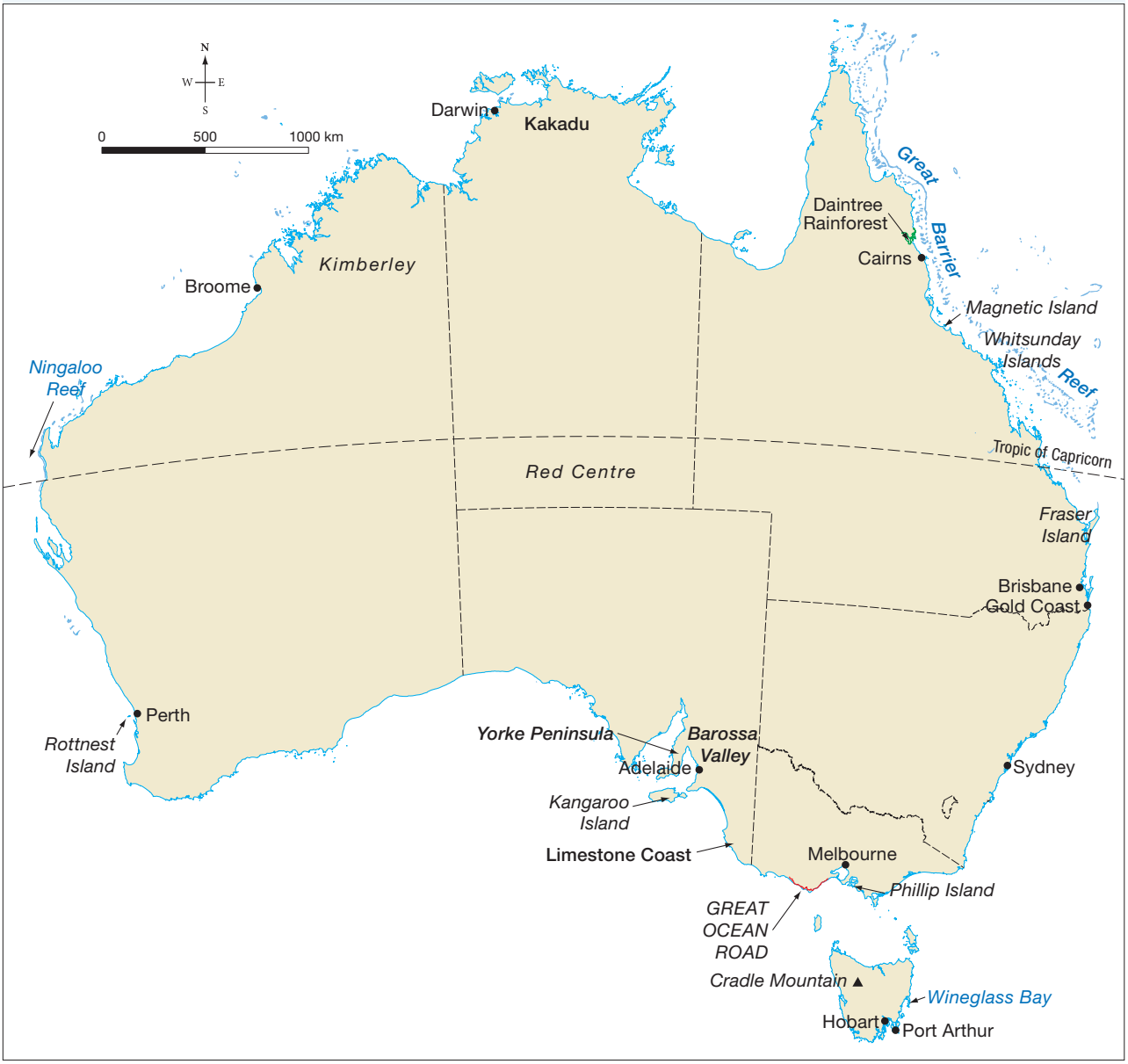



**FIGURE 2** Country of origin for tourists visiting Australia, and destinations for Australian tourists




***Source:*** ABS, Austrade

**FIGURE 3** Australia's most popular tourist destinations




***Source:*** Data © Commonwealth of Australia (Geoscience Australia) 2013 & © State of Queensland (Department of Agriculture, Fisheries and Forestry) 2013

Each Australian state has its own culture and features that attract tourists. **TABLE 1** provides a snapshot of the key feature of the various states. Tourism statistics have revealed that Victoria has increased its share of the international tourist market. Tourism in this state grew by 8.2 per cent in 2018 and added $28.2 billion to the state's economy. Of the 82.3 million visitors Victoria welcomed, 28.4 million stayed overnight, and 54 million were day trippers. New South Wales, however, remains the most visited state, with iconic attractions such as the Sydney Opera House and Sydney Harbour Bridge continuing to draw huge numbers of tourists from all around the world.

**TABLE 1** Key attractions of Australian states

| | |
|---|---|
| New South Wales | Nightlife |
| Northern Territory | Outback |
| Queensland | Beaches |
| South Australia | Wine |
| Tasmania | Nature |
| Victoria | Sport |
| Western Australia | Wine |

## Explore more with myWorldAtlas

Deepen your understanding of this topic with related case studies and questions.
- Investigate additional topics > Tourism > **Tourism in Australia**

## 16.5 INQUIRY ACTIVITIES

1. Investigate people's favourite overseas ***places*** by completing the following tasks.
   (a) Survey members of your class to find out which three overseas ***places*** they would most like to visit and why.
   (b) Each member of the class should ask their parents which three overseas ***places*** they would most like to visit and why.
   (c) Compile your class data and identify the most popular ***places*** selected by students and their parents. Make sure you also collate the data showing the reasons for the choices.
   (d) On an outline map of the world, show the results of your survey. Make sure you can distinguish between ***places*** chosen by parents and ***places*** chosen by students.
   (e) Annotate your map with the reasons given for the choices.
   (f) Is there an ***interconnection*** between ***places*** chosen by parents and by students? Suggest reasons for your observations. **Examining, analysing, interpreting**
2. Prepare an annotated visual display that showcases ***places*** of interest within Victoria. Include information about the attractions, their location and why they are a 'must-see' destination. **Classifying, organising, constructing**

## 16.5 EXERCISES

**Geographical skills key: GS1** Remembering and understanding **GS2** Describing and explaining **GS3** Comparing and contrasting **GS4** Classifying, organising, constructing **GS5** Examining, analysing, interpreting **GS6** Evaluating, predicting, proposing

### 16.5 Exercise 1: Check your understanding

1. **GS1** Why might more Australians choose to holiday overseas rather than in Australia?
2. **GS2** Explain the ***interconnection*** between the ***places*** most visited by Australians and our major source of tourists.
3. **GS2** Explain the importance of tourism to the Australian economy.
4. **GS5** Which state or territory would you recommend to an international visitor who was interested in each of the following?
   (a) Sporting events
   (b) Experiencing the natural ***environment***
   (c) Getting 'off the beaten track'
5. **GS2** Explain what you understand by the term 'day tripper'.

### 16.5 Exercise 2: Apply your understanding

1. **GS5** Study **FIGURE 3**.
   (a) Identify the top tourist destinations in Victoria and Tasmania.
   (b) Identify which are human and which are natural ***environments***.
   (c) Suggest other ***places*** in Australia that you think should be at the top of every tourist's holiday itinerary.
2. **GS6** Predict the impact on Australian tourism if the Australian dollar was to suddenly lose value in relation to international currencies.
3. **GS6** Predict the impact on Australian tourism if the Australian dollar was to suddenly increase in value and achieve parity with the US dollar.
4. **GS2** What is your favourite tourist destination? What is the appeal of this ***place*** for you?
5. **GS6** Suggest a strategy for encouraging more Australians to holiday at home and enticing more international visitors to Australia.

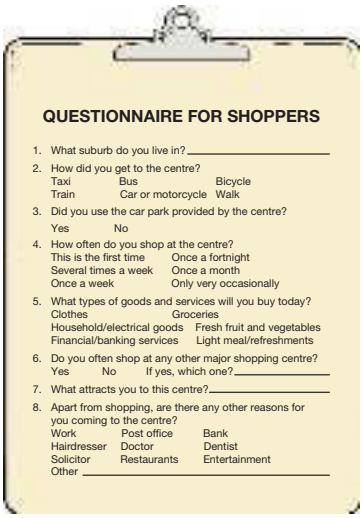
Try these questions in learnON for instant, corrective feedback. Go to www.jacplus.com.au.

# 16.6 SkillBuilder: Creating a survey

online only

## What is a survey?

Surveys collect primary data. A survey involves asking questions, recording and collating and interpreting the number of responses. Because your survey is taken from a relatively small number of people in a population, it is called a sample.



QUESTIONNAIRE FOR SHOPPERS

1. What suburb do you live in? _____
2. How did you get to the centre?
   Taxi Bus Bicycle
   Train Car or motorcycle Walk
3. Did you use the car park provided by the centre?
   Yes No
4. How often do you shop at the centre?
   This is the first time Once a fortnight
   Several times a week Once a month
   Once a week Only very occasionally
5. What types of goods and services will you buy today?
   Clothes Groceries
   Household/electrical goods Fresh fruit and vegetables
   Financial/banking services Light meal/refreshments
6. Do you often shop at any other major shopping centre?
   Yes No If yes, which one? _____
7. What attracts you to this centre? _____
8. Apart from shopping, are there any other reasons for you coming to the centre?
   Work Post office Bank
   Hairdresser Doctor Dentist
   Solicitor Restaurants Entertainment
   Other _____

### Select your learnON format to access:

- an overview of the skill and its application in Geography (Tell me)
- a video and a step-by-step process to explain the skill (Show me)
- an activity and interactivity for you to practise the skill (Let me do it)
- questions to consolidate your understanding of the skill.

### on Resources

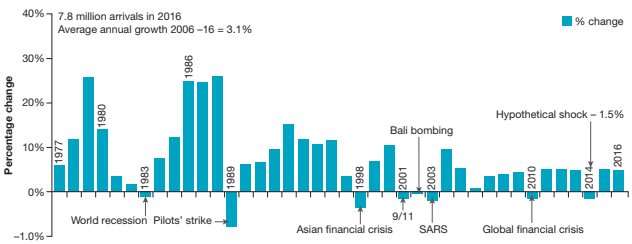
**Video eLesson** Creating a survey (eles-1764)
**Interactivity** Creating a survey (int-3382)

# 16.7 SkillBuilder: Describing divergence graphs

online only

## What is a divergence graph?

A divergence graph is a graph that is drawn above and below a zero line. Those numbers above the line are positive, showing the amount above zero. Negative numbers that are shown indicate that the data has fallen below zero.




### Select your learnON format to access:

- an overview of the skill and its application in Geography (Tell me)
- a video and a step-by-step process to explain the skill (Show me)
- an activity and interactivity for you to practise the skill (Let me do it)
- questions to consolidate your understanding of the skill.

### on Resources

**Video eLesson** Describing divergence graphs (eles-1739)
**Interactivity** Describing divergence graphs (int-3357)

# 16.8 The impacts of tourism

## 16.8.1 Do the benefits outweigh the costs?

In some ways, tourism seems like the perfect industry. It can encourage greater understanding between people and bring prosperity to communities. However, tourism development can also destroy people's culture and the places in which they live. There is sometimes a fine line between exploitation and sustainable tourism. **FIGURES 2** and **3** outline some of the key positive and negative impacts of tourism.

**FIGURE 1** Promoting cultural understanding or commercialising traditional culture? Protecting or exploiting the natural environment? Tourism can have both positive and negative impacts on people and the environment.

**FIGURE 2** The positive impacts of tourism

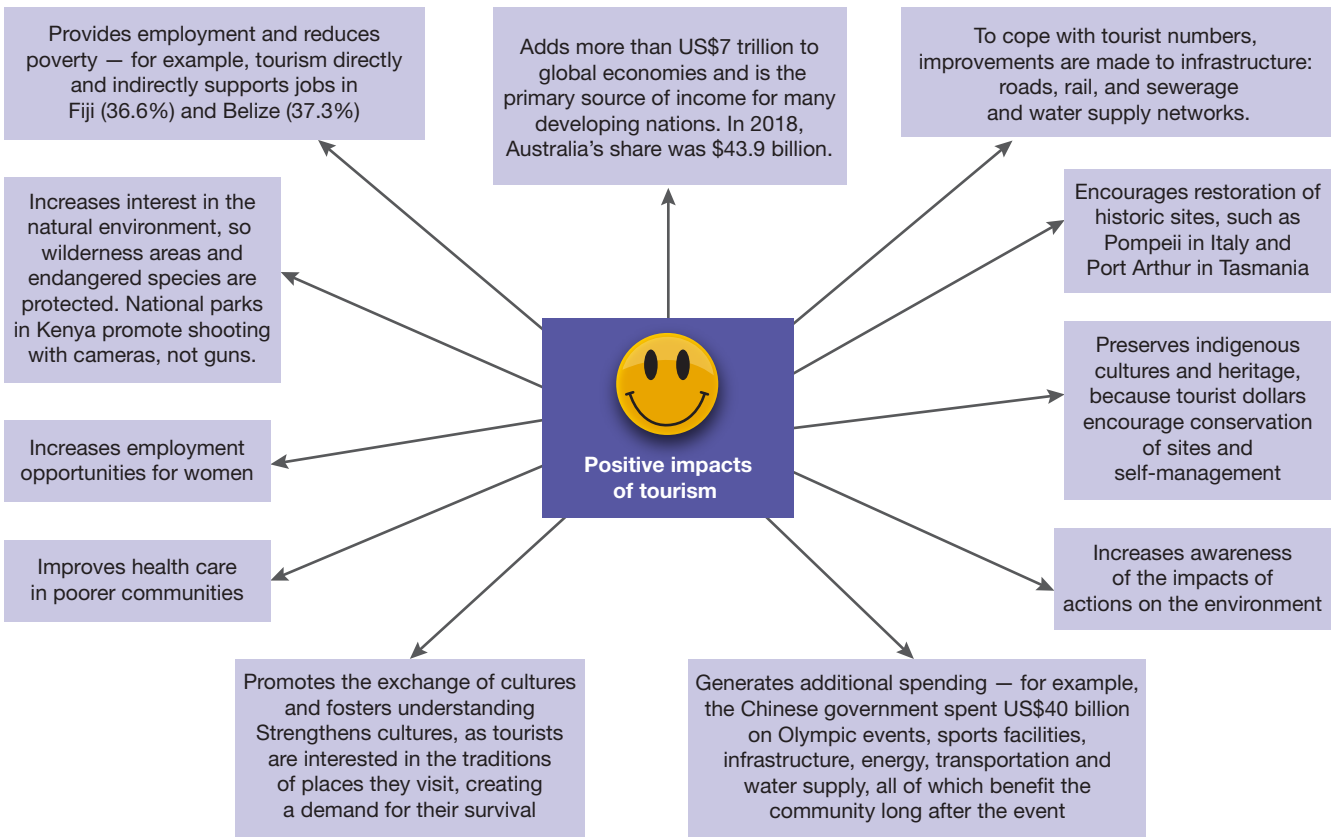
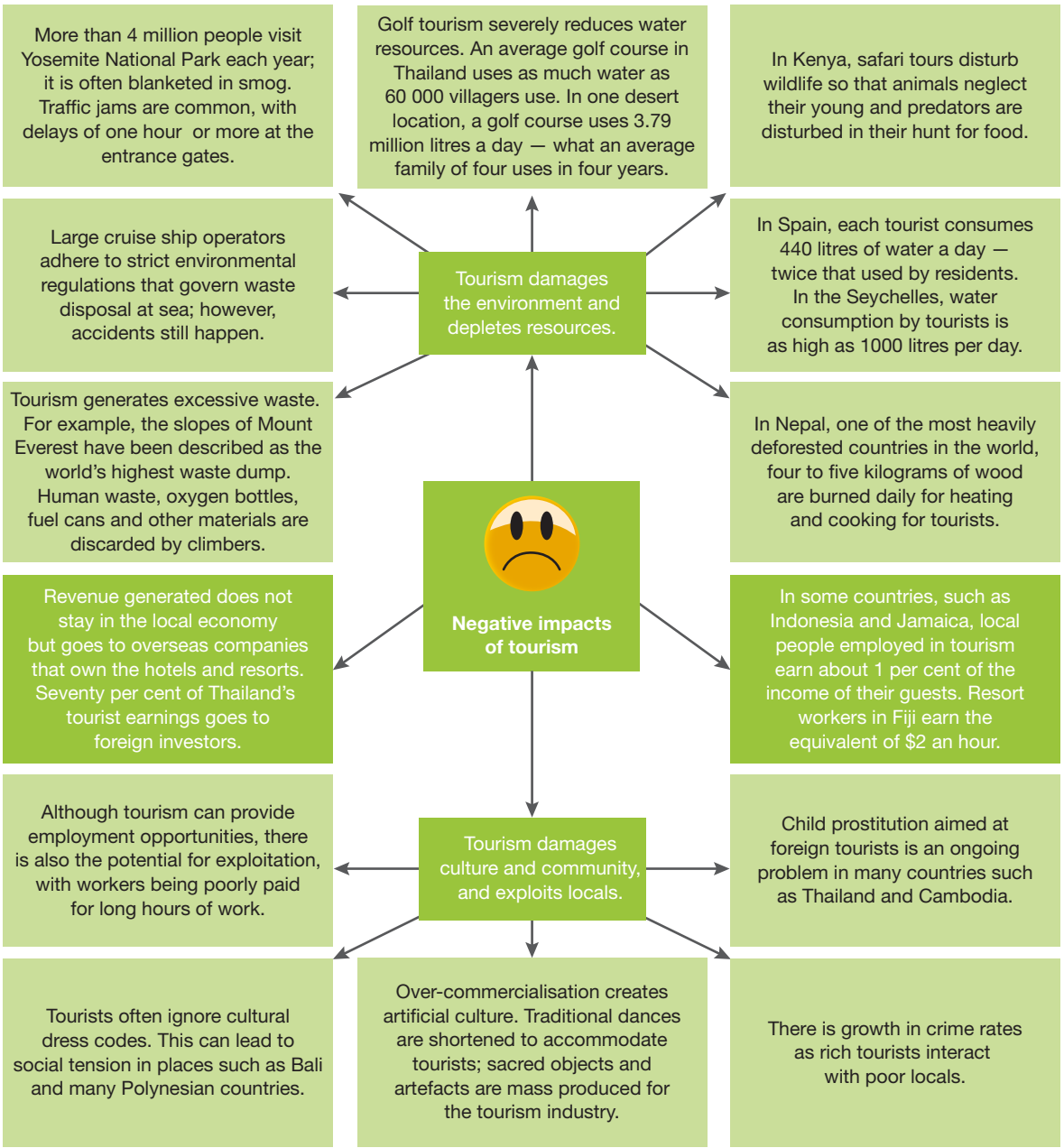


**FIGURE 3** The negative impacts of tourism




## 16.8 EXERCISES

**Geographical skills key: GS1** Remembering and understanding **GS2** Describing and explaining **GS3** Comparing and contrasting **GS4** Classifying, organising, constructing **GS5** Examining, analysing, interpreting **GS6** Evaluating, predicting, proposing

### 16.8 Exercise 1: Check your understanding

1. **GS2** One criticism of tourism is that it is 'over-commercialised'. Explain your understanding of this term.
2. **GS2** Tourism provides both direct and indirect employment. Provide an example of each.
3. **GS2** Explain how tourism can improve the living conditions for individuals in developing nations.
4. **GS2** Explain how tourism may lead to an increase in the crime rate in a popular tourist destination.
5. **GS2** Explain how tourism can lead to the preservation and conservation of ancient ruins and the creation of nature reserves.

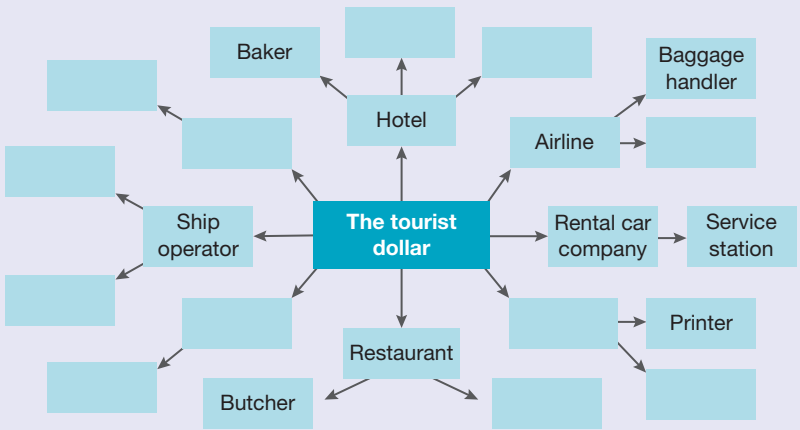
### 16.8 Exercise 2: Apply your understanding

1. **GS4** Study **FIGURES 2** and **3**.
   (a) Create a table like the one shown below to classify the impacts of tourism as social, economic or ***environmental***.

| Impacts of tourism | Social/cultural | Economic | Environmental |
|---|---|---|---|
| **Positive** | | | |
| **Negative** | | | |

   (b) Rank each of the impacts from most to least impactful. Write a paragraph to explain your rankings.
2. **GS2** Using the table you created in question 1, select a negative impact from each category. Explain the ***scale*** of each impact and devise a strategy for ***sustainable*** tourism.
3. **GS5** **FIGURE 4** shows how the tourist dollar can flow from one job to the next. The jobs in the centre of the diagram interact directly with the tourist, while those on the outside do not.
   (a) Copy the diagram into your workbook at an enlarged size. Complete it by adding other jobs.
   (b) Study your completed diagram and write a paragraph explaining the ***interconnection*** between tourism and the economy.
   (c) Repeat this exercise looking at either the social or ***environmental*** impacts.

**FIGURE 4** One view of tourism




4. **GS6** The type of ***interconnection*** shown between industries in **FIGURE 4** is sometimes called the multiplier effect. Explain what you think this means.
5. **GS6** Which of the following would be the best to develop as a tourist resource in your region: art gallery, museum, cinema complex or sports stadium? Justify your answer.

Try these questions in learnON for instant, corrective feedback. Go to www.jacplus.com.au.

# 16.9 Managing environmental impacts — eco-friendly tourism

## 16.9.1 What is ecotourism?

Tourism has the capacity to benefit environments and cultures or destroy them. **Ecotourism** has developed in response to this issue. The aim is to manage tourism in a sustainable way. This might be through educational programs related to the environment or cultural heritage, or through controlling the types and locations of tourist activities or the number of tourists visiting an area. Ecotourism is the fastest growing sector in the tourism industry, increasing by about 10 to 15 per cent per year.

Ecotourism differs from traditional tourism in two main ways.

- It recognises that many tourists wish to learn about the natural environment (such as reefs, rainforests and deserts) and the cultural environment (such as indigenous communities).
- It aims to limit the impact of tourist facilities and visitors on the environment.

**FIGURE 1** An ideal ecotourism resort

**A** The natural bush is retained and native plants are used to revegetate or landscape the area.

**B** Composting toilets treat human waste, and worm farms consume food waste. Water is treated with ultraviolet light rather than chlorine. Recycling is practised; for example, greywater is used in irrigation and toilet systems.

**C** Visitors are encouraged to improve and maintain the environment by using paths or planting trees.

**D** Buildings blend in with the natural landscape, and local materials are used. Buildings are often raised to prevent damage to plant roots. During construction, builders prevent contamination of the local environment by having workers change shoes and by washing down equipment to keep out foreign organisms.

**E** Local organically grown produce is used, and craft markets and stalls might also be established and run by indigenous communities, supporting the local economy, creating jobs and reducing poverty.

**F** There is no golf course, because of the water that would need to be used and the pesticides it would require.

**G** Low-impact, non-polluting transport such as bicycles is provided for guests.

**H** Walking trails include educational information boards.

**I** An information centre helps visitors understand the environment. Local indigenous people are employed to educate visitors about their culture.

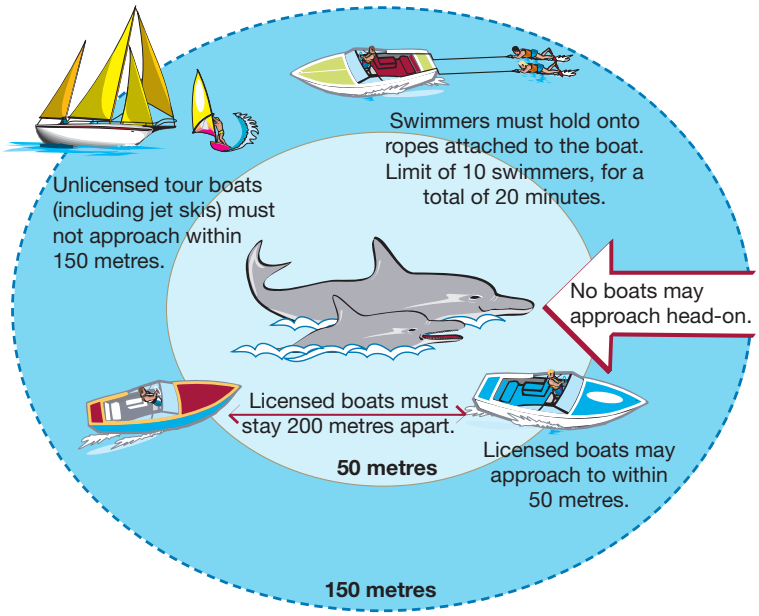
**J** Electricity is generated through solar panels on the roofs of eco-cabins.

**K** Boardwalks are built over sensitive areas such as sand dunes to protect them from damage. Boardwalks might also be constructed in the tree canopies.

**L** Trained guides educate tourists about coral reefs and native vegetation, and show visitors how to minimise their impact.

One of the most famous examples of wildlife-based ecotourism in Australia is Monkey Mia in Western Australia. Here the wild dolphins come into shore and tourists are able to feed, swim with and touch them. **FIGURE 2** shows some of the regulations in place to manage this experience for the mutual benefit of tourists and the marine wildlife.

**FIGURE 2** Regulations for contact with dolphins




## 16.9.2 Are zoos and aquariums eco-friendly?

### The development of zoos over time

A zoo is a place where animals are held in captivity and are put on display for people to view. The concept of zoos is not new; wall carvings provide evidence that ancient civilisations had zoos. Some of the earliest records date back to 2500 BCE when wealthy aristocrats and rulers in Egypt and Mesopotamia had their own private collections called menageries. They arranged expeditions to distant lands to bring back both terrestrial and marine creatures. They hired people to care for their collections and ensure that their animals not only thrived but also reproduced.

The first public zoo was built in 1793 in Paris, France. People not only wanted to be able to see exotic foreign animals but also study them for scientific purposes. However, these early zoos have been described as resembling a museum with living animals that were kept in small display areas rather than natural habitats (see **FIGURE 3**).

In recent years the design of zoos has undergone a major transformation in many parts of the world. People have become more aware of the plight of animals that are kept in captivity. The trend is towards giving animals more space and redeveloping enclosures to mimic their natural environment (see **FIGURE 4**). Education programs are also integrated to provide information about the threats and challenges that exist in the wild. Conservation strategies are highlighted, including what individuals may do to help. Captive breeding programs are also part of a much wider conservation strategy.

Today the definition of a zoo can be extended to include wildlife reserves, petting zoos, aquariums and aviaries, where care is taken to reproduce natural environments including cold habitats for animals such as polar bears and heated enclosures with regulated humidity for species from tropical areas.

The redevelopment of zoos and the focus on conservation rather than purely on human entertainment has meant that they are considered to have some environmental benefit. Although the International Union for Conservation of Nature (IUCN) Red List of endangered and threatened species continues to grow, zoos have been instrumental in ensuring that some species have been brought back from the brink of extinction.

**FIGURE 3** Melbourne Zoo, 1963

**FIGURE 4** Melbourne Zoo, 2016

### Przewalski's horse

Przewalski's horse is a rare and endangered wild horse, native to the Gobi Desert in Mongolia. In 1969 it was declared extinct in the wild, with the only remaining populations being held in the Munich and Prague zoos. At one stage only 15 of the animals remained. A captive breeding program was devised to not only increase numbers but also ensure the genetic viability of the offspring produced. The program, which continues today, had astounding success.

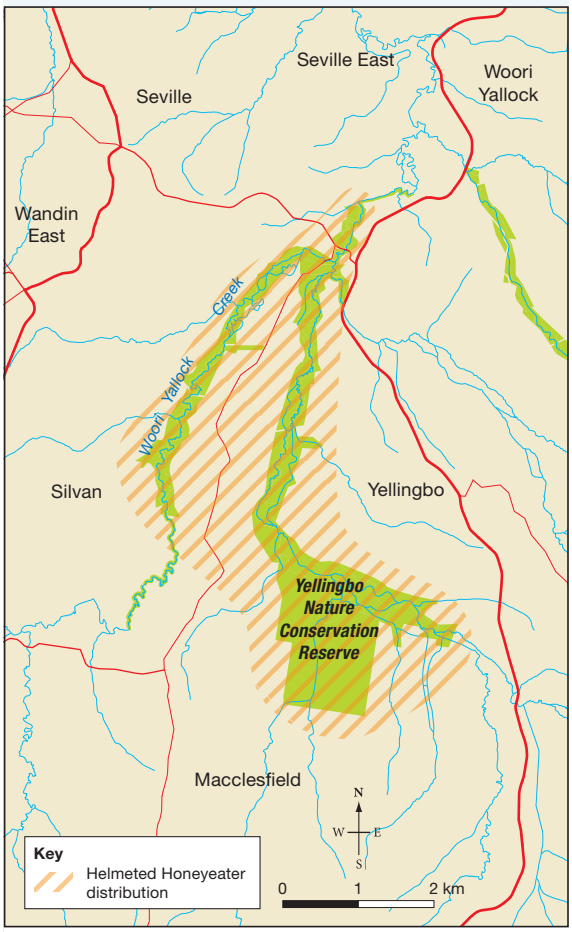
Today, there are about 1500 Przewalski's horses in captivity and 400 in the wild after they were successfully reintroduced into a protected reserve in Mongolia. Despite the harsh conditions of their natural environment and setbacks such as the brutally cold winter of 2009, which saw the wild population fall by half, they have continued to thrive.

### Helmeted Honeyeater

Victoria's bird emblem, the Helmeted Honeyeater, is listed as critically endangered, with numbers falling to as low as 50 in the wild. There are currently only three small semi-wild populations, located to the east of Melbourne in the Yellingbo Conservation Reserve, which consists largely of swamp forest (see **FIGURE 5**). Healesville Wildlife Sanctuary (part of Zoos Victoria) has a captive breeding program that aims to increase the number of birds in the wild to ten interconnected and stable breeding colonies.

Due to the risk of fire, the sanctuary also has a management plan in place that includes relocating its inhabitants to Melbourne in the event of fire sweeping through the area. The Helmeted Honeyeaters held at Healesville are the only viable populations that could be used to repopulate the Yellingbo Conservation Reserve if it were devastated by fire.

**FIGURE 5** Helmeted Honeyeater distribution map




***Source:*** http://www.zoo.org.au/healesville/animals/helmeted-honeyeater
The State of Victoria, Department of Environment, Land, Water & Planning 2016

## on Resources

**Google Earth:** Yellingbo Conservation Reserve

## Are all zoos eco-friendly?

While zoos primarily promote themselves as acting in the best interests of the wildlife they keep, sometimes this is not necessarily the case. The scenario outlined in **FIGURE 6** provides one example of a situation where the best interests of the animal were not taken into account.

**FIGURE 6** The case of Marius the giraffe

Last weekend, a healthy juvenile male reticulated giraffe at the Copenhagen Zoo was killed. His name was Marius. The reason given was that his genes were already sufficiently represented in the giraffe population across the zoos of the European Association of Zoos and Aquariums (EAZA) — his brother lives in a zoo in England, for example — making him a so-called 'surplus animal.' Despite the international outcry against it, the giraffe was euthanized, a necropsy was performed by scientists while educators explained the dissection to the gathered crowd, and hunks of meat were fed to the zoo's lions, polar bears, and other carnivores.

***Source:*** Jason G Goldman

## Marine parks

Marine parks are similar to zoos except that they are home to marine creatures. They were a boom industry in the mid to late twentieth century, with many offering not just the opportunity to view marine animals but also to watch them perform.

While most parks promoted the fact that they only housed animals born in captivity or rescued from the wild, this has not always been the case, with adult orcas, for example, sometimes killed so that their young could be taken into captivity. The *Free Willy* movies, which first screened in the 1990s, focused attention on the plight of whales in captivity. Orcas were often housed in pools that were inadequate in size; the collapsed dorsal fins of many of these animals indicated inadequate standards and perhaps even boredom. In addition, the lifespan of captive orcas is halved compared to the species living in the wild.

**FIGURE 7** Sea World in California is home to orcas.

As tourists boycotted facilities in protest against the treatment of killer whales and the visitor numbers fell, marine parks such as Sea World in San Diego, California, revamped their shows to improve the conditions of the animals and emphasise the natural environment. Some marine parks now also promote themselves as theme parks — for example, Sea World on the Gold Coast.

### Chimelong Ocean Kingdom, China

In contrast, China's ocean theme parks have experienced a tourist boom despite the fact that their living conditions are less than adequate. It is thought that across China 872 cetaceans are held, including bottlenose dolphins, beluga whales, orcas and sea lions, all taken directly from the wild and sold on the black market at prices ranging from US$50 000 to US$1 000 000.

Chimelong Ocean Kingdom is home to whales, dolphins, polar bears, Arctic foxes, walruses and seals held in tanks and enclosures described as inadequate in terms of meeting their social and behavioural needs. Their diet is similarly inadequate and animal conservationists report that cramped living conditions are resulting in aggressive behaviours rarely seen in the wild.

In their natural Arctic and sub-Arctic environment, beluga whales are social animals that live in pods varying in size from a few to a couple of hundred individuals. They may travel up to 160 kilometres in a day and dive to depths of 300 metres. In captivity, they are confined to shallow tanks that only allow them to aimlessly circle their enclosure and are expected to perform tricks that are not a part of their natural behaviour.

## Explore more with myWorldAtlas

Deepen your understanding of this topic with related case studies and questions.
- Investigate additional topics > Tourism > **Kakadu National Park**
- Investigate additional topics > Managing environments > **Wilsons Promontory**
- Investigate additional topics > Tourism > **Ningaloo Reef and ecotourism**

## on Resources

**Interactivity** Sustainable sightseeing (int-3336)
**Weblink** Zoos Victoria

## 16.9 INQUIRY ACTIVITIES

1. Visitors to ecotourism resorts are often attracted by brochures that emphasise the resort's ***environmental*** policies. These brochures also set out guidelines to follow in order to minimise visitor impact.
   (a) Design and produce a brochure for the ecotourism resort illustrated in **FIGURE 1**. Use ICT tools and techniques to maximise the brochure's impact.
   (b) Add another eco-activity to the island and devise strategies to educate tourists and minimise their impact on the ***environment***. **Classifying, organising, constructing**
2. Use the **Zoos Victoria** weblink in the Resources tab.
   (a) Investigate what is being done to fight extinction.
   (b) Investigate one of the threatened species featured on the website.
   (c) Prepare an annotated visual display of your findings. **Examining, analysing, interpreting** **Classifying, organising, constructing**
3. Select and investigate one of the species mentioned in this subtopic. Write a report that compares the species' natural habitat existence with that of being held in captivity. **Examining, analysing, interpreting**

## 16.9 EXERCISES

**Geographical skills key: GS1** Remembering and understanding **GS2** Describing and explaining **GS3** Comparing and contrasting **GS4** Classifying, organising, constructing **GS5** Examining, analysing, interpreting **GS6** Evaluating, predicting, proposing

### 16.9 Exercise 1: Check your understanding

1. **GS1** How does an ecotourism resort differ from a traditional tourist resort?
2. **GS2** Consider the ecotourism example of Monkey Mia, Western Australia.
   (a) What rules and other techniques are used to control the interaction between dolphins and tourists?
   (b) Predict potential problems that might occur between dolphins and tourists.
   (c) Do you think this is an example of ***sustainable*** ecotourism? Give reasons for your answer.
3. **GS1** What is a zoo?
4. **GS1** Outline the different types of zoos and the positive and negative impacts they may have on wildlife.
5. **GS2** Explain what you understand by the term *captive breeding program*.

### 16.9 Exercise 2: Apply your understanding

1. **GS2** Consider the eco-resort shown in **FIGURE 1**.
   (a) Outline further ***changes*** that could be made to the resort to make it even more ***environmentally*** friendly.
   (b) Would you describe your ***changes*** as small-***scale*** or large-***scale***?
   (c) Justify how these ***changes*** might be more ***environmentally sustainable***.
2. **GS6** To what extent do you think zoos are an ethical form of tourism? Justify your point of view. In your response consider:
   - how culture, personal beliefs and world views can influence the decision making of people in different ***places***
   - how individual perceptions of fairness, equality, respect and tolerance influence people's decision making.
3. **GS2** With reference to one species featured in this subtopic, explain the role zoos play in a comprehensive conservation program.
4. **GS2** Explain the difference between a theme park and a marine park.
5. **GS6** There is a thriving 'black market' trade in marine animals. Suggest a strategy for reducing the illegal trade in wildlife.

Try these questions in learnON for instant, corrective feedback. Go to www.jacplus.com.au.

# 16.10 Cultural tourism

## 16.10.1 Defining cultural tourism

According to the UN World Tourism Organization,

> Cultural tourism is a type of tourism activity in which the visitor's essential motivation is to learn, discover, experience and consume the tangible and intangible cultural attractions/products in a tourism destination.
>
> These attractions/products relate to a set of distinctive material, intellectual, spiritual and emotional features of a society that encompasses arts and architecture, historical and cultural heritage, culinary heritage, literature, music, creative industries and the living cultures with their lifestyles, value systems, beliefs and traditions.

Cultural tourism is not a new thing — it has long been a factor in many people's reasons for travel. Visits to places like Port Arthur in Tasmania, Sovereign Hill in Ballarat, the Colosseum in Rome or the Pyramids in Egypt can be considered cultural tourism, as people endeavour to learn about and connect with the past. This type of tourism prompts us to preserve and protect our heritage.

Visiting art galleries, such as the Louvre in Paris, attending music and theatre performances, or even undertaking a cooking course in another place are also examples of cultural tourism activities that broaden our knowledge and understanding of our world and its people.

In 2017, more than two-fifths of international visitors to Australia included a cultural event in their itinerary and a third participated in a heritage event. Cultural tourists also tend to stay longer. In 2017, international visitors to Victoria who attended a cultural event stayed for 25 nights, compared with 23 nights for those who did not.

Globally, cultural tourism is on the rise as people return home, undertake a pilgrimage, or simply want to experience a significant cultural event in another place. Examples include the following.

- The Day of the Dead — originating in Mexico, the festival celebrates the dead, who have awakened to celebrate with loved ones before continuing their spiritual journey (see **FIGURE 1**). The festivities span three days, and the public holiday encourages people to remember and pray for family and friends who have passed away. The custom has now spread to other places such as the United States and other countries in Latin America.
- The ancient religious festival of Holi, marking the arrival of spring, celebrates the start of a plentiful spring harvest. Originating in the predominantly Hindu nations of India and Nepal, it is also referred to as the Festival of Colours, because of the traditional practice of throwing colours at the Emperor. It has now also spread to other parts of Asia, the Caribbean, North America and South Africa.

- The Hajj pilgrimage to the sacred city of Mecca, located in Saudi Arabia, is a practice dating back to the ancient prophets. With the expectation that it will be made at least once in every Muslim person's lifetime, the Hajj is an enormous gathering, attracting 3 to 5 million people each year (see **FIGURE 2**). It occurs over 5 or 6 days in the last month of the Islamic calendar.
- In many cultures where Christianity is the predominant religion, people come together to celebrate Christmas, commemorating the birth of Christ, and Easter, to remember his resurrection.

Whatever the reason, the mass movement of people associated with these events has a significant impact on both people and places.

**FIGURE 1** Thousands gather to attend the Day of the Dead parade in Mexico City each year.

**FIGURE 2** Muslims from all over the world make the Hajj pilgrimage to Mecca, Saudi Arabia.

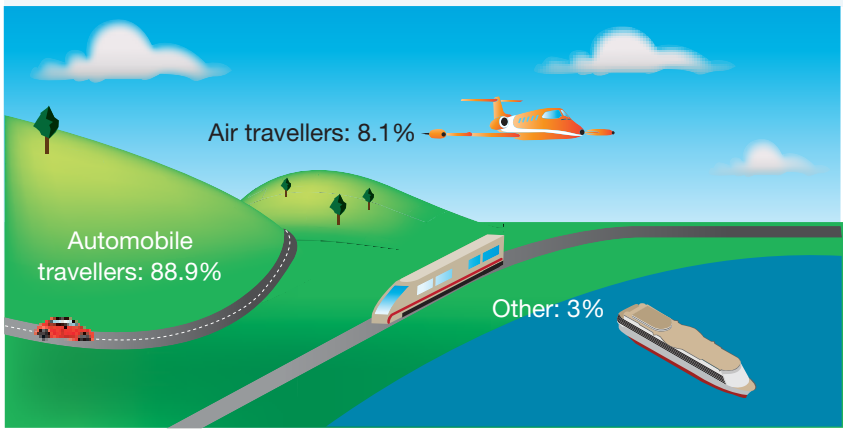
## 16.10.2 Thanksgiving

Thanksgiving is held each year in the United States on the fourth Thursday in November. It dates back to the seventeenth-century celebration of the harvest. Today it is a time for families to get together and give thanks for what they have.

The Thanksgiving holiday period runs from Wednesday to Sunday. As millions of people travel across the United States, transport systems are stretched to their limits, creating traffic congestion and delays. Because the holiday season is so close to the start of winter, the weather can further complicate people's travel plans, especially for those who live in the colder northern states. Early winter storms can bring ice and snow, resulting in airport closures and impassable roads.

The average American will spend around 21 per cent of their Thanksgiving budget on travelling to their destination, whether by car, air or other means (see **FIGURE 3**).

**FIGURE 3** Modes of transport used for Thanksgiving travel



## 16.10.3 Chinese New Year

Chinese New Year is the longest and most important of the traditional Chinese holidays. Dating back centuries, it is steeped in ancient myths and traditions. The festivities begin on the first day of the first month in the traditional Chinese calendar, and last for 15 days. They conclude with the lantern festival on Chinese New Year's Eve, a day when families gather for their annual reunion dinner. It is considered a major holiday, and it influences not only China's geographical neighbours but also the nations with whom China has economic ties.

The date on which Chinese New Year occurs varies from year to year. This date coincides with the second **new moon** after the Chinese **winter solstice**, which can occur any time between 21 January and 20 February.

Chinese New Year, or Lunar New Year, is celebrated as a public holiday in many countries with large Chinese populations or with calendars based on the Chinese lunar calendar (see **FIGURE 4**). The changing nature of this holiday has meant that many governments have to shift working days to accommodate this event.

In China itself, many manufacturing centres close down for the 15-day period, allowing tens of millions of people to travel from the industrial cities where they work to their hometowns and rural communities. This means that retailers and manufacturers in overseas countries such as the United States and Australia have to adjust their production and shipping schedules to ensure they have enough stock on hand to deal with the closure of factories in China. For those shopping online, delays in delivery are to be expected during this period.

**FIGURE 4** To ensure prosperity and good fortune in the year ahead, parades, dragons and lion dances feature in Chinese New Year celebrations.

## The logistics of moving millions

Chinese New Year has been described as the biggest annual movement of people in China. Over a five-day period, an average of 80 million journeys are recorded in the last-minute dash to make it home for the traditional family celebrations – a total of 400 million people on the move in just five days!

Although incomes have risen for middle-class citizens in China, most people elect to travel by road as they do not want to stand in long queues for hours or even days to purchase bus or rail tickets. In 2018, over the 40-day Spring Festival period that encompasses Chinese New Year, 2.4 billion trips were made by road, 389 million trips were made by train and 65 million trips were made by plane. Airlines scheduled an additional 200 flights to cope with the demand. It is not uncommon for commuters to add hundreds, or even thousands of kilometres to their journey; one airline passenger flew from Beijing to Kunming in Southern China via Bangkok in Thailand because there were no direct flights. Weather conditions and the impact of additional flights competing for the same amount of air space make delays inevitable.

Weather conditions can also impede rail and car travel. In 2017 a cold snap saw highways in central China covered in ice; this was further complicated by heavy fog making road travel close to impossible. In 2016, almost 100 000 people were left stranded at railway stations after ice and snow in other parts of the country caused long delays. Fifty-five trains in Shanghai and 24 in Guangzhou were unable to leave their respective stations when China was struck by a record-breaking cold snap (see **FIGURE 5**). Almost 4000 police and security guards were called in to keep order.

Late in 2018, ten new railways were added to the rail network to expand the length of China's high-speed railway — the second-largest in the world behind the United States. At its peak, the online rail booking system had to cope with 1000 bookings per minute! High demand also leads to high prices, and scalpers were quick to cash in, charging double or even triple the usual ticket cost.

**FIGURE 5** Travel chaos as crowds swell outside Guangzhou station after bad weather causes long delays

For many, motorbike travel is the cheapest way to return home, with some making journeys in excess of 400 kilometres. Motorbikes offer not only a cost saving, but also a time saving. Although China boasts one of the world's largest road networks, with almost 98 000 kilometres of motorway, when 2.4 billion people take to the roads, congestion is inevitable. To ensure safety and improve traffic flow, 170 000 additional police in an extra 60 000 police vehicles are mobilised.

With such challenges to moving around China during this period, it is no wonder that a growing trend favoured by more than 7 million Chinese is to celebrate the New Year by travelling abroad to over 90 countries. Others are now electing not to travel at all, instead choosing to work through the holiday period to take advantage of increased pay rates on offer. In response to an increasing trend in takeaway food orders during the festivities, some employers in the hospitality industry are offering delivery drivers triple pay to work on Chinese New Year.

## Resources

**Weblink** Thanksgiving

### 16.10 INQUIRY ACTIVITY

**a.** As a class, brainstorm a list of cultural or celebratory events that occur in Australia.

**b.** Use the internet to find out more about either Chinese New Year or Thanksgiving. Investigate the history, myths and traditions associated with your chosen event. Prepare an annotated visual display comparing your findings with a cultural or celebratory event in Australia. Make sure you include references to the ***scale*** of your chosen event and the ***place*** in which it occurs. **Examining, analysing, interpreting Classifying, organising, constructing**

### 16.10 EXERCISES

**Geographical skills key: GS1** Remembering and understanding **GS2** Describing and explaining **GS3** Comparing and contrasting **GS4** Classifying, organising, constructing **GS5** Examining, analysing, interpreting **GS6** Evaluating, predicting, proposing

#### 16.10 Exercise 1: Check your understanding

1. **GS2** In your own words, explain what is meant by the term *cultural tourism*.
2. **GS2** Why are Thanksgiving and Chinese New Year regarded as cultural events?
3. **GS2** Explain why Chinese New Year leads to industries shutting down for 15 days.
4. **GS2** What is a *pilgrimage*?
5. **GS2** Describe the impact the weather might have on a cultural event.

#### 16.10 Exercise 2: Apply your understanding

1. **GS5** Write a paragraph explaining how cultural events can ***change*** people, ***places*** and the ***environment.***
2. **GS3** Answer the following to reflect on Thanksgiving and Chinese New Year travel.
   (a) What is the preferred mode of transport for Thanksgiving and for Chinese New Year? Suggest reasons for differences in travel arrangements. In your response, include reference to the ***scale*** of movement.
   (b) Make a list of problems associated with the mass movement of people.
   (c) Select one of the problems you have identified and explain the impact it might have on people, ***places*** and the ***environment***. Suggest a strategy for the ***sustainable*** management of this problem in order to reduce its impact.
3. **GS5** Write a paragraph describing a traditional cultural event that you and your family celebrate. Is it an example of cultural tourism? Give reasons for your answer.
4. **GS6** Explain the impact Chinese New Year might have on a clothing import business in Australia. In your answer, explain what a business owner might need to do to ensure their business is not affected by this event.
5. **GS5** Some cultural events, such as Thanksgiving, occur at approximately the same time each year, whereas others such as Chinese New Year vary more in their timeframe. Explain why this is so.

Try these questions in learnON for instant, corrective feedback. Go to www.jacplus.com.au.

# 16.11 Tourism and sport

## 16.11.1 How are tourism and sport connected?

Sport tourism involves people travelling to view or participate in a sporting event or sporting pursuits. Tourism in which someone travels to either actively participate in or watch a competitive sport as the main reason for their travel is known as **hard sport tourism**. Tourism in which someone participates in recreational and leisure activities, such as skiing, fishing and hiking as part of their travel is known as **soft sport tourism**. A common trait in all sports tourists is their passion for the sport and a willingness to spend money to indulge this passion.

**FIGURE 1** On the trail — soft sport tourism

Sport tourism is an expanding sector of the tourism industry, estimated to add $800 billion to global economies each year. It is estimated that between 12 million and 15 million international trips are made to view sporting events. But what impact does this have on people and places?

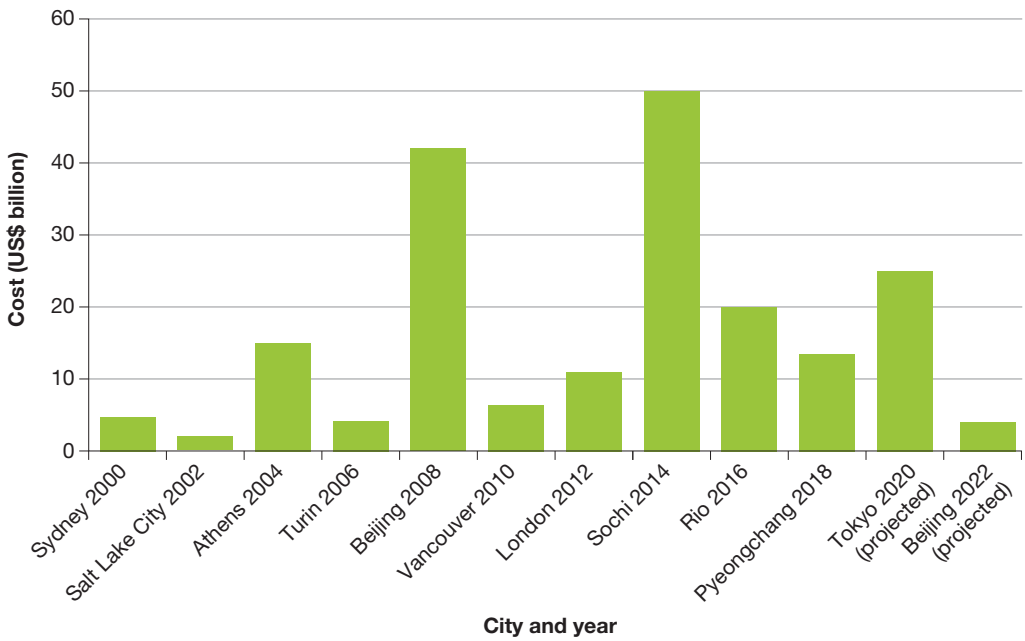
Governments spend millions of dollars to attract people to sporting events such as the Olympics, the cricket, the FIFA World Cup and motor racing events, to name just a few. These events also trigger:

- construction of new stadiums
- expansion and upgrades of transport networks
- improvements to airport facilities
- clean-ups of cities in readiness for the arrival of tourists.

## 16.11.2 Are the Olympics a tourist bonanza?

Major sporting events such as the Olympic Games translate into improved infrastructure, and provide the host city with considerable international exposure, but this comes at a substantial cost (see **FIGURE 2**). Does this bring in more tourists and justify the capital outlay?

**FIGURE 2** Olympics expenditure (summer and winter), including infrastructure



The general consensus among economists is that the costs associated with hosting a one-off major event, such as the FIFA World Cup or the Olympic Games, generally exceed the value of any anticipated long-term benefits. The 2016 Rio Olympic Games were plagued by political and economic controversy. As the cost of hosting the Games blew out to $20 billion, Brazil was plunged into recession. Issues such as the Zika virus epidemic, a Russian doping scandal and high levels of pollution also threatened to derail the games. On the plus side, upgrades to the public transport network and sewerage system, cleaning up the pollution at Guanabara Bay, and the construction of nine new permanent venues and seven temporary venues delivered a boost to the construction industry. However, now that the Games are long past, Rio has a surplus of venues that it no longer needs. Plans to sell them off failed due to a lack of buyer interest, resulting in many venues, such as the Olympic pool and Maracanã Stadium (site of the opening and closing ceremonies) falling into a state of disrepair. The athletes' village, which housed 10 000 athletes in 3604 apartments, is largely empty, with only 7 per cent of the apartments sold.

In the United Kingdom during the 2012 Olympics year, statistics for August showed 5 per cent *fewer* visitors than in the previous year. Tourism spending, however, went up by 9 per cent, in part because of spending on Olympics tickets. In addition, many UK residents chose to holiday overseas rather than remain at home during the Olympic Games. Organisers were also frustrated by the number of empty seats in many of the venues. On the plus side, however, building the Olympic village provided a £6 billion boost to the building and construction industry.

**FIGURE 3** The opening ceremony of the London Olympic Games

But what happens to the people who originally lived on the site of the new venues and athletes' village? Quite simply, they are moved on. While they may receive some compensation, land values go up in the shadow of renewed development. Residents simply cannot afford to live in the new developments, nor can they afford to renovate their existing dwellings. In the lead-up to the Beijing Olympics, 1.5 million Chinese people were forced out of their homes to make way for Olympics venues.

Once the event is over, many of the stadiums are underused, and it can take years to recover from the cost of staging the event. For instance, the city of Montreal in Canada, which hosted the games in 1976, took 30 years to pay back the equivalent of US$6 billion (in today's money) in Olympic spending.

## 16.11.3 Other sports events

It has generally been accepted that regular sporting events can have financial benefits for the host location. Many international tourists visiting the United Kingdom, for instance, include a sporting event on their itinerary. Most popular is soccer, because of the opportunity to see some of the world's most talented athletes playing in some the UK's top teams. Overall, sports tourists stay longer and are not deterred by the weather. Sporting fans also tend to spend more than the rest of the tourist population.

The popularity of football is also evident in Australia, where three separate codes (AFL, soccer and rugby league) attract huge crowds every week, and many fans are prepared to travel interstate to watch their teams play.

But it is not just football that attracts the crowds. The English cricket team, for example, is followed around the world by its unofficial cheer squad — the Barmy Army. Many Australian fans participate in a range of organised sporting tours each year, taking in some of the biggest events both at home and abroad involving, in addition to cricket, sports such as tennis, rugby and golf.

**FIGURE 4** The Barmy Army are English cricket fans who travel the world to cheer on the English cricket team.

## Explore more with myWorldAtlas

Deepen your understanding of this topic with related case studies and questions.
- Investigate additional topics > Australia's links with the world > **Sport**
- Investigating Australian Curriculum topics > Year 9: Geographies of interconnections > **The FIFA World Cup**

## on Resources

**Interactivity** Are the Olympic Games worth gold? (int-3337)

## 16.11 INQUIRY ACTIVITY

Phillip Island is located 100 kilometres south-east of Melbourne, Victoria, and is linked to the mainland by a bridge. The area is popular for its beaches and wildlife, but it is also home to a Grand Prix racing circuit that stages a variety of motor sports throughout the year. Collectively, more than $110 million is generated annually from the circuit's car and bike activities. Three events — the Moto GP, V8 Supercars and Superbikes — bring in around $80 million. Each of these events brings more than 65 000 people to the island.

**a.** What facilities are needed to cater for such a large influx of people?

**b.** **FIGURE 4** in subtopic 16.8 shows how the tourist dollar can flow from one job to the next. Complete a diagram like this for the Phillip Island Grand Prix circuit.

**c.** With a partner, brainstorm a list of negative consequences that might result from having a Grand Prix circuit on Phillip Island. Make sure you consider the impact on people and the ***environment***, as well as the ***scale*** of such effects.

**d.** Write a paragraph explaining the ***interconnection*** between the location of sporting facilities and their impact on people and ***places***.

**e.** Do you think this is an example of ***sustainable*** tourism? Justify your point of view.

**Examining, analysing, interpreting**

## 16.11 EXERCISES

**Geographical skills key: GS1** Remembering and understanding **GS2** Describing and explaining **GS3** Comparing and contrasting **GS4** Classifying, organising, constructing **GS5** Examining, analysing, interpreting **GS6** Evaluating, predicting, proposing

### 16.11 Exercise 1: Check your understanding

1. **GS1** Define *hard sport tourism*.
2. **GS1** Define *soft sport tourism*.
3. **GS2** Consider the concept of sport tourism.
   (a) Is someone who goes to a local football match a sport tourist? Explain.
   (b) What if that person travels interstate? Explain.
4. **GS2** Brainstorm a list of sports on which money might be spent to attract tourists. Categorise these as either hard or soft sport tourism events.
5. **GS4** Compile a table that highlights the positives and negatives of sport tourism.
6. **GS2** From the table you created in question 5, choose two positives and two negatives. For each, explain the impact it has on people and ***places***.

### 16.11 Exercise 2: Apply your understanding

1. **GS6** Suggest a reason why some of the stadiums built for the Rio Olympic Games were temporary rather than permanent.
2. **GS1** Explain how hosting a major international sporting event can lead to improvements in infrastructure.
3. **GS6** Identify a financial cost and a financial benefit of hosting a major sporting event. In your opinion does the benefit outweigh the cost? Give reasons for your answer.
4. **GS6** Queensland has recently expressed interest in hosting the 2032 Olympic Games. Considering the pros and cons of hosting such an event, what advice would you give to the Queensland government?
5. **GS6** A leading economist recently said, 'Major events such as the Olympics should be hosted by developed countries; the cost to developing nations is too great.' To what extent do you agree with this statement? Explain your view.

Try these questions in learnON for instant, corrective feedback. Go to www.jacplus.com.au.

# 16.12 Thinking Big research project: Design a 7-day cruise adventure

online only

## SCENARIO

Mystic Cruises is about to add a new cruise ship to its fleet. As part of the company's cruise development team, you need to design a 7-day cruise, including exotic ports of call and shore excursions that allow cruise guests to take in the sites and culture of the places they visit.

### Select your learnON format to access:

- the full project scenario
- details of the project task
- resources to guide your project work
- an assessment rubric

### Resources

**ProjectsPLUS** Thinking Big research project: Design a 7-day cruise adventure (pro-0194)

# 16.13 Review

online only

## 16.13.1 Key knowledge summary

Use this dot point summary to review the content covered in this topic.

## 16.13.2 Reflection

Reflect on your learning using the activities and resources provided.

### on Resources

| | |
|---|---|
| **eWorkbook** | Reflection (doc-31726) |
| | Crossword (doc-31727) |
| **Interactivity** | Tourists on the move crossword (int-7650) |

## KEY TERMS

**developed** describes countries with a highly developed industrial sector, a high standard of living, and a large proportion of people living in urban areas
**ecotourism** tourism that interprets the natural and cultural environment for visitors, and manages the environment in a way that is ecologically sustainable
**gross domestic product** (GDP) the value of all the goods and services produced within a country in a given period of time (usually a year). It is often used as an indicator of a country's wealth.
**hard sport tourism** tourism in which someone travels to either actively participate in or watch a competitive sport as the main reason for their travel
**infrastructure** the facilities, services and installations needed for a society to function, such as transportation and communications systems, water pipes and power lines
**Masai** an ethnic group of semi-nomadic people living in Kenya and Tanzania
**mature-aged** describes individuals aged over 55
**national park** a park or reserve set aside for conservation purposes
**new moon** the phase of the moon when it is closest to the sun and is not normally visible
**soft sport tourism** tourism in which someone participates in recreational and leisure activities, such as skiing, fishing and hiking as part of their travel
**winter solstice** the shortest day of the year, when the sun reaches its lowest point in relation to the equator

# 16.4 SkillBuilder: Constructing and describing a doughnut chart

## 16.4.1 Tell me

### What is a doughnut chart?

A doughnut chart is a circular chart with a hole in the middle. Each part of the doughnut is divided as if it were a pie chart with a cut-out. The circle represents the total, or 100 per cent, of whatever is being looked at. The size of the segments is easily seen. Presenting the parts in order from largest to smallest makes it easy to interpret.

### Why is a doughnut chart useful?

Doughnut charts are a useful visual interpretation of data. Just like a pie chart, they give us an overall impression of data. They are useful for comparing proportions of categories. They are easy to read, as they show a lot of data and make it easy for us to interpret and compare this data. Doughnut charts can be used to graph any data that adds up to 100 per cent.

They are useful for:

- economists, to show segments of a country's tourism industry
- agriculturalists, to show the percentage of various crops on the land
- retailers, to compare the importance of various goods in their stores during different years.

A good doughnut chart:

- has a hole at its centre
- has segments that are labelled with names, or has a key
- includes percentages and/or raw figures
- is drawn with the largest segment starting at 12 o'clock, proceeding clockwise from largest to smallest, unless there is an 'other' category, which comes last
- gives the source of the data
- has a clear title.

A good description of a doughnut chart:

- identifies and communicates key features, such as highest and lowest data values
- refers to data and names.

## 16.4.2 Show me

### How to construct and describe a doughnut chart

**You will need:**

- a set of data
- a computer
- a blank Excel spreadsheet.

**Model**

**TABLE 1** Australia's food export markets by value, 2010–2011

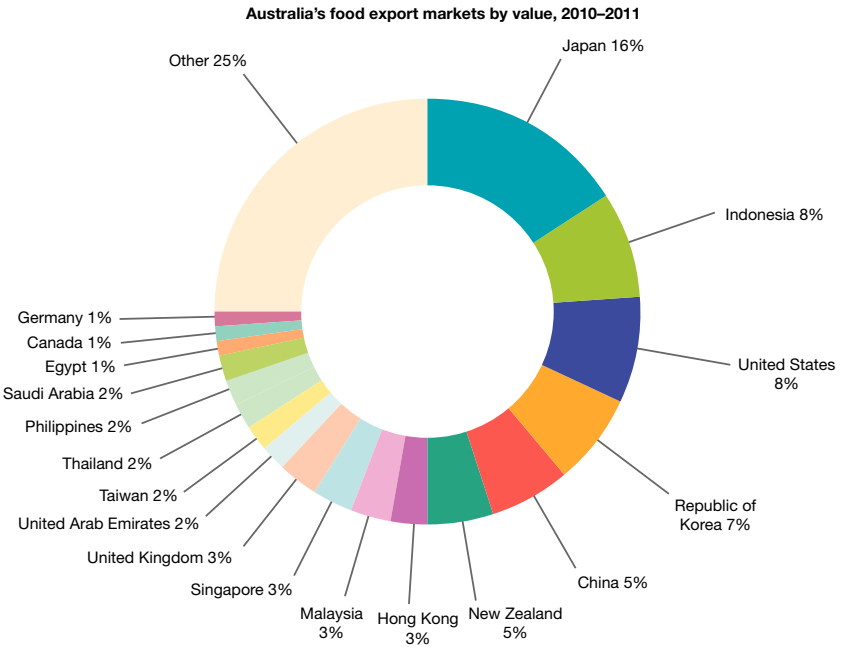
| Country | Value ($ million) |
|---|---|
| Japan | 4207 |
| Indonesia | 2288 |
| United States | 2138 |
| Korea, Rep. of | 1994 |
| China | 1511 |

*(continued)*

**TABLE 1** Australia's food export markets by value, 2010–2011 *(continued)*

| Country | Value ($ million) |
|---|---|
| New Zealand | 1281 |
| Hong Kong, China | 886 |
| Malaysia | 849 |
| Singapore | 739 |
| United Kingdom | 692 |
| United Arab Emirates | 581 |
| Taiwan | 569 |
| Thailand | 539 |
| Philippines | 502 |
| Saudi Arabia | 499 |
| Egypt | 402 |
| Canada | 332 |
| Germany | 263 |
| Other | 6815 |

**FIGURE 1** Australia's food export markets by value, 2010–2011




***Source:*** © DAFF 2012, National Food Plan green paper 2012, Department of Agriculture, Fisheries and Forestry, Canberra. CC BY 3.0.

Australia's food exports go to a large number of countries. These countries are predominantly in Asia, with the exception of the United States and New Zealand. Japan is Australia's greatest importer of food by monetary value, with $4207 million of imports in 2010–2011, or about 16 per cent. Indonesia, the Republic of Korea and China are the other significant Asian buyers of Australian food. Asian countries account for 51 per cent of all our food exports, while the United States and New Zealand account for 13 per cent. Europe and the Middle East take less of our food.

## Procedure

### Step 1

Open a spreadsheet in Excel. Into the spreadsheet, add the data that you wish to graph. If the data is in the form of whole numbers, you will need to convert them to percentages. If the total of the whole numbers is not given, you will have to add the numbers together to get the total. Excel will do this for you with the Auto Sum function ($\sum$) in the toolbar. For example, using the data that went into **FIGURE 1**, select all the data in column B plus row 20 (see **FIGURE 2(a)**). Then click on the Auto Sum symbol and the total will appear in cell B20, as shown in **FIGURE 2(b)**.

### Step 2

To complete the percentage column, click on the first cell of a new column, cell C1, and type in the formula =B1/$B$20. (The $ sign is used to make sure that one specific cell is referred to. Make sure the final number, 20 in this example, is the cell number in which the total appears. This will change with each set of data you enter.) Press Enter and a decimal number will appear. Now click the percentage symbol (%) in the Number section of the toolbar, and the figure in cell C1 will appear as a percentage.

**FIGURE 2** (a) Selecting the column (b) The total appears when you click the $\sum$ button in the Editing section of the toolbar.

(a)

| | A | B |
|---|---|---|
| 1 | Japan | 4207 |
| 2 | Indonesia | 2288 |
| 3 | United States | 2138 |
| 4 | Republic of Korea | 1994 |
| 5 | China | 1511 |
| 6 | New Zealand | 1281 |
| 7 | Hong Kong | 886 |
| 8 | Malaysia | 849 |
| 9 | Singapore | 739 |
| 10 | United Kingdom | 692 |
| 11 | United Arab Emirates | 581 |
| 12 | Taiwan | 569 |
| 13 | Thailand | 539 |
| 14 | Philippines | 502 |
| 15 | Saudi Arabia | 499 |
| 16 | Egypt | 402 |
| 17 | Canada | 332 |
| 18 | Germany | 263 |
| 19 | Other | 6815 |
| 20 | | |

(b)

| | B |
|---|---|
| | 4207 |
| | 2288 |
| | 2138 |
| | 1994 |
| | 1511 |
| | 1281 |
| | 886 |
| | 849 |
| | 739 |
| | 692 |
| | 581 |
| | 569 |
| | 539 |
| | 502 |
| | 499 |
| | 402 |
| | 332 |
| | 263 |
| | 6815 |
| | **27087** |

**FIGURE 3** (a) Use the cursor to drag the bottom right corner of a cell over the remaining rows to be calculated.
(b) Percentage data is now complete.

(a)

| | A | B | C |
|---|---|---|---|
| 1 | Japan | 4207 | 16% |
| 2 | Indonesia | 2288 | |
| 3 | United States | 2138 | |

Small square

(b)

| | A | B | C |
|---|---|---|---|
| 1 | Japan | 4207 | 16% |
| 2 | Indonesia | 2288 | 8% |
| 3 | United States | 2138 | 8% |
| 4 | Republic of Korea | 1994 | 7% |
| 5 | China | 1511 | 6% |
| 6 | New Zealand | 1281 | 5% |
| 7 | Hong Kong | 886 | 3% |
| 8 | Malaysia | 849 | 3% |
| 9 | Singapore | 739 | 3% |
| 10 | United Kingdom | 692 | 3% |
| 11 | United Arab Emirates | 581 | 2% |
| 12 | Taiwan | 569 | 2% |
| 13 | Thailand | 539 | 2% |
| 14 | Philippines | 502 | 2% |
| 15 | Saudi Arabia | 499 | 2% |
| 16 | Egypt | 402 | 1% |
| 17 | Canada | 332 | 1% |
| 18 | Germany | 263 | 1% |
| 19 | Other | 6815 | 25% |
| 20 | | **27087** | |

### Step 3

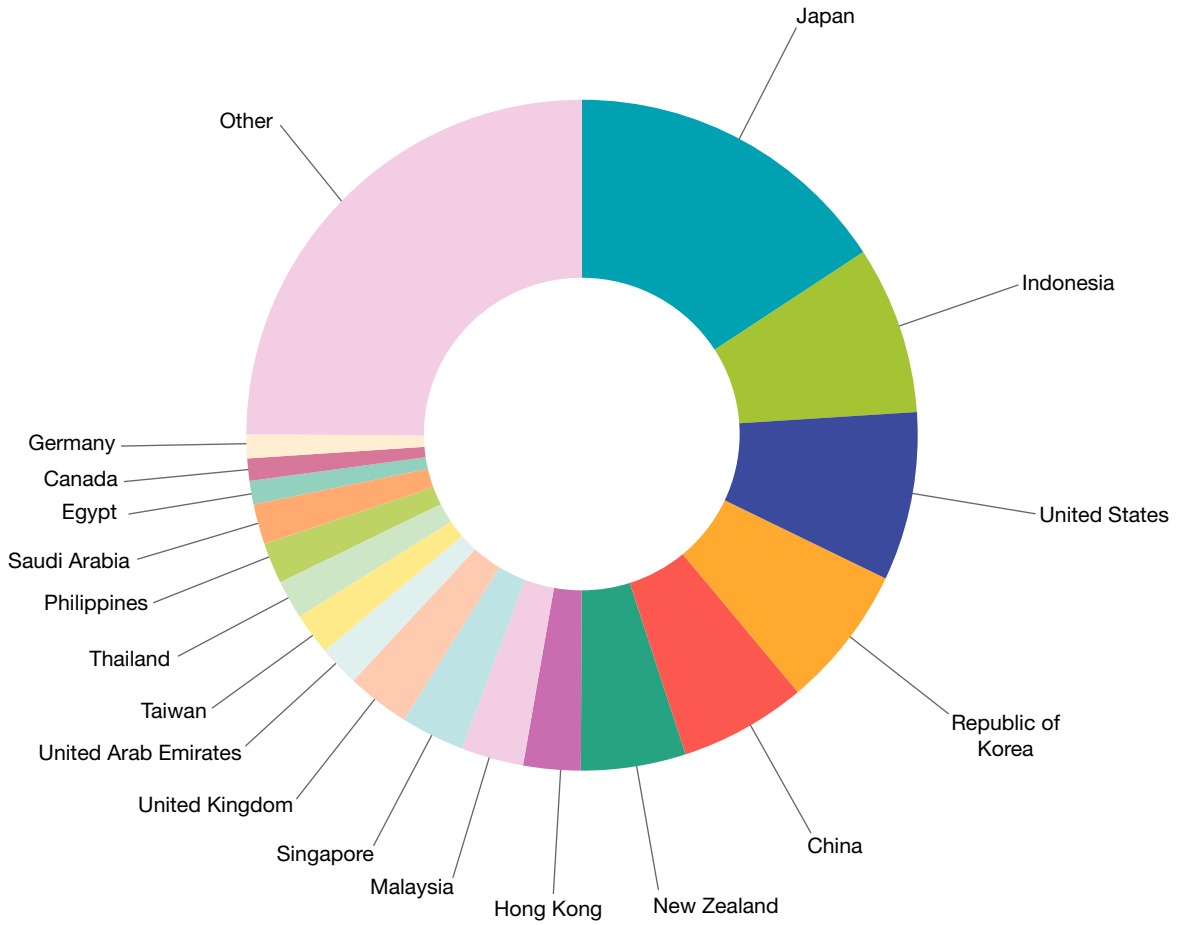
Click on cell C1, and you will see a small square in the bottom right corner, as shown in **FIGURE 3(a)**. Using the cursor, drag this down over the remaining rows to be calculated. Do not include the row in which the total is shown (row 20 in this example). The percentages for all remaining cells will appear. **FIGURE 3(b)** shows a completed chart.

### Step 4

You can now generate the doughnut chart. To do this, select all columns and rows in which your data appears, excluding the total figure (columns A, B and C and rows 1 to 19 in this example), and then click the Insert tab on your toolbar. In the Charts section, select Other Charts and choose the simple doughnut chart. The Excel spreadsheet will create a doughnut chart (see **FIGURE 4**).

If your doughnut chart appears with a second, inner doughnut, click on this and delete it (see **FIGURE 4**).

**FIGURE 4** A completed doughnut chart. This one has a secondary ring within it, which needs to be deleted in this instance.



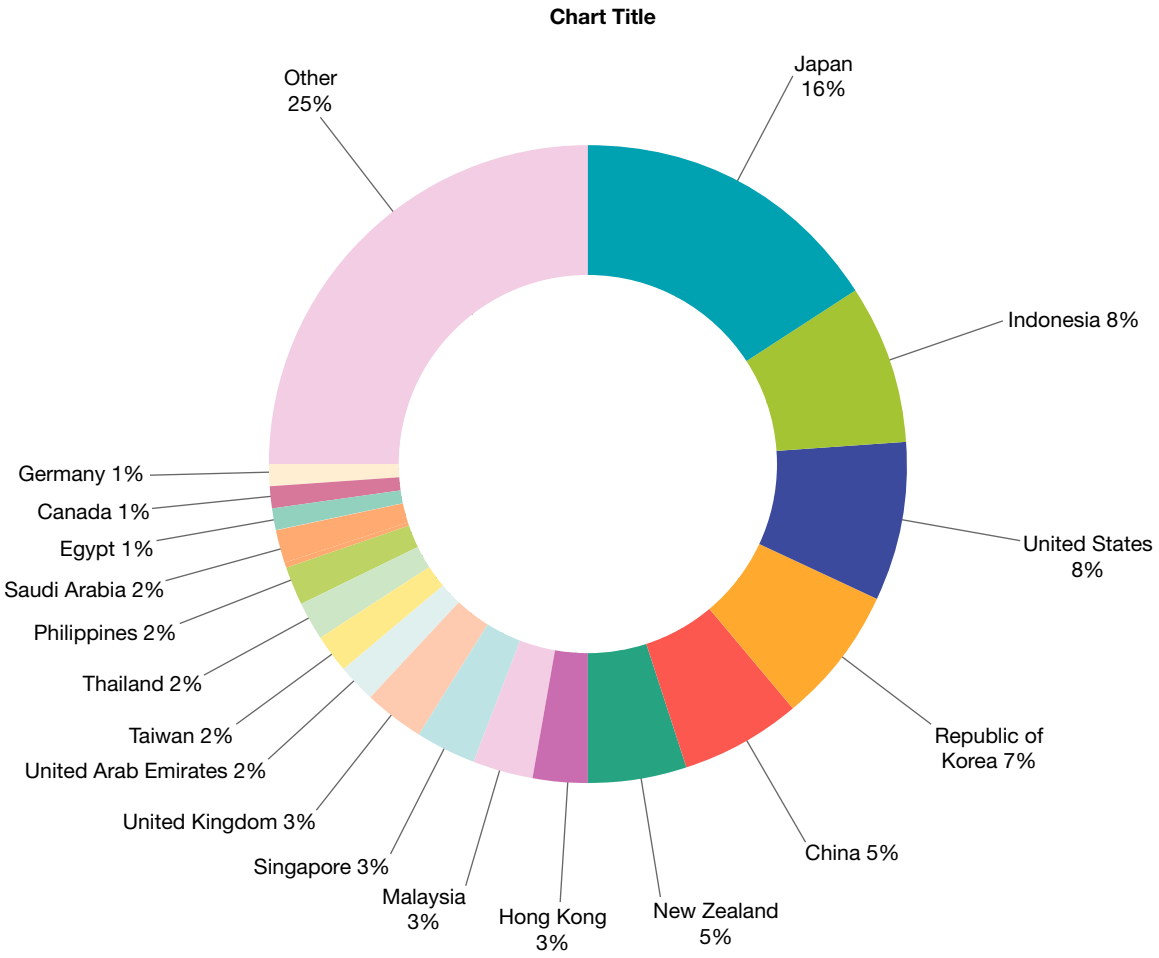
### Step 5

To make the percentage labels appear within your doughnut chart, click on the doughnut and select Chart Layouts in the Design tab on the toolbar, then choose a layout in which the percentage symbol (%) appears. Percentages will appear (see **FIGURE 5**). Try different chart layouts to see which works best.

You might find that the chart appears small and cramped. If so, click on the outer rectangular border around your doughnut chart and drag it. As you do this, the chart will enlarge and the labels and legend will become easier to read.

You can also decrease the type size of the labels by clicking on one (which will highlight all of them), going to the Home tab and reducing the font size. You can do the same for the legend if necessary.

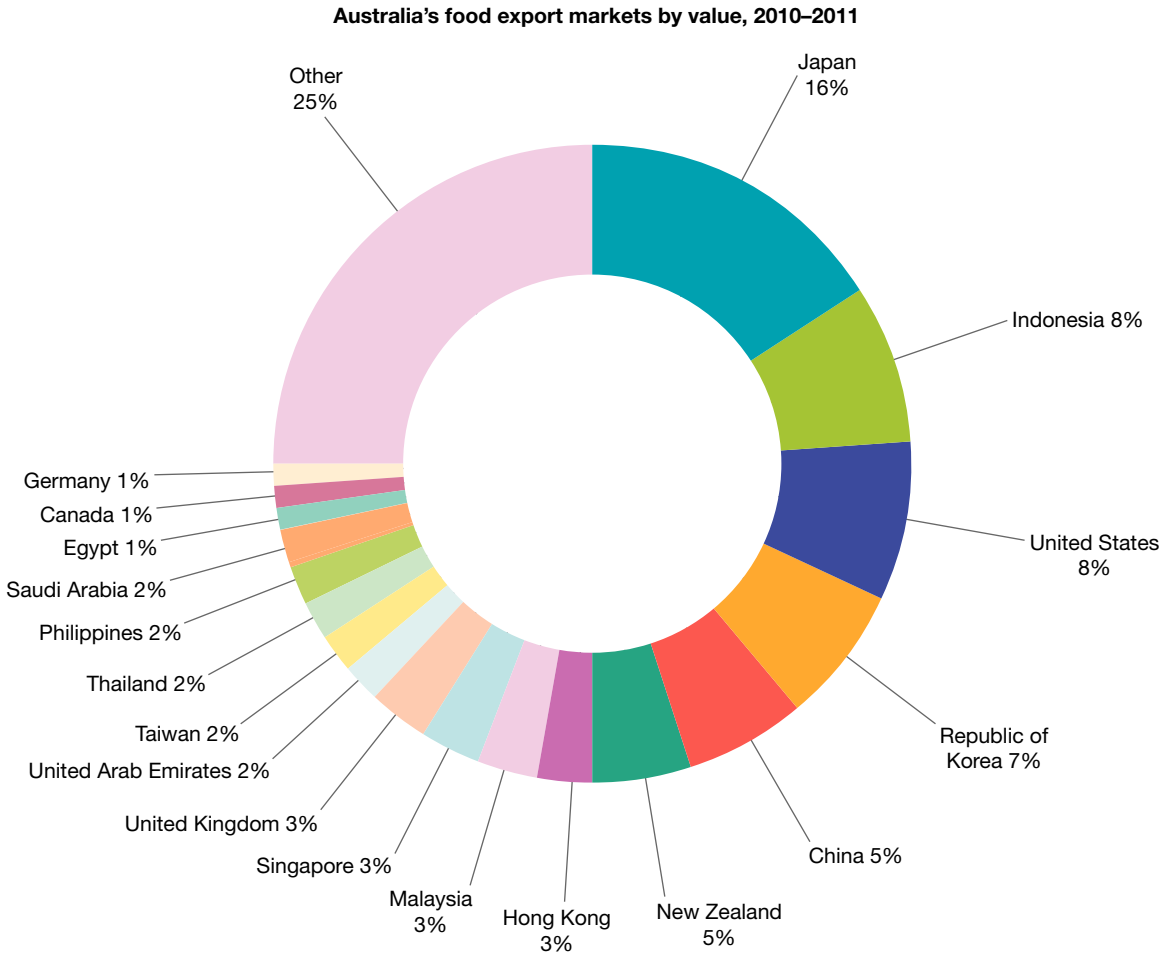
**FIGURE 5** A doughnut chart with percentages added



### Step 6

You now need to add the title. Simply click on the heading *Chart Title* (see **FIGURE 5**), type your title and then press Enter. Your title should include the places and dates for which this data was relevant. You should also provide the source of the data (see **FIGURE 6**).

**FIGURE 6** A doughnut chart with its legend and title in place, along with a source line




***Source:*** © DAFF 2012, National Food Plan green paper 2012, Department of Agriculture, Fisheries and Forestry, Canberra. CC BY 3.0.

## on Resources

**Video eLesson** Constructing and describing a doughnut chart (eles-1738)
**Interactivity** Constructing and describing a doughnut chart (int-3356)

## 16.4.3 Let me do it

Complete the following activities to practise this skill.

### 16.4 ACTIVITIES

1. Using the data in **TABLE 2**, construct a doughnut chart and then write a description of the information it conveys. Use the checklists for constructing and describing a doughnut chart to ensure you cover all aspects of the task.
2. Based on what you have learned in this SkillBuilder, apply your skills to answer the following questions.
   (a) Where do most visitors to Sydney come from?
   (b) Suggest which states provide the fewest visitors to Sydney.
   (c) The ACT is within the boundaries of New South Wales but provides only 6.4 per cent of visitors. Can you explain why?
   (d) List two factors that might indicate why there is no separate category for visitors from South Australia.
   (e) What did your doughnut chart make clear that the table did not?

**TABLE 2** Origins of Australian tourists visiting Sydney, June 2012

| Origin | Percentage |
|---|---|
| New South Wales | 51.4 |
| Victoria | 20.2 |
| Queensland | 12.7 |
| Australian Capital Territory | 6.4 |
| Other states | 9.3 |

#### Checklist

In drawing a doughnut chart I have:

- drawn a hole at the centre of the chart
- drawn segments that are labelled with names or have a key
- included percentages or raw figures
- drawn the largest segment starting at 12 o'clock, proceeding clockwise from largest to smallest, unless there is an 'other' category, which comes last
- provided the source of the data
- given my chart a clear title.

In writing a description of a doughnut chart I have:

- identified and communicated key features, such as the highest and lowest data values
- referred to data and names.

# 16.6 SkillBuilder: Creating a survey

## 16.6.1 Tell me

### What is a survey?

Surveys collect primary data. A survey involves asking questions, recording and collecting responses, and collating and interpreting the number of responses. Because your survey is taken from a relatively small number of people in a population, it is called a sample.

### Why are surveys useful?

Surveys are useful because they provide statistics for a specific topic that might not be available by any other means. A wide range of data can be gathered in an efficient and simple way.

They are also useful for:

- counting features in a given area — tourist destinations, houses with air conditioners or traffic flows, for example
- summarising people's activities
- providing a snapshot of people's opinions, values and attitudes
- testing people's perspectives and viewpoints — how they rate a feature, for example.

A good survey:

- has no more than 10 questions
- ensures that each question focuses on one thing
- makes almost all questions closed questions, providing choices for participants to select from
- uses simple and direct language
- includes questions respondents will be able to answer without needing too much time to think
- ensures questions can be answered briefly
- puts questions in a logical order
- has questions that avoid bias
- does not include questions that are of a personal nature
- has data/results that can be summarised.

## 16.6.2 Show me

### How to develop a survey

#### You will need:

- a computer to set out the questions — this makes organising the questions easier
- suitable computer software.

#### Model

#### Procedure

To develop a survey, you must take the time to create a set of questions relevant to the topic being investigated.

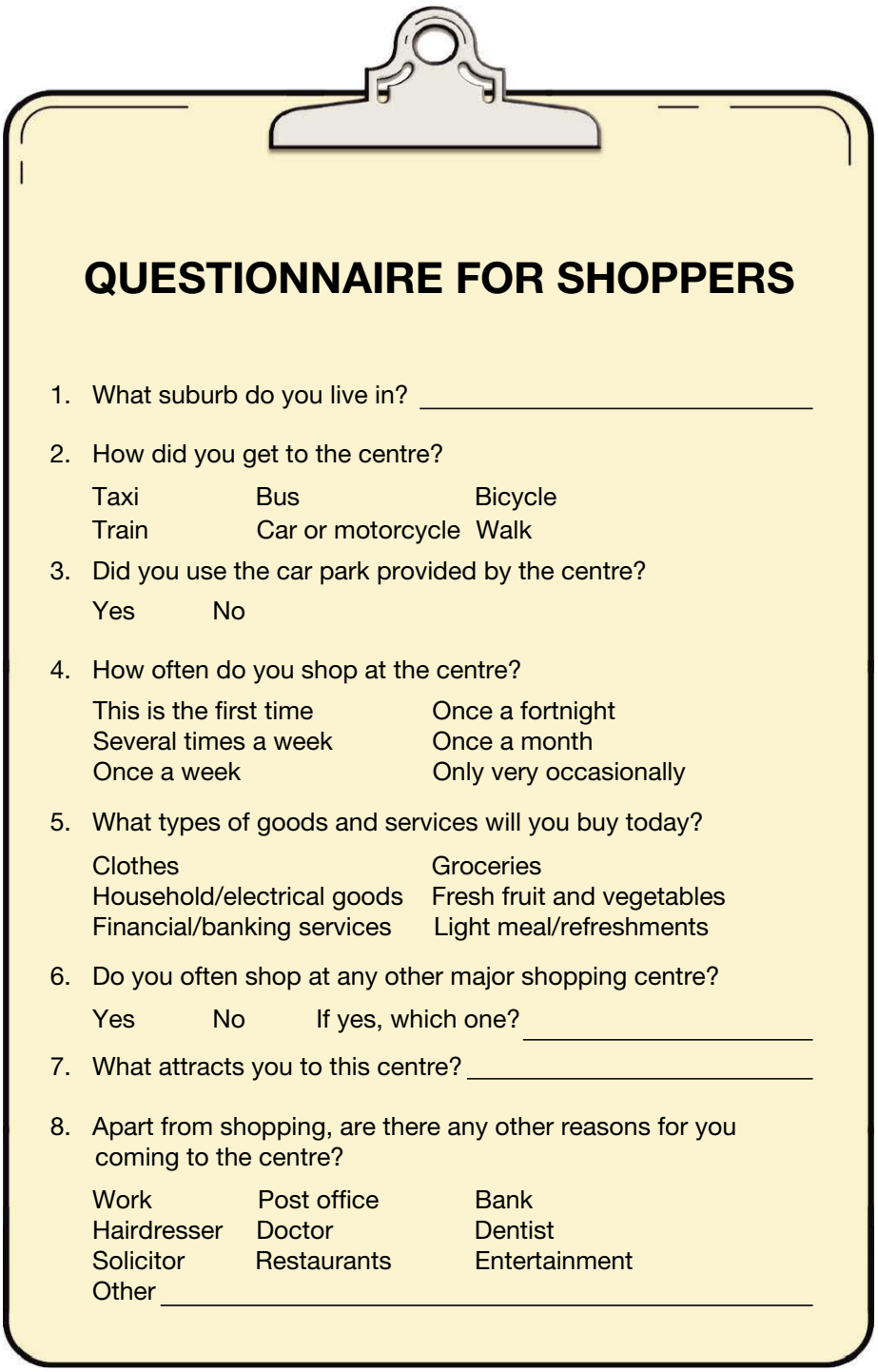
#### Step 1

Determine the topic that you want to gather data about, and consider why you want this data. In **FIGURE 1**, the questionnaire is about shopping habits.

#### Step 2

Begin by listing a series of questions. Use a computer so that you can easily modify the wording. Remember these should be closed questions, so they should include a series of answers to choose from. Each question should have four to six responses for people to select from. Examples of these in **FIGURE 1** are questions 2 to 5.

**FIGURE 1** A survey of shoppers



## QUESTIONNAIRE FOR SHOPPERS

1. What suburb do you live in? _____

2. How did you get to the centre?

| | | |
|---|---|---|
| Taxi | Bus | Bicycle |
| Train | Car or motorcycle | Walk |

3. Did you use the car park provided by the centre?

Yes No

4. How often do you shop at the centre?

| | |
|---|---|
| This is the first time | Once a fortnight |
| Several times a week | Once a month |
| Once a week | Only very occasionally |

5. What types of goods and services will you buy today?

| | |
|---|---|
| Clothes | Groceries |
| Household/electrical goods | Fresh fruit and vegetables |
| Financial/banking services | Light meal/refreshments |

6. Do you often shop at any other major shopping centre?

Yes No If yes, which one? _____

7. What attracts you to this centre? _____

8. Apart from shopping, are there any other reasons for you coming to the centre?

| | | |
|---|---|---|
| Work | Post office | Bank |
| Hairdresser | Doctor | Dentist |
| Solicitor | Restaurants | Entertainment |

Other _____

### Step 3

Try your questions with a classmate, to see whether the questions are clear and whether they elicit quick, concise responses. If necessary, reword your questions.

### Step 4

Discuss the order of questions with a classmate, and review and reorganise the order of the questions if this seems necessary.

### Step 5

Provide one or two open-ended questions to allow the respondent to have their say. These are questions which the respondent can answer in their own words and give more detail. Question 7 in **FIGURE 1** (*What attracts you to this centre?*) is considered open-ended, because a wide range of answers is possible. Word these carefully, because you need to be able to gather the data from all the respondents.

### Step 6

Make sure that you have not asked the respondents anything that is too personal, as you don't want to offend or embarrass people. Reword or delete any questions that you are not sure about.

### Step 7

Check your survey for bias. Bias is when you have unfairly influenced the respondent to your survey. You do not want to lead your respondent in a particular direction and thus skew your research. This is particularly important if the survey is about opinions, values, attitudes and perspectives on issues. For example, question 2 in **FIGURE 1** would be considered biased if it asked 'If you didn't come by bus, what transport did you use?'

### Step 8

Review your work before asking people to complete your survey.

### Step 9

When you go out into the field to ask people to respond to your survey, there are a number of guidelines to follow.

- Introduce the survey (what it is, who you are, what you are trying to find out).
- Assure people that you are a student, that their responses will be used only for research purposes and that no-one will be identified.
- Accept that not everyone will want to talk to you.
- Be sure that you are safe at all times; take no risks and always work with a partner.
- Thank the respondents for their time at the end.

## on Resources

**Video eLesson** Creating a survey (eles-1764)
**Interactivity** Creating a survey (int-3382)

## 16.6.3 Let me do it

Complete the following activities to practise this skill.

### 16.6 ACTIVITIES

1. (a) Design a questionnaire to discover ***places*** that students from your year level, or people in the wider community, have visited as tourists in the past five years. To help you work out what questions to ask in your survey, look at Activities question 2 for details of what you will need to report. Use the checklist for creating a survey to ensure you cover all aspects of the task.
   (b) Ask people in your class, year level or local area to complete your survey. When you come back to school, tally your results and see if you can draw some conclusions. Write a paragraph on what your survey has shown you.
2. Apply your skills to answer the following questions.
   (a) From your survey responses, what percentage of people have travelled somewhere as tourists within the past five years?
   (b) What trends emerged from your survey regarding travel within Australia in comparison to overseas travel?
   (c) Is there a relationship between how far people travel and how frequently they go? Is there a relationship between how far people travel and how long they stay?
   (d) What were the main recreational activities people were involved in when they travelled to other ***places*** as tourists?
   (e) Describe the key features of your respondents' travel patterns. For example, were there particular continents or countries, or even regions within countries, that were more popular than others?

#### Checklist

I have:

- asked no more than 10 questions
- ensured that each question focuses on one thing
- made almost all questions closed questions, providing choices for participants to select from
- used simple and direct language
- included questions respondents will be able to answer without needing too much time to think
- ensured questions can be answered briefly
- put questions in a logical order
- ensured that questions avoid bias
- not included questions that are of a personal nature
- ensured that data/results can be summarised.

# 16.7 SkillBuilder: Describing divergence graphs

## 16.7.1 Tell me

### What is a divergence graph?

A divergence graph is a graph that is drawn above and below a zero line. Those numbers above the line are positive, showing the amount above zero. Negative numbers that are shown indicate that the data has fallen below zero.

You may have seen graphs with negative numbers in climate graphs, where some months of the year in some places are below 0 °C on average.

### Why is a graph with negative numbers useful?

A divergence graph allows you to identify changes away from the normal in a trend. A trend is a common pattern of gradual change. A divergence graph can indicate data that varies considerably over time.

A good interpretation of a graph with negative numbers:

- identifies and communicates key features such as patterns, peaks and troughs
- clearly represents and communicates the data (e.g. about a specific place).

## 16.7.2 Show me

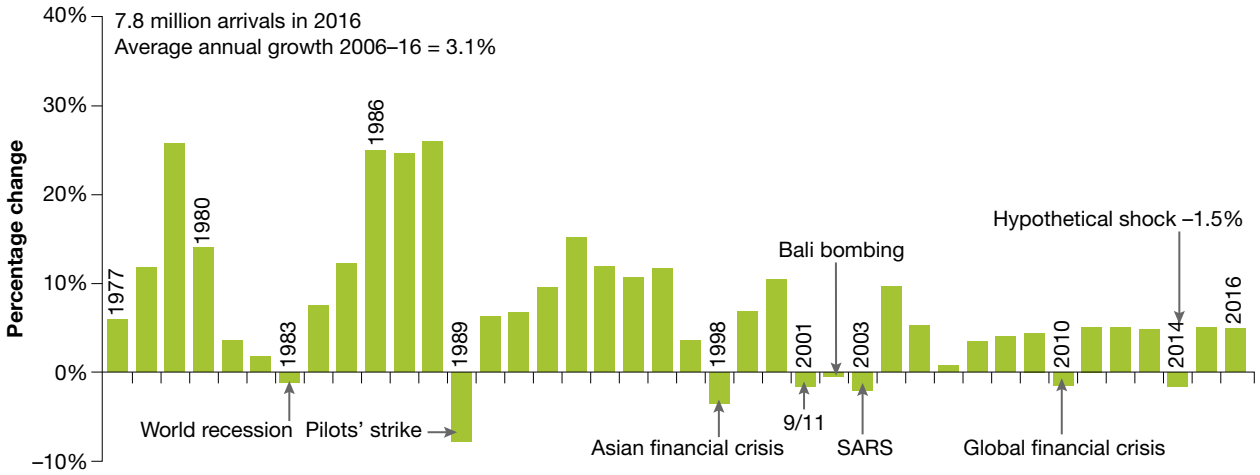
### How to describe a divergence graph

**You will need:**

- a graph showing trends, including negative trends.

**Model**

**FIGURE 1** Australia's past and future tourism trends




Australia's tourism industry has experienced fluctuating highs and lows for the past 50 years. The 1980s was a period of high percentage change in tourism (20–30 per cent), hit by a world recession and pilots' strike (negative growth) but rebounding strongly afterwards (15 per cent) in the early 1990s. The percentage change in tourism has not been as strong (<10 per cent) since the 1990s. The 1990s saw more growth than the 2000s (5 per cent), when global events had a big impact. More recently, Australian tourism has been affected by the global financial crisis (with negative growth in 2010).

### Procedure

#### Step 1

Read the title of the graph carefully to see what data has been graphed, and to check the locations and dates to which the graph refers.

#### Step 2

Study the labels on both axes and any key or legend provided to add to your knowledge. In **FIGURE 1**, you can see that the time frame of the information is from 1977 to 2016, and that the number of visitors to Australia is represented on the vertical axis as percentage change.

#### Step 3

Study the shape of the graph; in **FIGURE 1**, you will note that some features are related to global events, such as recessions, pilots' strike, terrorism and disease outbreaks (SARS). At times the graph flattens out as there is little change, such as in the late 2000s.

#### Step 4

Write a few sentences to outline the shape of the graph; for example, '**FIGURE 1** shows that Australian tourism has experienced fluctuating highs and lows for the past 50 years.' In your description, include any events that affected the change. For example, the text below **FIGURE 1** includes the explanation that the 1980s was 'a period of high percentage change in tourism (20–30 per cent), hit by a world recession and pilots' strike (negative growth)'. Also look for periods of time where the change was either slow (2010 in **FIGURE 1**) or rapid (1989 in **FIGURE 1**).

### on Resources

**Video eLesson** Describing divergence graphs (eles-1739)
**Interactivity** Describing divergence graphs (int-3357)

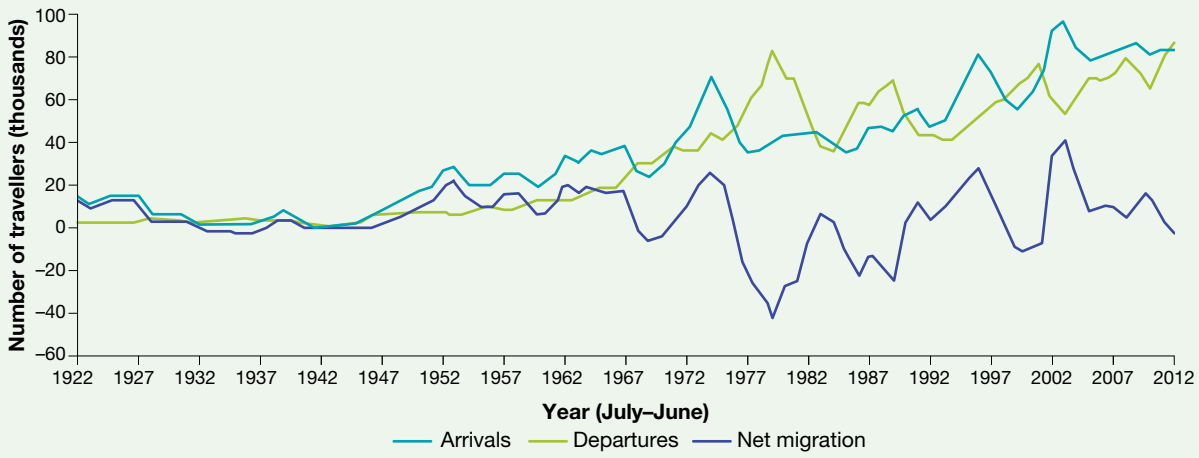
## 16.7.3 Let me do it

Complete the following activities to practise this skill.

### 16.7 ACTIVITIES

1. Using the graph shown in **FIGURE 2**, explain what has happened to the level of migration in New Zealand. Use the net migration line as the basis for your answer.

**FIGURE 2** New Zealand migration trends: Annual permanent and long-term arrivals, departures and net migration, 1922–2012



**2.** Apply your skills to answer the following questions. Use the checklist to ensure you have covered all aspects of the task.

(a) What is the trend for the line indicating the number of arrivals?

(b) What is the trend for the line indicating the number of departures?

(c) In which years did the population of New Zealand lose more people than it gained?

(d) Identify a period of time when increases happened slowly and a period when they happened quickly. Identify a period of time when decreases happened slowly and a period when they happened quickly.

(e) If net migration is the difference between arrivals and departures, what has happened to people's attitudes towards migration to New Zealand?

### Checklist

I have:

- identified and communicated key features such as patterns, peaks and troughs
- clearly represented and communicated the data about a specific ***place***.

# 16.12 Thinking Big research project: Design a 7-day cruise adventure

## Scenario

Mystic Cruises is about to add a new cruise ship to its fleet. As a member of the company's cruise-development team, you need to design a 7-day cruise, including exotic ports of call and shore excursions that allow cruise guests to take in the sites and culture of the places they visit. If your itinerary is accepted, you will also have the honour of naming the ship!

## Task

Design a 7-day cruise for a new cruise line. You can choose where in the world the cruise ship will operate, and at which ports the ship will dock (at least four).

- Show the ports of call and the home port on a map.
- For *each* port of call you will need to develop three shore excursions that allow people to take in the sites and culture of the places they visit:
  - one that is culturally based
  - one that is eco-friendly
  - one that applies to a specific demographic group (e.g. age-related, or family- or singles-oriented).
- You will also need to come up with a name for the new ship—this might be influenced by where the ship will be based, or the ports of call it will make. Be creative! Include your suggested name in your cruise itinerary presentation.
- You should use PowerPoint or Prezi to present your proposed itinerary.

## Process

- Open the ProjectsPLUS application in the Resources for this topic. Click on the **Start new project** button to enter the project due date and set up your project group if you wish. You may work individually or in pairs, depending on your teacher's preference. Save your settings and the project will be launched.
- Navigate to the **Research forum**, where you will find starter topics loaded to guide your research. You can add further topics to the Research forum if you wish.
- In the **Media centre** you will find an assessment rubric to guide your work and some weblinks that will provide a starting point for your research. Pay particular attention to the cruise-line websites that are included in the weblinks – these are designed to help your group decide which destinations to visit on your cruise. Remember it must be feasible to visit each of the ports. Investigate the weblink sites first, then branch out and conduct additional research.
- Remember to record details of your sources so you can create a bibliography to submit with your completed itinerary. Add your research notes and source details to the relevant topic pages in the Research forum. When you have completed your research, you can print out the **Research report** in the Research forum to easily view all the information you have gathered, if you wish.
- Plan your cruise. First decide the part of the world your cruise will operate in; then the ports you will visit. Prepare a map to show the home port and all the ports to be visited.
- Investigate your ports of call and prepare your shore excursions.
- Create your PowerPoint or Prezi presentation outlining the 7-day cruise itinerary and excursion options. Include appropriate images or diagrams to illustrate your information. Don't forget to name the ship!
- Review your work thoroughly, checking for correct spelling and grammar. Ensure that maps have BOLTSS applied and images have captions. Finalise your bibliography. Present your proposal to the class and submit your presentation and bibliography to your teacher for assessment.

## Resources

**ProjectsPLUS** Thinking Big research project: Design a 7-day cruise adventure (pro-0194)

# 16.13 Review

## 16.13.1 Key knowledge summary

### 16.2 The importance of tourism

- Tourism is one of the world's fastest-growing industries.
- A combination of factors such as increased leisure time, improved standard of living and advances in technology have ensured that tourism is no longer only for the rich.
- New forms of tourism, such as medical tourism and opportunities to travel and work overseas, are contributing to the expansion of the tourism industry.

### 16.3 Global tourism

- Tourism is accessible to a wider demographic.
- With people living longer, there are more opportunities for mature-aged tourists and cheap travel options for the 18–25-year-old market.
- North America, China and Western Europe are not only popular destinations, but also among the top ten in tourism spending.
- Most hotel chains are owned and operated by companies based in the United States.

### 16.5 Australian tourism

- More Australians are choosing to travel abroad rather than holiday at home; this is mostly due to increased choice and competition within the tourism industry.
- While New South Wales continues to attract the most international visitors, Victoria has also recorded strong growth.

### 16.8 The impacts of tourism

- Tourism has both positive and negative impacts, and these impacts can be interconnected.
- While tourist spending can boost the economy, this is not always of benefit to the local community if people are being exploited, or if the revenue is going to major corporations and the locals are being underpaid.
- The infrastructure that is needed to support the tourism industry can also benefit local communities.

### 16.9 Managing environmental impacts — eco-friendly tourism

- Eco-tourism aims to be sustainable, to limit the impact of tourism and to educate the public.
- Zoos and aquariums perform an important role in the education of the public and conservation of endangered species.
- Many zoos and aquariums have undergone a transformation to make them more eco-friendly, but this is not the case everywhere.

### 16.10 Cultural tourism

- Cultural tourism results in the mass movement of people over a short period of time so that they can come together to celebrate their shared history, religion or traditions.
- Examples of cultural tourism include Chinese New Year and Thanksgiving.
- While it is traditional for people to spend holidays with their extended family, there is a growing trend of travelling abroad to avoid the holiday overcrowding.

### 16.11 Tourism and sport

- It is becoming more common for people to combine a sporting event with their travels, either as an active participant or a passive observer.
- Major sporting events such as the Olympics are often touted as being a financial windfall for the host nation; however, while there might be a peak in employment in the lead-up and during the event, nations can also be left with significant debt.
- There are travel companies that focus primarily on putting together sporting itineraries.

## 16.13.2 Reflection

Complete the following to reflect on your learning.

### 16.13 ACTIVITIES

Revisit the inquiry question posed in the Overview:

**Can a simple relaxing holiday really create jobs, support an economy or affect the environment?**

1. Now that you have completed this topic, what is your view on the question? Discuss with a partner. Has your learning in this topic changed your view? If so, how?
2. Write a paragraph in response to the inquiry question, outlining your views.

### on Resources

**eWorkbook** Reflection (doc-31726)
Crossword (doc-31727)

**Interactivity** Tourists on the move crossword (int-7650)

### KEY TERMS

**developed** describes countries with a highly developed industrial sector, a high standard of living, and a large proportion of people living in urban areas
**ecotourism** tourism that interprets the natural and cultural environment for visitors, and manages the environment in a way that is ecologically sustainable
**gross domestic product** (GDP) the value of all the goods and services produced within a country in a given period of time (usually a year). It is often used as an indicator of a country's wealth.
**hard sport tourism** tourism in which someone travels to either actively participate in or watch a competitive sport as the main reason for their travel
**infrastructure** the facilities, services and installations needed for a society to function, such as transportation and communications systems, water pipes and power lines
**Masai** an ethnic group of semi-nomadic people living in Kenya and Tanzania
**mature-aged** describes individuals aged over 55
**national park** a park or reserve set aside for conservation purposes
**new moon** the phase of the moon when it is closest to the sun and is not normally visible
**soft sport tourism** tourism in which someone participates in recreational and leisure activities, such as skiing, fishing and hiking as part of their travel
**winter solstice** the shortest day of the year, when the sun reaches its lowest point in relation to the equator

# 17 Trade — a driving force for interconnection

## 17.1 Overview

Buy, swap, sell, give. Is the trade that occurs between different countries just a way of getting things?

### 17.1.1 Introduction

Trade, in the form of buying, swapping, selling and giving of goods and services, is a driving force that interconnects people and places all over the world. Trade has been going on since the beginning of human society. In contrast, international aid is a modern phenomenon, although countries have always had internal programs to help those in need. Trade and aid can bring people together to share the Earth's resources, but there can be problems when those resources are limited and, potentially, negative consequences for the environment. The big question is how to organise trade and aid so that they foster social justice and are fair and sustainable.

**on Resources**

**eWorkbook** Customisable worksheets for this topic

**Video eLesson** Trading places (eles-1724)

**LEARNING SEQUENCE**


**17.1** Overview
**17.2** How does trade connect us?
**17.3** Australia's global trade
**17.4** Food trade around the world
**17.5** **SkillBuilder:** Constructing multiple line and cumulative line graphs online only
**17.6** Impacts of globalisation
**17.7** Making trade fair
**17.8** Global connections through Australian Aid
**17.9** The troubling illegal wildlife trade
**17.10** **SkillBuilder:** Constructing and describing a flow map online only
**17.11** **Thinking Big research project:** World Trade Fair infographic online only
**17.12** **Review** online only


To access a pre-test and starter questions and receive immediate, **corrective feedback** and **sample responses** to every question, select your learnON format at www.jacplus.com.au.

# 17.2 How does trade connect us?

## 17.2.1 Trade in goods and services

The Earth's resources are not distributed evenly over space. For instance, some places may have an abundance of iron ore and others may have none. To solve this problem, nations have developed trade, allowing producers and consumers to exchange goods and services.

The system of trade has been around for a long time. Its earliest form was as barter at local markets or fairs. Merchants also used land and sea routes to access markets in foreign lands, where they exchanged goods for payment. More recently, air transport has become a means of trade, and the internet has made it possible to instantly exchange information. Today, we have a highly sophisticated, large-scale, global system of trade.

A modern example of the interconnection of trade is the production of the Airbus A380. To construct this plane, component parts must be purchased from different countries and transported over land and sea to reach their final assembly place in Toulouse, France (see **FIGURE 1**).

Goods and services, of which there are many, are generated by either processing Earth's resources (goods) or people doing things for each other (services). A good can be an item as simple as a loaf of bread or it can be as complex as a motor car. A service is not something you can hold in your hand; examples of a service are education in a school or the advice a doctor gives a patient. What types of goods and services do you use to support your lifestyle?

As seen in **FIGURE 2**, the processing of a resource into more complex goods can be a series of transitions, in which there is **value adding** at each level of industry (that is, its value increases). An important consideration in the production of goods and services is the impact on the environment.

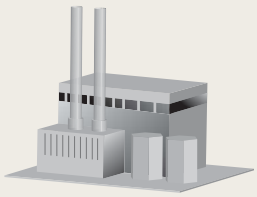
**FIGURE 1** The component parts routes of the Airbus A380

***Source:*** Data from Wikimedia Commons

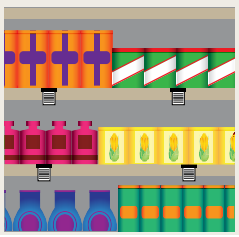
**FIGURE 2** Four levels of industry

**Primary industry**
Takes natural resources from the Earth or grows them
Example: a farmer grows corn that is then transported to a canning factory.

**Secondary industry**
Makes products from natural resources
Example: a factory makes tins of corn and sells them to supermarkets.



**Tertiary industry**
Sells products or services
Example: a supermarket sells tins of corn and other products to consumers.



**Quaternary industry**
Sells knowledge and information
Example: a marketing analyst works out how best to position products, and sells this information to supermarkets.

## 17.2.2 How are goods and services consumed?

### Household final consumption per person

If we tally the value or money spent on all goods and services such as food, cars, washing machines, electricity, water and gas, education, medical service expenses and entertainment within a country for a year, then divide this figure by the total population of the country, we obtain what is referred to as the household final consumption per person. This per-person dollar value can provide a general indication of the economic development and prosperity of a country.

The greatest consumers of goods and services on a per-person basis tend to be wealthy, industrialised countries, as shown in **FIGURE 3**. However, countries such as China and India also consume high levels of goods and services because they have very large populations. As would be expected, countries that are high-level consumers can have a significant impact on the environment, particularly in terms of energy use and waste production.

At the lower end of the scale of household final consumption per person, people in countries such as Niger and the Democratic Republic of the Congo spend $269 and $275 respectively per year, or around $0.75 per day per person (see **FIGURE 4**). This expenditure is mainly for food.

**FIGURE 3** Top 10 countries for household final consumption, per person. Australia is ranked fifth in this list for the years 2016–2017.

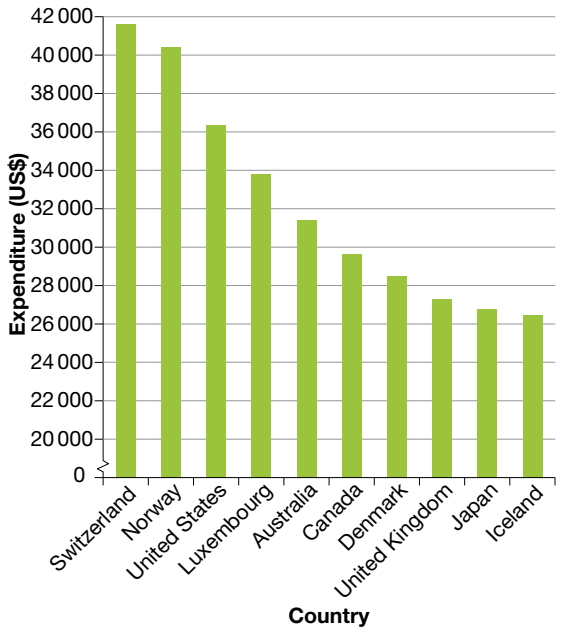
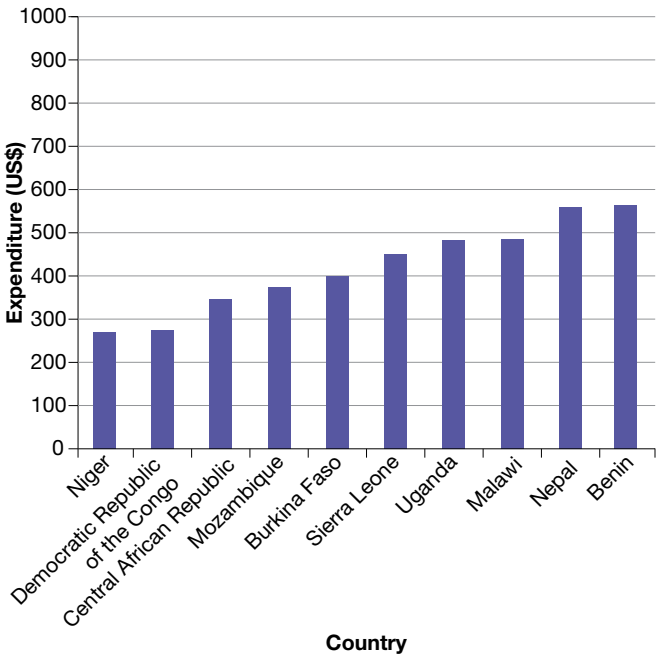



**FIGURE 4** Household final consumption expenditure per person for the 10 lowest ranked countries in the world for 2016–2017




### Resources

**Interactivity** Up, up and away! (int-3339)

## 17.2 EXERCISES

**Geographical skills key: GS1** Remembering and understanding **GS2** Describing and explaining **GS3** Comparing and contrasting **GS4** Classifying, organising, constructing **GS5** Examining, analysing, interpreting **GS6** Evaluating, predicting, proposing

### 17.2 Exercise 1: Check your understanding

1. **GS2** What reasons can you suggest as to why goods and services are traded?
2. **GS1** Name the four levels of industry and give an example of a good as it moves through the production process.
3. **GS2** What reasons can you suggest for component parts of the Airbus A380 having to come from different ***places*** (countries)?
4. **GS2** Explain what is meant by the term *value adding*, as a product moves through the four levels of industry. Choose a product such as wheat or timber to explain this process.
5. **GS2** What are some of the impacts of a high level of consumption?

### 17.2 Exercise 2: Apply your understanding

1. **GS6** Suggest why the United States is one of the largest consumers of goods and services in the world.
2. **GS6** It has been claimed that countries such as China and India, with growing middle classes that are now eager for goods and services, will put a strain on world resources. How might a growing demand for energy sources in these countries affect the ***environment***?
3. **GS6** How might a ***change***, such as growth in Australia's population from 25 million to 40 million, affect Australia's trade?
4. **GS5** In 2016–17, Hong Kong, which is a Special Administrative Region (SAR) of China, was ranked eleventh in household final consumption per person, while the wider country of China was ranked eighty-fifth. Why might this be the case?
5. **GS5** What reasons can you give for people being able to survive on less than $300 per person per year in countries such as Niger and the Democratic Republic of the Congo?

Try these questions in learnON for instant, corrective feedback. Go to www.jacplus.com.au.

# 17.3 Australia's global trade

## 17.3.1 The coordination of trade

Australia is one of the 164 members of the World Trade Organization (WTO), which covers 95 per cent of global trade. The organisation promotes free and fair trade between countries and, since 2001, its Doha Development Agenda has aimed to help the world's poor by slashing **trade barriers** such as tariffs, quotas and farm subsidies.

The Department of Foreign Affairs and Trade (DFAT) coordinates trade agreements on behalf of the Australian government, and the Australian Trade Commission (Austrade) promotes the export of goods and services. In 2017–18, $587 billion or 73.5 per cent of Australia's total trade was with the member countries of the Asia-Pacific Economic Cooperation (APEC) forum.

**FIGURE 1** People involved with trade

## 17.3.2 Australia's trading partners

China, Japan and the United States were Australia's top three two-way **trading partners** in 2017–18, accounting for nearly 43 per cent of total trade. **FIGURE 1** shows the value of imports and exports traded between Australia and its top ten trading partners. **TABLE 1** shows the total two-way trade value (imports and exports added together) of all goods and services traded with these ten countries.

**FIGURE 2** Australia's top ten two-way trading partners 2017–18, value of imports and exports (A$ million)

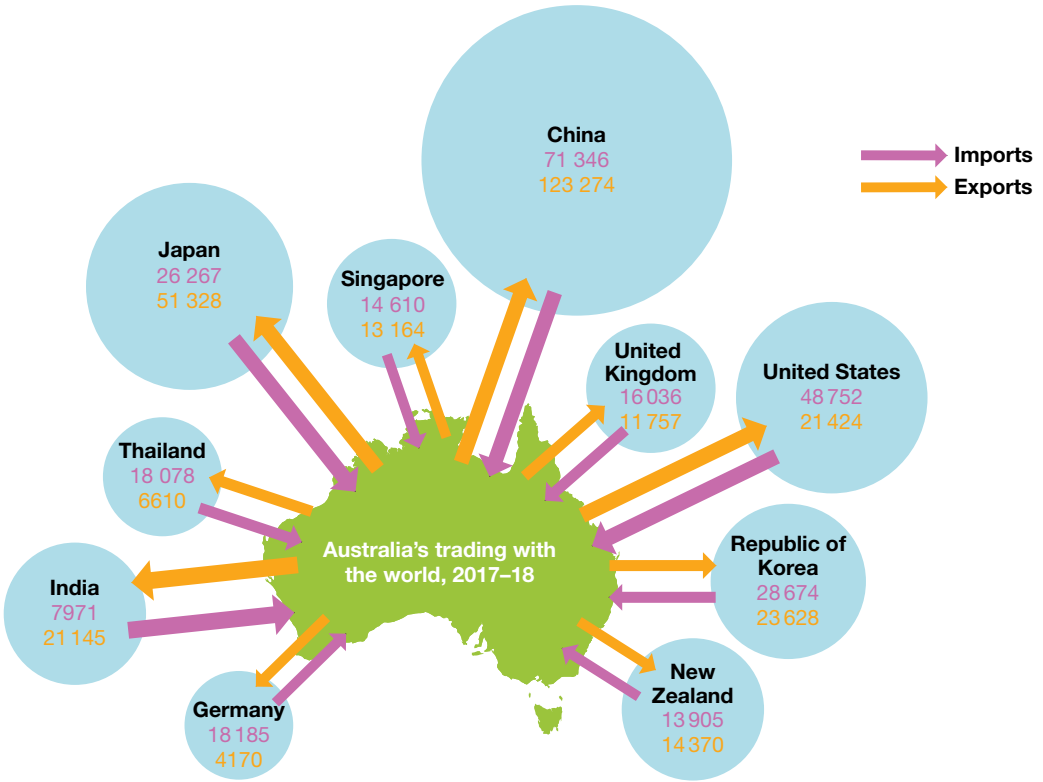



**TABLE 1** Australia's top 10 two-way trading partners, 2017–18, total two-way trade value (A$ million)

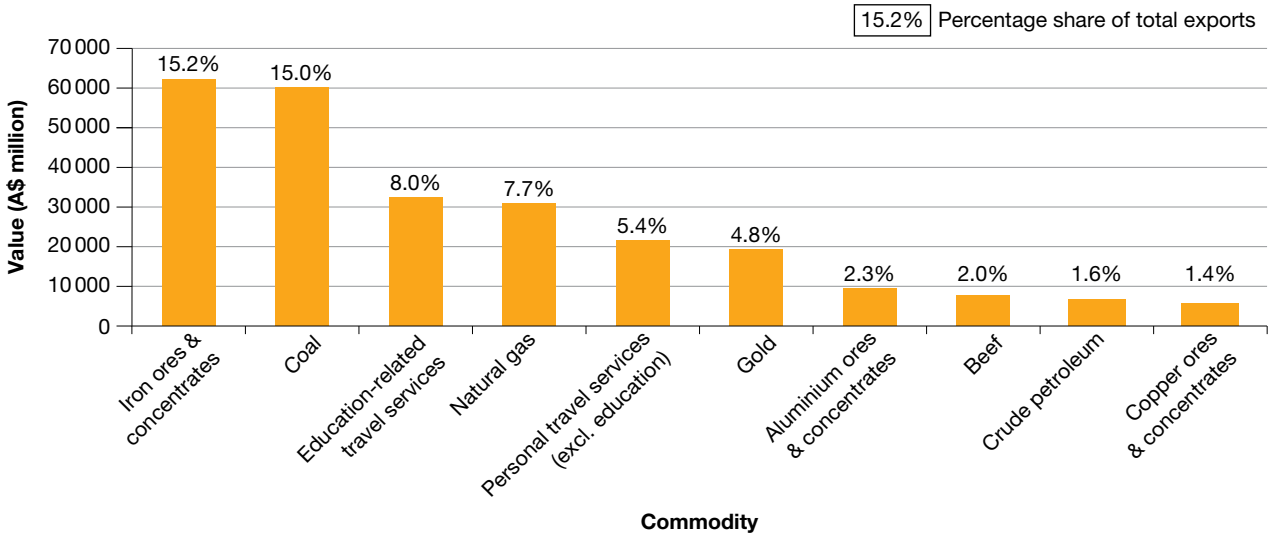
| Rank | | Goods | Services | Total | % share |
|---|---|---|---|---|---|
| | **Total two-way trade** | **617 565** | **181 076** | **798 641** | |
| 1 | China | 174 451 | 20 169 | 194 620 | 24.4 |
| 2 | Japan | 71 348 | 6247 | 77 595 | 9.7 |
| 3 | United States | 44 018 | 26 159 | 70 177 | 8.8 |
| 4 | Republic of Korea | 49 300 | 3003 | 52 303 | 6.5 |
| 5 | India | 21 868 | 7248 | 29 116 | 3.6 |
| 6 | New Zealand | 17 282 | 10 993 | 28 275 | 3.5 |
| 7 | United Kingdom | 13 772 | 14 021 | 27 793 | 3.5 |
| 8 | Singapore | 17 308 | 10 465 | 27 773 | 3.5 |
| 9 | Thailand | 20 355 | 4333 | 24 688 | 3.1 |
| 10 | Germany | 17 230 | 5125 | 22 355 | 2.8 |

## 17.3.3 Australia's types of trade

### Exports

Australia's export trade in 2017–18 was valued at $403 billion, and was dominated by the mineral products of iron ore and coal. Education-related and personal travel were Australia's leading services exports. See **FIGURE 3** for details of leading exports.

**FIGURE 3** Australia's top ten exports of goods and services 2017–18 — value and share of total exports by sector

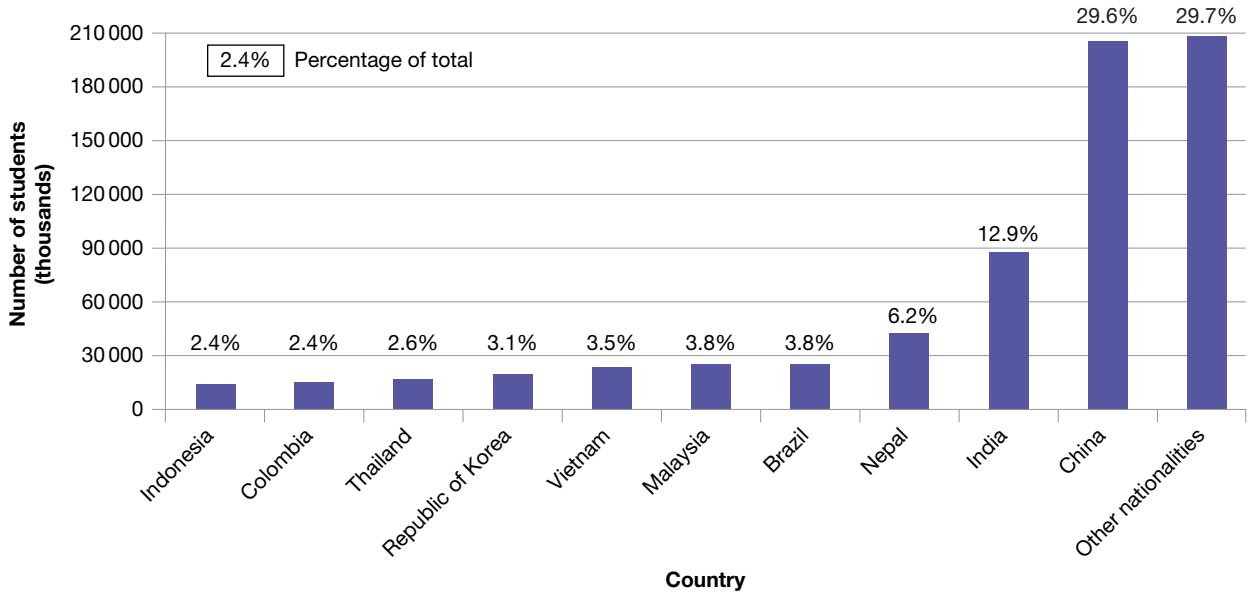



### International students

A more recent high-level earner for Australia (now ranked as our third-highest export), is the category of 'education-related travel services', which for 2017–18 was valued at over $32 billion. In effect, education is a service export, in that students are paying for knowledge that they will take back to their home country.

Numbers of international students have grown significantly in recent years. In 2014, Australia hosted 450 000 international students; by 2018, there were 693 750 students from more than 200 countries studying in Australia (see **FIGURE 4**), making education a very important factor in our economy.

**FIGURE 4** International students studying in Australia, 2018



## Imports

Like many countries, Australia is not self-sufficient in all goods and services. In 2017–18 Australia imported goods and services valued at over $395 billion. **FIGURE 5** shows the top ten commodities of this trade.

**FIGURE 5** Australia's top ten imports of goods and services, 2017–18 (A$ million)

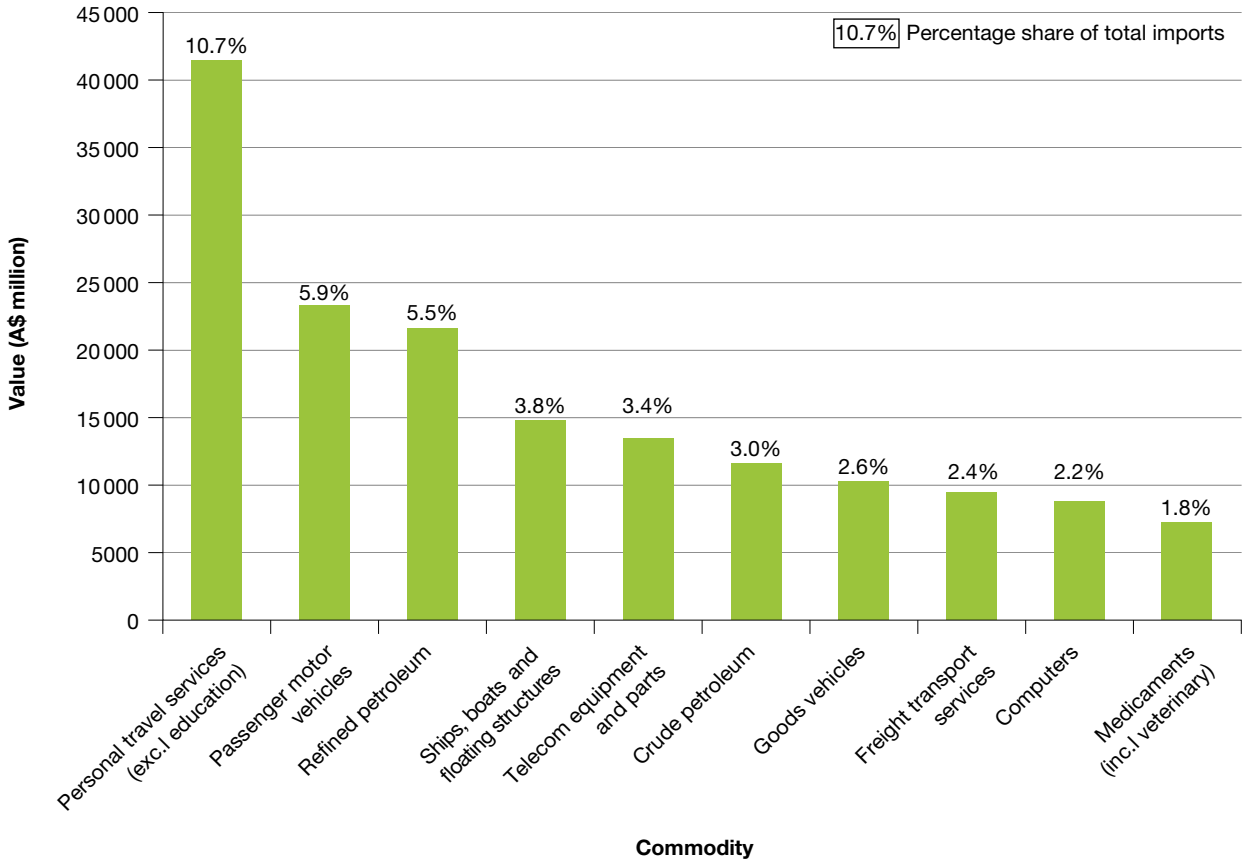



**FIGURE 6** Oil and petroleum products make up a significant part of Australia's import trade.

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- Investigate additional topics > Australia's links with the world > **Aid, migration and trade**

### 17.3 EXERCISES

**Geographical skills key: GS1** Remembering and understanding **GS2** Describing and explaining **GS3** Comparing and contrasting **GS4** Classifying, organising, constructing **GS5** Examining, analysing, interpreting **GS6** Evaluating, predicting, proposing

#### 17.3 Exercise 1: Check your understanding

1. **GS2** What is the ***interconnection*** between the World Trade Organization and Australia's trade?
2. **GS1** What are Australia's three most important exports?
3. **GS1** What are Australia's three most important imports?
4. **GS5** Refer to **FIGURE 2** and **TABLE 1**. How many of Australia's top ten two-way trading partners are Asian countries?
5. **GS2** What reasons can you suggest for Australia's significant two-way trade with Asian nations?

#### 17.3 Exercise 2: Apply your understanding

1. **GS2** Despite having a relatively small population, Australia has many goods and services to trade. Explain why this might be so.
2. **GS6** How might a ***change*** in the growth of Australia's population affect the country's agricultural exports?
3. **GS5** Consider Australia's exports (see **FIGURE 3**).
   (a) What evidence is there in this subtopic to confirm the fact that Australia is regarded as mostly a primary industry exporter?
   (b) Are there any figures for export trade that contradict this statement?
4. **GS6** Look at the goods that Australia imports (see **FIGURE 5**). What factors could lead to a ***change*** in the types of goods imported by the year 2050?
5. **GS6** Why do you think Australia has become such an important exporter of education services?

Try these questions in learnON for instant, corrective feedback. Go to www.jacplus.com.au.

# 17.4 Food trade around the world

## 17.4.1 Trade in food production surpluses

The world's population is unevenly distributed across space, as is the quantity of food produced. Some places, such as Australia, produce an abundance of food, while others struggle to produce enough to maintain food security.

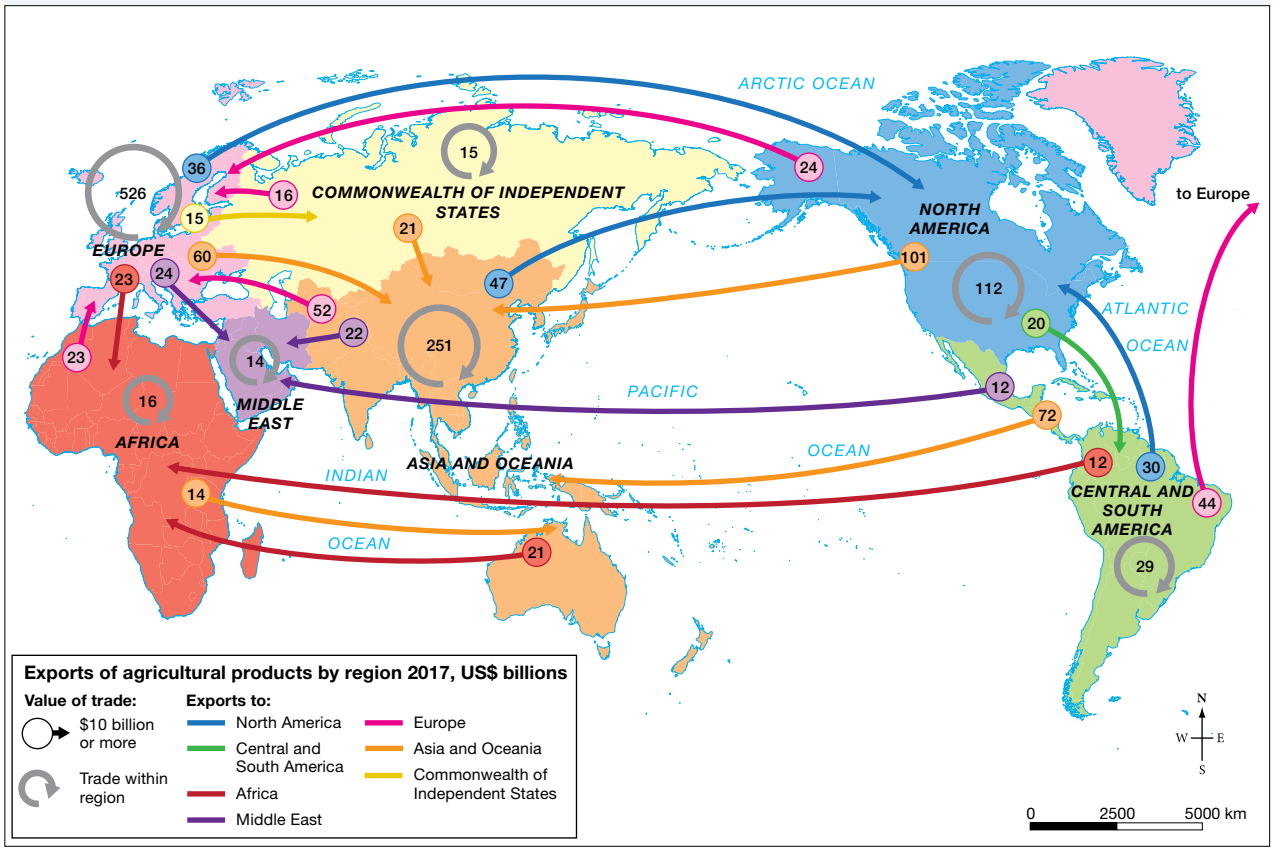
Traditionally, food production consisted of hunting and gathering or cropping and herding. Excess food was consumed locally or sent to nearby markets for **barter** or cash. While some 40 per cent (or by some estimates, more) of the world's population is still directly tied to subsistence agriculture, many of the world's highly developed economies produce large surpluses of food specifically for international trade. For instance, Australia's 2018–19 farm production is estimated to be worth $60 billion, with $47 billion of this in export worth.

### The flow of food trade

Much of the flow of food trade is controlled by powerful entities, such as the United States, the European Union and China, and by international food trade agreements. The World Trade Organization (WTO) and the G20 (a group of 20 developed and powerful nations) have a significant say in the flow of food products around the world, particularly with respect to tariffs and fair-trade rules.

Food trade is a complicated business, as can be seen in **FIGURE 1**. It is estimated that for **developing countries**, three-quarters of exports are agricultural produce. While developed countries may need to import some foods, many actually export as much as they import in agricultural produce. For instance, the United States, Canada and Australia use large farms to produce wheat, and they control 75 per cent of the global export trade in cereals.

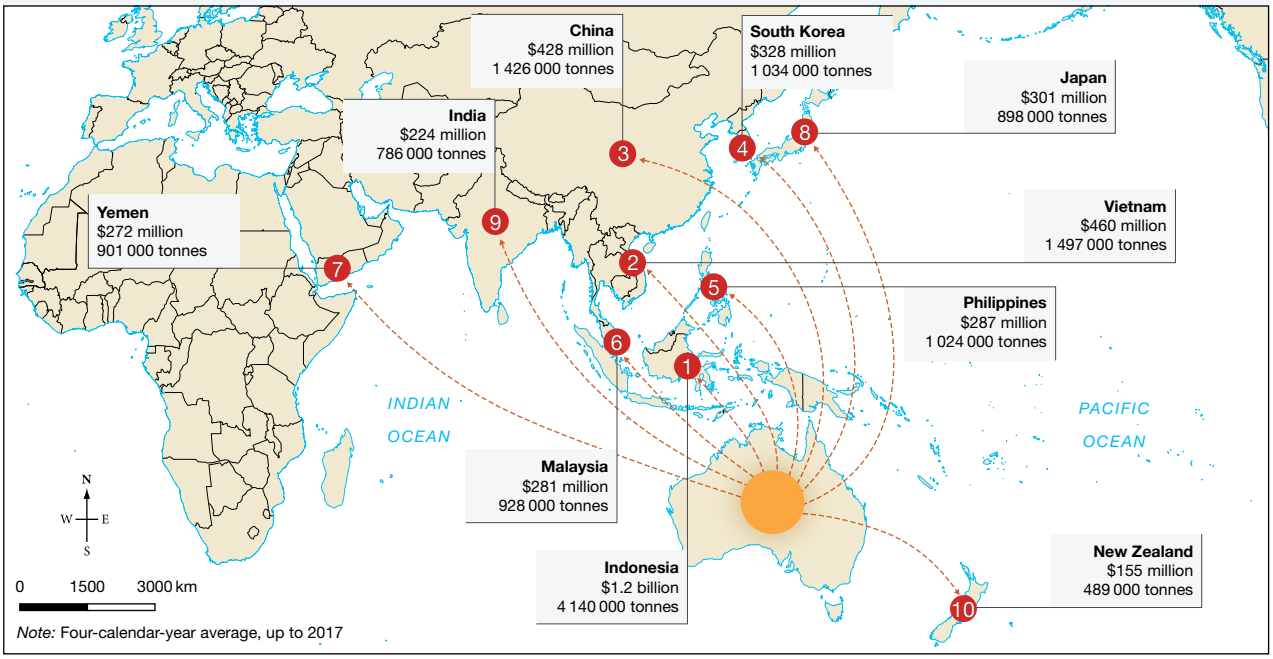
**FIGURE 1** World trade flows — exports of agricultural products by region, US$ billion




***Source:*** Data from World Trade Organization

Wheat production levels vary from year to year, depending on weather conditions experienced at particular times in the growing season. After a bumper year in 2016–17, when in excess of 34 million tonnes was produced, in 2017–18, Australia produced just over 21 million tonnes of wheat. More than three-quarters of this crop was for sale in overseas markets, worth some $5 billion in export earnings. **FIGURE 2** shows Australia's top ten wheat export partners, with production quantities and earnings averaged over the four-year period up to 2017.

**FIGURE 2** Top ten Australian wheat export destinations




***Source:*** Australian Export Grains Innovation Centre. All rights reserved.

**FIGURE 3** Australia's wheat exports are worth billions to the economy

## Australia's diverse food trade

In addition to wheat, Australia conducts more than $5 billion worth of trade annually through a range of other agriculture, forestry and fisheries exports. **TABLE 1** provides information about Australia's top 20 exports in this category and their respective export values for the 2016–17 financial year.

**TABLE 1** Australia's top 20 agriculture, forestry and fisheries exports, 2016–17

| Rank | Commodity | $ million | % share |
|---|---|---|---|
| 1 | Beef | 7115 | 13.8 |
| 2 | Wheat | 6073 | 11.8 |
| 3 | Meat (excl. beef) | 3832 | 7.4 |
| 4 | Vegetables | 3270 | 6.3 |
| 5 | Wool and other animal hair | 3263 | 6.3 |
| 6 | Wine | 2612 | 5.1 |
| 7 | Edible products and preparations | 2524 | 4.9 |
| 8 | Sugars, molasses and honey | 2409 | 4.7 |
| 9 | Oil seeds and oleaginous fruits | 2278 | 4.4 |
| 10 | Barley | 2106 | 4.1 |
| 11 | Cotton | 1787 | 3.5 |
| 12 | Fruit and nuts | 1769 | 3.4 |
| 13 | Live animals (excl. seafood) | 1618 | 3.1 |
| 14 | Milk, cream, whey and yoghurt | 1239 | 2.4 |
| 15 | Animal feed | 1148 | 2.2 |
| 16 | Wood (in chips or particles) | 1085 | 2.1 |
| 17 | Crustaceans | 988 | 1.9 |
| 18 | Cheese and curd | 848 | 1.6 |
| 19 | Hides and skins, raw (excl. furskins) | 777 | 1.5 |
| 20 | Cereal preparations | 728 | 1.4 |
| **Total agriculture, forestry and fisheries exports** | | **51 643** | |

## 17.4.2 Trade in animals for food

World trade in animals as food is estimated at close to 50 million animals per year — pigs, cattle, goats and sheep. Using modern shipping methods, many animals are transported over long distances, and questions have been asked about potential cruelty in the operation of this trade.

The value of the export trade in animal products from Australia was close to $20 billion in 2016–17. Of this figure, live animal exports comprised $1.6 billion, or 8 per cent. The industry employs up to 10 000 workers at abattoirs, ports and in the transport industry. While there may be concerns about this industry, it should be remembered that some countries request live animal exports so that they can be slaughtered according to **halal** religious customs.

Due to the extensive nature of cattle and sheep farming in Australia, these animals must often travel very large distances to reach ports. They then travel by ship to distant markets. The Australian government has set high standards in the handling of live animals and is monitoring carefully how they are treated at destination ports.

## DISCUSS

Would Australia be failing to respect and tolerate other countries' cultural practices if we were to ban the live export of animals? **[Ethical Capability]**

## on Resources

**Weblink** Trade

## 17.4 INQUIRY ACTIVITIES

1. Use the **Trade** weblink in the Resources tab to investigate Australia's top five trade partnerships. Prepare a mind map to show the different goods and services traded with these countries.
   **Classifying, organising, constructing**
2. Investigate the issue of live animal exports from Australia. What are the concerns of those who seek to have live exports stopped? How might a ban on live animal exports from Australia affect farmers? Write two letters to the editor outlining the views of:
   (a) someone who supports live animal exports
   (b) someone who wants to see them banned.
   **Examining, analysing, interpreting**
   **[Critical and Creative Thinking Capability]**

## 17.4 EXERCISES

**Geographical skills key: GS1** Remembering and understanding **GS2** Describing and explaining **GS3** Comparing and contrasting **GS4** Classifying, organising, constructing **GS5** Examining, analysing, interpreting **GS6** Evaluating, predicting, proposing

### 17.4 Exercise 1: Check your understanding

1. **GS1** What percentage of Australia's total agricultural production is exported?
2. **GS1** What are Australia's five biggest agricultural export products?
3. **GS5** Refer to **FIGURE 1**.
   (a) What is the value of food trade from Oceania to Europe?
   (b) What is the value of food trade from Europe to Oceania?
   (c) Is there a balance in this food trade based on your calculations in parts (a) and (b)?
4. **GS5** Rank the regions of the world in decreasing order by volume of food trade.
5. **GS1** What proportion of Australia's export trade in animal products do live animal exports comprise?

### 17.4 Exercise 2: Apply your understanding

1. **GS2** Why do countries in ***places*** such as the Middle East and Asia have a preference for live animal imports?
2. **GS5** Refer to **FIGURE 2**.
   (a) Explain why Australia can export such a large quantity of wheat to the world.
   (b) What reasons can you suggest for why a country such as Russia might not export wheat to Indonesia and Malaysia?
3. **GS5** If the United States is a major trade partner of Australia, why do we not export wheat to the US?
4. **GS6** Suggest ways in which Australia might overcome the problem of drought, which has significant impacts on wheat production tonnage.
5. **GS4** Classify the export commodities in **TABLE 1** according to whether they are animal or non-animal products. Calculate the percentage share of these exports that each category (animal/non-animal) comprises.

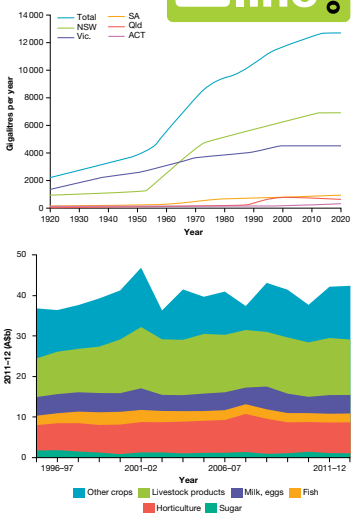
Try these questions in learnON for instant, corrective feedback. Go to www.jacplus.com.au.

# 17.5 SkillBuilder: Constructing multiple line and cumulative line graphs

online only

## What are multiple line graphs and cumulative line graphs?

Multiple line graphs consist of a number of separate lines drawn on a single graph. Cumulative line graphs are more complex to read, because each set of data is added to the previous line graph.




### Select your learnON format to access:

- an overview of the skill and its application in Geography (Tell me)
- a video and a step-by-step process to explain the skill (Show me)
- an activity and interactivity for you to practise the skill (Let me do it)
- questions to consolidate your understanding of the skill.

### on Resources

**Video eLesson** Constructing multiple line and cumulative line graphs (eles-1740)
**Interactivity** Constructing multiple line and cumulative line graphs (int-3358)

# 17.6 Impacts of globalisation

## 17.6.1 Changing trends

Today, you might purchase a jacket online that was designed in Milan, but it is woven from New Zealand wool and stitched together in China. The globalised economy that has resulted from technological developments since the 1990s has brought global marketing, encouraging consumers everywhere to buy goods without considering where they come from. Online shopping has revolutionised the business world by making just about anything imaginable available at the simple tap of a finger or click of a mouse.

The Australian clothing manufacturing industry has produced some very recognisable brand names and distinctive products. Today, the industry faces tough international competition, especially from producers in developing countries who can afford to mass-produce clothing far more cheaply than Australian companies can. As a result, Australian clothing manufacturers tend to focus on high-end, high-quality products rather than attempting to compete with lower-cost producers.

It is not just the clothing industry that has felt the impact of an increasingly globalised economy. Many multinational companies have '**offshored**' various production and service divisions to developing countries, such as India, China, Malaysia and the Philippines, due to these countries' lower labour costs. A range of other economically appealing factors, such as a lack of labour unions and incentives offered by those governments including tax breaks and low import duties, have also fueled this trend.

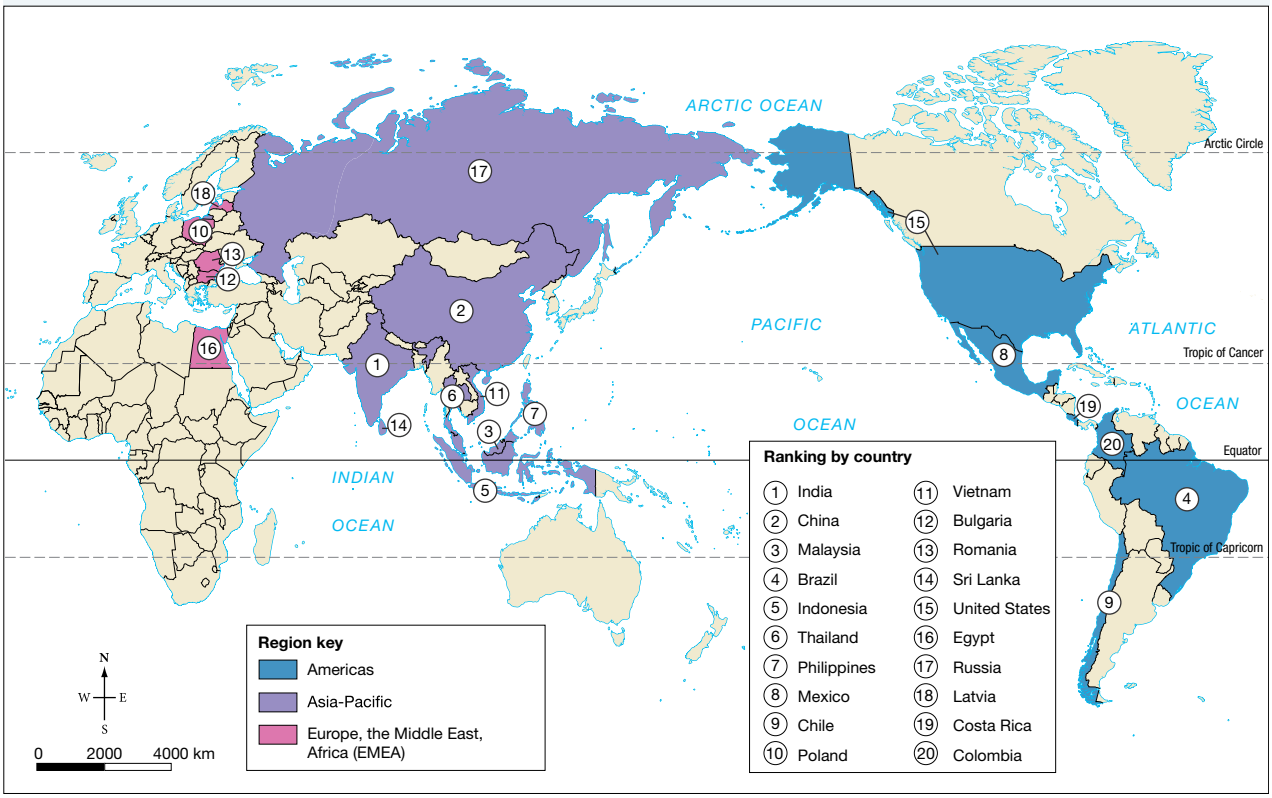
**FIGURE 1** This symbol signifies that a product has been manufactured in Australia by an Australian-owned company.

The Global Services Location Index ranks the top destinations for global offshoring. To develop this index three main categories are identified: financial attractiveness, people skills and availability, and business environment. 'Financial attractiveness' constitutes 40 per cent of the index, 'people skills and availability' 30 per cent, and 'business environment' also 30 per cent of the total weighting.

### Foreign companies in China

As an example of the growth in global business operations, in 1979, there were 100 foreign-owned enterprises in China. In 1998, there were 280 000, and by the end of 2015, there were more than 835 000 companies with foreign direct investment registered in mainland China. Since 2007, foreign companies have employed more than 25 million people in China. These companies include Coca-Cola, Pepsi, Nike, Citibank, General Motors, Philips, Ikea, Microsoft and Samsung. China's economy is growing rapidly; the country is destined to remain an engine for global growth for some years to come.

**FIGURE 2** Top 20 locations for offshore companies, 2017, by region




***Source:*** Data from Statista. Map drawn by Spatial Vision.

## 17.6.2 Sweatshops — a negative side of global trade

If you buy well-known global brands, then you may be wearing clothing or footwear that was made in a sweatshop.

A sweatshop is any working environment in which the workers experience long hours, low wages and poor working conditions. Typically, they are workshops that manufacture goods such as clothing. Sweatshops are common in developing countries, where labour laws are less strict or are not enforced at all. Workers often use dangerous machinery in cramped conditions and can even be exposed to toxic substances. In the worst cases, child labour may be used. Sweatshop workers' wages are generally insufficient to sustain reasonable living conditions; many workers live in poverty. Most are young women aged 17 to 24.

In our globalised world, the question of ethical trade is increasingly important. Socially responsible companies are taking steps to ensure that profits gained from offshoring production and services to less developed countries do not come at the expense of the wellbeing of the people within those countries.

**FIGURE 3** A sweatshop in Bangladesh

## 17.6 INQUIRY ACTIVITY

If clothing carries the Ethical Clothing Australia (ECA) label, it means the garment was manufactured in Australia and the manufacturer has ensured that all people involved in its production received the legally stated wage rates and conditions — known in Australia as award wages and conditions. Research which Australian-made garments you can purchase to support fair working conditions. **Examining, analysing, interpreting**

## 17.6 EXERCISES

**Geographical skills key: GS1** Remembering and understanding **GS2** Describing and explaining **GS3** Comparing and contrasting **GS4** Classifying, organising, constructing **GS5** Examining, analysing, interpreting **GS6** Evaluating, predicting, proposing

### 17.6 Exercise 1: Check your understanding

1. **GS1** Why have many countries moved their production to offshore ***places***?
2. **GS1** What are sweatshops?
3. **GS2** What ***change*** do you think online shopping will make to the Australian retail industry?
4. **GS3** Compare the advantages and disadvantages of ordering a T-shirt online rather than buying it in a department store.
5. **GS1** What are the three main categories considered in developing the Global Services Location Index?

### 17.6 Exercise 2: Apply your understanding

1. **GS6** Look at **FIGURE 2**. Suggest reasons why so many offshore manufacturing companies are located in the Asia-Pacific region.
2. **GS5** What impact does moving production offshore have on the Australian economy and people?
3. **GS6** Are sweatshops ethical or ***sustainable***? Explain your answer.
4. **GS4** Online ordering of goods is a feature of the internet age. List the advantages and disadvantages of online ordering for workers in the Australian retail industry.
5. **GS5** Australia has made stronger regional trade ***interconnections*** with its neighbours by lowering its tariffs on imported textiles, clothing and footwear. Suggest two benefits and two disadvantages of this approach for Australian trade and the economy.

Try these questions in learnON for instant, corrective feedback. Go to www.jacplus.com.au.

# 17.7 Making trade fair

## 17.7.1 Problems of trade

The benefits of international trade are not evenly shared around the world, and trade often favours developed countries rather than developing countries. It is the role of governments, organisations and agencies to regulate this trade so that the economic benefits are more evenly distributed.

Australians benefit economically, culturally and politically from international trade, but **social justice** problems can arise through this trade. For example, if we import 'blood diamonds' from Africa, clothing manufactured in sweatshops in Bangladesh, or carpets from Nepal produced by child labour, we are supporting unethical industries.

In addition, some countries can make it difficult for other countries to compete fairly, on a 'level playing field'. They do this by:

- *imposing tariffs* — taxes on imports
- *imposing quotas* — limits on the quantity of a good that can be imported
- *providing subsidies* — cash or tax benefits for local farmers or manufacturers.

**FIGURE 1** Fair trade organisations promote fair labour practices such as preventing and eliminating child labour.

## 17.7.2 Fair trade

The fair trade movement aims to improve the lives of small producers in developing nations by paying a fair price to artisans (craftspeople) and farmers who export goods such as handicrafts, coffee, cocoa, sugar, tea, bananas, cotton, wine and fruit. The movement operates through various national and international organisations such as the World Fair Trade Organization and Fairtrade International.

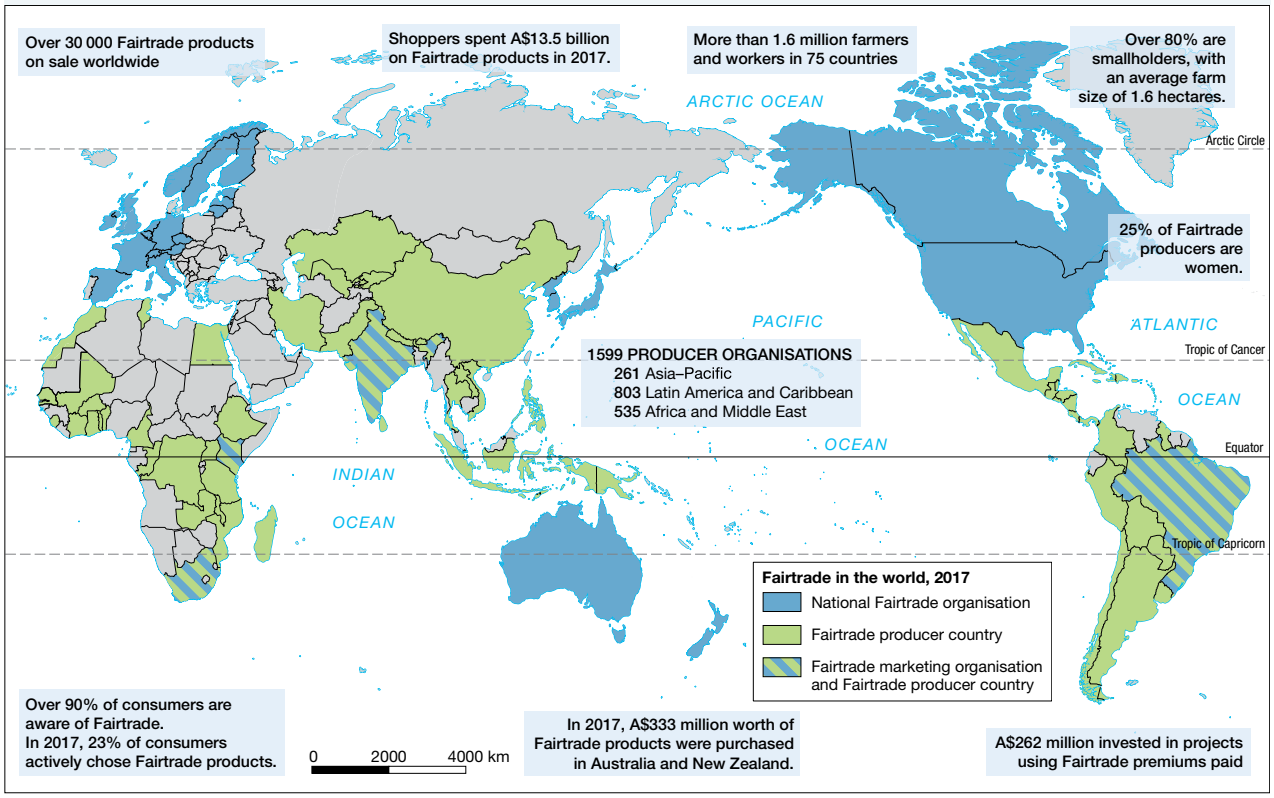
**FIGURE 2** Goods produced by workers for the World Fair Trade Organization mission

The fair trade labelling system is operated by Fairtrade International, of which Australia is a participating member. This system works to ensure that income from the sale of products goes back directly to the farmers, artisans and their communities. Fairtrade International works with 1599 producer groups across 75 countries (see **FIGURE 3**). The number of Fairtrade International farmers and workers is estimated at more than 1.6 million, of which 25 per cent are women.

Fairtrade food items include sugar, chocolate, coffee, tea, wine and rice. Other products include soaps, candles, clothing, jewellery, bags, rugs, carpets, ceramics, wooden handicrafts, toys and beauty products.

In 2017–18, Australia and New Zealand had a combined retail sales total of A$333 million in Fairtrade-certified products, with three in five New Zealanders and two in five Australians purchasing Fairtrade offerings. This included 3 million kilograms of coffee, 10.1 million kilograms of chocolate and 354 000 kilograms of Fairtrade tea. On a global scale, Fairtrade's 1.6 million farmers and their families have benefited from Fairtrade premium-funded infrastructure and community development projects with a value of A$262 million.

**FIGURE 3** Fairtrade in the world, 2017




***Source:*** Fairtrade Foundation

## 17.7.3 Non-government organisations and fair trade

**Non-government organisations** (NGOs) such as Oxfam and World Vision also support fair trade, and oppose socially unjust trade agreements. They oppose attempts by developed countries to:

- block agricultural imports from developing countries
- subsidise their own farmers while demanding that poorer developing countries keep their agricultural markets open.

### DISCUSS

In small groups, consider the following questions:

- Why is there a need for organisations such as Fairtrade International?
- Should stores be allowed to sell items that are not sourced from Fairtrade producers? **[Ethical Capability]**

### 17.7 INQUIRY ACTIVITIES

1. Visit your local supermarket and find as many products as you can that carry the Fairtrade symbol. Take pictures of these products and create an annotated world map to show each of the products and where it is produced. **Classifying, organising, constructing**
2. Conduct internet research to find out what Oxfam does to promote fair trade. What types of goods does Oxfam sell in Australia? **Examining, analysing, interpreting**

### 17.7 EXERCISES

**Geographical skills key: GS1** Remembering and understanding **GS2** Describing and explaining **GS3** Comparing and contrasting **GS4** Classifying, organising, constructing **GS5** Examining, analysing, interpreting **GS6** Evaluating, predicting, proposing

#### 17.7 Exercise 1: Check your understanding

1. **GS1** What are the main principles of fair trade?
2. **GS1** List three products that are sold under the Fairtrade International banner.
3. **GS1** How many farmers throughout the world are associated with Fairtrade International?
4. **GS2** Explain the role of NGOs such as Oxfam in relation to trade.
5. **GS2** Why can trade be unfavourable to poorer countries?

#### 17.7 Exercise 2: Apply your understanding

1. **GS5** Describe the distribution of Fairtrade producer countries.
2. **GS5** In which parts of the world are National Fairtrade Organisation countries found?
3. **GS6** How could awareness of the work of Fairtrade be increased?
4. **GS2** Explain how consumers in developed countries may unwittingly support unethical enterprises.
5. **GS6** In theory, every country, rich or poor, should have the opportunity to benefit from international trade. However, the reality is very different. Write a page discussing this statement.

Try these questions in learnON for instant, corrective feedback. Go to www.jacplus.com.au.

# 17.8 Global connections through Australian Aid

## 17.8.1 Why give overseas aid?

Overseas aid is the transfer of money, food and services from developed countries such as Australia to less-developed countries in order to help people overcome poverty, resolve humanitarian issues and generally help with their development. Over one billion people in the world live in poverty and do not have easy access to education and health care. When disasters strike, they lack the resources to get back on their feet. Poverty needs to be addressed by the international community because it can:

- breed instability and **extremism**
- cause people to flee violence and hardship, thus swelling the number of refugees.

Australia takes the stance that helping people who are less fortunate is a vital way of supporting **humanitarian principles** and social justice. Apart from showing we care, it is in the interests of our **national security** as it may also help promote stability and prosperity in the region. In addition, it improves our status throughout the world and creates political and economic interconnections with our Asia-Pacific neighbours. Australia's Official Development Assistance (ODA) program is known as Australian Aid.

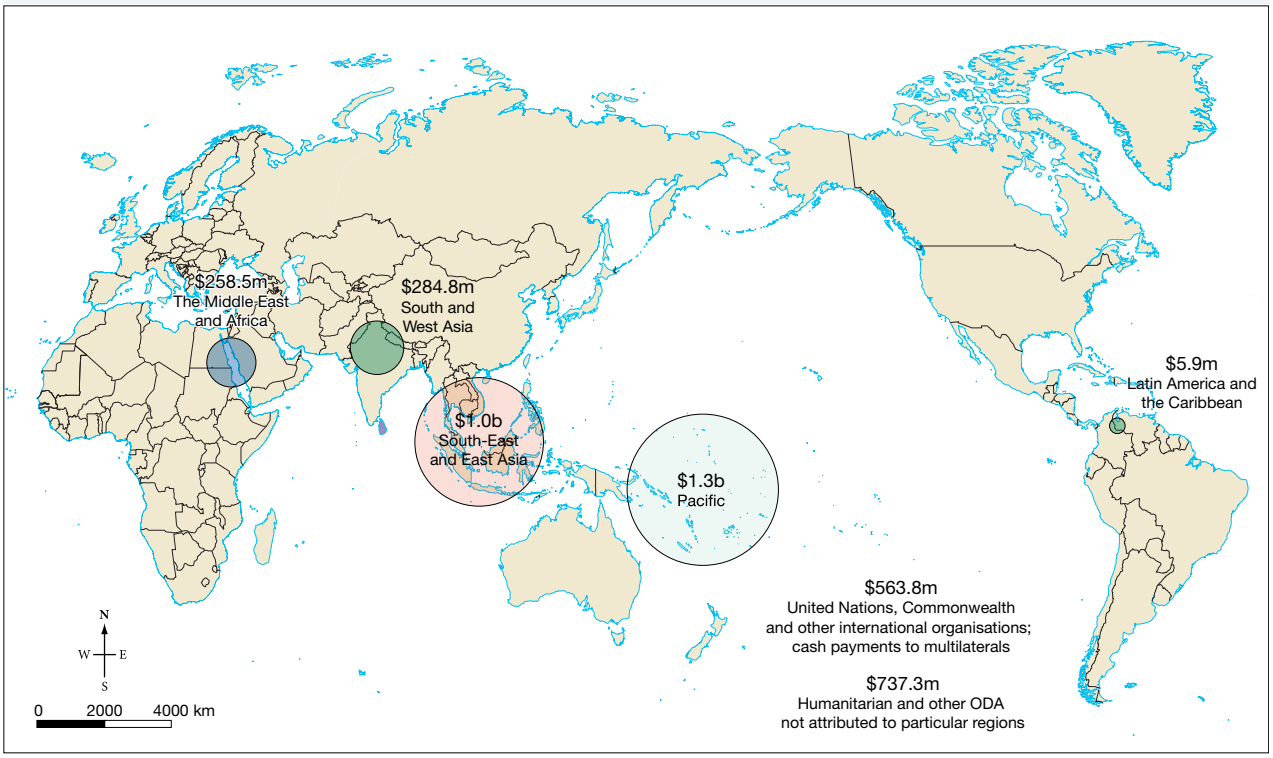
## 17.8.2 The Australian Aid program

The Department of Foreign Affairs and Trade (DFAT) manages the Australian government's multi-billion-dollar overseas aid program. To ensure that funds reach those in need, Australian Aid works with Australian businesses, non-government organisations such as CARE Australia, and international agencies such as the United Nations (UN) and the World Bank. In 2018–19, Australia's ODA budget was $4.2 billion, with the majority of this being earmarked for the Indo-Pacific region, of which Australia is a part (see **FIGURE 1**).

There are various investment priorities within Australia's ODA budget (see **FIGURE 2**). Within these priorities, many programs that target specific areas of need or interest are covered. These include:

- aid to governments for post-conflict reconstruction, as in Afghanistan
- distribution of food through the United Nations World Food Programme
- contributions to United Nations projects on refugees and climate change
- disaster and conflict relief in the form of food, medicine and shelter
- programs by non-government organisations to reduce child labour in developing countries
- funding for education programs
- funding for programs to promote gender equality and improve women's economic and social participation
- support for Australian volunteers working overseas.

**FIGURE 1** Australia's aid 2018–19, by region

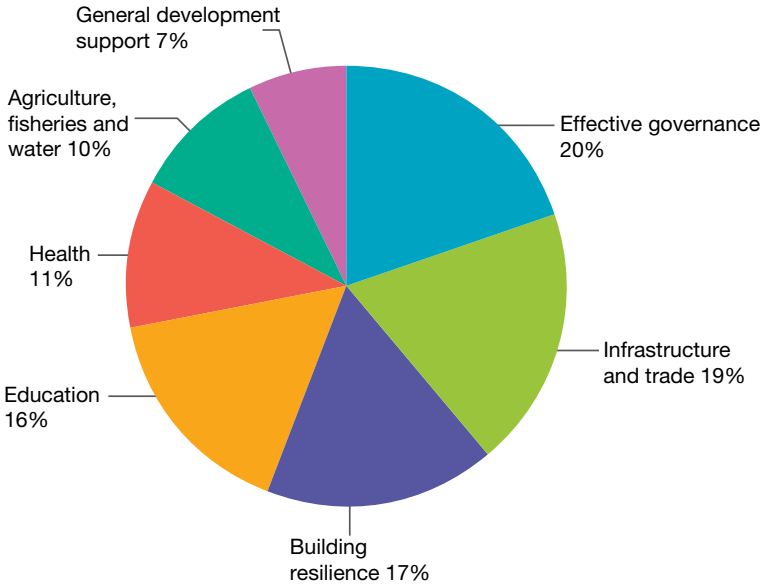



***Source:*** Data from © Commonwealth of Australia, DFAT, Australian Aid Budget Summary 2018–19. Map drawn by Spatial Vision.

### DISCUSS

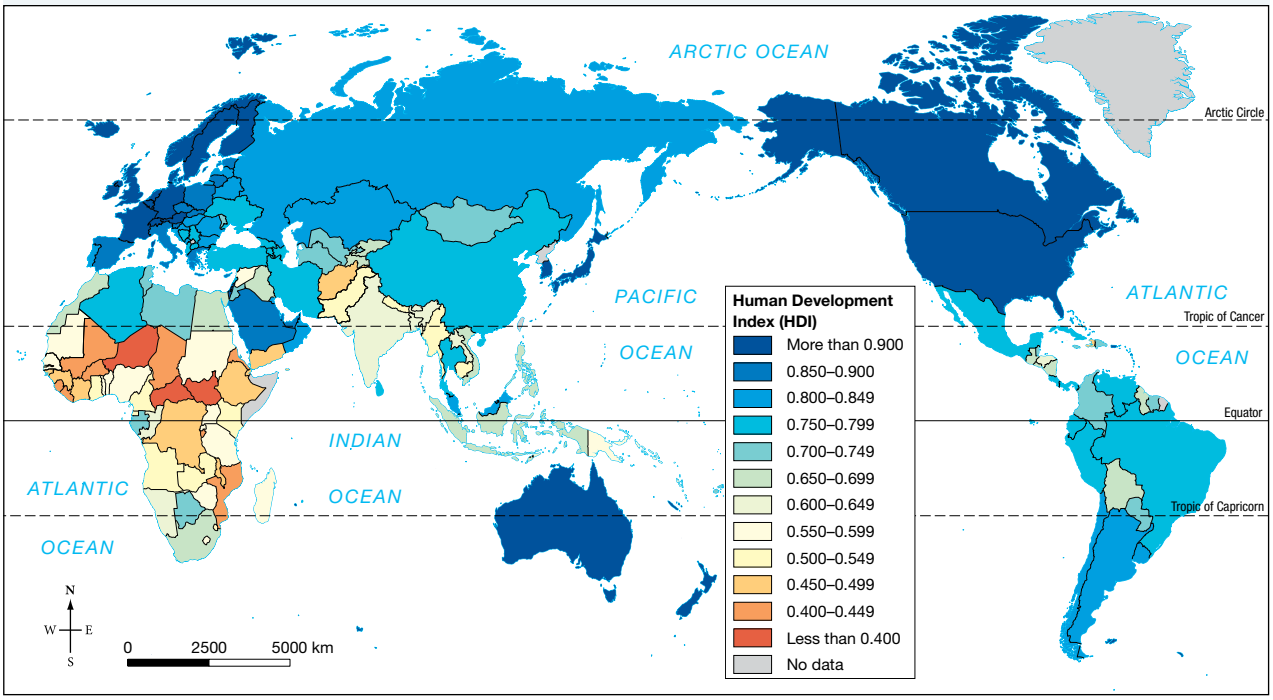
Australia should help its less developed neighbours, not just because it benefits Australia but because it is the right thing to do. **[Ethical Capability]**

**FIGURE 2** Distribution of Australia's Official Development Assistance (ODA) budget by investment priority, 2018–19




The Australian Aid program supports the United Nations Sustainable Development Goals (SDGs). In addition, countries with a low Human Development Index (HDI) score are the target for development assistance. The HDI ranks countries according to life expectancy, education and per capita income. The highest possible score for a country is 1.0; countries with low HDI ranking score below 0.55 (see **FIGURE 3**). Australian ODA aims to improve the lives of people in such countries through programs and initiatives that seek to build social and economic resilience.

**FIGURE 3** The Human Development Index, 2017




***Source:*** Data from UNDP Human Development Reports. Map drawn by Spatial Vision.

### 17.8 INQUIRY ACTIVITY

Undertake internet research to find out how the Sustainable Development Goals guide the Australian Aid program. **Examining, analysing, interpreting**

### 17.8 EXERCISES

**Geographical skills key: GS1** Remembering and understanding **GS2** Describing and explaining **GS3** Comparing and contrasting **GS4** Classifying, organising, constructing **GS5** Examining, analysing, interpreting **GS6** Evaluating, predicting, proposing

#### 17.8 Exercise 1: Check your understanding

1. **GS1** Which government department manages Australia's Official Development Assistance (ODA) program?
2. **GS2** Which regions of the world receive most of Australia's aid funding and why do you think this is so?
3. **GS1** List the different focus areas across which Australia's ODA budget is distributed.
4. **GS2** Is there a case that could be argued for cutting aid budgets? Explain your reasons.
5. **GS2** Describe the global distribution of low-HDI countries.

#### 17.8 Exercise 2: Apply your understanding

1. **GS6** If Australian Aid was to stop, what impact do you think this would have on Australia's reputation in the international community?
2. **GS6** Which elements of the Australian Aid program do you think will have the greatest impact on the lives of people in the Pacific region? Give reasons for your selection.
3. **GS3** Compare the distribution of low-HDI countries with that of high-HDI countries. Suggest an explanation for what you observe.
4. **GS6** If Australia's economic prosperity were to decline in the next 50 years, which elements of the Australian Aid program do you believe would not be ***sustainable***?
5. **GS5** What reasons can you put forward to explain why Australian Aid programs are worthwhile in terms of Australia's ***interconnections*** with its neighbours?

Try these questions in learnON for instant, corrective feedback. Go to www.jacplus.com.au.

# 17.9 The troubling illegal wildlife trade

## 17.9.1 Threatened wildlife

Not all trade is legal. The international trade in wildlife has been one of the factors responsible for the decline in many species of animals and plants (see **FIGURES 1** and **2**). Millions of live birds, reptiles, mammals, insects and plants are illegally shipped around the world each year (see **FIGURE 3**). Some will supply the pet trade, others may be used in traditional medicines or as food delicacies. Wild animal and plant products, such as skins, meat, ornaments, animal parts and timber, are traded in enormous quantities — estimated to be worth US$10 billion per year.

## 17.9.2 What is traded and how?

Trade in threatened wildlife takes place through **smuggling**. Birds are drugged and stuffed into plastic tubes; snakes are coiled into stockings and posted; lizards are stitched into suitcases. Many of the animals die.

Prices on the **black market** can be very high. Bird traffickers can earn more than $150 000 for taking 30 eggs out of a country in specially designed vests that keep the eggs warm. Overseas collectors will pay up to $50 000 for a breeding pair of endangered red-tailed black cockatoos.

**FIGURE 1** Number of threatened mammal species

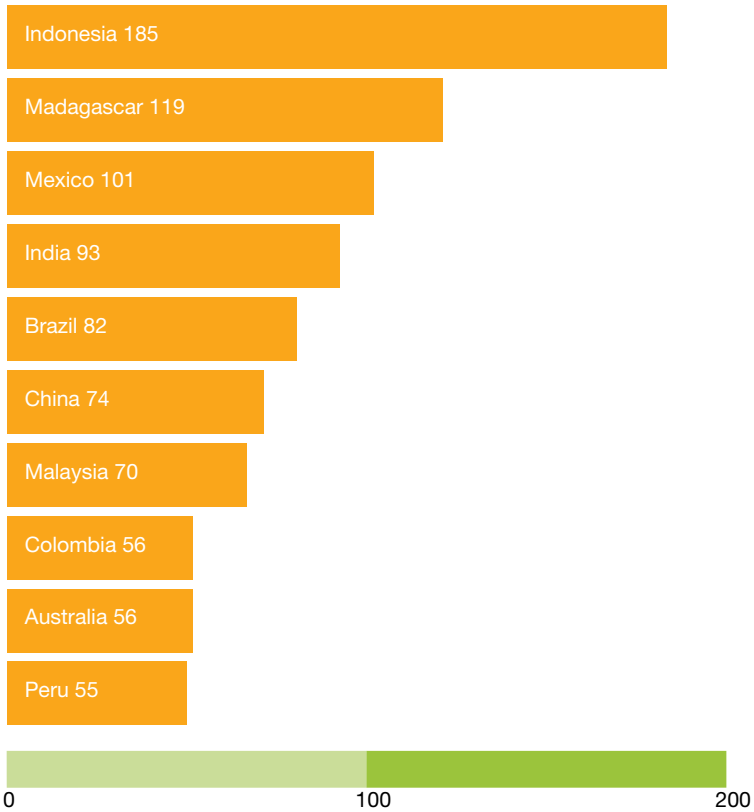



**FIGURE 2** Number of threatened bird species

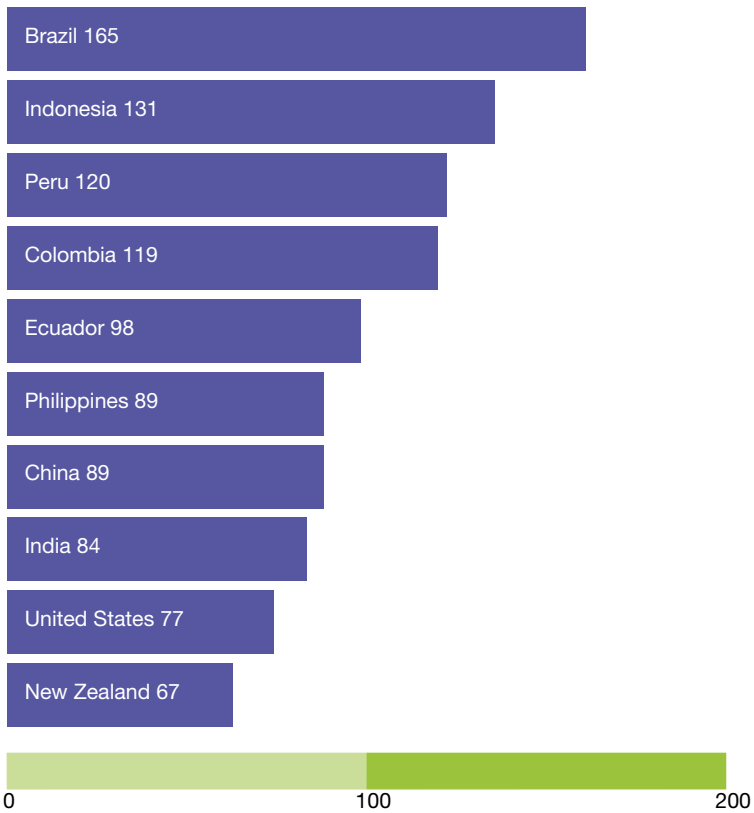
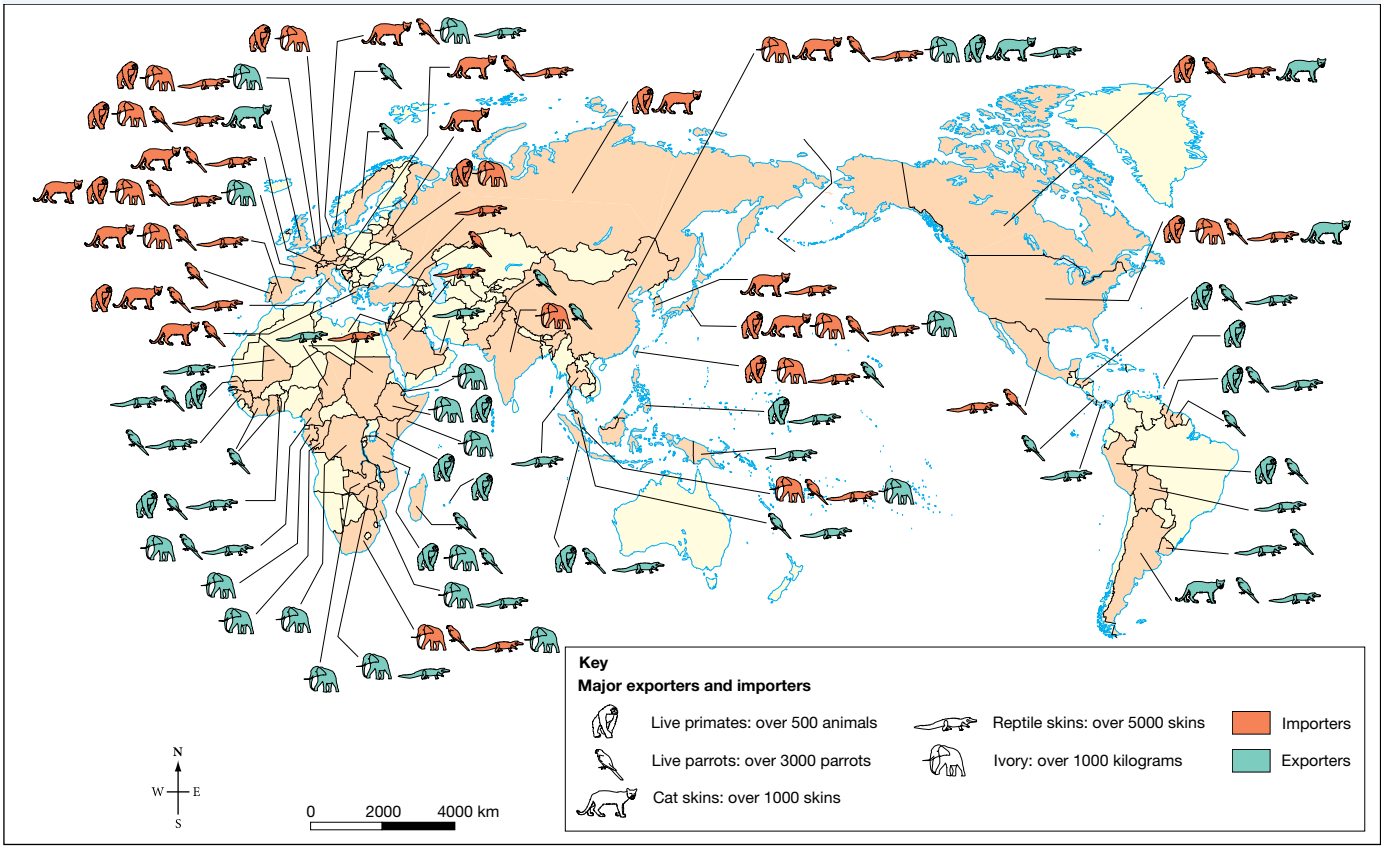


**FIGURE 3** Who trades what — exporters and importers in the illegal wildlife trade




***Source:*** MAPgraphics Pty Ltd, Brisbane

## Traditional Chinese medicine

Traditional Chinese medicine (TCM), the most widely practised traditional medicine system in the world, uses more than 1000 plant and animal species. While TCM has been practised for perhaps 5000 years, some of the wild plants and animals used are now threatened or in danger of extinction. Among them are certain orchids, musk deer, rhinoceroses, tigers and some bear species.

**FIGURE 4** Some of the skins seized from poachers in India

All five species of rhinoceros are threatened with extinction due to a long history of being killed by poachers who then remove and sell their horns. The black rhino horn is sometimes referred to as 'black gold' because it is so expensive. Rhinoceros horns are mostly used in traditional Asian medicines to treat a variety of ailments, including fever and blood disorders. Horns are cut into oblong pieces and smuggled into other countries in jars of honey, cartons of matches or raw meat.

## 17.9.3 Tackling the issue

In 1973, an international **treaty** known as the Convention on International Trade in Endangered Species (CITES) was established to prevent international trade that threatened species with extinction. Any trade in products from threatened wildlife requires a special permit. Unless there are exceptional circumstances, no such permits are issued for species threatened with extinction. These include species of tigers, elephants, rhinoceroses, apes, parrots and all sea turtles.

Although international trade in rhino horn has been banned since 1977, demand remains high, which encourages rhino poaching in Africa and Asia. Criminal syndicates link the poachers, in places like South Africa, to transit points, smuggling channels and final destinations in Asia. To combat this, conservationists sedate rhinos in the wild and remove their horns, thus removing the commodity that poachers seek in killing them.

**FIGURE 5** Conservationists dehorning a sedated rhinoceros

Creating wildlife reserves and employing rangers to patrol and protect the wildlife within them has had some success, but poaching continues, and in some cases the lives of the rangers themselves are at risk from criminal poachers focused solely on financial gain. In 2017, 100 rangers died in the course of their work.

In October 2018, the Illegal Wildlife Trade Conference was held in London. At this event, wildlife conservationists, policymakers and others sought to coordinate efforts to put an end to criminal activity in the trade of wildlife — an ongoing problem that threatens plants, animals, humans, and the planet's biodiversity alike. While awareness has grown, and concerted measures are being undertaken, there is still much to be done to bring this trade to a halt.

### 17.9 INQUIRY ACTIVITY

Look carefully at **FIGURE 3**.

**a.** Which categories of wildlife are traded for their skins?

**b.** Using an atlas, list the ***places*** that are the major exporters of live primates, cat skins, ivory, live parrots and reptile skins.

**c.** Based on your list in part **b**, list the continents that are the main sources of wildlife species and wildlife goods.

**Classifying, organising, constructing**

## 17.9 EXERCISES

**Geographical skills key: GS1** Remembering and understanding **GS2** Describing and explaining **GS3** Comparing and contrasting **GS4** Classifying, organising, constructing **GS5** Examining, analysing, interpreting **GS6** Evaluating, predicting, proposing

### 17.9 Exercise 1: Check your understanding

1. **GS1** Why are wild species traded?
2. **GS1** Which three countries have the highest number of threatened mammal species?
3. **GS1** Which three countries have the highest number of threatened bird species?
4. **GS2** Refer to **FIGURE 5**.
   (a) How does the action shown support the ***sustainability*** of rhinoceros populations?
   (b) Why are conservationists taking this action?
5. **GS2** What was the purpose of the 2018 Illegal Wildlife Trade Convention?

### 17.9 Exercise 2: Apply your understanding

1. **GS6** Other than the loss of endangered species, what other negative consequences may occur through the illegal export and import of wildlife?
2. **GS6** What might be the impact on the Australian ***environment*** if animals such as koalas were to become a target for smugglers?
3. **GS6** Suggest what could be done to persuade people not to buy poached products such as animal skins.
4. **GS6** Propose ways of educating people to move away from the use of traditional medicines that endanger wildlife species.
5. **GS6** Suggest some strategies to reduce the number of wildlife rangers who are killed in the course of their work.

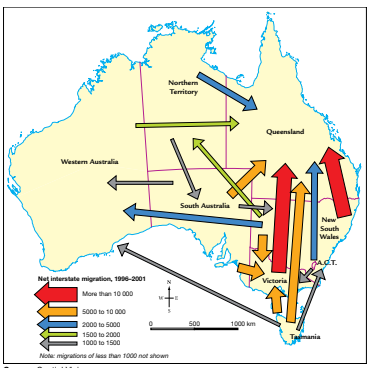
Try these questions in learnON for instant, corrective feedback. Go to www.jacplus.com.au.

# 17.10 SkillBuilder: Constructing and describing a flow map

online only

### What is a flow map?

A flow map is a map that shows the movement of people or objects from one place to another. Arrows are drawn from the point of origin to the destination. Sometimes these lines are scaled to indicate how much of the feature is moving. Thicker lines show a larger amount; thinner lines show a smaller amount.



*Source:* Spatial Vision

### Select your learnON format to access:

- an overview of the skill and its application in Geography (Tell me)
- a video and a step-by-step process to explain the skill (Show me)
- an activity and interactivity for you to practise the skill (Let me do it)
- questions to consolidate your understanding of the skill.

### on Resources

**Video eLesson** Constructing and describing a flow map (eles-1741)
**Interactivity** Constructing and describing a flow map (int-3359)

# 17.11 Thinking Big research project: World Trade Fair infographic

online only

## SCENARIO

The Department of Foreign Affairs and Trade is running a competition looking for exciting, engaging infographic posters depicting Australia's export and import trade relationships, to be displayed at the upcoming World Trade Fair. Winners of 'Best poster' will get to present their infographic at the fair.

### Select your learnON format to access:

- the full project scenario
- details of the project task
- resources to guide your project work
- an assessment rubric.

### on Resources

**projectsPLUS** Thinking Big research project: World Trade Fair infographic (pro-0195)

# 17.12 Review

online only

## 17.12.1 Key knowledge summary

Use this dot point summary to review the content covered in this topic.

## 17.12.2 Reflection

Reflect on your learning using the activities and resources provided.

### on Resources

**eWorkbook** Reflection (doc-31728)
Crossword (doc-31729)

**Interactivity** Trade — a driving force for interconnection crossword (int-7651)

## KEY TERMS

**barter** to trade goods in return for other goods or services rather than money
**black market** any illegal trade in officially controlled or scarce goods
**developing countries** nations with a low living standard, undeveloped industrial base and low human development index relative to other countries
**extremism** extreme political or religious views or extreme actions taken on the basis of those views
**halal** describes food that is prepared under Islamic dietary guidelines
**humanitarian principles** the principles governing our response to those in need, with the main aim being to save lives and alleviate suffering

**national security** the protection of a nation's citizens, natural resources, economy, money, environment, military, government and energy
**non-government organisation** (NGO) a group or business that is organised to serve a particular social purpose at local, national or international level, and operates independently of government
**offshore** to relocate part of a company's processes or services overseas in order to decrease costs
**smuggling** importing or exporting goods secretly or illegally
**social justice** a principle applied so that a society is based on equality, the appreciation of the value of human rights and the recognition of the dignity of every human being
**trade barrier** government-imposed restriction (in the form of tariffs, quotas and subsidies) on the free international exchange of goods or services
**trading partner** a participant, organisation or government body in a continuing trade relationship
**treaty** a formal agreement between two or more independent states or nations, and usually involving a signed document
**value adding** processing a material or product and thereby increasing its market value

# 17.5 SkillBuilder: Constructing multiple line and cumulative line graphs

## 17.5.1 Tell me

### What are multiple line graphs and cumulative line graphs?

Multiple line graphs consist of a number of separate lines drawn on a single graph. Cumulative line graphs are more complex to read, because each set of data is added to the previous line graph. Both formats show change over time, and both show trends effectively.

### How are multiple line graphs and cumulative line graphs useful?

Multiple line graphs and cumulative line graphs are useful when comparing the change in one set of data with changes in other sets of data, and are easier to read than a table of statistics. Sometimes in multiple line graphs the lines may cross one another, so a coloured key is used. Cumulative line graphs are good for showing the breakdown of a total quantity.

They are also useful for:

- showing a pattern of change
- comparing changes in components of the total
- showing trends in data.

Good multiple line graphs and cumulative line graphs:

- have labelled axes
- include a clear title or caption that identifies places and dates for the data.

## 17.5.2 Show me

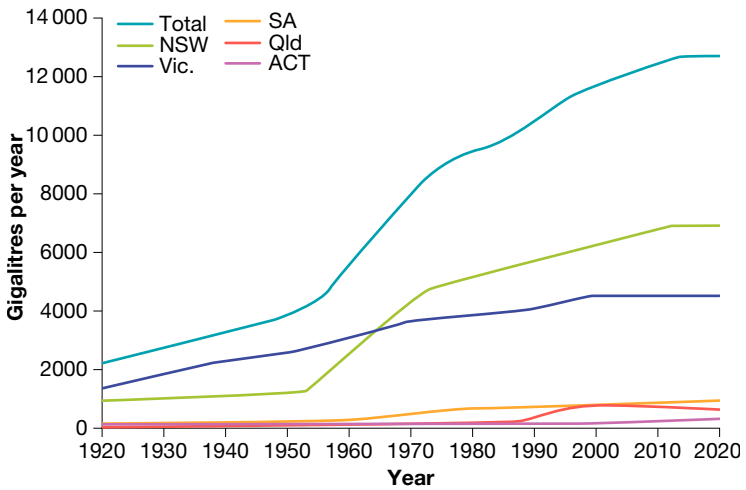
### How to draw multiple line graphs and cumulative line graphs

#### You will need:

- data for multiple places or uses shown over time
- access to a computer
- a blank Excel spreadsheet.

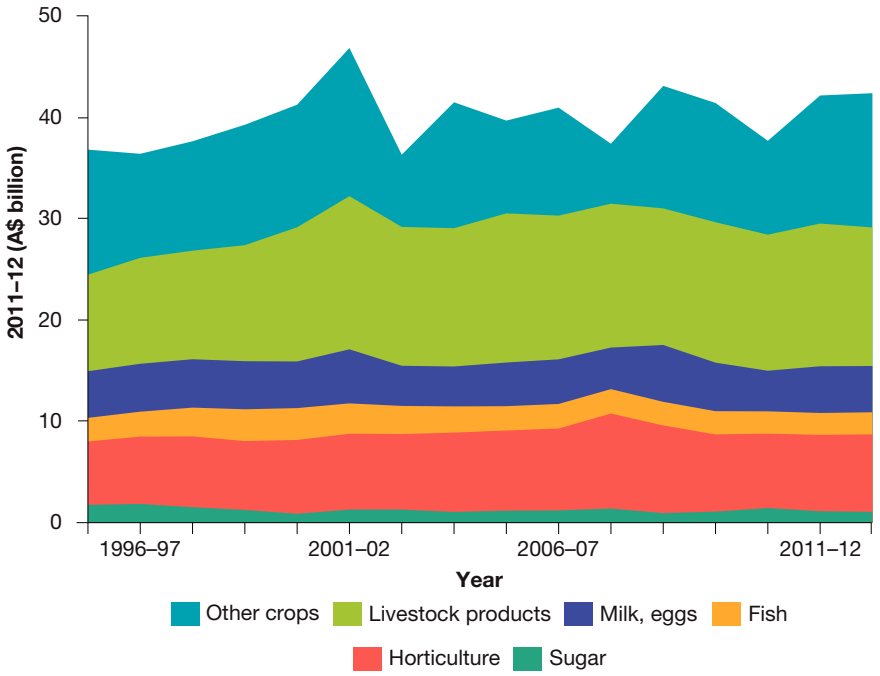
#### Model

**FIGURE 1** Water use by five states in the Murray-Darling Basin, 1920–2020, as a multiple line graph




***Source:*** Food and Agriculture Organization of the United Nations, 2012 FAOSTAT, http://faostat3.fao.org/home/index.html

**FIGURE 2** Value of Australian farms and fisheries food production, 1996–2012, as a cumulative line graph




***Source:*** © DAFF 2013, *Australian Food Statistics 2011–12*. Department of Agriculture, Fisheries and Forestry, Canberra. CC BY 3.0.

## Procedure

### Step 1

To complete multiple line graphs and cumulative line graphs you must have an appropriate set of data to graph. Both types of graphs can be completed from the same data set.

**TABLE 1** Agricultural food production, selected grains (1000 tonnes), Australia, 2006–12

| Crops | 2006–07 | 2007–08 | 2008–09 | 2009–10 | 2010–11 | 2011–12 |
|---|---|---|---|---|---|---|
| Wheat | 10 822 | 13 569 | 21 420 | 21 834 | 27 410 | 21 923 |
| Barley | 4257 | 7160 | 7997 | 7865 | 7995 | 8349 |
| Oats | 748 | 1502 | 1160 | 1162 | 1128 | 1274 |

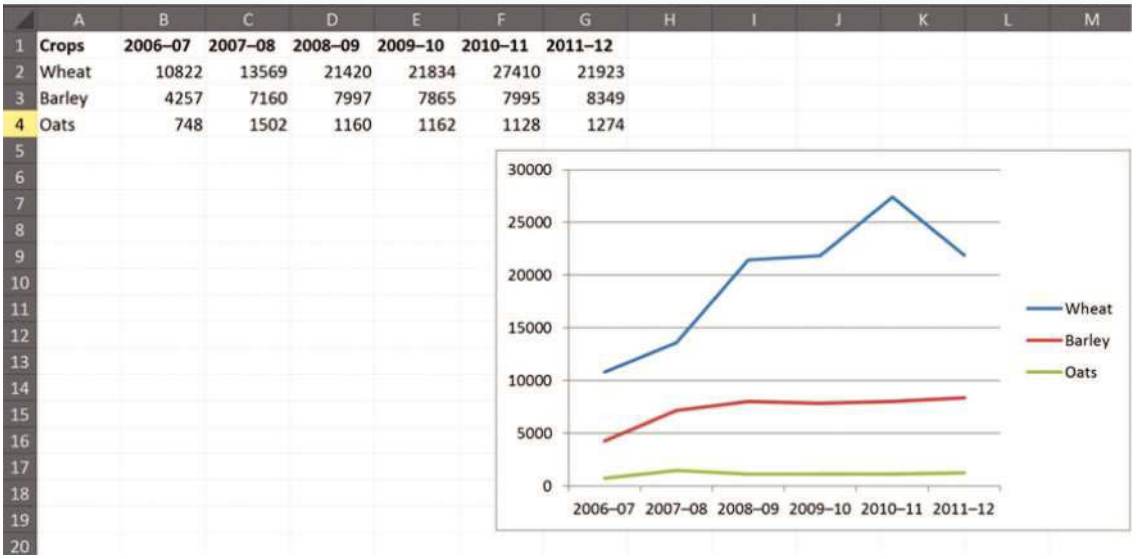
***Source:*** © DAFF 2013, *Australian Food Statistics 2011–12*. Department of Agriculture, Fisheries and Forestry, Canberra. CC BY 3.0.

Place all the data into an Excel spreadsheet. At this stage, if you have spaces in your numbers, close them up or replace them with commas, as spaces can create problems in Excel.

### Step 2

Click on the Insert tab and select a multiple line chart. You will then have to add the axis labels. Do this by clicking on your graph's outer border, selecting the Layout tab in the Chart Tools section, clicking on Axis Titles in the Labels section, and following the steps from there (see **FIGURE 3**).

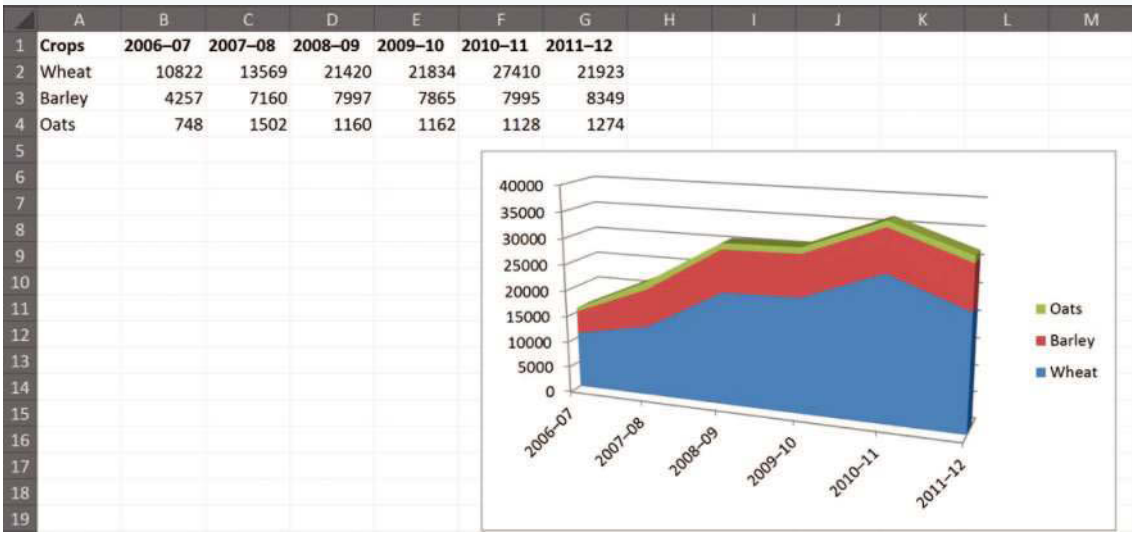
**FIGURE 3** An Excel-generated multiple line graph




## Step 3

A cumulative line graph can be generated by selecting the table data and selecting an Area chart from the Charts section under the Insert tab. Don't forget to add axis labels (see **FIGURE 4**).

**FIGURE 4** An Excel-generated cumulative line graph




## Step 4

Check that you have included labels on all axes, units of measurement, and a title or caption.

## on Resources

**Video eLesson** Constructing multiple line and cumulative line graphs (eles-1740)

**Interactivity** Constructing multiple line and cumulative line graphs (int-3358)

## 17.5.3 Let me do it

Complete the following activities to practise this skill.

### 17.5 ACTIVITIES

1. Use the data in **TABLE 2** to construct a multiple line graph and a cumulative line graph for four Asian countries to which Australia exports food. Use the checklist to ensure you cover all aspects of the task.

**TABLE 2** Australian total food exports by selected destination, A$million, 2006–12

| Country | 2006–07 | 2007–08 | 2008–09 | 2009–10 | 2010–11 | 2011–12 |
|---|---|---|---|---|---|---|
| China | 664 | 917 | 1178 | 1426 | 1540 | 2174 |
| Indonesia | 1566 | 1702 | 2652 | 2129 | 2288 | 2272 |
| Japan | 4752 | 4553 | 5517 | 4278 | 4207 | 4448 |
| Republic of Korea | 1850 | 1655 | 1873 | 1925 | 1994 | 2338 |

***Source:*** © DAFF 2013, *Australian Food Statistics 2011–12*. Department of Agriculture, Fisheries and Forestry, Canberra. CC BY 3.0.

2. Apply your skills to answer the following questions.
   (a) Which country received the greatest value of food exports from Australia?
   (b) Which country showed the greatest ***change*** in its level of importation of food from Australia?
   (c) From 2006 to 2012, which country was most consistent in its level of importation of food from Australia?
   (d) Suggest why these Asian countries need to import food from Australia.
   (e) Which graph showed you a clearer picture of the data: the multiple line graph or the cumulative line graph? Explain.

**Checklist**

I have:

- labelled the axes
- included a clear title or caption that identifies places and dates for the data.

# 17.10 SkillBuilder: Constructing and describing a flow map

## 17.10.1 Tell me

### What is a flow map?

A flow map is a map that shows the movement of people or objects from one place to another. Arrows are drawn from the point of origin to the destination. Sometimes these lines are scaled to indicate how much of the feature is moving. Thicker lines show a larger amount; thinner lines show a smaller amount.

### How is a flow map useful?

A flow map is used to give us a visual image of the movement of something that might otherwise be provided through a set of statistics or a lengthy paragraph of text. Interconnections between destinations and places of origin are made very clear, and regional patterns can be readily identified.

Flow maps are useful when trying to understand:

- individual movements, such as use of transport systems and aisles in supermarkets
- local movements, such as traffic flows at intersections or the use of pathways in parks
- national movements, such as the importation of cars to Australian states
- regional movements, such as flows between states of Australia or between countries within the Pacific
- global movements, such as imports and exports, human movement and communication.

A good flow map:

- is drawn in pencil initially and then coloured appropriately
- uses arrows to indicate flow directions
- may use scaled arrow widths, which are also explained in a key/legend
- includes labelled features as necessary
- has a clear title, which identifies places and dates.

A good description of a flow map:

- identifies and communicates key features of the movement, patterns and places shown
- clearly represents and communicates the data with the use of statistics, places and dates.

## 17.10.2 Show me

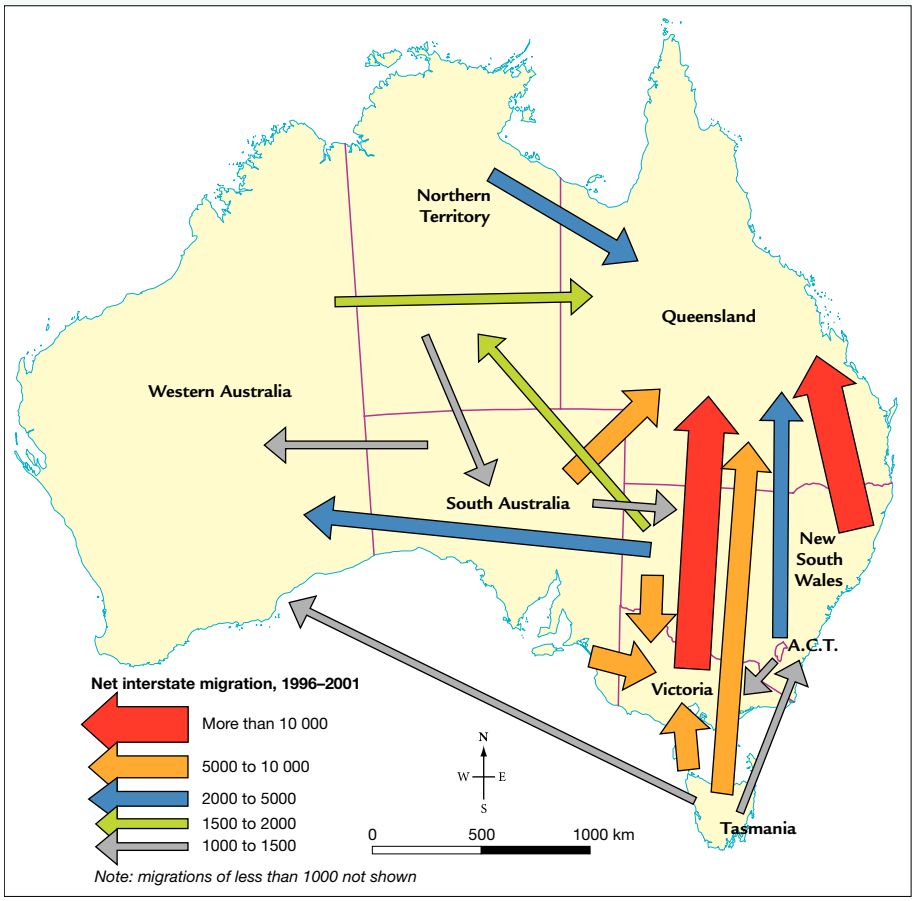
### How to construct and describe a flow map

**You will need:**

- a set of data that shows the movement of some object
- a base map that corresponds to the places included in your data set
- a light grey pencil
- a set of coloured pencils
- a ruler
- an eraser.

## Model

**FIGURE 1** Interstate migration flows, 1996–2001




***Source:*** Spatial Vision

Between 1996 and 2001, people moved from the southern states to Queensland, and from the eastern states to Western Australia. All states experienced migration of residents to Queensland, with more than 10 000 migrants from each of Victoria and New South Wales, and 5000–10 000 from Tasmania and South Australia. New South Wales lost more people than it gained, with inflows of 1000 to 1500 from South Australia and Tasmania only. Victoria, however, had inflows from all the surrounding states, including Tasmania (totalling between 16 000 and 31 500), which indicates that Victoria's net loss — more than 10 000 to Queensland — was far less than that of New South Wales, which had a loss of 13 500–17 000 or more.

## Procedure

To complete a flow map, you will need to convert a table of data to a coloured map.

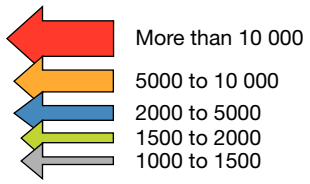
### Step 1

If you are planning to simply show the flow between places, then you need only identify each place and draw an arrow from the origin to the destination, as shown in **FIGURE 1** in subtopic 17.2. Writing numbers on the flow lines is another method for creating a basic flow map. (If you use this method, go now to step 5.) On the other hand, if you want to create a map that provides an instant snapshot of the quantities of a feature being moved, then a scaled flow map is a better option. Your first step is to determine the scale you will use. Look over the data set that you have and establish no more than five categories that will allow you to represent the data. **FIGURE 2** shows how these appear in the key of the **FIGURE 1** model.

### Step 2

Draw up the key, or legend, for the base map. Note that you will have to work in millimetres; otherwise, your arrows will dominate the map. In a key such as **FIGURE 2**, one millimetre could be used to represent 1000 people. This will avoid having very wide arrows for the larger values, and allow the arrows to fit within the map. Label your key appropriately.

**FIGURE 2** Scaled arrows for the flow map in **FIGURE 1**




### Step 3

Now you need to rule an arrow, of an appropriate width, from a place of origin to a place of destination. Before you begin, think where you will place each arrow, as it is best to avoid overlapping them. This is most important if you are mapping global data; look at **FIGURE 1** in subtopic 17.4 to see how complex this can become.

### Step 4

As you draw arrows between the places of origin and destination, use your ruler to keep the arrow widths consistent. Neatness is important. Colour the arrows as you go to avoid confusion at the end.

### Step 5

Ensure that the completed map includes geographical conventions (BOLTSS).

### Step 6

Look at the completed map and identify any patterns that are evident. Is there an interconnection between the widest arrows? Is there an interconnection between the narrowest arrows? Write a few sentences to explain any patterns you can identify. In the **FIGURE 1** model, people moved from the southern states to Queensland — more than 10 000 from Victoria, 5000–10 000 from Tasmania, 2000–5000 from the ACT and more than 10 000 from New South Wales. They also moved from the eastern states to Western Australia — 2000–5000 from New South Wales, 1000–1500 from Tasmania, and 1000–1500 from South Australia.

### Step 7

Look for any anomalies in the pattern — arrows that stand out as being different. Write a sentence to identify any anomalies. For example, in **FIGURE 1**, although Victoria had an inflow from all its surrounding states, including Tasmania, fewer than 1000 Victorians moved to each of the states of Western Australia, South Australia, New South Wales, ACT or Tasmania.

## on Resources

**Digital document** Blackline master: World map (doc-11392)
**Video eLesson** Constructing and describing a flow map (eles-1741)
**Interactivity** Constructing and describing a flow map (int-3359)

## 17.10.3 Let me do it

Complete the following activities to practise this skill.

### 17.10 ACTIVITIES

1. Using a blank world map and the data in **TABLE 1**, construct a flow map of ivory smuggled from Africa to Asia. Think carefully about the ***scale*** you choose, as the data for China is high. Note that the flow is from Africa to Asia, so the arrows need to go from Africa to the appropriate country in Asia. Use the checklist for drawing a flow map to ensure you cover all aspects of the task.
2. Write a description of the supply of smuggled ivory to Asia. Use the checklist for interpreting a flow map to ensure you cover all aspects of the task.

**TABLE 1** Ten Asian countries with the most ivory seized, 1989–2011 — total weight of seizures in kilograms

| India | Singapore | Malaysia | Japan | Philippines | Vietnam | Taiwan | Hong Kong | Thailand | China |
|---|---|---|---|---|---|---|---|---|---|
| 6758 | 8028 | 8527 | 8618 | 10 659 | 13 426 | 18 370 | 20 638 | 21 364 | 41 095 |

***Source:*** TRAFFIC, Tom Milliken

3. Apply your skills in interpreting a flow map to answer the following questions.
   (a) Which Asian country had the most smuggled ivory seized?
   (b) Which Asian country had the least smuggled ivory seized?
   (c) Describe the areas of Asia to which *smaller* quantities of ivory are smuggled and the areas to which *larger* quantities are smuggled.
   (d) Does distance seem to affect the amount of ivory smuggled? Explain your answer, using the map ***scale*** to help you.
   (e) Does the level of a country's development influence the smuggling of ivory? Explain your answer.

**Checklist**

In drawing a flow map I have:

- drawn in pencil initially and then coloured appropriately
- used arrows to indicate flow directions
- used ***scaled*** arrow widths, which are also explained in a key/legend
- included labelled features as necessary
- provided a clear title, which identifies ***places*** and dates.

In interpreting a flow map I have:

- identified and communicated key features of the movement, patterns and ***places*** shown
- clearly represented and communicated the data with the use of statistics, ***places*** and dates.

# 17.11 Thinking Big research project: World Trade Fair infographic

## Scenario

The Department of Foreign Affairs and Trade is running a competition looking for exciting, engaging infographic posters depicting Australia's export and import trade relationships, to be displayed at the upcoming World Trade Fair. Winners of 'Best poster' will get to present their infographic at the fair.

## Task

Create an informative and engaging poster to present information about Australia's exports and imports, and our trading partners. What do we trade and with whom? Which are our most important trade relationships and why?

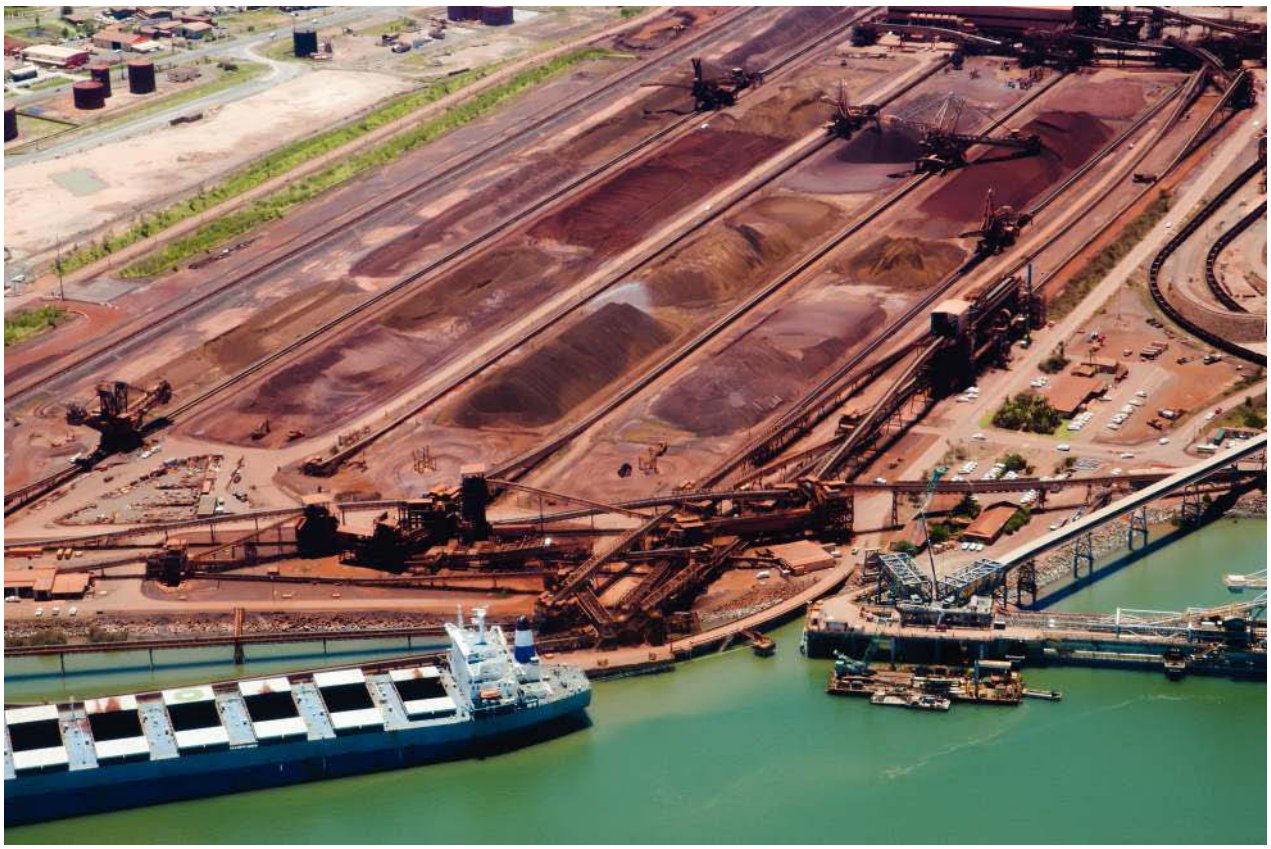
You may choose to:

- focus on a particular industry (e.g. agriculture, mining, tourism, education etc.)
- focus on a particular country or region with whom we trade
- look more broadly at our top exports and imports and top trading partners
- focus on a combination of the above — the choice is yours!

In your infographic, include relevant graphs, images, maps, tables and text to present data and information in a clear and engaging way.

## Process

- Open the ProjectsPLUS application in the Resources for this topic. Click on the **Start new project** button to enter the project due date and set up your project group if you wish. You may work individually or in pairs, depending on your teacher's preference. Save your settings and the project will be launched.
- Navigate to the **Research forum**, where you will find starter topics loaded to guide your research. You can add further topics to the Research forum if you wish. In the **Media centre** you will find an assessment rubric to guide your work and some weblinks that will provide a starting point for your research.
- As you work, remember to record details of your sources so you can create a bibliography to submit with your completed infographic. Add your research notes and source details to the relevant topic pages in the Research forum. When you have completed your research, you can print out the **Research report** in the Research forum to easily view all the information you have gathered, if you wish.



- Do some preliminary research and decide what will be the focus of your infographic. Gather relevant export and import data for the most recent year available.
- Plan the layout of your infographic. Organise your data using tables and graphs, where appropriate. Add images and a map to display the location of the trade partner(s) you are discussing. Create clear, concise text points to accompany your visual elements.
- Review your work thoroughly, checking for correct spelling and grammar. Ensure that maps have BOLTSS applied and any images, graphs or diagrams have captions. Finalise your bibliography. When you are happy with your work, submit your infographic and bibliography to your teacher for assessment.

## Resources

**ProjectsPLUS** Thinking Big research project: World Trade Fair infographic (pro-0195)

# 17.12 Review

## 17.12.1 Key knowledge summary

### 17.2 How does trade connect us?

- Countries of the world are interconnected through trade in goods and services.
- Different countries, because of their level of economic development, have varying levels of consumption of goods and services.

### 17.3 Australia's global trade

- Australia is a member nation of the major organisations that control world trade. These include the World Trade Organization (WTO) and the Asia-Pacific Economic forum (APEC).
- Australia with its small population and vast mineral and agricultural resources is a major exporter of goods.
- Tertiary and secondary education services are now a major export, with students from many nations studying in our schools, colleges and universities.

### 17.4 Food trade around the world

- Some countries have an excess of certain goods and services commodities and others have a shortage. There is therefore a need to interconnect in the export and import trade.
- Australia's exports of wheat and other cereal crops, as well as live animals and animal products, are significant aspects of our trade.
- The production of goods can have significant impacts on the environment, requiring careful management of water and soil resources to achieve sustainability.

### 17.6 Impacts of globalisation

- Globalisation has led to a change in manufacturing such that goods are now more likely to be produced in developing countries where labour costs are low.
- Offshoring of production and services has occurred in many businesses.
- Sweatshops are a negative aspect of the globalised trade economy.
- The question of ethical trade is increasingly important in our globalised world.

### 17.7 Making trade fair

- The fair-trade movement aims to improve the lives of small producers in developing nations by paying a fair price to artisans and farmers who export goods.
- The fair-trade labelling system is operated by Fairtrade International. The system works to ensure that income from the sale of products goes directly to farmers, artisans and their communities.
- NGOs such as Oxfam and World Vision also support fair trade and oppose socially unjust trade agreements.

### 17.8 Global connections through Australian Aid

- Overseas aid is the transfer of money, food and services from developed countries to less-developed countries in order to help people overcome poverty, resolve humanitarian issues and generally help with their development.
- Australia takes the stance that providing aid is a vital way of supporting humanitarian principles and social justice and is in the interests of our national security as it promotes stability and prosperity in the region.

### 17.9 The troubling illegal wildlife trade

- The international trade in wildlife has been one of the factors responsible for the decline in many species of animals and plants.
- Illegal trade in wild animal and plant products, such as skins, meat, ornaments, animal parts and timber, is estimated to be worth US$10 billion per year.
- In 1973, the Convention on International Trade in Endangered Species (CITES) treaty was established to prevent international trade that threatened species with extinction.

- The Illegal Wildlife Trade Conference was held in London in 2018. At this event, wildlife conservationists, policymakers and others sought to coordinate efforts to put an end to the illegal wildlife trade.

## 17.12.2 Reflection

Complete the following to reflect on your learning.

### 17.12 ACTIVITIES

Revisit the inquiry question posed in the Overview:

**Buy, swap, sell, give. Is the trade that occurs between different countries just a way of getting things?**

1. Now that you have completed this topic, what is your view on the question? Discuss with a partner. Has your learning in this topic changed your view? If so, how?
2. Write a paragraph in response to the inquiry question, outlining your views.

### on Resources

**eWorkbook** Reflection (doc-31728)
Crossword (doc-31729)

**Interactivity** Trade — a driving force for interconnection crossword (int-7651)

### KEY TERMS

**barter** to trade goods in return for other goods or services rather than money
**black market** any illegal trade in officially controlled or scarce goods
**developing countries** nations with a low living standard, undeveloped industrial base and low human development index relative to other countries
**extremism** extreme political or religious views or extreme actions taken on the basis of those views
**halal** describes food that is prepared under Islamic dietary guidelines
**humanitarian principles** the principles governing our response to those in need, with the main aim being to save lives and alleviate suffering
**national security** the protection of a nation's citizens, natural resources, economy, money, environment, military, government and energy
**non-government organisation (NGO)** a group or business that is organised to serve a particular social purpose at local, national or international level, and operates independently of government
**offshore** to relocate part of a company's processes or services overseas in order to decrease costs
**smuggling** importing or exporting goods secretly or illegally
**social justice** a principle applied so that a society is based on equality, the appreciation of the value of human rights and the recognition of the dignity of every human being
**trade barrier** government-imposed restriction (in the form of tariffs, quotas and subsidies) on the free international exchange of goods or services
**trading partner** a participant, organisation or government body in a continuing trade relationship
**treaty** a formal agreement between two or more independent states or nations, and usually involving a signed document
**value adding** processing a material or product and thereby increasing its market value

# 18 Global ICT — connections, disparity and impacts

## 18.1 Overview

Technology makes our lives easier and helps us connect, but at what cost to people and the planet?

### 18.1.1 Introduction

The rapid development of information and communication technologies has led to immense change in the way we live and work, and has created a degree of global connectedness unseen and perhaps unimaginable in the past. But not everyone is equally connected. Variations in access exist that lead to social and economic disparity, and there are social, economic and environmental impacts of our increasing production and consumption of technology-related goods and the **e-waste** that results.

**on Resources**

**eWorkbook** Customisable worksheets for this topic

**Video eLesson** Plugging in (eles-1725)

**LEARNING SEQUENCE**


**18.1** Overview
**18.2** Information and communications technology
**18.3** The internet connects us
**18.4** Connected Australians
**18.5** Improving lives via digital connection — Kenya
**18.6** Forging new ICT directions — India
**18.7** The impact of ICT production
**18.8** The future for e-waste
**18.9** **SkillBuilder:** Constructing a table of data for a GIS online only
**18.10** **SkillBuilder:** Using advanced survey techniques — interviews online only
**18.11** **Thinking Big research project:** Trash or treasure? online only
**18.12** **Review** online only

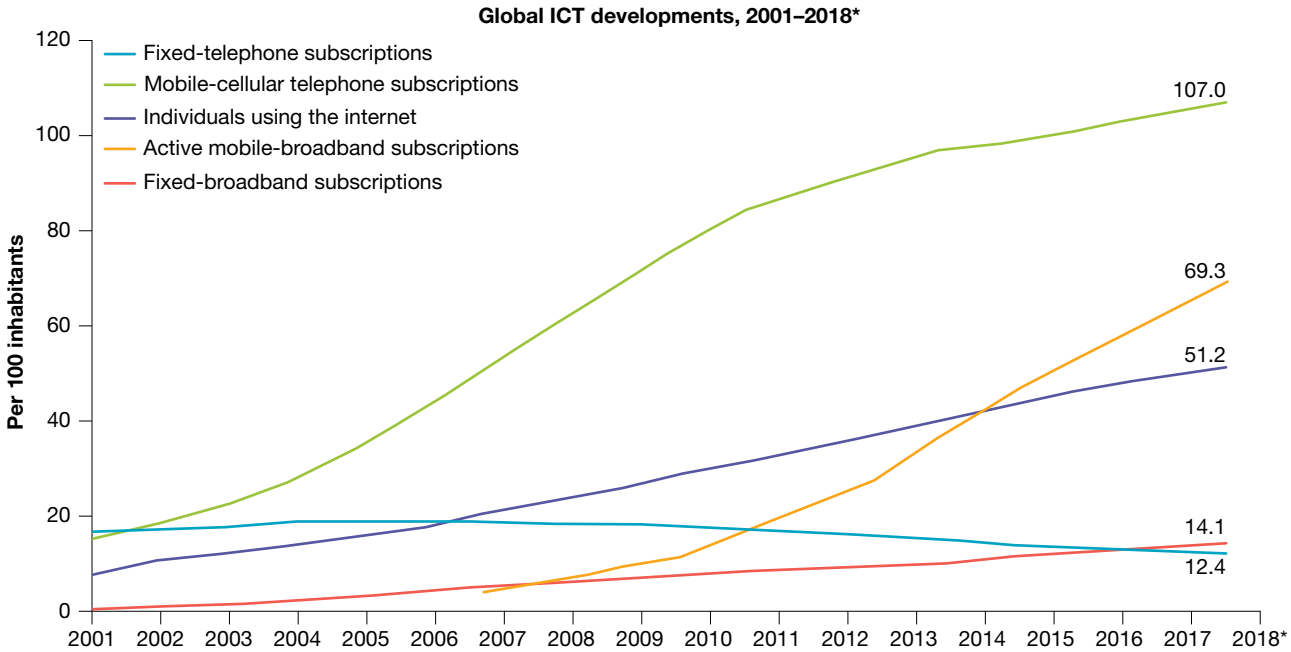

To access a pre-test and starter questions and receive immediate, **corrective feedback** and **sample responses** to every question, select your learnON format at www.jacplus.com.au.

# 18.2 Information and communications technology

## 18.2.1 Changing communications technology

The information and communications technology (ICT) sector is a rapidly evolving aspect of our lives. Change is ongoing, with new technologies constantly emerging. At the same time, some technologies have been superseded. **FIGURE 1** shows the surge in use of mobile phones and in particular the active (used within last 30 days) use of mobile broadband, compared to the decline of the fixed telephone line.

**FIGURE 1** The change in our use of technology




*Note:* *Estimate

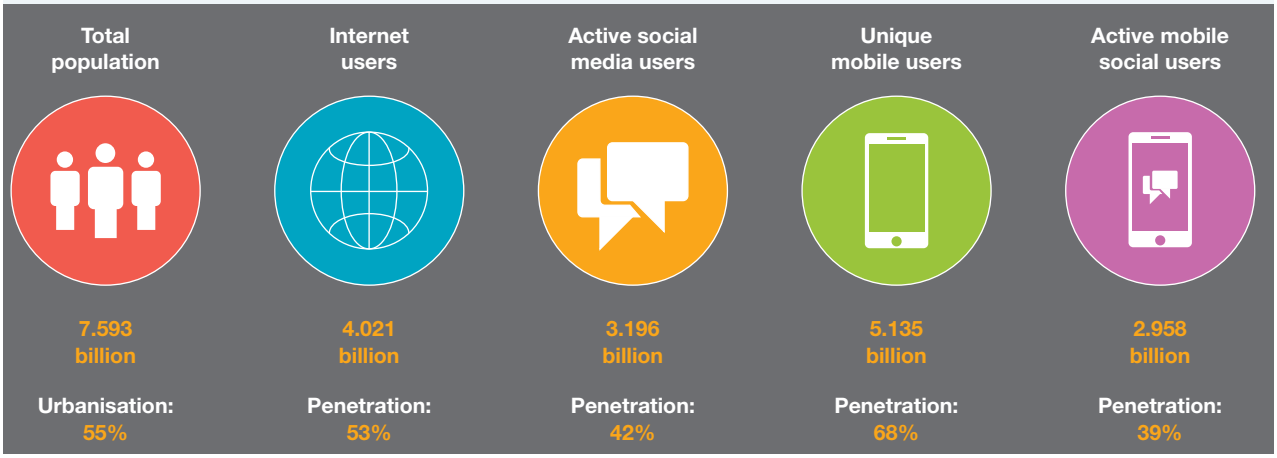
***Source:*** ITU World Telecommunication/ICT Indicators database

The **World Wide Web** was developed as a way of accessing and spreading information. It was once simply a means of collaboration and exchanging ideas online. Today it is an enabler that makes our lives connected to almost everything through the internet.

The first mobile phones in the 1980s were used solely for conversation. Today mobile phones have evolved with a global demand for smartphones — technology that can map travel routes, take photos and videos, act as a diary or notebook, do shopping and banking, participate in gaming, record music, print documents wirelessly, allow face-to-face talking, share documents via the cloud and much, much more. Applications (apps) are being developed at a high rate for the interpretation and use of everything from human health matters, to bird calls, to alerts for disaster management, and so on. Virtual reality is taking us places we have never been.

Although there are more than 750 million adults in the world who lack basic literacy skills, youth culture worldwide has adopted ICT as a mainstream part of life. It has become a fundamental element in the way many of us connect to services and information, and to people in other places. Today, globally, there are more people using the internet on their mobile phones than those using the internet from a stand-alone computer (see **FIGURE 2**).

**FIGURE 2** Global users of digital communications, 2018




***Source:*** wearesocial.com

## 18.2 EXERCISES

**Geographical skills key: GS1** Remembering and understanding **GS2** Describing and explaining **GS3** Comparing and contrasting **GS4** Classifying, organising, constructing **GS5** Examining, analysing, interpreting **GS6** Evaluating, predicting, proposing

### 18.2 Exercise 1: Check your understanding

1. **GS1** What was the initial purpose of the World Wide Web (www)?
2. **GS2** What does it mean to say the www is an 'enabler'?
3. **GS1** List how the uses of mobile phones are different to when they were introduced in the 1980s.
4. **GS1** How many adults in the world lack basic literacy skills?
5. **GS2 FIGURE 2** shows the global users of ICT. Describe the role of mobile phones in our lives.

### 18.2 Exercise 2: Apply your understanding

1. **GS2** Using **FIGURE 1**, describe the ***change*** over time from 2001 to 2018 of the technologies shown.
2. **GS6** Suggest the innovations in ICT that have ***changed*** people's use of the internet.
3. **GS6** Smartphones have taken communications to a 'new level'. What might smartphones or the next generation of phones be able to do in the future?
4. **GS6** Suggest why it is youth culture that has adopted technology so readily into their lives.
5. **GS6** Will computers become extinct for communications in the future? Explain your view.

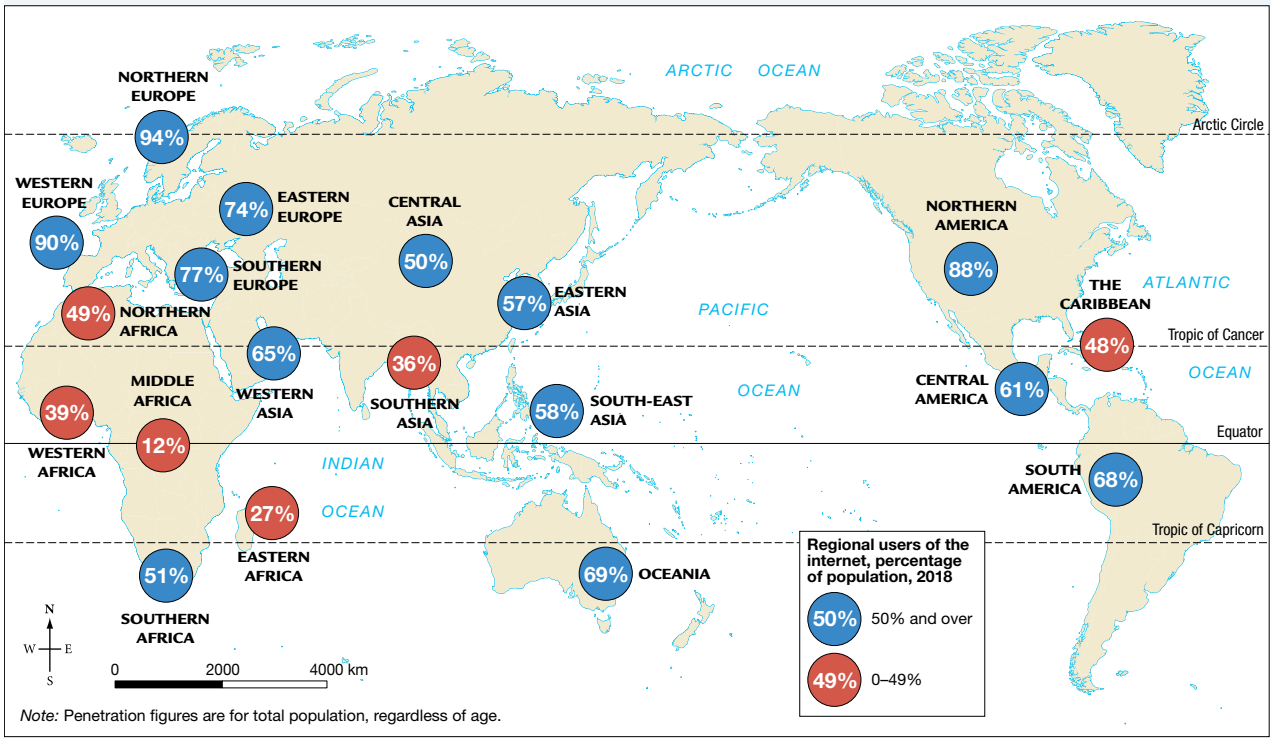
Try these questions in learnON for instant, corrective feedback. Go to www.jacplus.com.au.

# 18.3 The internet connects us

## 18.3.1 Global internet connections

Internet **connectivity**, whether via a computer or a mobile phone, is available across the world, but its distribution is not even across regions or within countries. From **FIGURE 1** it is clear that the regions with a very high level of **human development**, for example Europe and North America, also have a high level of internet users. The countries of Middle and Eastern Africa with a lower level of human development have fewer people using the internet. **TABLE 1** shows the **digital divide** between countries and regions, with the top ten countries and the bottom ten countries measured per head of population using the internet.

**FIGURE 1** Regional users of the internet as a percentage of the population, 2018




*Note:* Penetration figures are for total population, regardless of age.

***Source:*** Internetworldstats; ITU; Eurostat; Internetlivestats; CIA World Factbook; Mideastmedia.org; Facebook; government officials; regulatory authorities; reputable media

**TABLE 1** Countries with the highest and lowest population proportion using the internet, 2018

| Rank | Country | Proportion of population | Number of users |
|---|---|---|---|
| **Top ten** | | | |
| 1 | Qatar | 99% | 2 640 360 |
| 2 | United Arab Emirates | 99% | 9 376 171 |
| 3 | Kuwait | 98% | 4 100 000 |
| 4 | Bermuda | 98% | 60 125 |
| 5 | Bahrain | 98% | 1 499 193 |
| 6 | Iceland | 98% | 329 675 |
| 7 | Norway | 98% | 5 222 786 |
| 8 | Andorra | 98% | 75 366 |
| 9 | Luxembourg | 98% | 572 216 |
| 10 | Denmark | 97% | 5 571 635 |
| **Bottom ten** | | | |
| 213 | North Korea | 0.06% | 16 000 |
| 212 | Eritrea | 1% | 71 000 |

*(continued)*

**TABLE 1** Countries with the highest and lowest population proportion using the internet, 2018 *(continued)*

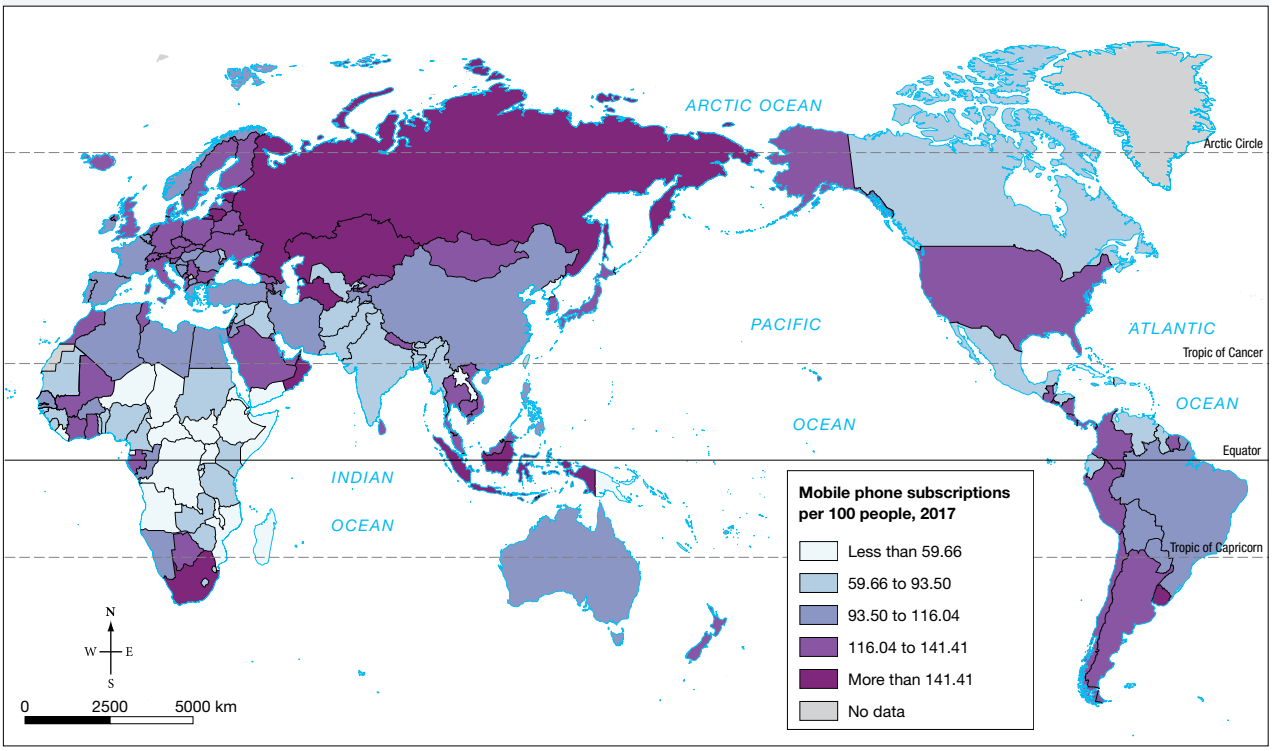
| Rank | Country | Proportion of population | Number of users |
|---|---|---|---|
| 211 | Niger | 4% | 946 440 |
| 210 | Western Sahara | 5% | 28 000 |
| 209 | Chad | 5% | 756 329 |
| 208 | Central African Republic | 5% | 246 432 |
| 207 | Burundi | 6% | 617 116 |
| 206 | Democratic Republic of the Congo | 6% | 5 133 940 |
| 205 | Guinea-Bissau | 6% | 120 000 |
| 204 | Madagascar | 7% | 1 900 000 |

## 18.3.2 Mobile phones connect with the internet

Today people of all ages carry a mobile phone. For young people, it is just a regular way to connect with friends, family and the world. People in their middle years were introduced to the technology as young adults and have embraced the interconnections provided; they readily take on each new development offered by the service providers. For older people, the adaptation to the technology has needed to be rapid and many see the technology as complex — understanding the technology and mastering the skills are a challenge, especially to many people over the age of 80.

Just like internet access, the distribution of mobile phones across the world is not even (see **FIGURE 2**).

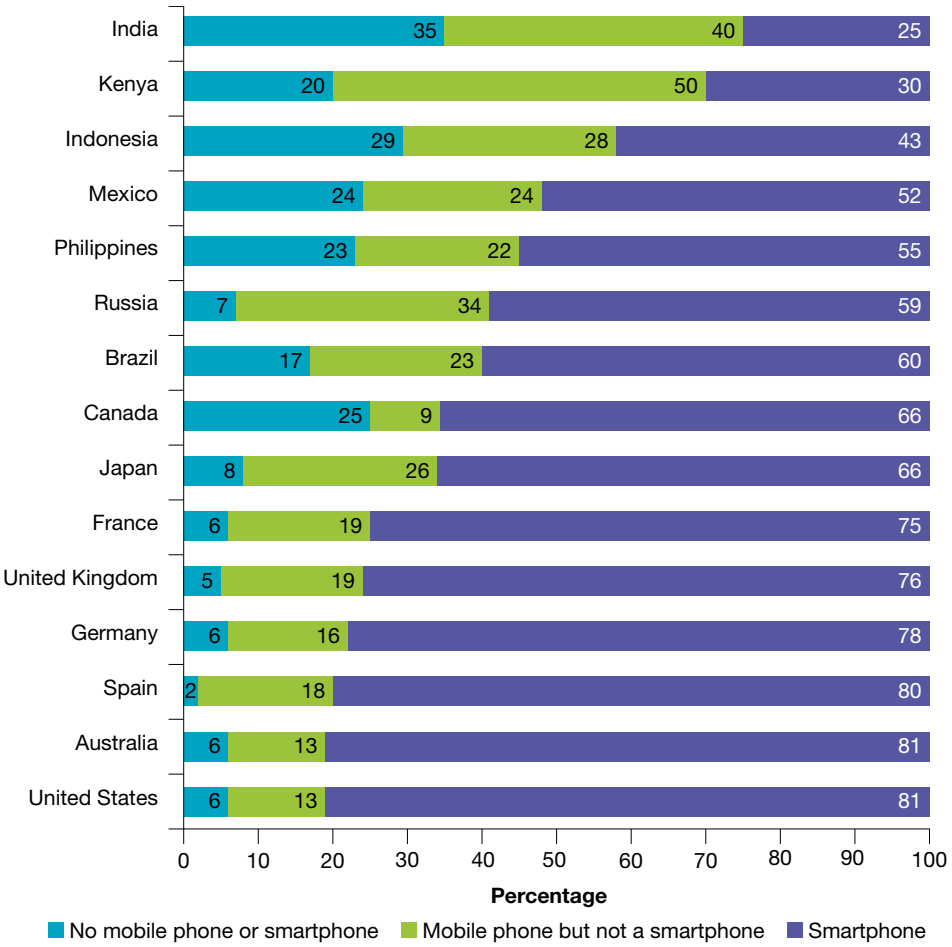
**FIGURE 2** The distribution of mobile subscriptions per 100 people, 2017




***Source:*** JUMIA (2018)

In countries with a very high level of human development there has been a shift to smartphones. In the countries with a lower level of human development the adoption of the latest technology is not as evident. **FIGURE 3** shows the adoption of mobile phones and smartphones in a few selected countries.

**FIGURE 3** The adoption of mobile phones by adults in selected countries, 2018




## 18.3 INQUIRY ACTIVITIES

1. **GS4** Refer to **FIGURE 1**.
   (a) On a blank map of the world, shade the different regions according to the data shown. Develop a key for 'very high', 'high', 'medium', 'low' and 'very low' users of the internet.
   (b) Compare your map with those of others in your class. Is your map the same as someone else's? Why or why not?
   (c) Describe the pattern of users shown on your map. **Classifying, organising, constructing**
2. **GS5** Using a world map, find the countries listed in **TABLE 1**.
   (a) In which parts of the world is the highest proportion of internet use found? Suggest a reason for this occurrence.
   (b) In which parts of the world is the lowest proportion of internet use found? Suggest reasons for this occurrence. **Examining, analysing, interpreting**

### 18.3 EXERCISES

**Geographical skills key: GS1** Remembering and understanding **GS2** Describing and explaining **GS3** Comparing and contrasting **GS4** Classifying, organising, constructing **GS5** Examining, analysing, interpreting **GS6** Evaluating, predicting, proposing

#### 18.3 Exercise 1: Check your understanding

1. **GS1** Is everyone across the world connected to the internet?
2. **GS1** In which regions of the world is the lowest number of people using the internet?
3. **GS2** Using **TABLE 1**, name three countries in which the proportion of the population using the internet is greater than 97 per cent.
4. **GS1** Which age groups have been able to handle the ***changes*** in mobile phone connectivity with the internet better than other age groups?
5. **GS2** In which parts of the world has the adoption of smartphones been greatest?

#### 18.3 Exercise 2: Apply your understanding

1. **GS4** Using statistics from **FIGURE 3** to support your answer, describe the level of mobile phone use in:
   (a) India
   (b) Kenya
   (c) Australia.
2. **GS5** Mobile phone use differs between the developed world and the less developed world. Use data from **FIGURE 3** to support this statement.
3. **GS6** Choose one European country, one African country and one Asian country included in **FIGURE 3** and hypothesise the ***changes*** to mobile phone adoption that might occur in those countries by 2030.
4. **GS6** Suggest three reasons for the uneven distribution of mobile phones across the world.
5. **GS6** For the next generation of mobile phones after smartphones, provide a reasoned answer as to which countries might be the first adopters of such a technology.

Try these questions in learnON for instant, corrective feedback. Go to www.jacplus.com.au.

# 18.4 Connected Australians

## 18.4.1 Australia's digital divide

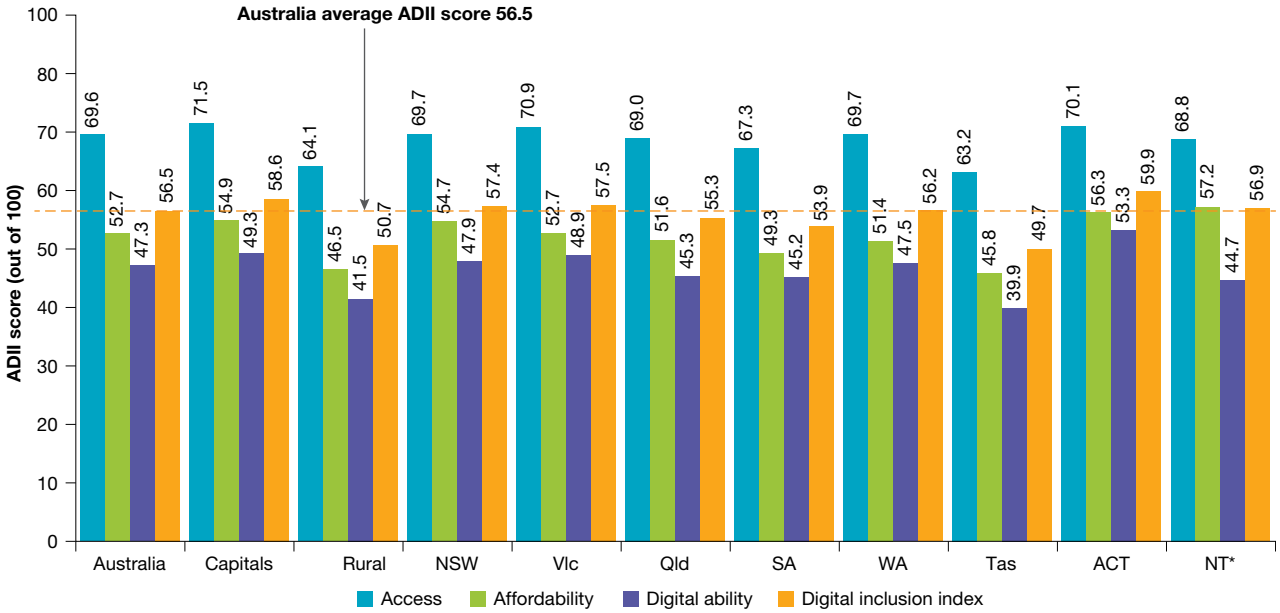
Australia is a highly developed country in which we consider access (immediate connection, advanced equipment, and high data allowances) to the internet a necessity. Australians also expect the technology to be affordable as a proportion of their income. Our ability to adapt to the rapidly changing environment and our high skill levels are such that Australians make good use of their connectivity. However, not everyone across the country has equal access to the internet — there is a 'digital divide', whereby some areas experience greater levels of digital inclusion than others.

The Australian Digital Inclusion Index (ADII) takes into consideration the three key components of ICT quality — access, affordability and digital ability. **FIGURE 1** shows the Australian average at a medium level (rating 56.5 from a possible 100). Most of the states are around that average, although people across South Australia and Tasmania appear to be less well connected. The divide is further evident between the capital cities and the rural areas. According to the 2017 ADII report, Australia's least digitally included regions are: Burnie and western Tasmania (44.1), north-west Queensland (45.9), north Victoria (46.5), east Victoria (47.0), Launceston and north-east Tasmania (47.7), and north-west Victoria (48.2).

## 18.4.2 Some Australians are less well connected

In addition to disparities in connectedness based on geographical location, there are also particular groups within Australian society that are more digitally disadvantaged. **FIGURE 2** shows that people with lower incomes, those with no income, those older than 50 years and especially those over 65, the disabled and the Indigenous (remote communities were not included in the ADII) have a digital inclusion index lower than the Australian average.

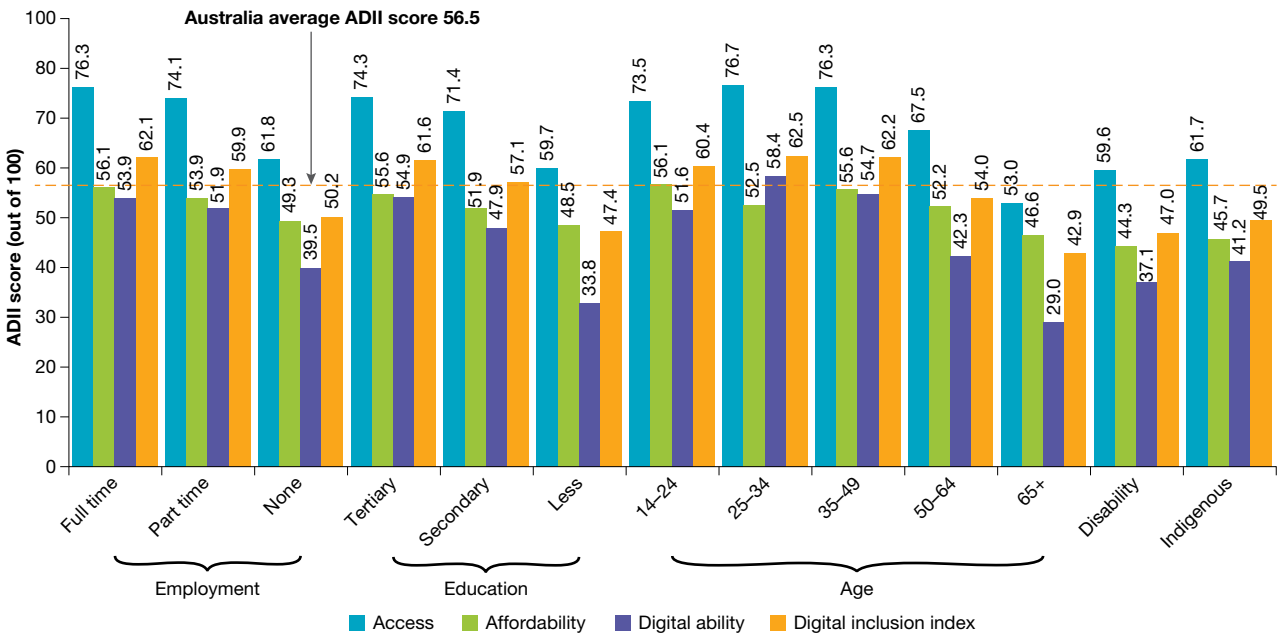
**FIGURE 1** Australian Digital Inclusion Index by state, 2017




*Sample size <100; exercise caution in interpretation.

***Source:*** Roy Morgan Research, April 2016–March 2017

**FIGURE 2** Australian digital inclusion by demography, 2017




***Source:*** Roy Morgan Research, April 2016–March 2017

## 18.4 EXERCISES

**Geographical skills key: GS1** Remembering and understanding **GS2** Describing and explaining **GS3** Comparing and contrasting **GS4** Classifying, organising, constructing **GS5** Examining, analysing, interpreting **GS6** Evaluating, predicting, proposing

### 18.4 Exercise 1: Check your understanding

1. **GS1** Define the term *digital divide* in your own words.
2. **GS1** Outline the components that make up the Australian Digital Inclusion Index (ADII).
3. **GS1** Which regions of Australia are the least digitally included?
4. **GS1** Which state or territory has the highest level of digital inclusion?
5. **GS1** Which groups within Australian society are more digitally disadvantaged?

### 18.4 Exercise 2: Apply your understanding

1. **GS5** Is there a digital divide between Australia's capital cities and its rural regions? Support your answer with evidence from **FIGURE 1** across all three components of the ADII.
2. **GS5** With reference to **FIGURE 1**, describe how close each of Australia's states and territories is to the average ADII.
3. **GS6** If you were moving to Australia and choosing in which state to live based on digital inclusion, where would you go? Use data from **FIGURE 1** on access, affordability and digital ability to justify your choice.
4. **GS5** The digital divide in Australia occurs across different sectors of our society. Use **FIGURE 2** to assess the following.
   (a) Which sector of Australia's population is furthest from the average Australian inclusion index?
   (b) Which is more of a hindrance to achieving digital connection: lack of employment or lower level of education?
   (c) For the disabled and Indigenous groups, how accessible, affordable and digitally skilled is their digital connection?
5. **GS5** Which of the ADII components — access, affordability, or digital skill — creates the greatest divide across Australia for the greatest proportion of the population? Explain.

Try these questions in learnON for instant, corrective feedback. Go to www.jacplus.com.au.

# 18.5 Improving lives via digital connection — Kenya

## 18.5.1 Increased consumption of ICT

Globally, there is a difference between the developed and the developing world in terms of levels of digital connection, but it is important to note that access to the internet and mobile phone networks has improved, especially across Africa. In Kenya, for example, many people live in rural and remote places in the countryside. In the past this left families disconnected from one another, as the primary earner in the family often had to work in a distant town to provide the family income. No longer do these rural and remote people have to make a long journey on poor quality roads into town to transfer money. Today these people use their mobile phones.

The number of mobile phone subscribers in Kenya has risen steadily (see **FIGURE 1**) and the mobile phone coverage has spread with the introduction of each new network speed (see **FIGURE 2**). Internet connection is via mobile phones and the young are the dominant users — 52 per cent of the 16–24 age group and 39 per cent of the 25–34 age group, as opposed to just six per cent of the 35–44 group and four per cent of the 45+ group.

**FIGURE 1** Mobile phone subscriptions and internet penetration, Kenya

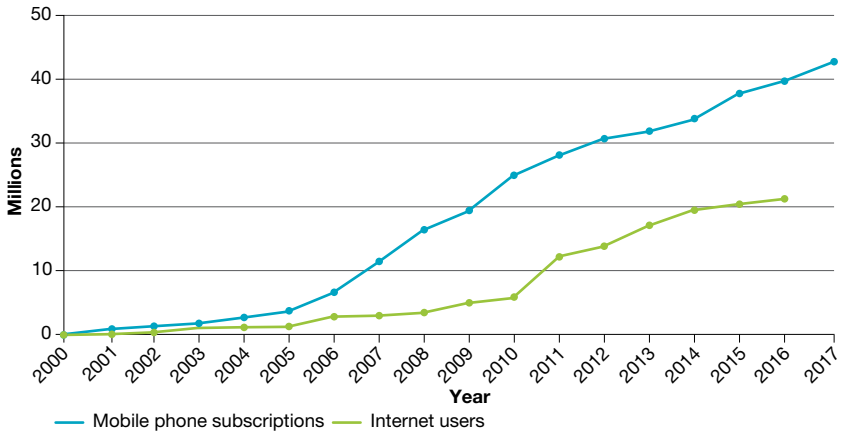



**FIGURE 2** Mobile phone network coverage, Kenya, 2017

***Source:*** JUMIA (2018)

## 18.5.2 Mobile money and moving forward

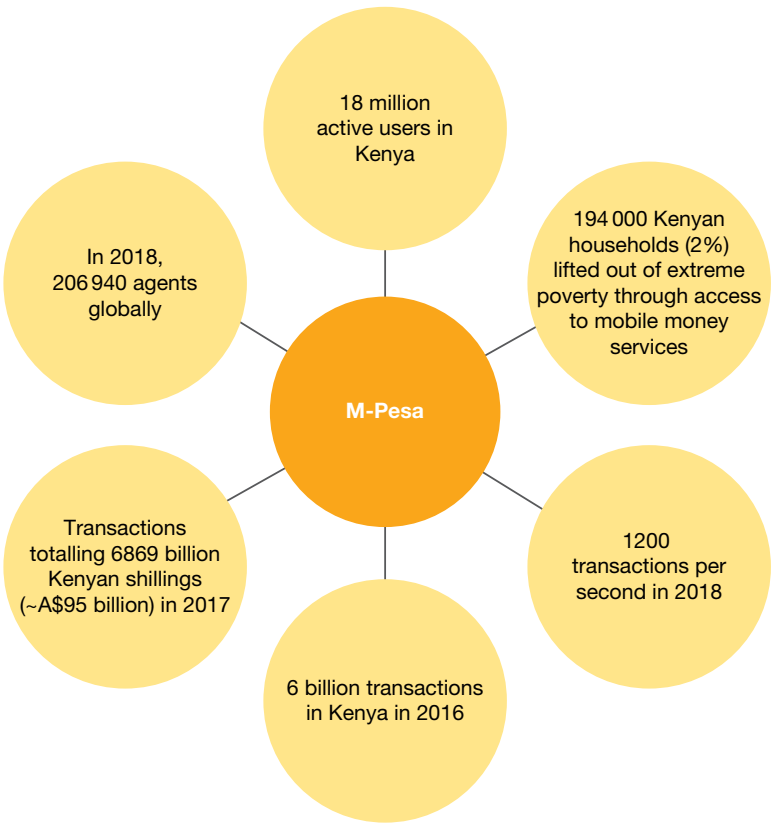
In 2007, the UK-based organisation Financial Deepening Challenge Fund (FDCF) worked in Kenya to set up M-Pesa (meaning 'mobile money'), and various agencies were set up to assist users (see **FIGURE 3**). Customers could then transfer, withdraw and deposit money through mobile phones; nearly 50 per cent of Kenya's **gross domestic product** (GDP) is processed over M-Pesa.

**FIGURE 3** A customer at an M-Pesa agent

Access to mobile phones for small-business owners has meant they are now able to advertise to a larger audience and are no longer dependent on word-of-mouth advertising. Clients can now contact business operators with ease. For those working away from home, it is a safe and easy way to send money back to families in the countryside. M-Pesa has eliminated the need to carry large sums of cash to markets, thus improving personal safety.

M-Pesa demonstrates how dreaming big but thinking locally can have a significant effect on the economic and social structure of a place, just through the use of a mobile phone.

**FIGURE 4** The impact of M-Pesa




Kenya has 'jumped forward' with its use of ICT — it is now dubbed the Silicon Valley of Africa. About 84 per cent of the population is connected to the internet. Additional service providers have opened up innovative platforms to give Kenyans connection to the world. For example, Kenyan channel KTN News joined YouTube in 2016 with 145 000 uploaded videos and 278 300 subscribers. With increased providers covering 90 per cent of the country, mobile phone packages are more affordable and smartphones are now cheaper, to the benefit of the consumers. By 2018 several local digital start-ups and international ICT companies were calling Kenya home. Kenya is bridging the digital divide.

### DISCUSS

a. In small groups, suggest a list of possible criteria that you could use to judge how effective technology has been in improving people's lives in Kenya.
b. Share and discuss your group's criteria with the class and select the three criteria that the class considers the most effective for judging.
c. Did you have to make many changes to create the class list? Why or why not? How difficult was it to reach a consensus? **[Critical and Creative Thinking Capability]**

### 18.5 EXERCISES

**Geographical skills key: GS1** Remembering and understanding **GS2** Describing and explaining **GS3** Comparing and contrasting **GS4** Classifying, organising, constructing **GS5** Examining, analysing, interpreting **GS6** Evaluating, predicting, proposing

#### 18.5 Exercise 1: Check your understanding

1. **GS2** Make a list of five ***interconnections*** than can occur between Kenyans thanks to M-Pesa.
2. **GS2** Use **FIGURE 4** to describe the success rate of M-Pesa. Use specific data in your answer.
3. **GS2** Explain how Kenya is bridging the digital divide.
4. **GS1** Which age group in Kenya is the dominant user of mobile phones?
5. **GS1** What percentage of Kenya is covered by ICT providers?

#### 18.5 Exercise 2: Apply your understanding

1. **GS5** Mobile phone usage has been an important part of the improvement in communications in Kenya. Using **FIGURE 1**, describe the ***change*** over time in mobile phone subscriptions and users of the internet.
2. **GS5** Which areas of Kenya are well serviced by the mobile phone network?
3. **GS5** Which ***places*** in Kenya are not well serviced by the mobile phone network?
4. **GS5** Which parts of Kenya have the most recent development of 4G services?
5. **GS2** Is there a correlation between the use of mobile phones and the internet as shown in **FIGURE 1**? Explain your answer.

Try these questions in learnON for instant, corrective feedback. Go to www.jacplus.com.au.

# 18.6 Forging new ICT directions — India

## 18.6.1 The digital divide in India

India is a medium-level-development country with varying levels of prosperity among its people. In 2017, Indian gross national product (GNP) was relatively low, at US$6353 per person, and 21.2 per cent of the population earned less than US$1.90 per day. However, mobile phone subscriptions are high (85.2 per cent in 2017, with an increase of 39.4 per cent between 2010 and 2016), providing greater connection within India and to the world. Conversely, internet users comprise a much smaller percentage of the population (only 29.5 per cent in 2017). Despite this, ICT is a boom industry in places like Bengaluru and Hyderabad, where many international companies have set up their service industries providing the world with call centres, and conducting research and development within the ICT sector.

## 18.6.2 ICT in India

Among Asian countries, India is a leader in internet affordability and is ranked third in its readiness for the internet, but poor mobile speed and uneven availability mean that a digital divide does exist within the country. **FIGURE 1** shows the uneven average download speeds across India. The ICT hubs are within the highest-rated areas, although this rate of connection is lower than can be expected in Melbourne, where the average download speed is over 40 Mbps.

## 18.6.3 Bengaluru — a dynamic city

Bengaluru began its role in the ICT world back in the 1980s when two Indian tech companies — Infosys and Wipro — moved their head offices there. Other tech companies followed, growing their businesses around the two firms. This included foreign companies looking to cut costs by employing cheap local ICT developers. The ICT outsourcing model had begun.

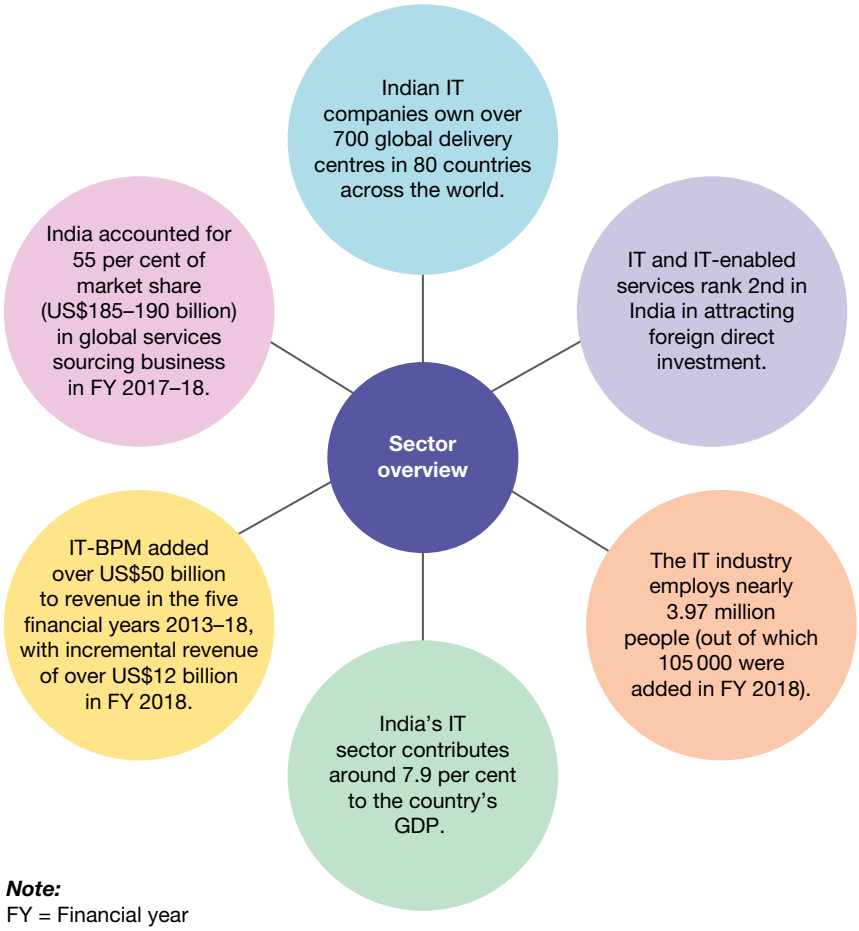
Bengaluru is now a modern city. These new jobs raised living standards and attracted educated Indians from across the country, as well as expatriates from across the world. Academic institutions set up alongside the innovative ICT businesses. Indians working elsewhere in the world are bringing their knowledge and skills home. More and more international companies are outsourcing to India because labour costs are lower and skill shortages occur across the world. India also has a large and able English-speaking workforce (there are more than 80 million English-speakers in India). In 2019, Australia's Telstra launched its Telstra Innovation and Capability Centre in Bengaluru to overcome the skill shortage in Australia. Bengaluru has grown into a major international hub for ICT companies. Since 2018, Bengaluru and Hyderabad (part of India's Silicon Valley) have shared top billing as the world's most dynamic cities, according to a ranking devised by the investment management firm Jones Lang LaSalle.

**FIGURE 1** Broadband speeds across India, 2018

***Source:*** © 2006–2019 Ookla, LLC

**FIGURE 2** Modern Bengaluru

**FIGURE 3** The strength of India's IT sector




***Note:***
FY = Financial year
IT = Information technology
BPM = Business process management

## 18.6 EXERCISES

**Geographical skills key: GS1** Remembering and understanding **GS2** Describing and explaining **GS3** Comparing and contrasting **GS4** Classifying, organising, constructing **GS5** Examining, analysing, interpreting **GS6** Evaluating, predicting, proposing

### 18.6 Exercise 1: Check your understanding

1. **GS1** What percentage of the Indian population earns less than US$1.90 per day?
2. **GS1** How rapid was the uptake of mobile phones in India between 2010 and 2016?
3. **GS1** In which Indian cities is the IT industry developing rapidly?
4. **GS1** In what aspects of the IT industry is India particularly well regarded?
5. **GS2** How significant is the ability of the Indian population to speak English? Explain.

### 18.6 Exercise 2: Apply your understanding

1. **GS2** Look at **FIGURE 1**. Describe the broadband speeds across India.
2. **GS6** Suggest what impact India's broadband speeds would have on the establishment of technological companies across the country.
3. **GS5** In what ways does the ICT sector help the economic development of India within the country?
4. **GS5** In what ways does the ICT sector help the economic development of India with its connections to the world?
5. **GS6** List the advantages of Bengaluru and India to the world as a major ICT hub.

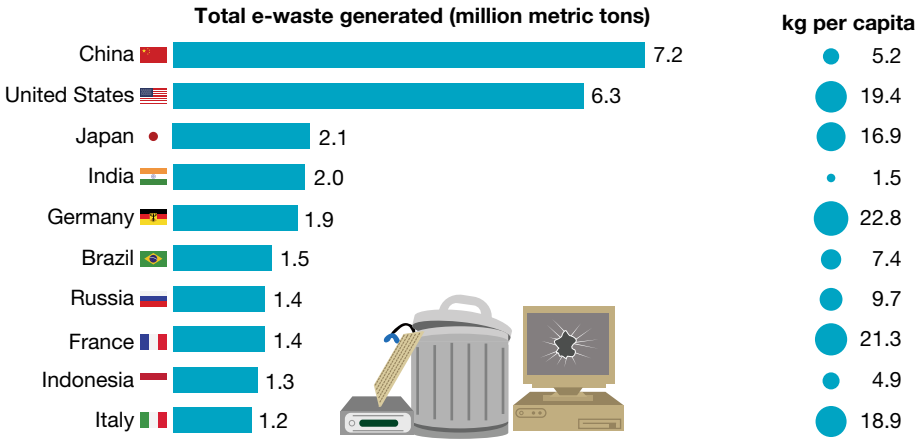
Try these questions in learnON for instant, corrective feedback. Go to www.jacplus.com.au.

# 18.7 The impact of ICT production

## 18.7.1 Production and consumption

China is one of the largest producers and consumers of electronics. With the short lifespan of some products — the Chinese buy a new mobile phone on average every 18 months — and with advances in technology, there is a growing amount of e-waste, produced both within China and by overseas countries (**FIGURE 1**). Globally 44.7 million metric tonnes of e-waste were produced in 2016; it is expected this figure will reach 63.7 million metric tonnes by 2025. For a long time, places like China, India and Ghana have accepted and processed the world's e-waste to enhance their economic development.

**FIGURE 1** Countries generating the most electronic waste, 2016




***Note:*** Includes discarded products with a battery or plug including mobile phones, laptops, televisions, refrigerators, electrical toys and other electronic equipment

***Source:*** The Global E-waste Monitor 2017, © Statista

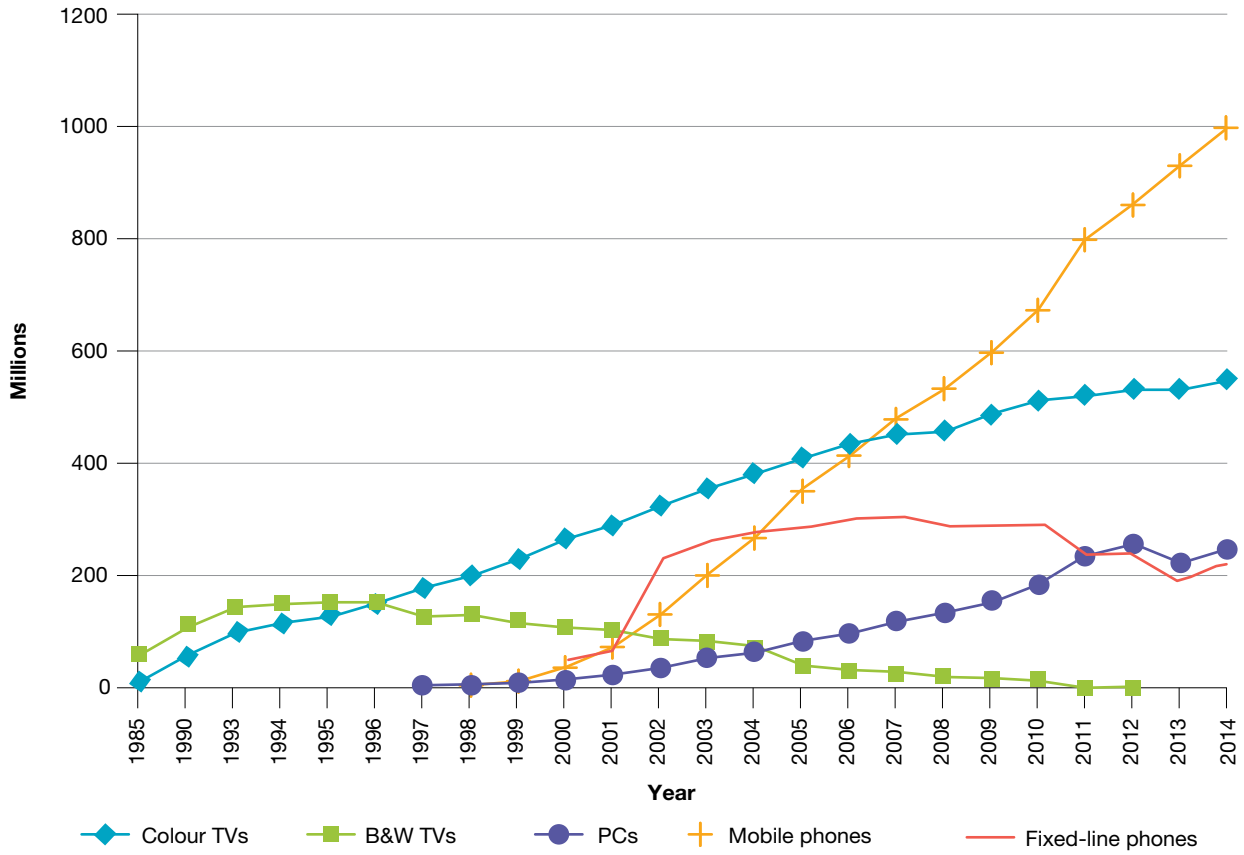
## 18.7.2 The impact of e-waste on people in China

Growth in China's national economy has seen a change in the sale of ICT appliances as its society develops a growing middle class. China generates the highest quantity of e-waste in Asia and in the world — some 7.2 million metric tonnes in 2016 alone. **FIGURES 2** and **3(a)** and **(b)** show the recent changes in ICT device ownership and disposal of devices in China.

In the domestic market, informal collectors travel door-to-door collecting no-longer-used technological appliances for cash. It is estimated that this mode of collection recovers most e-waste (86 per cent in 2015). Formal collectors are tax-paying businesses or waste stations that buy back old appliances. But the Chinese consumers prefer the informal collectors who offer a higher price and a more convenient service.

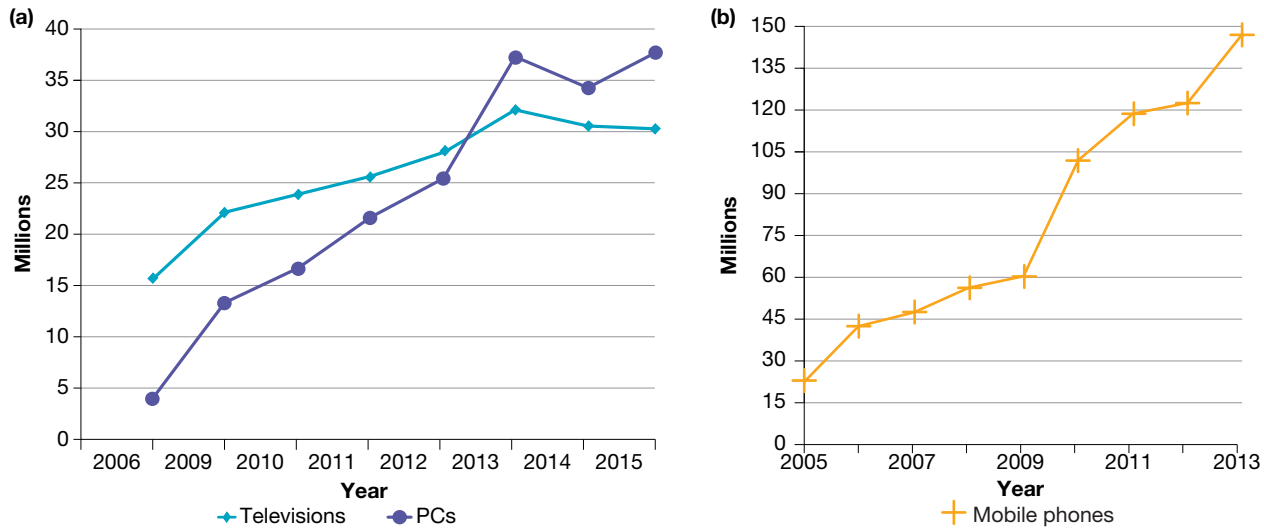
The informal collectors' method of handling the e-waste is a major concern for their wellbeing. In backyards and laneways families sift through the e-waste, exposing themselves to many toxic components. **FIGURE 4** shows the various human body systems and the e-waste components that can affect them. Major exposure to the toxic elements occurs when the e-waste component parts are melted down over open fires to extract gold, copper and silver (**FIGURE 5**). Recent studies have shown that exposure to such toxic components reduces intelligence and has a negative impact on the development of the central nervous system of children.

**FIGURE 2** The number of ICT devices owned in China




***Source:*** China Household Electric Appliance Research Institute (CHEARI), White Paper on WEEE Recycling Industry in China 2015

**FIGURE 3** The number of devices discarded annually in China (a) televisions and PCs and (b) mobile phones




***Source:*** CHEARI, White Paper on WEEE Recycling Industry in China, 2015

**FIGURE 4** Health impacts of e-waste on waste workers and people who live near landfills or incinerators

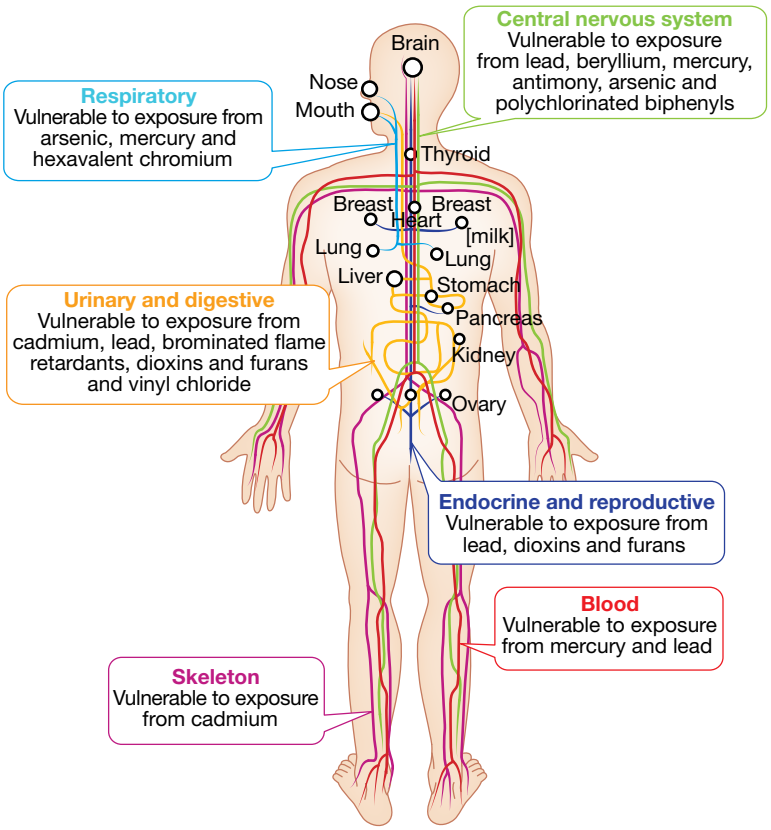



**FIGURE 5** Informal collectors sort and burn e-waste.

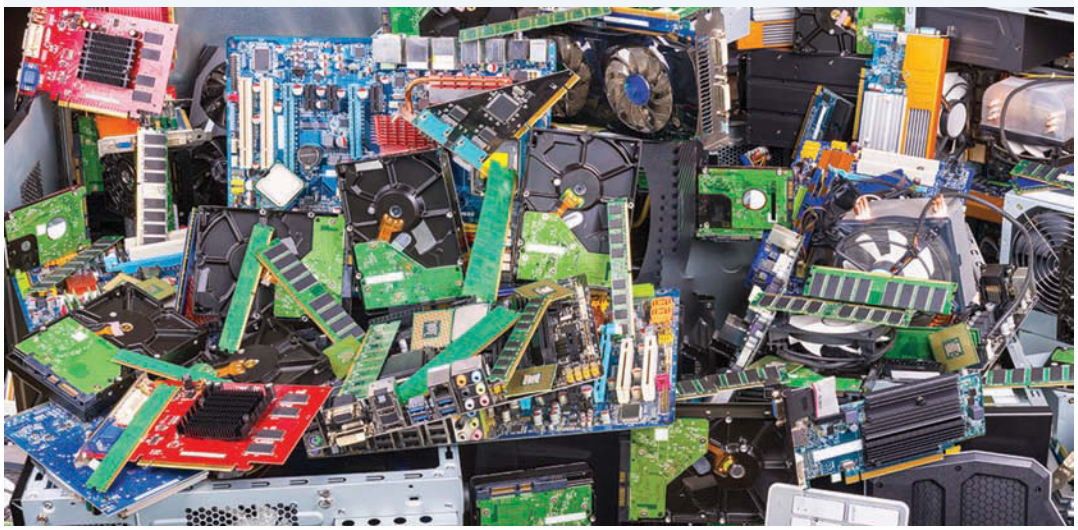
## 18.7.3 The impact of e-waste on places in China

For many years Guiyu, in Guangdong province, China, was known as the centre for reclaiming e-waste. The livelihood of its residents depended on this business. The air was polluted by an acidic smell, waste water as a by-product flowed into waterways, and soils were contaminated. Local agricultural produce was contaminated by the toxic water used for irrigation. Vegetables further absorbed toxins through their leaf systems, and people ate these vegetables.

Today Guiyu has a number of modern formal recycling plants. The informal collectors have been forced into operating in and through these plants. However, it has not been easy to change people's ways, so regulation and law enforcement have not always been adequate to bring about change.

**FIGURE 6** Animals graze among e-waste in Guiyu.

**FIGURE 7** E-waste components for recycling. How we manage our e-waste is an ongoing challenge that will require global solutions.



### 18.7 INQUIRY ACTIVITY

Conduct internet research to find a selection of 4 or 5 images and annotate these in a photographic essay to show an understanding of the life of an informal e-waste collector. **Classifying, organising, constructing**

### 18.7 EXERCISES

**Geographical skills key: GS1** Remembering and understanding **GS2** Describing and explaining **GS3** Comparing and contrasting **GS4** Classifying, organising, constructing **GS5** Examining, analysing, interpreting **GS6** Evaluating, predicting, proposing

#### 18.7 Exercise 1: Check your understanding

1. **GS1** Define the term *e-waste*.
2. **GS2** Compile a list of potential e-waste from items in:
   (a) your classroom
   (b) your home.
3. **GS1** Name the two countries that produce the greatest amount of e-waste.
4. **GS1** Name the five countries that produce the most e-waste per person (per capita). How would you categorise the economic development of these countries?
5. **GS2** Describe how the consumption of ICT products has increased in China since 2006.

#### 18.7 Exercise 2: Apply your understanding

1. **GS2** Has the production of e-waste reflected the consumption of ICT products in China since 2006? Explain your answer.
2. **GS6** China might produce the most e-waste, but its per capita level is low. India also has a low per capita level, although it produces far less e-waste. Try to explain this situation.
3. **GS5** Interpret **FIGURE 5**, which shows an informal collector in China sorting and burning e-waste. Annotate the image to show the health effects that this person might experience in the future.
4. **GS5** Explain how the animal grazing in the ***environment*** in **FIGURE 6** is likely to be affected by the e-waste.
5. **GS6** Propose a set of regulations that might assist the city of Guiyu to replace the culture of informal collection of e-waste in the city. Suggest how each regulation might be introduced so that the program is a success.

Try these questions in learnON for instant, corrective feedback. Go to www.jacplus.com.au.

# 18.8 The future for e-waste

## 18.8.1 Addressing concerns

Since 2014, legislation regarding the management of e-waste has been developed and, to varying degrees, adopted across the globe (see **TABLE 1**). The coverage by legislation has risen from 44 per cent to 66 per cent of the world's population (in 67 countries). India, as a major generator of e-waste, has been leading the way with the adoption of legislation; African countries, conversely, have done little to address the issue.

**TABLE 1** Global adoption of e-waste legislation

| Well-developed e-waste legislation | Absence of e-waste legislation |
|---|---|
| Europe | Africa |
| North America | Caribbean |
| East Asia (China, Hong Kong, Japan, Taiwan, South Korea) | Central Asia |
| South Asia | East Asia (Mongolia, North Korea) |
| Oceania (Australia and New Zealand) | Oceania (Pacific Islands) |

## 18.8.2 Legislation

The existence of policies or legislation does not necessarily imply successful enforcement or the existence of sufficient e-waste management systems. **TABLE 2** lists some of the more significant attempts at e-waste management around the world.

**TABLE 2** E-waste legislation around the world

| Policy/legislation | Specific actions |
|---|---|
| Basel Convention 1994 | • Keep the production of hazardous waste as low as possible.<br>• Make suitable disposal facilities available.<br>• Reduce and manage international flow of hazardous waste.<br>• Ensure management of waste is controlled in an environmentally friendly way.<br>• Block and punish illegal movement of hazardous waste. |
| Buy-back policies | Many countries have tried buy-back schemes, with varying degrees of success. |
| China's e-waste ban, 2002 | Although an official ban was placed on e-waste being shipped into China, it continued to be smuggled in or came across the borders by land. In 2017 China strengthened its ban on e-waste. |
| International Telecommunication Union | Connect 2030 has taken on board the Sustainable Development Goals, especially Goals 3, 7, 11, 12 and 13, where ICT can be applied. |
| Kenya e-waste Act | Initiated in 2013 but stalled in parliament, this Act has been replaced by a National E-Waste Management Strategy to cover the period 2019–20 to 2023–24. Its purpose is to prescribe ways to minimise negative impacts of e-waste on the environment and human health. |
| Global e-waste Statistics Partnership 2017 | The International Telecommunication Union, the United Nations University, and the International Solid Waste Association have joined together to improve the collection, analysis and publication of worldwide e-waste statistics, with a view to increasing the awareness of the need for further development in the e-waste industry. |
| India 2018 | Rules were first established in 2011 using the concept of Extended Producer Responsibility whereby the manufacturer is responsible for safe disposal of electronic goods. In 2018 the emphasis was on regulating the dismantlers and recyclers and providing revised collection targets into the future. |

Only 41 countries in the world collect statistics. Measuring e-waste is an important step towards addressing the e-waste challenge. Statistics help to evaluate developments over time, set and assess targets, and identify best practices of policies. Better e-waste data will help to minimise its generation, prevent illegal dumping and emissions, promote recycling and create jobs.

## 18.8.3 Consumption awareness and responsible e-waste handling

In 2011, the Australian government commenced the National Television and Computer Recycling Scheme (NTCRS). The NTCRS website directs people to places to dispose of e-waste, such as MobileMuster and Planet Ark.

On 1 July 2019 Victoria banned the inclusion of e-waste in general garbage collections and curbside collections. E-waste will no longer go to landfill.

Each individual must be aware of the e-waste being produced by their consumption of modern technological appliances and their method of disposal of no-longer-wanted items. How aware are you? Act local, think global.

**FIGURE 1** Toxic components in the central processing unit and cathode-ray tube monitor of a desktop computer

## on Resources

**Interactivity** e-wasted (int-3343)
**Weblink** Survey Monkey

## 18.8 INQUIRY ACTIVITIES

1. Conduct research to find out where your nearest National Television and Computer Recycling Scheme drop-off point is located.
   (a) Is it realistic to take your e-waste there?
   (b) How can the Victorian government support its legislation on e-waste?
   **Examining, analysing, interpreting**
2. As a class, conduct a survey and interview students, teachers and families about their e-waste recycling habits.
   (a) Draft the questions you wish to ask and consider how you will record the responses. Some ideas for questions might include whether students are more ***environmentally*** aware than teachers/families, whether age makes a difference to a person's attitude to e-waste recycling, whether you consider you have enough e-waste to make it worthwhile recycling, whether it is easy to reach a location that will take your e-waste, etc.
   (b) If you wish to conduct your survey online, use the **Survey Monkey** weblink in the Resources tab. Otherwise, you can use the SkillBuilder in subtopic 18.10 to assist in your survey development.
   (c) After you have conducted your surveys, collate and present your findings in graphic form.
   (d) Analyse the graphs and write a summary of the findings. If possible, arrange to present your findings to an interested group within your school or community — you may help improve awareness of issues and ***change*** attitudes towards e-waste recycling!
   **Classifying, organising, constructing**
3. Research and write a considered paragraph on the state of e-waste management in the United States, Germany, Thailand or Nigeria.
   **Examining, analysing, interpreting**

## 18.8 EXERCISES

**Geographical skills key: GS1** Remembering and understanding **GS2** Describing and explaining **GS3** Comparing and contrasting **GS4** Classifying, organising, constructing **GS5** Examining, analysing, interpreting **GS6** Evaluating, predicting, proposing

### 18.8 Exercise 1: Check your understanding

1. **GS1** What proportion of the world's countries has legislation in place regarding e-waste management?
2. **GS1** Which areas of the world are lacking in e-waste management legislation?
3. **GS1** Outline the key actions identified in the Basel Convention.
4. **GS2** Explain the importance of statistics in addressing the issue of e-waste management.
5. **GS1** List five toxic components within a desktop computer.

### 18.8 Exercise 2: Apply your understanding

1. **GS6** Why does legislation often seem to have limited impact in the e-waste sector?
2. **GS6** Now more than 25 years on from the Basel Convention, how has the world responded to the legislation?
3. **GS6** Suggest reasons for Kenya's inability to bring into law an e-waste Act.
4. **GS6** Many countries are looking at an Extended Producer Responsibility (EPR) for e-waste. In China, the four key areas of manufacturing responsibility are: producing ***environmentally*** friendly designs; using recycled materials; standardising waste management and recycling processes; and disclosing data on recycling. Discuss whether these four aspects of e-waste management are likely to be easily, readily and willingly taken into law in China.
5. **GS5** Explain what is meant by the 'need for a global solution to the transboundary issue of e-waste'.

Try these questions in learnON for instant, corrective feedback. Go to www.jacplus.com.au.

# 18.9 SkillBuilder: Constructing a table of data for a GIS

online only

### Why are there tables within GIS?

Geographical information systems, or GIS, use tables to organise and store information about points, lines, and polygons (vector data). These tables have rows and columns, called fields. The GIS software links the rows in the table to the points, lines or polygons on a map.

| Sample | Address | No_home | No_mobiles |
|---|---|---|---|
| 1 | 42 Jacob Street | 2 | 4 |
| 2 | 27 Jacob Street | 3 | 3 |
| 3 | 36 Adele Avenue | 4 | 3 |
| 4 | 34 Flint Street | 4 | 1 |
| 5 | 35 Flint Street | 5 | 3 |
| 6 | 25 Flint Street | 4 | 2 |
| 7 | 12 Jess Court | 4 | 2 |
| 8 | 2 Jess Court | 4 | 4 |
| 9 | 12 Flint Street | 5 | 3 |
| 10 | 52 Jacob Street | 6 | 2 |

### Select your learnON format to access:

- an overview of the skill and its application in Geography (Tell me)
- a video and a step-by-step process to explain the skill (Show me)
- an activity and interactivity for you to practise the skill (Let me do it)
- questions to consolidate your understanding of the skill.

### on Resources

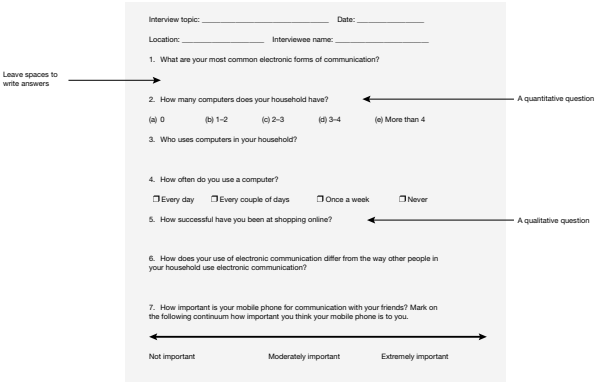
**Video eLesson** Constructing a table of data for a GIS (eles-1743)
**Interactivity** Constructing a table of data for a GIS (int-3361)

# 18.10 SkillBuilder: Using advanced survey techniques — interviews

online only

## What are interviews that survey people's opinions?

Surveys collect primary data, such as data that has been gathered in the field. Conducting a survey interview means asking questions, recording and collating the number of responses, and collating the number of responses.




### Select your learnON format to access:

- an overview of the skill and its application in Geography (Tell me)
- a video and a step-by-step process to explain the skill (Show me)
- an activity and interactivity for you to practise the skill (Let me do it)
- questions to consolidate your understanding of the skill.

### on Resources

**Video eLesson** Using advanced survey techniques — interviews (eles-1742)
**Interactivity** Using advanced survey techniques — interviews (int-3360)

# 18.11 Thinking Big research project: Trash or treasure?

online only

## SCENARIO

Showcasing Japanese dedication to sustainability, the Tokyo 2020 Olympic medals contain electronic waste. You will create a pamphlet to accompany the medals, explaining the background to their production — how the trash of millions has been recycled to create the prized Olympic treasures of the athletes of the 2020 Olympic Games.

### Select your learnON format to access:

- the full project scenario
- details of the project task
- resources to guide your project work
- an assessment rubric.

### on Resources

**ProjectsPLUS** Thinking Big research project: Trash or treasure? (pro-0196)

# 18.12 Review

online only

## 18.12.1 Key knowledge summary

Use this dot point summary to review the content covered in this topic.

## 18.12.2 Reflection

Reflect on your learning using the activities and resources provided.

### on Resources

**eWorkbook** Reflection (doc-31730)
Crossword (doc-31731)

**Interactivity** Global ICT — connections, disparity and impacts crossword (int-7652)

## KEY TERMS

**connectivity** the ability to access the internet
**digital divide** a type of inequality between groups in their access to and knowledge of information and communication technology
**e-waste** any old electrical equipment such as computers, toasters, mobile phones and iPods that no longer works or is no longer required
**gross domestic product** (GDP) the value of all the goods and services produced within a country in a given period of time (usually a year). It is often used as an indicator of a country's wealth.
**human development** measures such as life expectancy, education and economic wellbeing that provide an overall indication of a place's level of development and the standard of living of its inhabitants
**World Wide Web** the global resources and information exchange available to internet users through the use of the Hypertext Transfer Protocol (HTTP)

# 18.9 SkillBuilder: Constructing a table of data for a GIS

## 18.9.1 Tell me

### Why are there tables within GIS?

A geographical information system, or GIS, uses tables to organise and store information about points, lines and polygons (vector data). These tables have rows and columns, called fields. The GIS software links the rows in the table to the points, lines or polygons on a map. GIS software also stores data as pixels in an image, called raster data.

The tables can be drawn with a spreadsheet program and linked to a GIS if there is relevant information about location in the table. However, specialist software is required.

### Why are tables useful in GIS?

Tables are very useful for storing large amounts of information, because they help to organise it. Creating tables makes it easy for GIS software to read data and to import or export the data to other programs, such as Excel.

A table allows us to access the original data. Maps, on the other hand, often use symbols and colours to represent information, and therefore they may not be as precise. Setting up the structure for a table helps us to understand how information may be stored digitally.

A good table of data:

- places point, line and polygon features into separate tables
- has rows in the table that relate to the points, lines or polygons on the map
- has columns called fields, which store the data as numbers (integers) or text
- has column (field) names that are no more than ten characters long and contain no spaces
- identifies the date, source and collector of the data, and stores this in the GIS program — this is called *metadata* in a GIS.

## 18.9.2 Show me

### How to construct a table of data

#### You will need:

- a piece of paper or a spreadsheet
- a data set — in this case, the results of a class survey about mobile phones.

#### Procedure

Imagine that your class has conducted a survey to find out how many mobile phones there are in each home, asking the following questions:

- Where do you live?
- How many people are in your home?
- How many mobile phones are in your home?

You can use the responses to construct a table of data and use GIS to plot the results on a map.

### Step 1

Draw a table with rows and columns. For this data, there should be 11 rows (for ten students plus the heading row) and four columns (see **FIGURE 1**).

**FIGURE 1** Create a table with 11 rows and four columns.

| | | | |
|---|---|---|---|
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

### Step 2

Give each of the columns a heading to represent the data collected. Each heading must be short (no more than ten characters) and use underscores instead of spaces.

Create four columns: sample number, address, the number of people in the home and the number of mobile phones (see **FIGURE 2**).

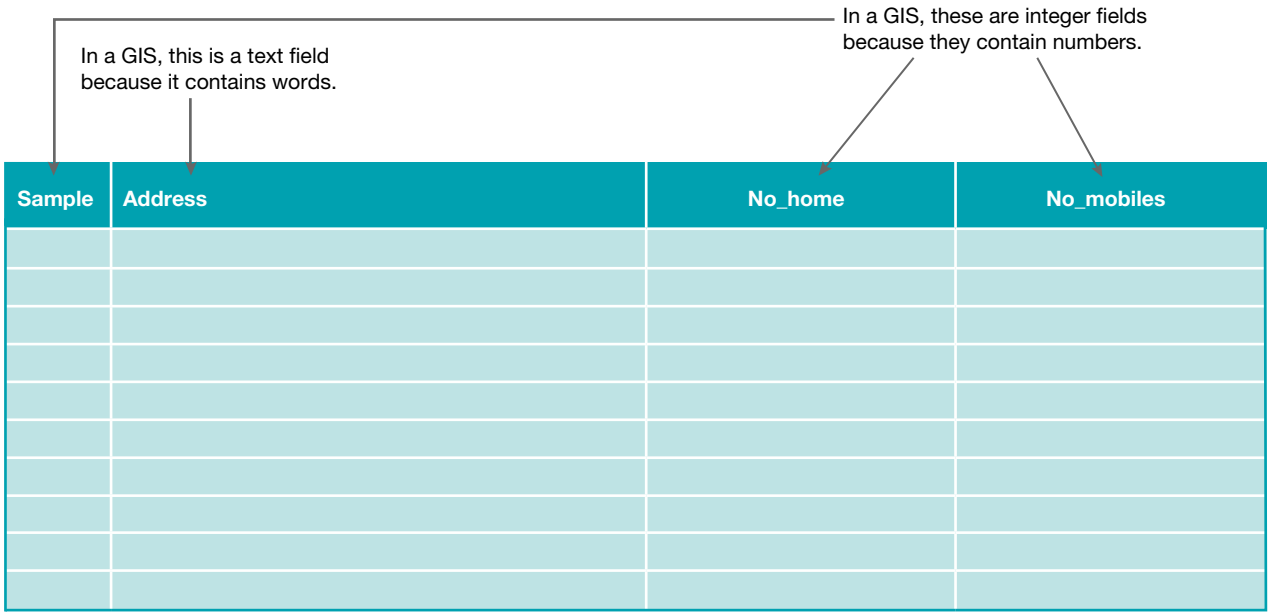
**FIGURE 2** Give each column a short heading of no more than ten characters.

| Sample | Address | No_home | No_mobiles |
|---|---|---|---|
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

### Step 3

Identify which columns (fields) contain text and which contain numbers (integers). You have to set this first when using GIS software (see **FIGURE 3**).

**FIGURE 3** Work out which are text fields and which are number (integer) fields.




### Step 4

Enter the collected data into the table. A thematic map of the data can then be created using GIS software. In this case, there will be two layers on the map. Each land parcel is coloured according to the number of people in the home, and the columns represent the number of mobile phones (see the **FIGURE 4** model). The map is shown in **FIGURE 5**.

### Model

**FIGURE 4** Data displayed in table form

In a GIS, each row in the table is linked to a polygon on the map

| Sample | Address | No_home | No_mobiles |
|---|---|---|---|
| 1 | 42 Jacob Street | 2 | 4 |
| 2 | 27 Jacob Street | 3 | 3 |
| 3 | 36 Adele Avenue | 4 | 3 |
| 4 | 34 Flint Street | 4 | 1 |
| 5 | 35 Flint Street | 5 | 3 |
| 6 | 25 Flint Street | 4 | 2 |
| 7 | 12 Jess Court | 4 | 2 |
| 8 | 2 Jess Court | 4 | 4 |
| 9 | 12 Flint Street | 5 | 3 |
| 10 | 52 Jacob Street | 6 | 2 |

**FIGURE 5** Map showing the number of mobile phones in each home

***Source:*** Spatial Vision

## on Resources

**Video eLesson** Constructing a table of data for GIS (eles-1743)

**Interactivity** Constructing a table of data for a GIS (int-3361)

## 18.9.3 Let me do it

Complete the following activities to practise this skill.

### 18.9 ACTIVITIES

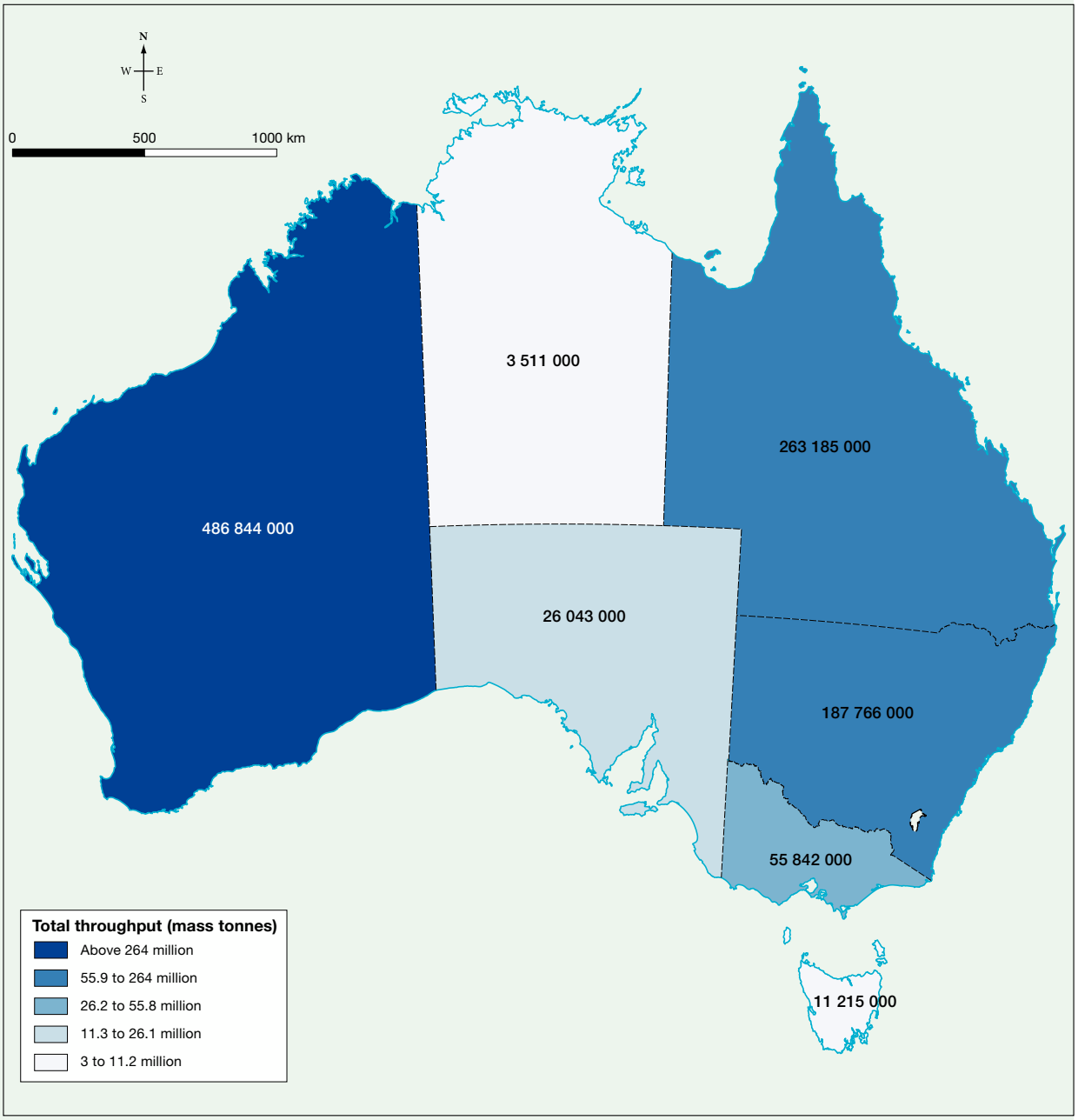
1. Create tables of data for the two maps shown in **FIGURES 6** and **7**. **TABLE 1** should be for the polygons (states) and **TABLE 2** for the points (ports). **TABLE 1** should have two columns, or fields, and **TABLE 2** should have four columns. Identify the text and integer fields in each table. Use the checklist to ensure you cover all aspects of the task.
2. Then apply your skills to answer the following questions.
   (a) Which state handled the most cargo by tonnage in 2011–12, and which two states handled the least cargo?
   (b) Name the two main ports exporting:
      i. iron ore
      ii. coal.
   (c) Compare the distribution of coal-exporting ports with that of iron ore–exporting ports. What does this tell us about the location of these resources in Australia?
   (d) Why are the values for wool exports much smaller than those for iron ore and coal?
   (e) Why is wool exported from ports in the southern part of Australia?

#### Checklist

I have:

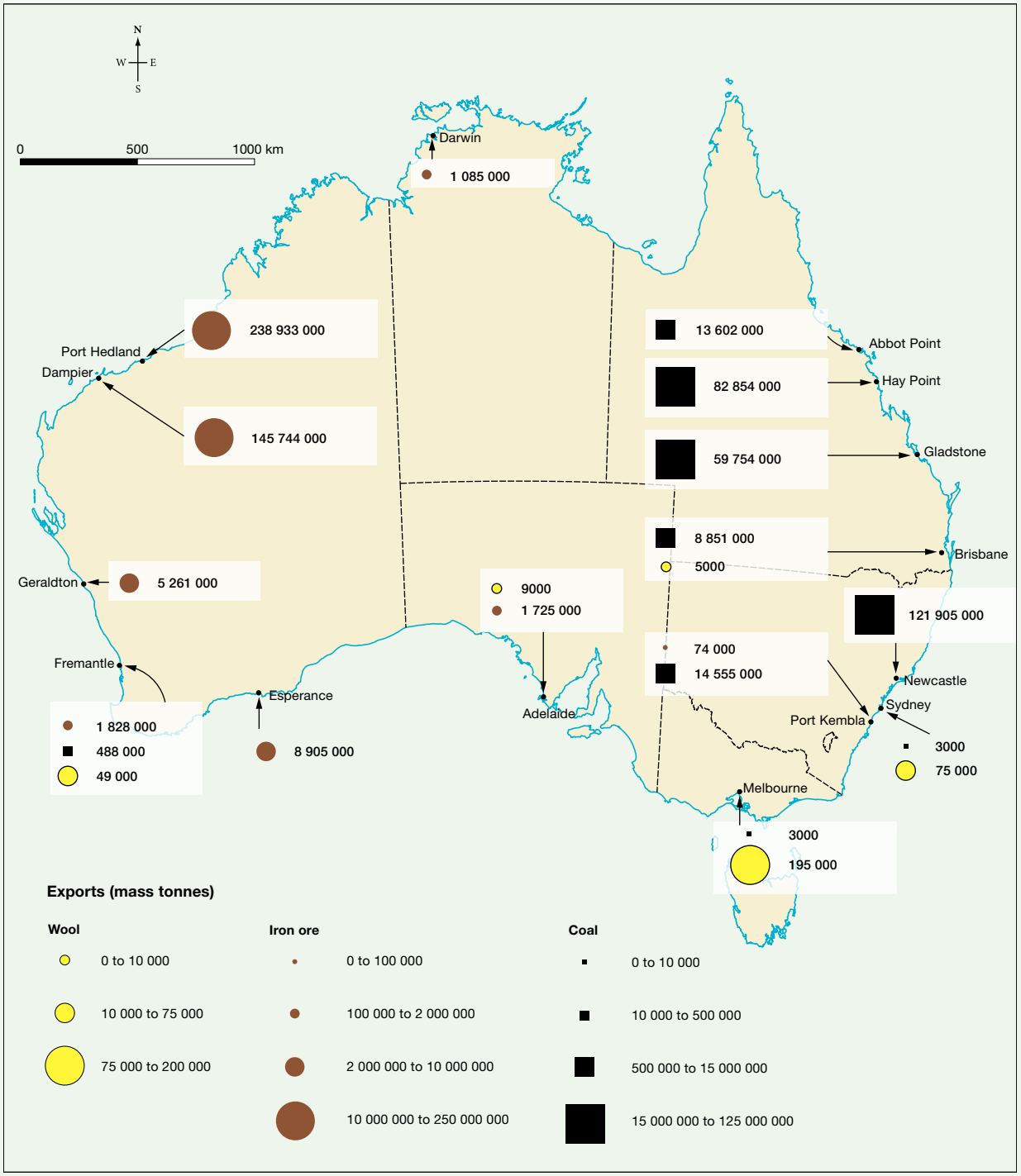
- created separate tables for polygon and point data (and line data, where relevant)
- created rows in the table that relate to the points, lines or polygons on the map
- identified the text and numeric fields
- ensured that the field headings have been shortened if necessary and contain no spaces
- entered the data as correctly as possible
- added explanatory notes (metadata) about the source of the data and the values in each field
- included a title for the tables.

**FIGURE 6** Cargo handled by ports in Australian states and territories, in mass tonnes, 2011–12




***Source:*** Data © Commonwealth of Australia Geoscience Australia 2013. Map drawn by Spatial Vision.

**FIGURE 7** Ports exporting iron ore, coal and wool, in mass tonnes, 2011–12




***Source:*** Spatial Vision

# 18.10 SkillBuilder: Using advanced survey techniques — interviews

## 18.10.1 Tell me

### What are interviews that survey people's opinions?

Surveys collect primary data, such as data that has been gathered in the field. Conducting a survey means asking questions, recording and collecting responses, and collating the number of responses. You can use basic questionnaires or more advanced sampling techniques, such as interviews. You can also use a variety of tally methods. A survey is taken from a few people in a population and is therefore a sample.

Interviews are particularly useful for gathering information on attitudes and values. The information that is gathered can be either quantitative (involving numbers) or qualitative (involving ideas), or both.

### Why are interviews that survey people's opinions useful?

Surveys are useful because they provide data gathered for a specific topic that might not be available by other means. They allow a wide range of data to be gathered in an efficient and simple way.

An interview, which is an advanced survey technique, allows you to explore attitudes and values without being restricted by survey categories. It may be difficult to then quantify the responses, but an interview does offer great flexibility, with a wide range of question types and varied responses. You also have the chance to add questions during the interview to pursue an idea that is raised.

Interviews are useful for:

- obtaining data or information that may not be available from another source
- summarising people's activities, such as recreational activities
- providing a snapshot of people's opinions, values and attitudes
- testing people's perspectives on the world, such as how a person rates a feature
- improving your understanding of a topic by speaking with people, or by obtaining first-hand information before collating it.

A good interviewer:

- thinks about the information that needs to be gathered
- works out which groups of people to interview — by age, gender, locality, business and so on
- decides on the best time to conduct the interview
- decides on the best place to conduct the interview — for example, in a park, in the middle of a shopping complex, in a cafe, or in an office
- writes a set of longer and more detailed predetermined questions
- writes open-ended questions that allow interviewees to express their opinions
- includes no more than about 15 questions to ensure people retain interest in the interview
- develops supplementary questions in response to anticipated answers
- sets a time limit of 15 to 20 minutes.

## 18.10.2 Show me

### How to construct an interview

**You will need:**

- a computer on which to design your questions
- a list of people to interview
- a questionnaire
- pens for people to use to write their answers
- sound- and/or video-recording devices
- a risk assessment carried out by the school to ensure your safety in approaching people — ask your teacher and check with your family that it is okay to conduct an interview.

## Procedure

### Step 1

Determine the purpose of using the interview technique. What is your topic?

### Step 2

Begin by developing 10–15 questions that allow the interviewee to express their opinion. No question should be answerable with a simple 'yes' or 'no'. The **FIGURE 1** model provides some sample questions.

### Step 3

Test your questions on a classmate or family member. Rework any questions to improve clarity of expression and to draw a more extended response from the interviewee.

### Step 4

You need to practise an interview on someone so that you are confident when talking to members of the public. When conducting an interview, use the following guidelines.

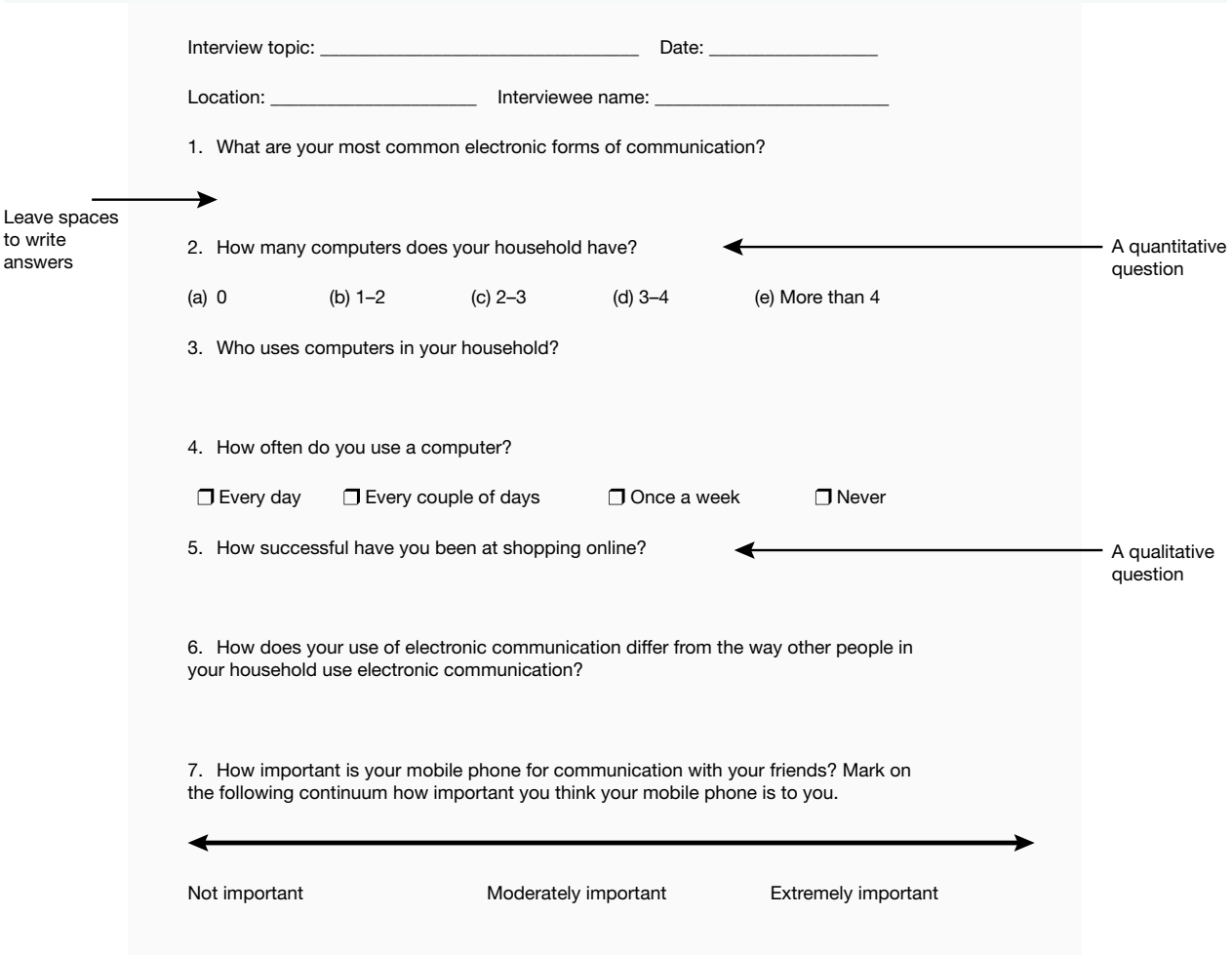
- Have some form of identification provided by your school so that people know you are genuinely collecting information.
- Introduce yourself and clearly state where you are from. Do not be offended if a person does not want to participate — that is their right.
- If you are going to record the interview, then seek permission from the person to do so.
- Explain to the person the purpose of the interview; that is, give some details about the topic to be discussed.
- Use a separate interview sheet for each person.
- Speak clearly so that you do not have to repeat yourself.
- Use a non-threatening tone of voice.
- Listen carefully to the answers given.
- Don't ask an interviewee to repeat their responses if they cover information for one question in the answer to another question. Write the information in the appropriate place on the sheet.
- Be prepared to slot in an additional question if the person has some great information to give you.
- Take notes, using your note-taking skills. Don't use full sentences — use key words and facts only — and don't make the person wait while you write.
- Try to keep your own opinion out of the answers; be neutral about the responses, even when you do not agree.
- Never interrupt an answer and always allow plenty of time for the interview — it should not go for longer than 20 minutes.
- Always thank the person for their time and support when you have finished.

### Step 5

Collating your information will take time, because you need to seek common themes through each interview. Quantitative data can be placed in tables. Qualitative data needs to be classified according to the percentage of people with the same or similar viewpoints.

## Model

**FIGURE 1** Sample interview questions




## on Resources

**Video eLesson** Using advanced survey techniques — interviews (eles-1742)
**Interactivity** Using advanced survey techniques — interviews (int-3360)

## 18.10.3 Let me do it

Complete the following activities to practise this skill.

### 18.10 ACTIVITIES

1. Create a set of interview questions that seek the opinion of your local community on technology consumption and e-waste management (look at question 2 to ensure your survey provides you with the information you will need to answer these questions). Conduct your survey, organise your data and summarise your findings. Use the checklist to ensure you cover all aspects of the task.
2. Apply your skills to answer the following questions.
   (a) What did people understand by the term *e-waste*?
   (b) Does the community dispose of its e-waste effectively?
   (c) Are there enough e-waste recycling depots for the community?
   (d) Is there enough advertising about how to deal with e-waste?
   (e) Which local community groups ought to be responsible for e-waste management?

#### Checklist

I have:

- thought about the information that needs to be gathered
- worked out which groups of people to interview
- decided when is the best time to conduct the interview
- decided where is the best ***place*** to conduct the interview
- written a set of longer and more detailed predetermined questions
- written open-ended questions that allow the interviewees to express their opinions
- included no more than about 15 questions to ensure people retain interest in the interview
- developed supplementary questions in response to anticipated answers
- set a time limit of 15 to 20 minutes.

# 18.11 Thinking Big research project: Trash or treasure?

## Scenario

Japan first hosted the Summer Olympic Games in Tokyo in 1964. In 2013 Tokyo was declared the venue for the 2020 Summer Olympics. In planning Tokyo 2020, the organisers were keen to make a mark that would identify these Games forever. Each Olympic medal contains Japanese electronic waste – mobile phones and other small appliances had component parts removed and melted down to extract the gold, silver and bronze. Recycling of the trash showcased Japanese dedication to sustainability.

## Task

You will create a pamphlet to accompany the medals, explaining the background of their production — how the trash of millions has been recycled to create the prized Olympic treasures of the athletes of the 2020 Olympic Games.

Your pamphlet should include the following headings and answer each of the questions below.

1. *Tokyo 2020 Medal Project* — Research and explain how it operated. Why did the Tokyo organising committee decide on this project?
2. *Donating pre-loved mobile phones* — Where could the Japanese leave their mobile phones?

3. *The Olympic medals* — How much gold, silver and bronze was required? Did the Medal Project achieve its aim for each metal?
4. *Mobile phones in Japan* — Research the production of mobile phones in Japan and recycling of e-waste in Japan. What happens to discarded mobile phones when consumers trade up for newer gadgets?
5. *Encouraging e-waste recycling* — Regulation of e-waste in Japan has been in place since 2009. In what way would this help the success of the Medal Project?
6. *Message* — What message do these Olympic medals send to the world?

## Process

- Open the ProjectsPLUS application in the Resources for this topic. Click on the **Start new project** button to enter the project due date and set up your project group if you wish. You may work individually or in pairs, depending on your teacher's preference. Save your settings and the project will be launched.
- Navigate to the **Research forum**, where you will find starter topics (the task questions) loaded to guide your research. You can add further topics to the Research forum if you wish. In the **Media centre** you will find an assessment rubric and some weblinks that will provide a starting point for your research.
- Conduct research to address the questions provided in the **Task** section. As you work, remember to record details of your sources so you can create a bibliography to submit with your completed infographic. Add your research notes and source details to the relevant topic pages in the Research forum. When you have completed your research, you can print out the **Research report** in the Research forum to easily view all the information you have gathered, if you wish.
- Plan the layout of your pamphlet. Create clear text responses to the **Task** questions and organise these under their headings, along with images or diagrams as appropriate, to add interest to your pamphlet.
- Review your work thoroughly, checking for correct spelling and grammar. Finalise your bibliography. When you are happy with your work, submit your pamphlet and bibliography to your teacher for assessment.

## Resources

**ProjectsPLUS** Thinking Big research project: Trash or treasure (pro-0196)

# 18.12 Review

## 18.12.1 Key knowledge summary

### 18.2 Information and communications technology

- The world of ICT is constantly developing and changing.
- Mobile phones have made a distinct change to the way we interconnect.

### 18.3 The internet connects us

- The internet is not evenly accessible across the world.
- There is a clear link between access to the internet and mobile phones.
- Some countries have moved to adopt smartphones quicker than others.

### 18.4 Connected Australians

- Not all Australians have equal access to digital technology.
- The Australian Digital Inclusion Index (ADII) shows some states and regions are less well connected.
- The ADII also shows that there are groups within Australian society that are less well connected.

### 18.5 Improving lives via digital connection — Kenya

- Increased consumption of ICT began in 2007 in Kenya with 'mobile money'.
- The adoption of digital technology has increased rapidly, especially among young adults.
- Daily life for Kenyans has improved with better interconnection between families, for business and for social contacts.

### 18.6 Forging new ICT directions — India

- Mobile phone subscriptions are high in India, but the internet has less penetration.
- The new service industries have been built around the areas of India with better broadband speeds.
- Bengaluru is a global hub for ICT companies and associated service industries.

### 18.7 The impact of ICT production

- China is one of the largest producers and consumers of ICT appliances.
- The e-waste generated has provided a living for the informal collectors, but it is not without risk to their health.
- E-waste disposal has impacted the environment, which has in turn impacted people.

### 18.8 The future for e-waste

- E-waste legislation is unevenly implemented across the world.
- Legislation does not always mean that improvement in disposal takes place.
- Improved statistics collected globally would assist change to take place in e-waste management.

## 18.12.2 Reflection

Complete the following to reflect on your learning.

### 18.12 ACTIVITIES

Revisit the inquiry question posed in the Overview:

**Technology makes our lives easier and helps us connect, but at what cost to people and the planet?**

1. Now that you have completed this topic, what is your view on the question? Discuss with a partner. Has your learning in this topic changed your view? If so, how?
2. Write a paragraph in response to the inquiry question, outlining your views.

## on Resources

**eWorkbook** Reflection (doc-31730)
Crossword (doc-31731)

**Interactivity** Global ICT — connections, disparity and impacts crossword (int-7652)

## KEY TERMS

**connectivity** the ability to access the internet
**digital divide** a type of inequality between groups in their access to and knowledge of information and communication technology
**e-waste** any old electrical equipment such as computers, toasters, mobile phones and iPods that no longer works or is no longer required
**gross domestic product** the value of all the goods and services produced within a country in a given period of time (usually a year). It is often used as an indicator of a country's wealth.
**human development** measures such as life expectancy, education and economic wellbeing that provide an overall indication of a place's level of development and the standard of living of its inhabitants
**World Wide Web** the global resources and information exchange available to internet users through the use of the Hypertext Transfer Protocol (HTTP)

# FIELDWORK INQUIRY: WHAT ARE THE EFFECTS OF TRAVEL IN THE LOCAL COMMUNITY?

## Scenario

People travel for many reasons at the local scale — for example, they may travel to work, to shops, to visit friends and to local sporting venues. Often there are times when traffic congestion occurs, creating danger areas for motorists and pedestrians. Examples of places where such congestion occurs are schools and shopping centres. Undertaking fieldwork allows you to observe and collect original data first-hand.

## Task

Your team has been commissioned by the local council to compile a report evaluating the impacts of travel movements around a local school or traffic hotspot. You will need to collect, process and analyse suitable data and then devise a plan to better manage future traffic and pedestrian movement in the area.

## Process

- Open the ProjectsPLUS application in the Resources for this topic. Click on the **Start new project** button to enter the project due date and set up your project group. Save your settings and the project will be launched.
- Watch the introductory project video to gain an overview of the task.
- In the **Media centre** you will find an assessment rubric to guide your work and several templates to assist you in your planning and data collection.

As part of a class discussion, determine a suitable location for your fieldwork study. This might be your own or a local school, or a nearby shopping centre. Talk about some of the issues related to your fieldwork site and then devise a key inquiry question — for example: 'What are the effects of ... ?' or 'How can we reduce the impact of ... ?' This will be the focus of your fieldwork. You then need to establish the following:

- **What** sort of data and information will you need to study the travel issue at your site?
- **How** will you collect this information?
- **Where** would be the best locations to obtain data?
- **When** would be the best times of the day or day(s) of the week to obtain data?
- **How** will you record the information you collect?

If you wish to collect people's views on the issue, or suggestions for improvements, you will need to plan and write suitable survey questions.

### Collecting and recording your information and data

As a class, plan the field trip by identifying and allocating tasks and possible data collection sites to different groups. It is often easier to share data collection.

In class, invite your school principal or a member of your local council to be a guest speaker discussing your fieldwork site. They may be able to assist with background information that you may not be able to gain elsewhere. They can also provide a different perspective on the effects of travel at your site. Plan a series of questions you would like to ask and be prepared to take notes that you can use in your report.

Once everything has been planned, you will need to perform your allocated tasks on the day. After the field trip, collate everyone's data and summarise surveys so that everyone has access to the shared information.

### Analysing your information and data

Create a map (or maps) detailing the area under study (remember to use BOLTSS), and use appropriate graphs to visually represent the data you have collected. Consider the following questions:

- What trends, patterns and relationships can you see emerging?
- Within your fieldwork area, are there some places that have a bigger issue with cars and pedestrians than other areas?
- Is there an interconnection between traffic congestion and time of the day, or day of the week?
- What have your surveys revealed?
- What are the major effects of travel at your fieldwork site?
- How do people perceive the travel issues in this place?

### Communicating your findings

Return to your key inquiry question.
To what extent have you been able to answer it?
Write up your observations and communicate your findings by preparing a fieldwork report. Download the Report template from the Media centre to help you structure your report.

Having identified a traffic problem and collected and analysed data, it is now time to try to solve the problem. Your completed map and supporting data will form part of your management plan for the future. What have been the main issues that have emerged from your fieldwork research? How can you best manage these issues? Using your base map, create an overlay or annotated map to show possible options for reducing the

traffic problem. You will need to support each proposal with data that you have gained from your fieldwork. Possible ideas could include:

- changing parking restrictions
- staggering times of drop-off and pick-up
- introducing traffic wardens to guide traffic
- creating a one-way system.

Your teacher may arrange for your completed report to be presented to your school or local council. Considering your audience, what is the best way to present your findings? You might like to produce a PowerPoint presentation or an annotated visual display.

Check your work thoroughly, ensuring you have used correct spelling and grammar and that all diagrams and maps are correctly labelled (remember BOLTSS for your maps!). When you are satisfied with your report, submit it to your teacher for assessment.

## on Resources

**ProjectsPLUS** Fieldwork inquiry: What are the effects of travel in the local community? (pro-0149)

# CIVICS AND CITIZENSHIP

**19** Choosing a government ..... 609

**20** Australia's justice system and the courts ..... 642

**21** Identity, the media and global connectedness ..... 680

# 19 Choosing a government

## 19.1 Overview

Parliament, elections and opposing parties. Is governing Australia about more than arguing politicians?

### 19.1.1 Australia's system of government

In Australia we have a form of government known as a representative democracy. This means that people elect representatives to sit in the parliament to make laws on their behalf. Members of parliament (MPs) are elected for a set period of time, so they have to be able to perform well enough to convince the voters to re-elect them after that period of time.

Our federal parliament is made up of the Governor-General, representing the British monarch, and two 'houses' — the Senate (upper house) and the House of Representatives (lower house). Most MPs belong to an organisation known as a political party. The aim of each political party is to win a majority in the House of Representatives and form government. This means winning 76 or more of the 151 electorates (also called seats) in the lower house. Winning government enables the successful political party to run the country until the next election. The party's leader becomes the prime minister, and other senior members of the party become government ministers.

Each government minister is responsible for a government department. These include health, defence, communications, immigration, social services, the environment, education or foreign affairs. Government employees and public servants in these departments then become responsible for carrying out the policies of the government, acting on the instructions of the minister.

**on Resources**

**eWorkbook** Customisable worksheets for this topic

**Video eLesson** Federal elections (eles-2258)

**LEARNING SEQUENCE**


**19.1** Overview
**19.2** Australia's political parties
**19.3** Voting and the federal electoral process
**19.4** Influencing your vote
**19.5** After the election — the formation of government
**19.6** The role of the prime minister and Cabinet
**19.7** **SkillBuilder:** Creating and analysing a table online only
**19.8** **Thinking Big research project:** Founding a political party online only
**19.9** **Review** online only


To access a pre-test and starter questions and receive immediate, **corrective feedback** and **sample responses** to every question, select your learnON format at www.jacplus.com.au.

# 19.2 Australia's political parties

## 19.2.1 Different political parties represent different views

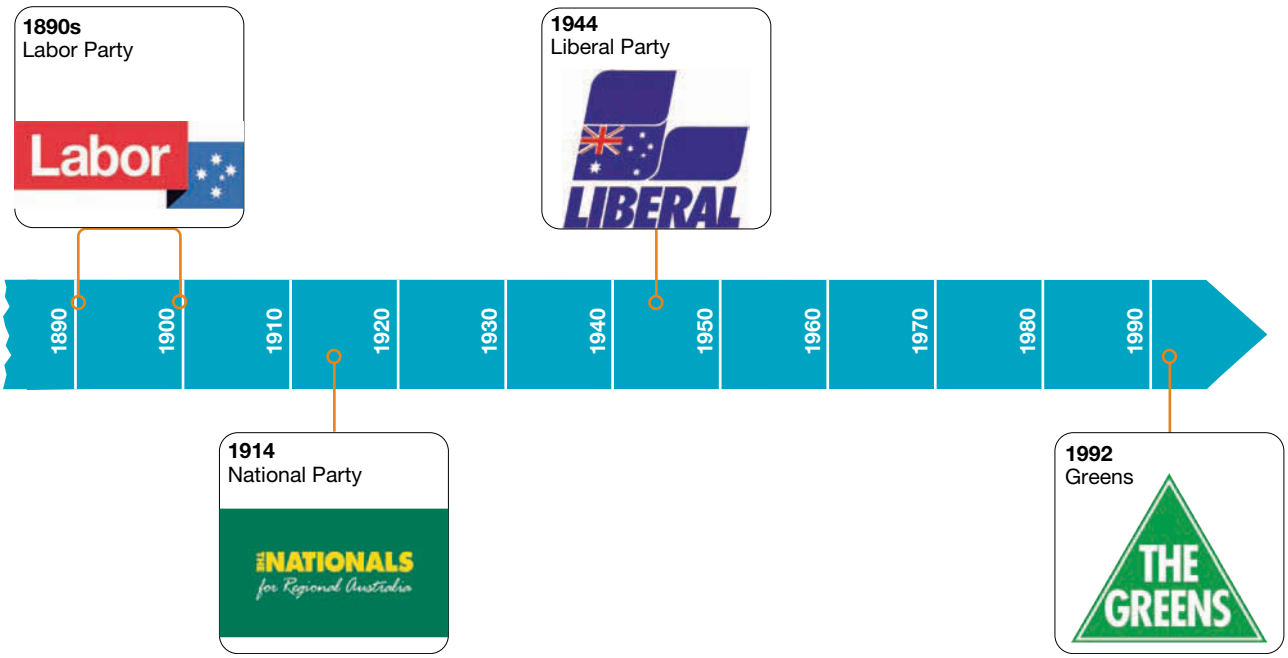
Political parties are groups of people who band together because they share the same views about issues they think are important. People join a political party because they support the party's views. The main aim of a political party is to get its candidates elected so it can control government.

Political parties in Australia range from traditional organisations to special interest groups. They work hard to promote their ideas and encourage members of the public to join them. Their main aim is to have candidates elected to parliament. In this way they can aim to have laws passed that are consistent with their beliefs and values. Use the **Political parties** weblinks in the Resources tab to learn more.

All political parties must be registered with the **Australian Electoral Commission**. There are two requirements for this registration:

1. The aims of the party must be submitted.
2. The party must have at least 500 **eligible voters** unless the party already has a member in parliament at the time it is formed.

**FIGURE 1** Timeline of Australia's political parties




## 19.2.2 Australian Labor Party

The Australian Labor Party (ALP) is the oldest political party in Australia. It was formed in the 1890s. Unemployment was high and living conditions were harsh, so workers relied on their trade unions for support and protection. The unions felt they would be more effective if they could gain a voice in parliament. For this reason they formed their own political party to put forward their own candidates for election. This background has meant that trade unions have always had strong links with the Labor Party.

The Labor Party believes that government has a responsibility to look after the people. Its main aims are to:

- ensure wealth and power are shared evenly and fairly in society
- make sure everyone who wants to work can find a job

- abolish poverty and improve the living standards of all Australians
- ensure that all Australians can obtain the education, housing and community services they need.

**TABLE 1** Labor Party governments since World War II

| Period of government | Prime Minister |
|---|---|
| October 1941 to December 1949 | John Curtin: 1941–1945 (died July 1945)<br>Ben Chifley: 1945–1949 |
| December 1972 to November 1975 | Gough Whitlam |
| March 1983 to March 1996 | Bob Hawke: 1983–December 1991<br>Paul Keating: December 1991–March 1996 |
| November 2007 to September 2013 | Kevin Rudd: November 2007–June 2010<br>Julia Gillard: June 2010–June 2013<br>Kevin Rudd: June 2013–September 2013 |

**FIGURE 2** The Australian Labor Party was formed in the late nineteenth century by trade unionists, seen here campaigning for the eight-hour working day.

## 19.2.3 The Liberal Party of Australia

The Liberal Party of Australia was founded by Robert Menzies in 1944 and first won government in the federal parliament in 1949. The Liberal party has since always formed a **coalition** government with the National Party.

The Liberal Party believes in individual freedom and free enterprise. Its main aims are to work towards:

- a just and humane society in which the family and the role of law and justice are maintained
- equal opportunity for all Australians; and the encouragement and facilitation of wealth so that all may enjoy the highest possible standards of living, health, education and social justice
- a lean government that minimises interference in daily life and minimises taxes
- a government that encourages private businesses and does not compete with them.

**FIGURE 3** The Liberal Party was founded in 1944 by Robert Menzies.

**TABLE 2** Liberal–National Party governments since World War II

| Period of government | Prime Minister |
|---|---|
| December 1949 to December 1972 | Robert Menzies: 1949–January 1966 (retired)<br>Harold Holt: January 1966–December 1967 (died)<br>John McEwen (National Party): Dec 1967–Jan 1968<br>John Gorton: January 1968–March 1971<br>William McMahon: March 1971–December 1972 |
| November 1975 to March 1983 | Malcolm Fraser |
| March 1996 to November 2007 | John Howard |
| September 2013– | Tony Abbott: September 2013–September 2015<br>Malcolm Turnbull: September 2015–August 2018<br>Scott Morrison: August 2018– |

## 19.2.4 National Party of Australia

The Nationals were established as a federal party in 1920, originally as the Country Party. The Nationals have been able to form government on several occasions as the junior partner in coalition with the Liberal Party since 1949, and with other parties before that. When the National Party is in government with the Liberal Party, the leader of the National Party becomes deputy prime minister.

The Nationals are dedicated to representing people who live, work or operate a business in regional Australia. The Nationals fight for an equality of services, lifestyle and opportunity between the cities and the regions. Their main aims are to:

- provide strong representation of local communities
- ensure security for families through decent health, safety, social and economic welfare standards
- promote individual achievement, free choice and a fair go
- encourage investment, wealth generation and reward for private enterprise.

## 19.2.5 Australian Greens

The Australian Greens party was formed in 1992. It grew out of the activism of environmental groups in the 1980s and based many of its principles on those of European green parties. Its main aims are to:

- look after the environment and preserve the Earth's resources for the future
- ensure that everyone in our society is treated fairly and with respect
- create a safe, harmonious world in which force is not used to solve differences
- ensure that society is governed by the people, and not run by the wealthy and powerful.

## 19.2.6 Minor parties

In addition to the major parties, a number of smaller parties have existed in recent times. Often these parties are centred on an individual politician, whose name forms part of the party name. In some cases this party leader and founder has been elected to parliament as an independent and has used their profile as a means to establish a new party and attract other candidates to join them. Examples include:

- Pauline Hanson's One Nation Party — founded by Queensland Senator Pauline Hanson in 1998. Hanson was elected to the Senate in 2016. She was elected as a Liberal member of the House of Representatives in 1996 and founded her own party after having been expelled from the Liberal Party. She unsuccessfully stood for the Senate on several occasions prior to 2016.
- Palmer United Party/United Australia Party — founded by Queensland businessman Clive Palmer as Palmer United Party in 2013, with a name change in 2018.
- Katter's Australian Party — founded by Queensland member of the House of Representatives Bob Katter, who was elected to federal parliament in 1993 as a National Party member, left the party to sit as an independent in 2001, and founded Katter's Australian Party in 2011.
- The Nick Xenophon Team/Centre Alliance — founded by South Australian Senator Nick Xenophon in 2013, who had been an independent member of the Senate since 2008. When Xenophon left the Senate to contest a seat in the 2018 South Australian state election, the party was renamed Centre Alliance, and no longer has any direct involvement with Nick Xenophon.
- Derryn Hinch's Justice Party — founded by media personality Derryn Hinch in 2016, with Hinch elected to the Senate in the federal election of that year. His party was successful in having three members elected to the Victorian upper house in 2018.
- Jacqui Lambie Network — founded by Tasmanian Jacqui Lambie, who was first elected to the Senate as a member of the Palmer United Party in 2013. After leaving that party in 2014, she founded her own party in 2015. She was re-elected in the 2016 election, but had to resign in 2017 because she held dual Australian and British citizenship. Under the Australian Constitution, a member of parliament must be an Australian citizen and cannot hold dual citizenship with any other country.

There have been a number of other minor parties that have had members elected to the Senate, such as the Liberal Democratic Party, the Family First Party and the Motoring Enthusiast Party. The Senate voting system, discussed in the following sections, made it possible for representatives of minor parties to gain a seat in the Senate, by gaining preferences from a wide range of other candidates.

**DID YOU KNOW?**

When Ricky Muir of the Motoring Enthusiast Party was elected to the Senate in the 2013 election, he won only 0.51 per cent of the primary vote. John Madigan of the Democratic Labour Party won his Senate seat with just 2.3 per cent of the primary vote. These results led for calls to reform the Senate voting and preference system to prevent 'micro-parties' being elected. The reforms came into effect before the next election in 2016, at which Muir and Madigan both failed to retain their seats.

## 19.2.7 Independents

Members of parliament who do not belong to a political party are called independents. They sit alone in parliament and may choose to vote with one of the major parties or with minor parties, or abstain from voting.

Within the parliament, government members sit on the benches to the right of the Speaker, while Opposition members sit to the left of the Speaker. Independents and minor party members sit on the benches in the middle, at the opposite end of the chamber to the Speaker. They are said to sit on the 'cross-benches', and so are known as 'cross-bench members' or 'cross-benchers'.

It is difficult for independent members to be elected because they do not have a party structure and membership to support them. Independent senators are usually people with a high profile across their whole state. An independent attempting to be elected to the House of Representatives needs to gain strong local community support in the electorate.

## on Resources

**Weblinks** Political parties: Australian Labor Party
Political parties: Liberal Party of Australia
Political parties: The Australian Greens
Political parties: The Nationals

### 19.2 ACTIVITY

Select one of the political parties described in this section and use the **Political parties** weblinks in the Resources tab to visit the party's website and find answers to the following:

a. What is your selected party's vision for the future of Australia?
b. Identify and explain six key policies that your selected party believes will help achieve this vision.

**Examining, analysing, interpreting**

### 19.2 EXERCISES

**Civics and Citizenship skills key: CS1** Remembering and understanding **CS2** Describing and explaining **CS3** Examining, analysing, interpreting **CS4** Questioning and evaluating **CS5** Reasoning, creating, proposing **CS6** Communicating, reflecting

#### 19.2 Exercise 1: Check your understanding

1. **CS1** What is a political party?
2. **CS1** What is a coalition?
3. **CS2** Why is the trade union movement influential within the Labor Party?
4. **CS2** Explain what the Liberal Party and National Party have in common that has allowed them to form a coalition in the federal parliament for over 65 years.
5. **CS3** Outline the similarities and differences of the main aims of the Labor and Liberal parties.

#### 19.2 Exercise 2: Apply your understanding

1. **CS3** What are the key policies of the Greens? In what ways are they different from the major parties?
2. **CS2** Why is it difficult for an independent to win a seat in parliament?
3. **CS6** Explain why the terms of prime ministers do not always coincide with the dates of elections and terms of governments.
4. **CS5** Why do you think so many minor parties are centred around an individual politician?
5. **CS6** Why are MPs who are members of minor parties generally referred to as 'cross-benchers'?

Try these questions in learnON for instant, corrective feedback. Go to www.jacplus.com.au.

# 19.3 Voting and the federal electoral process

## 19.3.1 The voting system

We elect representatives to state and federal parliaments, as well as to local councils, to make laws and to take other decisions on our behalf. It is important that the voting system is as fair as possible because this ensures that the composition of parliament is a true representation of the voters' wishes.

**FIGURE 1** Our democratic system is based on the principle that all Australian citizens over 18 vote to elect members of parliament.

on Resources

**Video eLesson:** What is parliament? (eles-2077)

## 19.3.2 The Australian electoral system

The Australian electoral system is based on a number of key principles. These are:

- universal suffrage and secret ballot
- compulsory voting
- fixed or maximum terms for parliament
- one vote, one value
- combinations of single-member and multi-member electorates
- preferential voting and proportional representation.

### Universal suffrage and secret ballot

Voting in all parliamentary elections in Australia is through universal adult **suffrage** or **franchise**. This means that all Australian citizens over the age of 18 have a right to vote. There are some exceptions to this. For example, anyone serving a prison term of three years or longer cannot vote while they are in prison, but can resume the right to vote once they are released.

We have not always had universal adult franchise in Australia. In the 1850s, colonial parliaments granted the franchise to white adult males over the age of 21. In 1902, the right to vote in elections for the Commonwealth Parliament was extended to white women over 21. Aboriginal and Torres Strait Islander peoples were excluded from voting until 1962. The legal voting age was lowered from 21 to 18 in 1973.

Australia was one of the first places in the world to introduce a secret ballot for voting. A secret ballot allows every voter to keep their vote private, so that no-one can force them to vote for a particular candidate. Before the introduction of the secret ballot, voters had to announce who they were voting for to an official. This vote was then recorded beside their name, so everyone could see who everyone else voted for. This system often led to the intimidation and bribery of voters. Most of the Australian colonial parliaments introduced the secret ballot in the 1850s. Under this system, voters fill out their voting papers in private, fold them so no-one can see, and place them in a ballot box. Once in the box, there is no way of identifying one voting paper from another.

**FIGURE 2** Australia was one of the first countries in the world to use the secret ballot.

## Compulsory voting

Compulsory voting is not required by the Australian Constitution, and was only introduced in Australia in 1924. Now, voting for federal, state and territory parliaments is compulsory for all eligible citizens over the age of 18. In some states, voting is also compulsory for local council elections. Failure to vote can result in a fine if the voter does not have a reasonable excuse, such as serious illness on the day of the election. To assist those who may have difficulty voting on election day, a number of alternative methods are available:

- Early voting centres are open in all electorates, often up to three weeks before the actual election. If a voter knows that he or she will be away from their home electorate on election day, it is possible to take advantage of this method.
- Voters can apply for postal votes, which allow them to receive ballot papers before the election and to post them to the appropriate electoral office. Envelopes containing these votes are opened face down to preserve the secrecy of the vote.
- It is possible to vote interstate or overseas if you have not been able to organise early voting or postal voting before travelling.

**FIGURE 3** All registered voters in an electorate have their names and addresses recorded in the electoral roll.

## Australian Electoral Commission and the electoral rolls

All Australian citizens are required to register to vote when they turn 18. This can be done either online or by obtaining an enrolment form from an office of the Australian Electoral Commission (AEC). The AEC is the official body responsible for the conduct of federal elections. It also maintains a record of all registered voters, known as the electoral roll. This record is updated regularly to allow for new

voters to be added, changes of voter addresses to be recorded, and names to be removed when voters die. You can enrol to vote any time after turning 16, although you will not be able to vote until you have turned 18. Failure to enrol to vote can result in a fine.

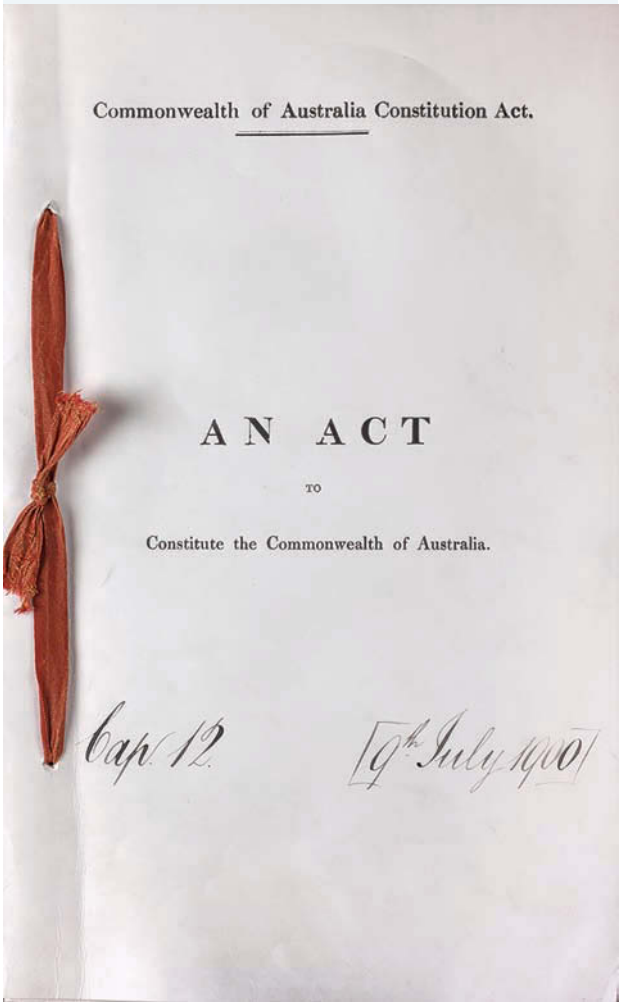
## Fixed or maximum terms for parliament

The Australian Constitution requires that elections for the House of Representatives be held at least every three years. They can be held before three years have elapsed — usually because the prime minister at the time chooses to hold an early election.

All of the states and territories are required to hold elections every four years. Each state has its own rules for holding these elections. For example, in Victoria the state parliament has a fixed term, with an election held on the last Saturday in November every four years. In some other states, an early election is possible if the state government chooses to do so.

The Senate also has elections every three years, but the rules are different from those in the House of Representatives. All senators are elected for six years (apart from the senators from the ACT and Northern Territory, who are elected only for three-year terms), so normally only half the senators have to face election every three years. The exception occurs when a double dissolution is called. In these circumstances all 76 senators face re-election. Some of the states have similar arrangements for their upper houses, with only half the members facing election at a time.

**FIGURE 4** The Australian Constitution requires that elections for the House of Representatives be held at least every three years.


Commonwealth of Australia Constitution Act.

AN ACT

TO

Constitute the Commonwealth of Australia.

Cap. 12. [9th July 1900]

## One vote, one value

Each person has only one vote for each house of parliament, so all voters are equal. However, the numbers of representatives and senators elected to parliament differ because of provisions written into the Australian Constitution at federation.

### House of Representatives

As far as possible, all federal electorates for the House of Representatives have a similar number of voters. This is to ensure that all votes have as close as possible to equal value throughout Australia. It also means that each state has a different number of electorates, according to population. The average number of voters is around 95 000 in each electorate, with some anomalies. Because the Constitution allows for a minimum of five electorates in any state, Tasmanian electorates have about 70 000 voters each, as Tasmania has the lowest population of the states. The Northern Territory is divided into two electorates, while the Australian Capital Territory has three electorates. Population differences mean that each ACT electorate has an average of around 85 000 voters, while the Northern Territory electorates average around 60 000 voters. **FIGURE 5** shows the number of electorates in each state and territory.

**FIGURE 5** Population and the House of Representatives

## The Senate

One of the original functions of the Senate was to protect the interests of the six states. The representatives of the less populated states were concerned that they could be out-voted in the House of Representatives by the combined members from Victoria and New South Wales. For this reason, the Senate has an equal number of members from each state. Currently this stands at 12 per state, with two from each of the two territories, making a total of 76. The principle of one vote, one value does not apply to the Senate. Consequently, New South Wales with almost 7.9 million people has the same number of senators as Tasmania, which has a population of just over 520 000.

## Combinations of single-member and multi-member electorates

The Commonwealth, state and territory parliaments use a variety of methods to determine the way in which the voters are represented. The House of Representatives has 151 members, with each member representing a single electorate or seat.

The Senate has a different form of representation. Each state and territory is a single electorate for the purpose of electing senators, so all senators effectively represent the entire state or territory rather than a smaller electorate. Each state is effectively a multi-member electorate as it has 12 senators representing it at any given time.

The states and territories have a combination of single-member and multi-member voting systems.

- In Victoria, New South Wales, Queensland, South Australia, Western Australia and the Northern Territory, each lower house is made up of members from single-member electorates.
- Members of the lower house in Tasmania and the ACT are elected from multi-member electorates.
- The upper houses in Victoria, New South Wales, South Australia and Western Australia have multi-member electorates.
- The Tasmanian upper house has 15 single-member electorates.
- There is no upper house in the Northern Territory, ACT and Queensland parliaments.

**FIGURE 6** The Victorian lower house, known as the Legislative Assembly, has 88 members elected from single-member electorates.

## Preferential voting and proportional representation

The type of voting system used in Australian elections depends on whether the election involves single-member electorates or multi-member electorates. When an election occurs in a single-member electorate, a system known as preferential voting is used. In multi-member electorates, proportional representation voting is applied.

### Preferential voting

A preferential system of voting is used for members of the House of Representatives, and state houses of parliament with single-member electorates. This means that voters are usually required to vote for the candidates in order of preference. The voter places the number 1 in the square next to their preferred candidate, the number 2 next to their second preference, and so on down the ballot paper. In House of Representatives elections, voters are expected to place a number in every square. (The process for counting preferences is discussed in subtopic 19.5.)

## Proportional representation

Proportional representation is the system of voting used in all elections for multi-member electorates in Australia. It is also used for the Senate. In most cases, voters are required to number their preferences on the ballot paper. The votes are divided up in such a way as to elect the required number of successful candidates based on the proportion of the total vote given to each party.

The counting method is quite complex, but the end result is that the members elected will usually come from a variety of different political parties, including some parties with a relatively small share of the total vote. Candidates are grouped on the ballot paper according to the party they represent. The possibility of being elected with a relatively small share of the vote has usually resulted in a large number of small parties nominating candidates for the Senate. This has meant that Senate ballot papers in recent elections in some states have had as many as 100 candidates!

With the number of candidates increasing over the years, it became very difficult for voters to mark all the squares without the risk of missing a number or mistakenly using a number twice. In order to deal with this problem, a system of 'above-the-line' voting was introduced to Senate elections in 1984. This meant that instead of placing a number in every square, voters simply had to place the number 1 above the group representing the political party they preferred.

Voting rules for the Senate changed again following the 2013 election in which minor parties were able to get candidates elected to the Senate with a very small percentage of the primary vote. (see the Did You Know? box in section 19.2.6). This so-called gaming of the system was seen as undemocratic, and the calls for reform resulted in a new system of voting for the Senate being introduced in the July 2016 election. Voters are now given the option of numbering at least six boxes above the line for the parties of their choice, or at least 12 boxes below the line for the individual candidates of their choice. The sample Senate voting papers in **FIGURES 8** and **9** show the two different methods of voting.

**FIGURE 7** In House of Representatives elections, voters are required to number every square next to the candidates' names.

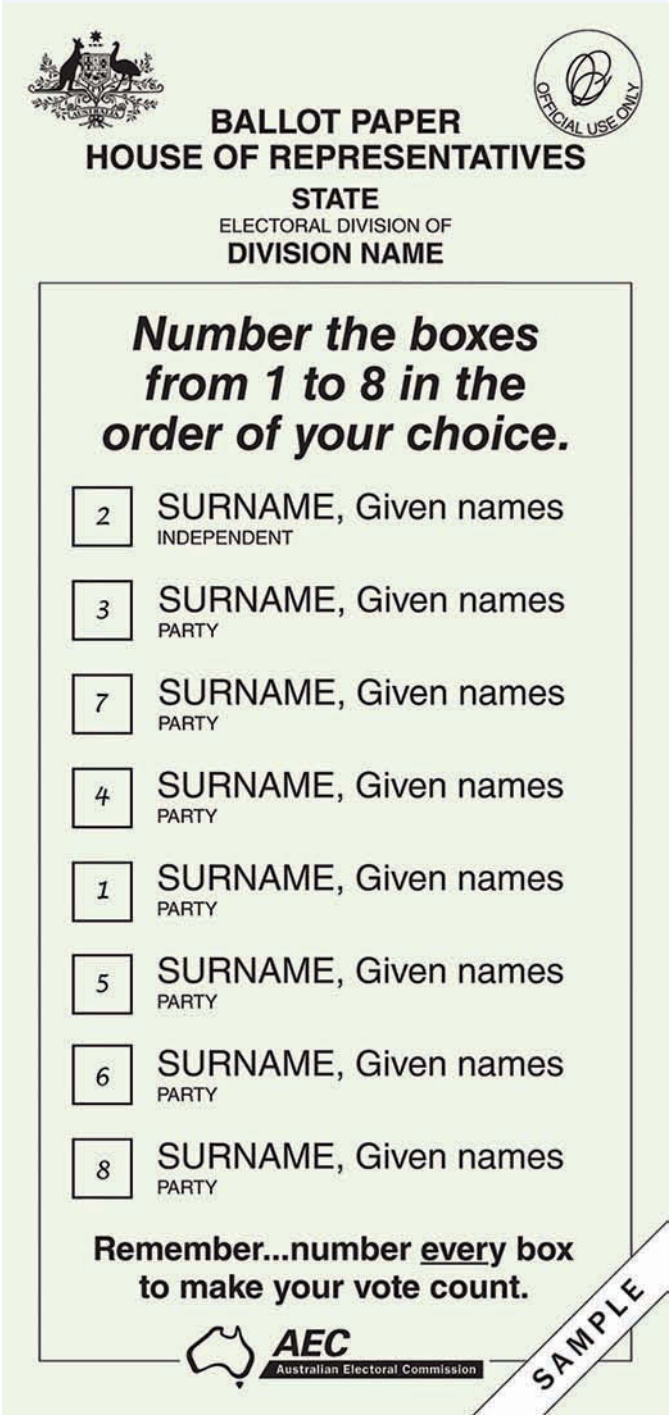


**FIGURE 8** Voting above the line: voters can accept the preferences decided by political parties by voting above the line. Under this option, they must number at least six parties.

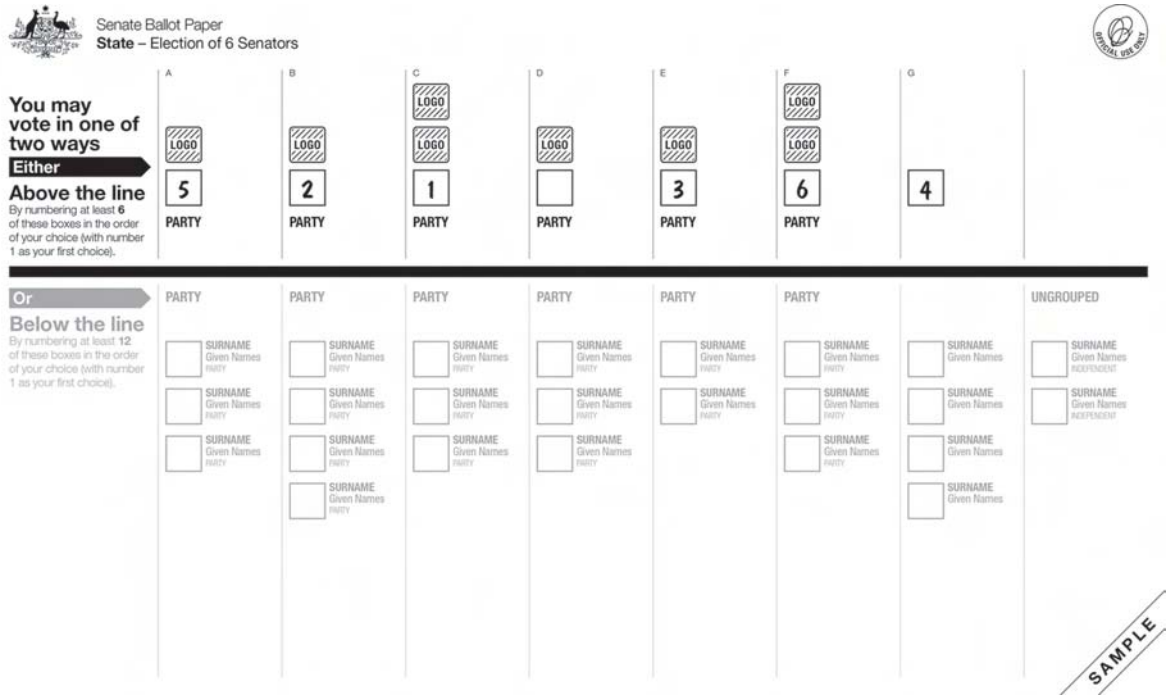
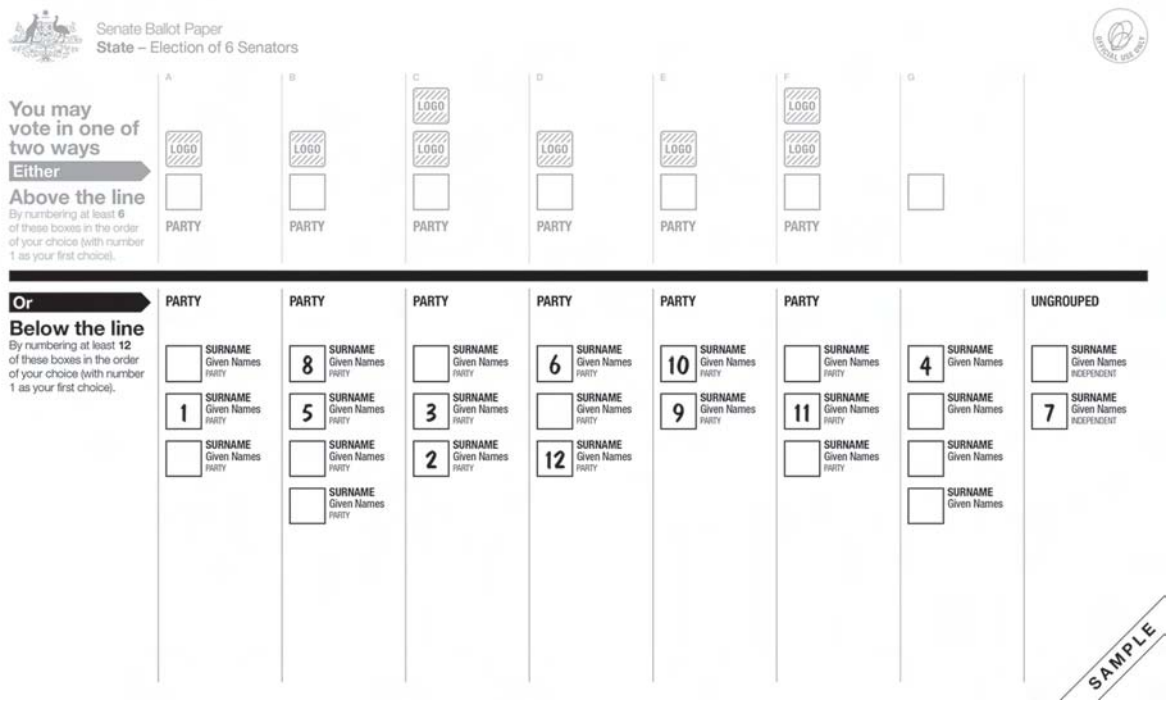



**FIGURE 9** Voting below the line: voters must number at least 12 Senate candidates when choosing to vote below the line.




## 19.3.3 Federal election day

The procedure for voting in a federal election is shown in **FIGURE 10**.

**FIGURE 10** Voting in a federal election

Elections in Australia are always held on a Saturday. On election day polling places are open between 8 am and 6 pm. Polling places are usually set up in schools, church halls and similar community buildings.

As you approach the polling place, representatives of the different parties and independent candidates will offer you how-to-vote cards. These are designed to tell you how each party would like you to vote in order to have their candidate elected. It is not compulsory to follow these cards — you can number the squares on the ballot paper in any order you wish — but many people do follow them.

When you enter, an official will usually direct you to a table where polling clerks sit with blank ballot papers and copies of the electoral roll for your electorate.

The polling clerk will ask you your name, and then locate it in the electoral roll, checking that the address details are correct. The clerk will then ask whether you have voted anywhere else that day.

Once these details have been verified, the clerk will place a small mark next to your name in the electoral roll and issue you with two ballot papers.

The House of Representatives ballot paper is always pale green in colour, while the Senate ballot paper is usually white. You take the ballot papers to one of the cardboard polling booths located in the polling place to cast your vote. Pencils are provided for you to fill in your ballot paper.

If you have decided to vote for a particular political party, you can then vote in accordance with the relevant how-to-vote card handed to you outside the polling place. If you wish to number the squares differently from the how-to-vote card, you are free to do so.

All squares must be numbered ion the green ballot paper to record a formal vote.

There are two choices for filling out the white Senate ballot paper.

If you want to indicate your party preferences, you can place the numbers 1 to 6 in the labelled boxes above the black line.

If you wish to vote for particular candidates, you can fill in a minimum of 12 squares below the line.

If you miss any squares, or accidentally use the same number twice, your vote may be informal.
Great care must be taken if you choose to vote below the line, so few people tend to vote this way.

Once you have voted, you fold the ballot papers to keep your vote secret, and take the completed ballot papers to the ballot boxes. These are clearly marked for Senate and House of Representatives ballot papers, and are supervised by a polling official. There are also usually bins or recycling boxes near the door for you to discard how-to-vote cards as you leave the polling place.

### 19.3 ACTIVITIES

1. Using internet resources, research and provide a brief summary of the electoral system for Victoria.
   (a) What is the name of the lower house, and what voting system is used in this house?
   (b) How many seats are there in the lower house, and are they single-member or multi-member electorates?
   (c) What is the name of the upper house, and what voting system is used in this house?
   (d) How many seats are there in the upper house, and are they single-member or multi-member electorates? **Examining, analysing, interpreting**
2. The Australian Constitution does not make voting compulsory. Compulsory voting was introduced by the federal parliament in 1924. Most other countries with parliamentary systems similar to Australia's have voluntary voting. These include Great Britain, New Zealand, the United States and Canada. Over the years many people in Australia have argued that it is undemocratic to force people to vote, and that Australia should switch to voluntary voting.
   (a) Working in groups of four or five, use the internet to research the arguments both in favour of and against compulsory voting. **Examining, analysing, interpreting**
   (b) Discuss these arguments within your group and decide where your group stands on the issue (in favour, against or undecided). **[Ethical Capability]**
   (c) Each group should then present its findings to the rest of the class. **Communicating, reflecting**
   (d) How easy was it to come to a consensus in your group? In what ways did the different values and beliefs in the group lead to different perspectives? **[Personal and Social Capability]**

### 19.3 EXERCISES

**Civics and Citizenship skills key: CS1** Remembering and understanding **CS2** Describing and explaining **CS3** Examining, analysing, interpreting **CS4** Questioning and evaluating **CS5** Reasoning, creating, proposing **CS6** Communicating, reflecting

#### 19.3 Exercise 1: Check your understanding

1. **CS1** What is the meaning of the term *universal adult suffrage*?
2. **CS1** What is the electoral roll? How do people get their name and other details included in the electoral roll?
3. **CS1** Identify two houses of parliament in Australia that have single-member electorates.
4. **CS1** Identify two houses of parliament in Australia that have multi-member electorates.
5. **CS2** What are how-to-vote cards?

#### 19.3 Exercise 2: Apply your understanding

1. **CS2** What is the importance of the secret ballot?
2. **CS2** Explain two ways in which you can vote if you are not going to be in your home electorate on election day.
3. **CS4** Why is it important to have a maximum period of time between parliamentary elections?
4. **CS2** Explain how the method of electing members to the House of Representatives upholds the principle of one vote, one value. Why is this not the case with the Senate?
5. **CS2** Explain the difference between preferential voting and proportional representation.

Try these questions in learnON for instant, corrective feedback. Go to www.jacplus.com.au.

# 19.4 Influencing your vote

## 19.4.1 Political campaigns

The key aim of the major political parties is to win government. In order to achieve this, the parties devote a lot of effort and resources to convincing voters to support their candidates. In particular, the parliamentary leaders of the parties will be very visible in these campaigns.

## 19.4.2 Public debate

During an election campaign, representatives of the parties will often seek opportunities to debate issues with representatives of different parties. Such debates can take a number of formats.

### Leaders' debates

It has become a regular feature of election campaigns for the leaders of the two major parties to take part in televised debates. This means that the leader of the Liberal Party and the leader of the Labor Party will meet face-to-face for an hour in a previously agreed format. Usually each leader has the opportunity to make an opening statement for a set period of time. This is followed by questions directed to both leaders by a panel of journalists who specialise in writing about political issues. Each leader then has an opportunity to make a final statement to conclude the debate.

### Other debates

In addition to the party leaders, other representatives will often appear on TV and radio during an election campaign. Current affairs programs will invite party spokespeople on to debate issues that are within their area of responsibility. For example, the Minister for Health may appear representing the government while the Shadow Minister for Health will represent the Opposition. Both will be asked questions and given the opportunity to explain their respective party's policies for improving health services. Each representative will try to convince the voters that they will be better off by voting for their party.

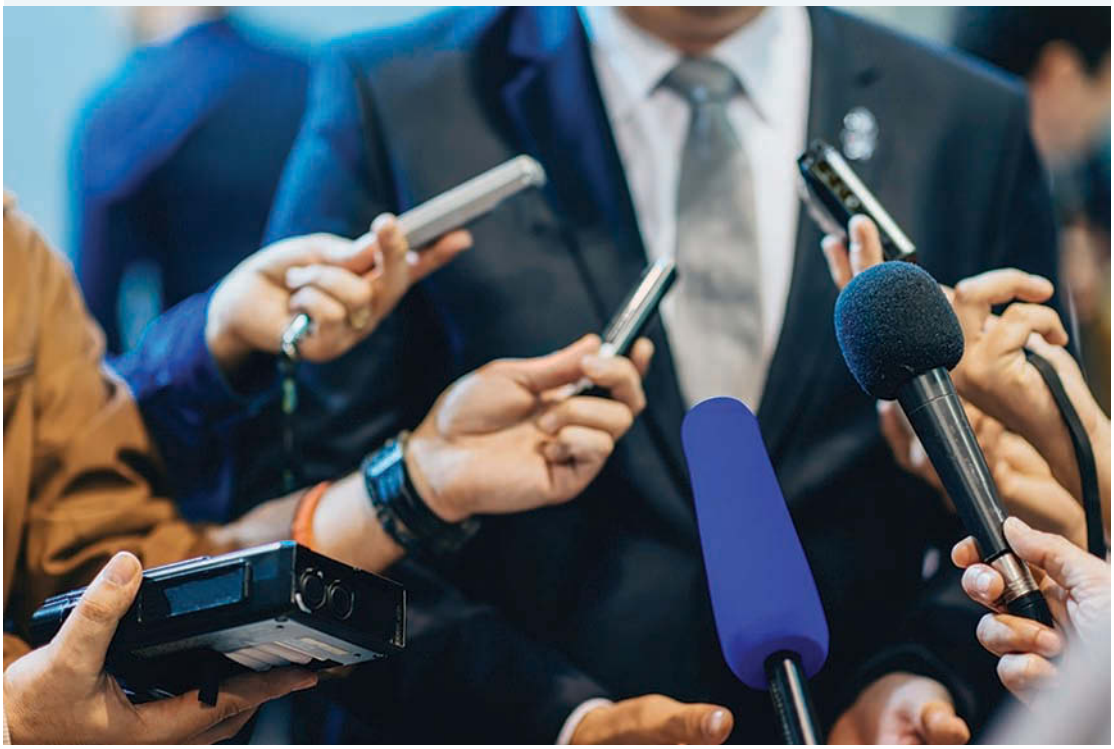
## 19.4.3 Traditional media

In addition to appearing on current affairs programs to answer questions and debate issues, political parties and their leaders will attempt to use the full range of the media to get their message across. This includes the traditional media outlets of television news, newspapers and radio.

### Television news

During an election campaign the two leaders travel around the country, accompanied by journalists and camera crews from all the television stations. Each day they attempt to make a significant announcement or promise that they hope will be broadcast on that evening's television news. This is a recognised strategy that all parties use to ensure they receive daily media coverage.

**FIGURE 1** Political leaders make use of daily television news broadcasts to spread details of their policies during election campaigns.



## Newspapers

Just as they make use of television, political parties and their leaders also try to have their message put before voters in daily newspapers. Political parties provide detailed documentation to journalists on every policy and promise. Whether in print or online, newspapers provide an opportunity for these policies to be published in greater detail. Newspapers often use their online editions to allow their readers to comment on stories and issues of the day. Daily online opinion polls also allow newspapers to gain speedy feedback from readers on a variety of issues.

**FIGURE 2** Newspapers allow politicians and their parties to communicate political promises and policies in greater detail.

## Radio

Radio provides another opportunity for political leaders and other party representatives to present their policies to the public. Current affairs programs on ABC Radio such as *AM* and *PM* carry out regular interviews with leaders, government ministers and Opposition spokespeople. During an election campaign, large portions of these programs are given over to discussing political issues. Talkback radio programs also give political leaders a chance to engage with the public. In addition to being interviewed by the host of the radio program, politicians will often have the opportunity to respond to listeners who phone in and ask them questions.

**FIGURE 3** During election campaigns, talkback radio hosts regularly interview political leaders.

## 19.4.4 Opinion polls

Opinion polls are surveys taken of people from all over Australia and from all walks of life. They are conducted by different polling companies. Most of these conduct their surveys by telephoning people and asking them a series of questions. They often also ask the person being surveyed their age and level of income. This is done to ensure that a broad range of people is surveyed.

**FIGURE 4** Opinion polling companies conduct surveys by phoning large numbers of people.

A small but important part of their business is to conduct surveys on people's attitudes to government policies and actions. To achieve this, they will survey people to find out whether they support or oppose a particular policy or political promise. When an election is close, they will also conduct surveys to find out who people intend voting for. It is this polling that can provide the political leaders with feedback on how well they are performing. Opinion polls also alert the leaders to issues that voters are concerned about, and in this way can influence the policies and promises the leaders make during an election campaign.

## 19.4.5 Advertising

All political parties put together an advertising program as part of their election campaign. Television advertising is the most common form used, but parties will also advertise on radio and in the newspapers. Most advertising has to be short, with a message that is easy to understand. Political parties make use of slogans they hope will be easy to remember. They also try to create a negative impression of their opponents. The party leaders feature heavily in these advertisements because they want voters to identify with that leader as the next prime minister.

## 19.4.6 Interest groups

Each party has support among a number of interest groups throughout the community. The Liberal Party has support from a number of business groups, and many of these will donate money to help cover the cost of that party's advertising. In the same way, the Greens often get support from environmental groups, who will provide time and resources to help that party's campaign. Labor has strong links with the trade union movement, so the union movement donates large amounts to that party's campaign. Unions will also often campaign directly against the Liberal Party. In the 2007 election, for example, the unions campaigned strongly against the Liberal government's WorkChoices laws in the belief that the laws harmed ordinary workers, who were often union members.

**FIGURE 5** Unions launched the 'Your rights at work' campaign in response to the Liberal government's WorkChoices laws.

DISCUSS

Consider this statement: 'Interest groups should not be able to donate money to political parties in order to try to influence them or help them win power.'

a. What would be the different positions that the following groups of people would have on this issue?
   (i) A Greens politician who has received a large donation from an environmental group to help her campaign
   (ii) A pro-business lobby group that donates to the Liberal party
   (iii) Undecided voters

b. What values and beliefs may influence their differing perspectives?

**[Ethical Capability, Personal and Social Capability]**

## 19.4.7 Other political party campaign activities

Political parties have a variety of additional campaign techniques that are used in most elections. These include:

- *Letterboxing*. Parties will print and distribute advertising leaflets during an election campaign. These will usually feature a photo and information about the local candidate, as well as information about the party's policies. Local party members then volunteer to walk around the electorate delivering the leaflets to letterboxes.
- *Polling*. As well as opinion-polling companies carrying out surveys of voters' opinions, political parties carry out their own opinion polls, particularly during an election campaign. They want up-to-date feedback on how well their campaign is being received by the voters, whether their policies are popular or not, and how well the leaders are performing. The political parties carry out polling almost every day during an election campaign.

- *Doorknocking*. A traditional method of campaigning has been for a candidate to walk around the electorate, knocking on doors to talk to voters. This is less likely to occur during the official campaign, but some candidates may have spent many hours doing this between elections, particularly if they are challenging a well-known member of parliament.
- *Letters to editor and talkback calls*. During an election campaign, there is always a strong emphasis on political issues in the letters pages of the newspapers as well as on talkback radio programs. Members and supporters of political parties regularly send letters to the newspapers, and phone up talkback radio programs during this time. They usually pretend to be ordinary members of the public and do not reveal their party membership.
- *Handing out how-to-vote cards*. On election day, political parties rely on volunteers and ordinary party members to stand outside polling places and hand out how-to-vote cards.

## 19.4.8 Social media

In today's world it seems that millions of people are almost constantly connected. Your ability to access websites, email and social media from almost anywhere through your smartphone means that you can express an opinion on any issue, to almost anyone, anytime, anywhere. Political parties and their leaders are very aware of the significance of social media, and have been adopting it to appeal to the public, particularly younger voters. In recent years they have expanded their efforts on social media in a variety of ways:

- All of the major parties have Facebook pages to keep their supporters updated, and most individual members of parliament have their own Facebook pages. As well as providing information about party policies, individual members use their Facebook pages to provide updates on their activities within their electorates.
- Almost every member of parliament in Australia today has a Twitter account. Every prime minister since Kevin Rudd in 2007 has had an account, and they have all made extensive use of it to promote their political messages on a daily basis.
- The use of social media has been shown to carry risks. In some recent elections in other countries, Facebook profiles have been analysed and used for targeted political advertising. In some cases this advertising has been misleading, or contained false information, designed to appeal to particular voters, based on their Facebook or other social media profiles. This has involved breaches of privacy, and a distortion of democratic processes, because it attempts to fraudulently influence the way people vote.

Members of parliament, supporters of particular political parties and opponents of the same political parties, as well as people campaigning for changes in the law, can all use social media to get their message across. Members of parliament and candidates for election can publicise their activities and gain immediate feedback from followers through the use of different social media platforms.

**FIGURE 6** Everyone can use social media to get their message across.

### 19.4 ACTIVITIES

1. Locate the Facebook page or Twitter account of the leader of one of the major parties.
   (a) What kind of information is made available through this medium?
   (b) How does the leader use social media to promote his or her image to voters?
   (c) Do you think it is successful or not? Give reasons for your answer.

**Examining, analysing, interpreting**

2. Find your local member of parliament's Facebook page or Twitter account.
   (a) What information does the member provide in relation to his or her local community activities?
   (b) How does the member use the social media to promote his or her party's policies?

**Examining, analysing, interpreting**

3. Imagine that opinion polls indicated that a political party's policy was unpopular with voters during an election campaign. The leader has to take action to change public opinion. What do you think might happen in the following circumstances?
   (a) The leader refuses to change the policy but initiates a new advertising campaign to better explain it.
   (b) The leader makes minor changes to the policy to make it more acceptable.
   (c) The leader drops the policy completely.

**Reasoning, creating, proposing**

### 19.4 EXERCISES

**Civics and Citizenship skills key: CS1** Remembering and understanding **CS2** Describing and explaining **CS3** Examining, analysing, interpreting **CS4** Questioning and evaluating **CS5** Reasoning, creating, proposing **CS6** Communicating, reflecting

#### 19.4 Exercise 1: Check your understanding

1. **CS2** Identify two ways in which candidates for parliament can engage in public debate during an election campaign.
2. **CS1** How can candidates use radio programs to help their campaign?
3. **CS1** Which interest groups are most likely to support the Australian Greens?
4. **CS2** Outline two ways in which candidates can make direct contact with voters in their electorate.
5. **CS1** How do political leaders make use of the evening television news during an election campaign?

#### 19.4 Exercise 2: Apply your understanding

1. **CS3** What advantage do newspapers have over other media during an election campaign?
2. **CS2** Why are opinion polls an important part of an election campaign?
3. **CS3** What features must a political advertising campaign have to be successful?
4. **CS4** Most of the money spent in political campaigns is spent on TV advertising. Do you think this is an effective way of campaigning? Justify your opinion.
5. **CS4** Doorknocking has been a traditional method of campaigning and it remains a common practice. If a political candidate came knocking on your door, would this impress you or annoy you? Give reasons for your response.

Try these questions in learnON for instant, corrective feedback. Go to www.jacplus.com.au.

# 19.5 After the election — the formation of government

## 19.5.1 Counting the votes

After all the polling places close at 6 pm on federal election day, counting of the votes commences immediately. The votes are counted at each polling place in an electorate and then added up for the electorate as a whole. When the votes for all electorates are eventually counted, it will be clear which candidates have won each electorate. The political party that wins at least 76 of the 151 seats in the House of Representatives will be declared the winner of the election and will form government for the next three years.

## 19.5.2 What's the result?

The vote count is usually carried out by the same electoral staff who have managed the election process at the polling place that day. House of Representatives votes are counted before Senate votes.

## Counting the House of Representatives votes

The ballot boxes are opened and the green ballot papers are spread onto tables. The polling clerks then sort the ballots according to first-preferences votes, and count them as they go. Any **informal votes** are put to one side and not included in the count.

**FIGURE 1** Polling officials empty ballot boxes in readiness to count the votes.

As well as the polling officials, each candidate is permitted to have at least one **scrutineer** present for the count. Scrutineers are usually members of the candidate's political party. They are required to fill out a form before the polling place closes, and to wear an identification badge while in the polling place. They will carefully watch the count to make sure it is conducted fairly and properly. Scrutineers have the right to challenge any aspect of the count. For example, if a vote is declared informal because the voter appears to have made a mistake in completing the form, a scrutineer may challenge that decision if they disagree with the polling official.

**FIGURE 2** The counting of votes is watched carefully by scrutineers representing each candidate.

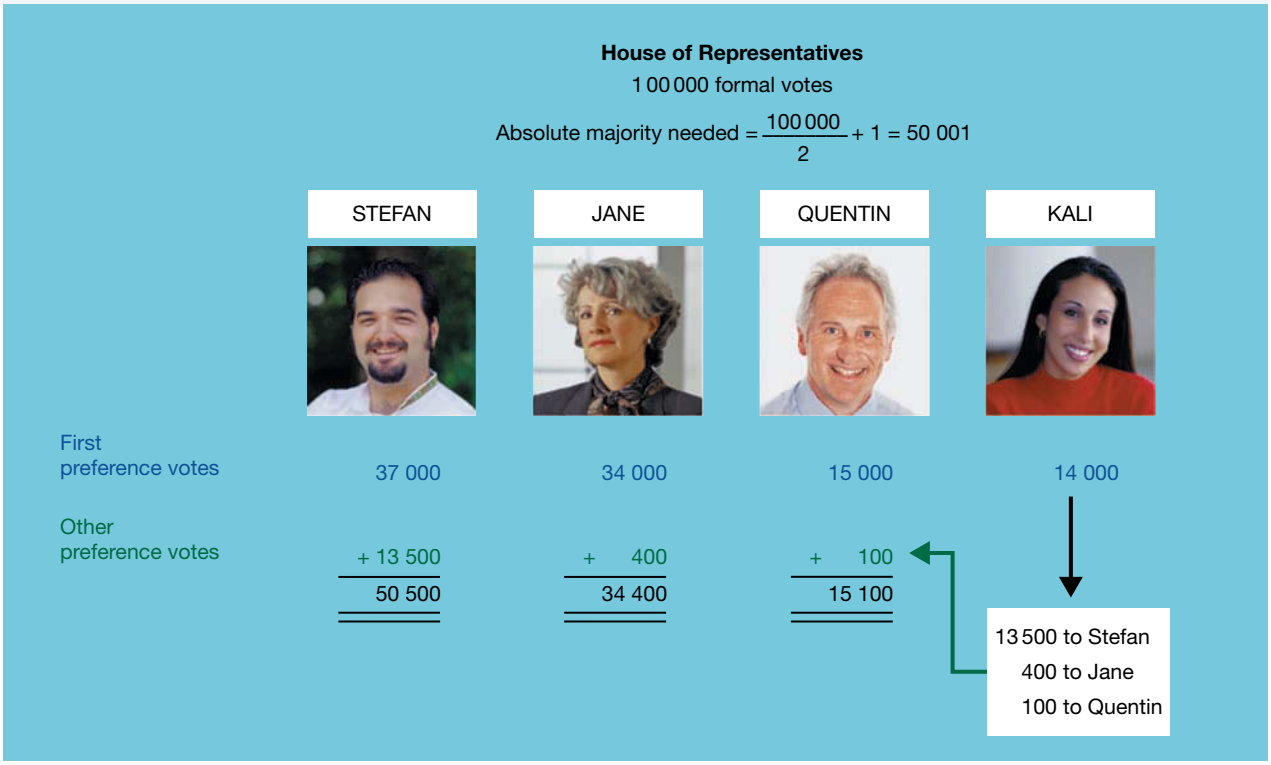
When first preferences have been counted, the results are phoned through to the Divisional Returning Officer (DRO). This is the official in charge of the voting process for the whole electorate. The DRO then enters the results for each polling place in the electorate on the AEC's computerised election-management system. This system tallies the votes for all electorates across Australia and keeps a running total of seats won by each party. The media also have access to these results, and a number of TV channels run special election-night programs with updates and commentary on the progress of the count.

**FIGURE 3** Television channels present detailed coverage of vote counting on election night.

In order to be elected, a candidate has to have the absolute majority of votes. This means having 50 per cent of the votes, plus one. For example, if there are 100 000 **formal votes** cast in an electorate, a candidate must have 50 001 votes to win. If one candidate has this number of first-preference votes, then they are declared elected. If no candidate has that number of first-preference votes, then other preferences on ballot papers have to be counted. The process for doing so is illustrated in **FIGURE 4**.

As you can see from the example in **FIGURE 4**, none of the candidates has an absolute majority of 50 001, so preference votes have to be counted. This is done by excluding the candidate with the fewest first-preference votes. In this case, that candidate is Kali, with 14 000 votes. Her votes are counted again, according to her voters' second-preference votes. In this case, 13 500 of those who gave Kali their first preference gave their second preference to Stefan. The other 500 of Kali's second-preference votes were split between Jane and Quentin as shown. This distribution of second-preference votes was enough to give Stefan an absolute majority. If there had been no clear winner after Kali's second-preference votes had been distributed, Quentin's votes would have been distributed in the same way — and so on until there was a clear winner.

**FIGURE 4** Counting preferences in the House of Representatives seats




## Counting the Senate votes

The proportional representation system used in the Senate is far more complex because it has to elect six senators from each state. Each state operates as one electorate for this purpose. You will notice that candidates on the Senate ballot paper are grouped according to the parties they represent. This is based on the expectation that most voters will support a party rather than individual senators in the election. In below-the-line voting, first preference is usually given to the first candidate in a group, second preference to the second candidate, and so on to the end of that group before moving to the next group.

If a voter votes above the line for a particular party, the vote will then be interpreted as giving the voting preferences in exactly the same way. This means that the first candidate gets all the first-preference votes for that party, while the other candidates only get second- or third-preference votes. In a preferential system like that used in the lower house, this would be a problem because a candidate needs to have a certain number of first-preference votes to stay in the count. The Senate vote-counting system is quite different, however, so this is not an issue.

To be elected to the Senate, a candidate has to achieve a **quota** of votes. If a candidate gains more first-preference votes than is required to meet the quota, those surplus votes are distributed to the candidates who have gained second preferences in the votes for the candidate who won on first preferences. Usually that will be the candidate in the same group on the ballot paper whose name appears immediately below the candidate who won on first preferences. If the first candidate within a group gains more than two quotas worth of votes, the second person within that group will usually also be elected even though they might not have received any first-preference votes. To be elected, a candidate has to achieve a whole quota — either in first-preference votes or in the surplus passed on because of second preferences.

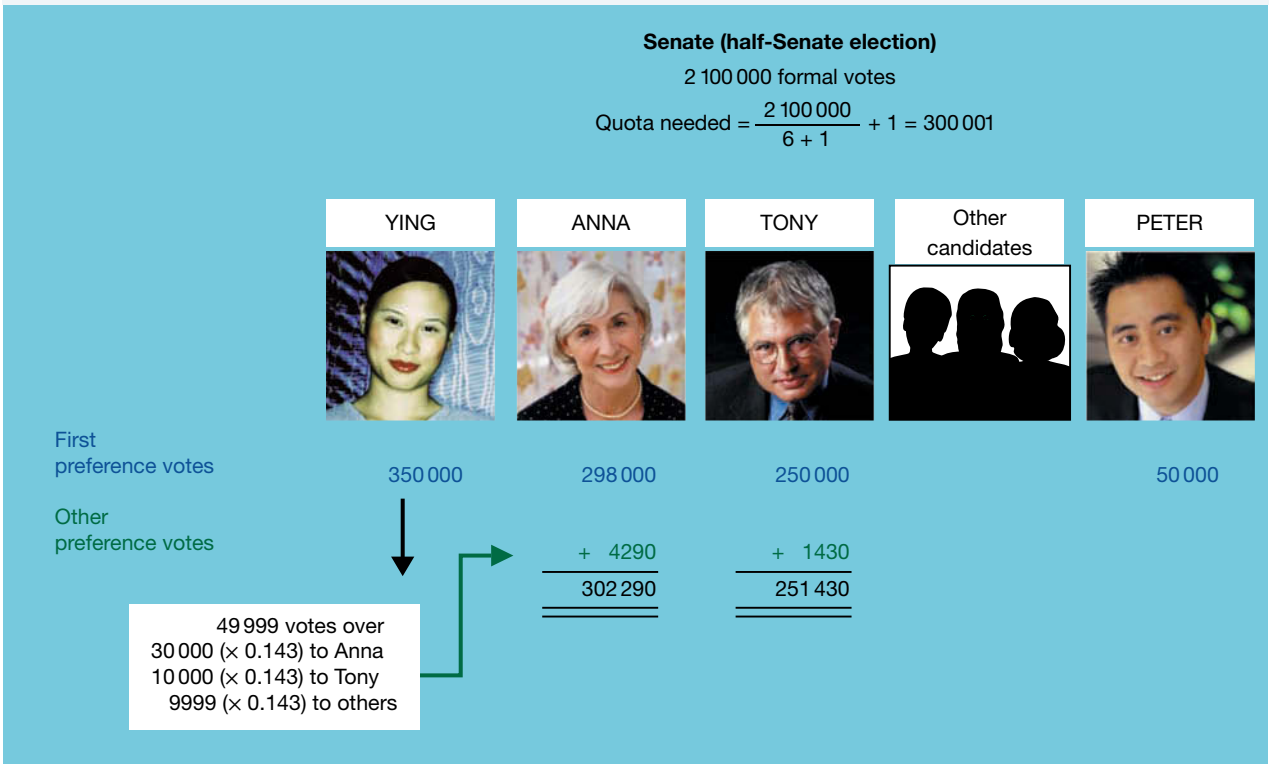
If a candidate requires a quota of 300 001 and gains 350 000 first-preference votes, that candidate effectively has a second quota to pass on. Because it is not possible to guarantee that all voters will have given their second preference to the second candidate in the group, we cannot just choose any votes to pass on. Instead, we pass on a proportion of all votes — known as the transfer value — representing the

ratio of surplus votes to the total number of votes received by the first candidate. This means that we divide the surplus above the quota by the total number of first-preference votes received by the first candidate.

Look at the example in **FIGURE 5**. A quota is calculated by dividing the number of formal votes by the number of vacancies plus 1, and then adding 1 to the result. In Australian Senate elections, this usually means dividing the number of formal votes by 7 before adding 1 to the result. In **FIGURE 5**, Ying gets a quota on first-preference votes. Her surplus votes are passed on to other candidates in the order in which second preferences appear on her ballot papers. This means that all the second preferences are passed on at the transfer value. This is calculated by dividing Ying's surplus votes (49 999) by the total of her first-preference votes (350 000). This gives a transfer value of 0.143.

Once these votes are distributed, Anna has a quota and 2290 surplus votes. These will be passed on at a transfer value calculated by dividing her surplus (2290) by her original first-preference total (298 000), which would give a value of 0.008.

**FIGURE 5** Counting preferences in Senate seats




Once all the surplus votes have been passed on, if there are not enough candidates with full quotas to fill all the vacancies, the candidate with the fewest first preferences (Peter) is excluded. His preference votes are passed on at full value to those candidates who have not gained a quota. This process continues until the required number have quotas, and all vacancies are filled.

In recent Senate elections in most states, it has been fairly common for the major party candidates listed first in their group to receive two quotas, with some votes left over. As a result, the first two candidates standing for the ALP and for the Liberal–National coalition tend to fill the first four vacancies. It has also been common for the Greens, as the most popular of the minor parties, to have the first candidate in their group gain one quota in their own right. This provides the fifth of the six candidates required. Consequently, there are a number of candidates who have a portion of a quota but none with a whole quota. How is this issue resolved?

Once all quotas have been allocated, the system becomes similar to that used in the House of Representatives vote count. The candidate with the fewest first-preference votes is excluded, and the candidate's second preferences allocated to those other candidates who have not already gained a quota. This often means that the sixth successful candidate may not be known for some time after the election. It often happens that an independent, or a member of a very small party, is elected to the sixth seat in some states.

**on** Resources

**Weblinks** Counting votes in the House of Representatives
Counting votes in the Senate

## 19.5.3 Forming the federal government

Winning the vote in a lower house electorate gives the successful candidate a seat in the House of Representatives. Government is formed in Australia on the principle of parliamentary majority in this house. This means that the party with the majority of seats in the House of Representatives forms the government, and its leader becomes prime minister. In government, the winning party has the power to make laws for governing the country.

An election will result in either the re-election of the existing government for another three-year term, or the defeat of the government and the election of the Opposition to form a new government. If the party in government retains power, its leader remains prime minister and the government continues as before. If the government is defeated, the leader of the Opposition prepares to take over as prime minister. The outgoing prime minister will usually visit the Governor-General to resign early in the week following election day. The newly elected prime minister then visits the Governor-General to be sworn in.

Once counting is complete for all electorates and the result is finalised, government ministers will be appointed and will in turn be sworn into office by the Governor-General. From this point the new government takes control and has three years before having to face the voters again.

The major party that fails to win enough seats in the House of Representatives to form government becomes the Opposition. Senior members of the Opposition become shadow ministers. For each minister in the government, there is a corresponding shadow minister in the Opposition. A shadow minister is expected to scrutinise the activities of the relevant minister, and will often publicly criticise that minister's performance. This is one way in which ministers and the government remain accountable to the people. If the Opposition then wins the next election, usually shadow ministers become ministers and the Opposition leader becomes prime minister.

## 19.5.4 Hung parliament

When the two major parties have the same number of seats in the House of Representatives following an election, there is said to be a 'hung parliament'. This means that neither side is in a position to form government on its own. Minor party representatives or independents will decide to support one side or the other, and this will lead to that party forming government. After the 2010 federal election, neither major party had a majority of seats in the lower house. Each won 72 seats, making a total of 144 out of the then 150 seats in the House of Representatives. The remaining six seats were won by independents and representatives of minor parties. It then became necessary for the leader of the Coalition, Tony Abbott, and the leader of the Labor Party, Julia Gillard, to negotiate with these cross-benchers to convince them to support their respective parties. Either side had to gain the support of at least four of the six members to have a majority of votes in the lower house and therefore form government. It took 17 days from the date of the election before the necessary four members agreed to support the Labor Party, which then returned to power. Julia Gillard retained her position as prime minister.

## 19.5.5 Minority government

It can sometimes occur that a government has fewer seats than the Opposition but is able to govern because it has the support of enough cross-benchers to win important votes in the House of Representatives. In this case it is said to be a minority government. In order to remain in power, a minority government has to be able to gather enough votes to support its spending decisions, and to retain the 'confidence' of the House. The first of these is known as 'guaranteeing supply', and the second involves having enough votes to survive a motion of no confidence that might be moved by the Opposition. After the 2016 election, the Coalition government led by Malcolm Turnbull won 76 seats, Labor won 69, and there were 5 cross-benchers. In August 2018 the Liberal Party voted for leadership change, and Scott Morrison replaced Malcolm Turnbull as Prime Minister. Turnbull resigned from parliament, and in the ensuing by-election Dr Kerryn Phelps, an independent, was elected to replace him as representative for the New South Wales electorate of Wentworth. In November 2018, Liberal member Julia Banks resigned from that party and chose to complete the remainder of her parliamentary term as an independent. This meant that the Coalition government was reduced to 74 members, with the combined Labor and cross-bench members at 76 members, a situation of minority government. Enough of the cross-benchers were prepared to guarantee confidence and supply for the government to survive, but would not necessarily agree to support all government legislation.

### 19.5 ACTIVITY

Using internet resources, investigate the most recent Senate results for Victoria and answer the following:

**a.** How many quotas did the highest placed candidate receive?
**b.** How many major party candidates were elected from the passing on of surplus votes above a quota?
**c.** Name any independents or minor party candidates elected.
**d.** How many first-preference votes did these independents or minor party candidates receive?
**e.** What was the final party-by-party breakdown of the six successful candidates?

**Examining, analysing, interpreting**

### 19.5 EXERCISES

**Civics and Citizenship skills key: CS1** Remembering and understanding **CS2** Describing and explaining **CS3** Examining, analysing, interpreting **CS4** Questioning and evaluating **CS5** Reasoning, creating, proposing **CS6** Communicating, reflecting

#### 19.5 Exercise 1: Check your understanding

1. **CS1** What is the role of scrutineers during the counting of votes?
2. **CS2** How is the result in each polling place communicated to the AEC's computerised election-management system?
3. **CS2** What is required to achieve an absolute majority of votes?
4. **CS2** Outline how each of the following roles is determined following a federal election.
   (a) Government
   (b) Opposition
   (c) Prime minister
   (d) Leader of the Opposition
   (e) Ministers
   (f) Shadow ministers
5. **CS2** What is the difference between a hung parliament and minority government?
6. **CS2** Explain what is meant by each of the following terms:
   (a) *guaranteeing supply*
   (b) *guaranteeing confidence*.

#### 19.5 Exercise 2: Apply your understanding

1. **CS3** How is a quota calculated for election to the Senate?
2. **CS2** Why are preferences important in counting House of Representatives votes?
3. **CS2** Why are votes above a quota passed on at a transfer value?

4. **CS2** Explain the method for calculating the transfer value of Senate votes.
5. **CS3** Who would win the seat in the following scenario?
   First preference votes were recorded for a House of Representatives seat at an election:

| Candidate | Votes |
|---|---|
| Ahmed | 32 000 |
| Michael | 21 000 |
| Jan | 29 000 |
| Tran | 8000 |

- Voters who gave first preferences to Jan gave 18 000 second preferences to Ahmed and 11 000 second preferences to Michael.
- Voters who gave first preferences to Michael gave 8000 second preferences to Ahmed and 13 000 second preferences to Jan.
- Voters who gave first preferences to Tran gave 3000 second preferences to Ahmed and 5000 second preferences to Jan.

Try these questions in learnON for instant, corrective feedback. Go to www.jacplus.com.au.

# 19.6 The role of the prime minister and Cabinet

## 19.6.1 Policy making in Australian politics

Once the government has been elected, it is charged with the responsibility of running the country. Part of this responsibility is the development and implementation of policy — the rules and regulations which become the laws by which all Australian citizens must live. The policy-making process in Australian politics is complex. All members of parliament have a role to play in this process, although some individuals hold more influence than others.

### Backbenchers

The House of Representatives is colloquially divided into backbenchers and frontbenchers. Traditionally backbenchers are young and inexperienced members of parliament who occupy the back seats of the House of Representatives. They are involved in parliamentary debate, can serve on parliamentary committees and can suggest amendments to bills. Backbenchers can also suggest their own bills, which may or may not have the support of their party. Known as **private members' bills**, this form of policy making is rare and these bills are often unsuccessful. The Commonwealth Electoral Bill 1924 (which introduced compulsory voting to Australia) and the Euthanasia Laws Bill 1996 (which outlawed euthanasia) are two notable exceptions.

### Frontbenchers and Cabinet

Members of parliament with an allocated **portfolio** are referred to as frontbenchers — because they occupy the front rows of the House of Representatives. Frontbenchers are usually more senior party members and so they can have a significant influence on policy decisions. Frontbenchers are also members of Cabinet, a council of senior members of parliament who are specifically chosen to assist the prime minister with policy decisions and other executive functions. Interestingly, the Cabinet is not mentioned in the Constitution and each government is free to determine its specific functions. As a result, the sitting prime minister has a significant influence on how the Cabinet works. Furthermore, the prime minister is free to shuffle the roles of Cabinet members if he or she feels such a change is necessary.

**FIGURE 1** The House of Representatives. Notice the long front bench where Cabinet members usually sit. The prime minister and leader of the Opposition sit on opposite sides of the large table in the middle of the chamber.

A properly functioning Cabinet should direct government policy and make decisions regarding the most important national concerns. During the private and confidential meetings of Cabinet, issues and policies are discussed and votes conducted. Once a Cabinet vote has been cast, the final verdict must be supported by all members of Cabinet, regardless of personal opinion. This is known as Cabinet solidarity.

### The prime minister

The final decision-making power in Australian politics is often left with the prime minister. Although the Governor-General can also make important decisions (mainly procedural in nature), the prime minister can develop his or her own policies, sometimes in contrast to the views expressed by the prime minister's Cabinet members. Prime ministerial policies still need to follow the same pathways as regular bills, and in this way the power of the prime minister is kept in check.

## 19.6.2 Shaping Australian policy and law

### Setting the policy agenda

Winning an election gives a government the right and responsibility to set the policy agenda for Australia. This is known as a mandate. Governments are free to decide on which areas they will focus their policy decisions. While all government responsibilities must be carefully administered and regulated, individual prime ministers and their parties may choose to focus on particular aspects. Pressure groups and members of the public can also help set the policy agenda by attempting to influence their local members and other politicians. When successful, this influence can both contribute to the development of new policy and result in the amendment or even complete withdrawal of other policy decisions.

## Education funding — an example of government policy development

One method of developing government policy is to set up a review of existing practices, invite submissions from interested parties and the general public, and then have the review panel make recommendations to assist in the development of policy. Although the provision of education has been a state government responsibility since federation, the Commonwealth government has provided additional funding to both government and non-government schools since the 1960s. Different funding models have been attempted over the years, with advocates for government schools, independent schools and Catholic schools all arguing for increased funding for their particular sectors.

Different federal governments have used various models, based on different policy approaches. By the time of the election of the Rudd Labor government in 2007, no real evaluation of funding models had occurred since the 1970s, so the government set up a panel in 2010 to review the issue and make recommendations about educational funding and other educational policy issues.

The review panel was chaired by businessman David Gonski. It received over 7000 submissions, consulted with over 70 education groups, and visited 39 different schools across all states. The panel completed its report late in 2011, and the government announced its policy response in early 2012. The key theme of the Gonski report was the need to allocate school funding on the basis of need, and the government set up a funding model which it believed would achieve this aim. The issue then became one of providing enough money to meet the needs.

**FIGURE 2** Funding for all schools is a shared responsibility of state and federal governments.

With the election of the Coalition government in 2013, the incoming government committed to the principles of the Gonski review, but issues arose in relation to the proportion of funds provided by the federal and state governments. By 2017, it was clear that the original aims of the Gonski review were not being met, so Gonski was commissioned to conduct a second review to provide advice to government on changes to education funding policy. This report was presented in 2018 and has provided the basis for

education funding policy by both the Coalition and Labor, although there has been disagreement over the detailed implementation of the recommendations of the review.

Although political considerations have influenced the actions taken by different political parties, the use of an independent review to help develop government policy remains a useful approach for governments to adopt. It allows for input from a wide variety of different groups and individuals from across society, and so can provide government with ideas that reflect community wishes.

## Parliamentary debate

Although the exact function of both houses of the Australian parliament differ, their general purpose remains the same — to debate issues of national significance and the laws proposed to deal with these issues. Within the walls of parliament, our elected representatives debate the merit of proposed legislation. Members of the ruling party, the Opposition and members of minor parties all participate in these discussions. Question Time is a designated part of the parliamentary schedule during which all members of parliament can pose questions to other members and ministers. Members of the Opposition are free to question the government but often MPs ask members of their own party questions instead. Designed to provide an opportunity for ministers to promote their opinions or policies, these questions are known as 'Dorothy Dixers'.

Through these questions and debates, government decisions are scrutinised and the power of the ruling party is closely monitored. The role of the Opposition party, and that of the leader of the Opposition in particular, is crucial as they have the most opportunity to ensure the accountability of the prime minister and Cabinet. This includes maintaining a close watch on the spending of public money and the administrative actions of the government.

## 19.6 EXERCISES

**Civics and Citizenship skills key: CS1** Remembering and understanding **CS2** Describing and explaining **CS3** Examining, analysing, interpreting **CS4** Questioning and evaluating **CS5** Reasoning, creating, proposing **CS6** Communicating, reflecting

### 19.6 Exercise 1: Check your understanding

1. **CS1** What are three roles or responsibilities of parliamentary backbenchers?
2. **CS1** Who is final decision-making power in Australian politics often left with?
3. **CS1** During the private and confidential meetings of Cabinet, issues and policies are discussed and votes conducted. Once a Cabinet vote has been cast, who needs to support the final verdict? What is this known as?
4. **CS2** Young or inexperienced members of parliament occupy the back seats of the House of Representatives and the more senior party members occupy the front seats of the House of Representatives. Explain why this is so.
5. **CS2** What is the role of Question Time in Parliament?

### 19.6 Exercise 2: Apply your understanding

1. **CS3** Do you believe that the Cabinet has any real power in the decision-making process in Australian politics? Justify your response.
2. **CS5** Should the power of the prime minister be restricted? What are the positive and negative implications of the prime minister having a large amount of individual power?
3. **CS3** Identify two sources of influence in the development of government policies.
4. **CS3** What are the advantages of setting up a review panel to provide recommendations in relation to policy development?
5. **CS6** What is 'parliamentary scrutiny' and why is it a significant part of our political system?

Try these questions in learnON for instant, corrective feedback. Go to www.jacplus.com.au.

# 19.7 SkillBuilder: Creating and analysing a table

online only

## What is a table?

A table is a way of displaying information, or data, in an organised way. The data is arranged in columns (reading down) and rows (reading across). A table is sometimes also called a grid, because the rows and columns are separated by lines, which form a grid.

### Select your learnON format to access:

- an explanation of the skill (Tell me)
- a step-by-step process to develop the skill (Show me)
- an activity to allow you to practise the skill (Let me do it).

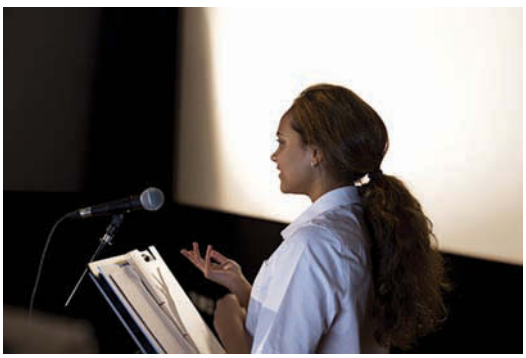
| | 1901 | | 2018 | |
|---|---|---|---|---|
| | Population | Seats | Population | Seats |
| NSW | 1 350 000 | 26 | 7 890 000 | 48 |
| Victoria | 1 200 000 | 23 | 6 270 000 | 38 |
| Queensland | 498 000 | 9 | 4 970 000 | 30 |
| South Australia | 363 000 | 7 | 1 720 000 | 10 |
| Western Australia | 184 000 | 5 | 2 670 000 | 15 |
| Tasmania | 172 000 | 5 | 521 000 | 5 |
| Northern Territory | | | 245 800 | 2 |
| ACT | | | 406 700 | 3 |
| Total | **3 767 000** | **75** | **24 694 500** | **151** |

# 19.8 Thinking Big research project: Founding a political party

online only

## SCENARIO

Imagine you have decided to establish your own political party. What would be your core beliefs? How would you like to improve Australia? What specific policies would you propose to achieve your aims? Prepare a policy document for your new political party, outlining your beliefs, policy priorities and vision for Australia.



### Select your learnON format to access:

- the full project scenario
- details of the project task
- resources to guide your project work
- an assessment rubric.

### Resources

**ProjectsPLUS** Thinking Big research project: Founding a political party (pro-0197)

# 19.9 Review

online only

## 19.9.1 Key knowledge summary

Use this dot point summary to review the content covered in this topic.

## 19.9.2 Reflection

Reflect on your learning using the activities and resources provided.

### on Resources

**eWorkbook** Reflection (doc-31732)
Crossword (doc-31733)

**Interactivity** Choosing a government crossword (int-5435)

## KEY TERMS

**Australian Electoral Commission** an independent body that organises and runs elections in Australia
**coalition** an alliance between two or more political parties, formed to improve their chances of winning an election and forming government
**eligible voters** Australian citizens who are over 18 years old and are on the electoral roll, which is an official register of voters
**formal vote** a ballot paper that has been filled out correctly
**informal vote** a ballot paper that has not been filled out correctly and therefore will not be counted
**portfolio** an area of responsibility given to a minister, such as health, education or defence
**private members' bills** bills that are proposed by members of the House of Representatives on their own behalf rather than on behalf of the government
**quota** in the Senate, refers to the share of votes required to be elected. It is calculated using the total number of votes cast and the number of vacancies to be filled.
**scrutineer** a representative of a parliamentary candidate who attends the counting of votes to ensure the count is fair
**suffrage** or **franchise** the right to vote

# 19.7 SkillBuilder: Creating and analysing a table

## 19.7.1 Tell me

### What is a table?

A table is a way of displaying information, or data, in an organised way. The data (text or numbers) is arranged in columns (reading down) and rows (reading across). A table is sometimes called a grid, because the rows and columns are separated by lines, which form a grid.

### How are tables useful?

- Tables provide a lot of information in a small amount of space.
- They are a very good way of arranging data so it can be easily understood.
- The column and row headings help tell you what the data is about.
- Graphs can be created from the data in the table.
- The information in a table can be used to help people make decisions.

## 19.7.2 Show me

You are given a set of figures that provide details of the number of House of Representatives seats in 1901 compared with 2018, and the state-by-state population for 1901 and 2018. You will be required to analyse and interpret this data, so you will need to create a table to assist you.

In 1901, the first Australian parliament had 26 members from NSW, 23 from Victoria, 9 from Queensland, 7 from South Australia, and 5 each from Western Australia and Tasmania. The population breakdown of the states in 1901 was as follows: NSW 1.35 million people, Victoria 1.2 million, Queensland 498 000, South Australia 363 000, Western Australia 184 000 and Tasmania 172 000. In 1901, the Northern Territory population was included in South Australia, and the ACT in New South Wales.

In 2018, the breakdown of seats in the federal lower house was NSW 47, Victoria 38, Queensland 30, Western Australia 16, South Australia 10, Tasmania 5, the ACT 3, and the Northern Territory 2. Australian population in 2018 was: NSW 7.89 million, Victoria 6.27 million, Queensland 4.97 million, Western Australia 2.67 million, South Australia 1.72 million, Tasmania 521 000, Northern Territory 245 800 and the ACT 406 700.

This data can be summarised in a table by placing the dates, population and number of seats along the top as column headings, with the names of the states as labels for the rows (see **TABLE 1**).

**TABLE 1** Comparison of population and House of Representatives seats, 1901 and 2018

| | 1901 | | 2018 | |
|---|---|---|---|---|
| | Population | Seats | Population | Seats |
| NSW | 1 350 000 | 26 | 7 890 000 | 47 |
| Victoria | 1 200 000 | 23 | 6 270 000 | 38 |
| Queensland | 498 000 | 9 | 4 970 000 | 30 |
| South Australia | 363 000 | 7 | 1 720 000 | 10 |
| Western Australia | 184 000 | 5 | 2 670 000 | 16 |
| Tasmania | 172 000 | 5 | 521 000 | 5 |
| ACT | | | 406 700 | 3 |
| Northern Territory | | | 245 800 | 2 |
| Total | **3 767 000** | **75** | **24 693 500** | **151** |

*Note:* 2018 figures represent total number of seats to be contested from 2017 onwards.

We can now use the table to analyse and interpret the data.

1. As the total number of seats in the lower house has doubled since 1901, why hasn't the number of seats in each state simply doubled?

   *The number of seats has not doubled for each state because the states have grown at different rates. The population of Australia is more than six times larger than it was in 1901, but the parliament is not six times larger. The number of seats per state is proportionate to the population of the state.*
2. Compare New South Wales' proportion of the total population in 1901 with that in 2018. Has the state maintained, increased or decreased its share of the seats in the House of Representatives? Explain your response.

   *New South Wales had a little more than a third of Australia's population in 1901 and just over a third of the seats. Today New South Wales has just under a third of Australia's population with just under a third of the seats, so it has maintained a proportion appropriate to its population.*
3. Which state has experienced the greatest increase in its share of the number of seats since 1901? Why has this occurred?

   *Queensland has experienced the greatest increase in its share of seats because of the rate at which its population has grown since 1901.*
4. The number of seats in Tasmania has not increased despite an increase in population. Why is this?

   *The Constitution dictates that no state can have less than five seats in the House of Representatives, so Tasmania had more than its proportional 'fair share' in 1901. Tasmania's population has not grown enough to justify any additional seats.*
5. Which state has the largest average population per electorate? Which state has the smallest average population per electorate?

   *Western Australia has an average population of 166 875 per electorate (2 670 000 divided by 16), while Tasmania has an average population of 104 200 per electorate (521 000 divided by 5).*

## 19.7.3 Let me do it

Complete the following activities to practise your skills.

### 19.7 ACTIVITIES

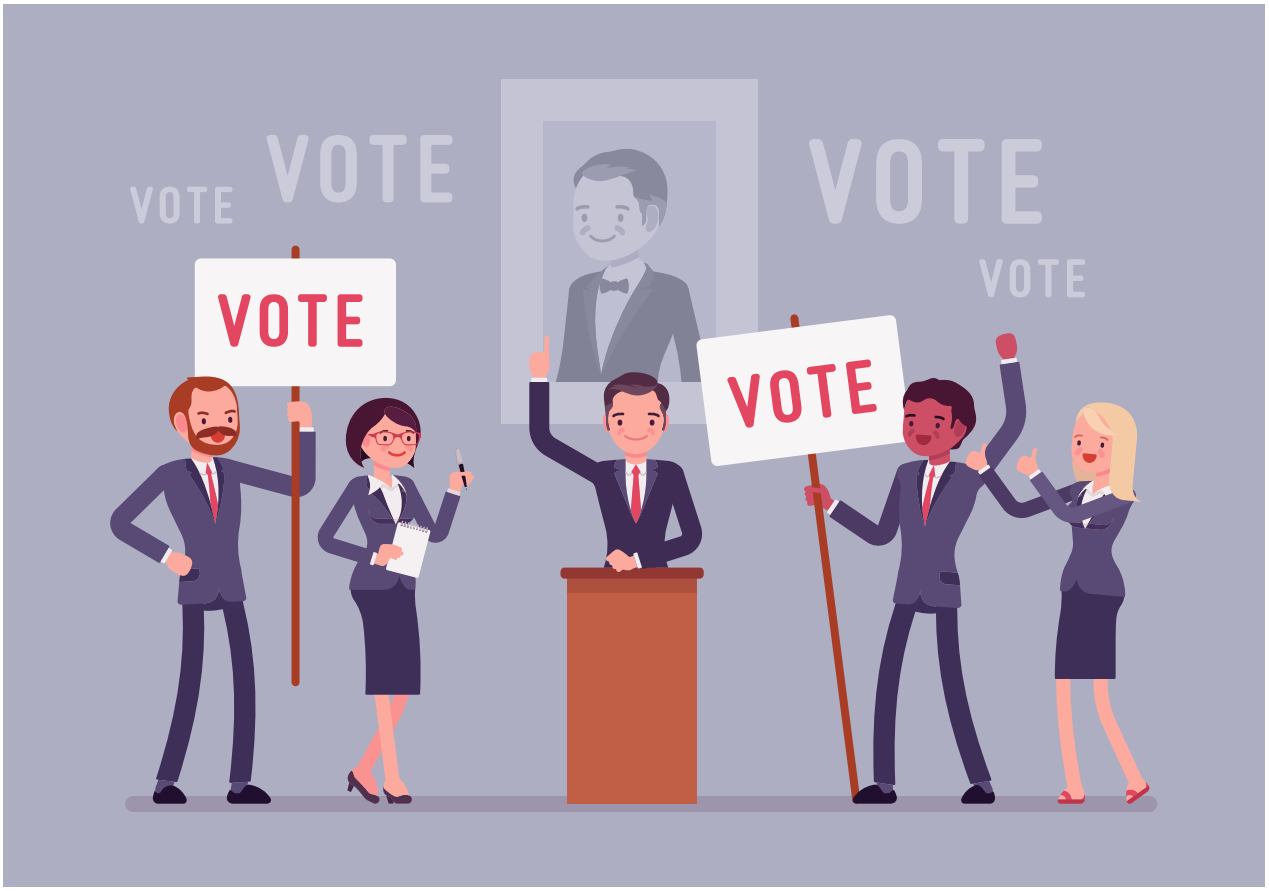
1. Draw up a table using the following data.
   In the 2013 election, Labor won 55 seats, the Coalition won 90 seats, and the Greens retained their one seat. Two new parties, Palmer United Party and Katter's Australian Party, each won a seat in Queensland, and two independents were also elected.
   In 2016 in the House of Representatives, Labor won 69 seats, the Liberal–National coalition won 76 seats, the Greens won one seat, the Nick Xenophon Team (now Centre Alliance) won one seat, Katter's Australian Party won one seat, and independents won two seats.
2. Now practise your analysing skills by using your table to answer the following questions.
   (a) Under the principle of majority rule, what was the actual majority of the Coalition over all other parties?
   (b) How many seats did the Coalition lose in the 2016 election compared with the 2013 election?
   (c) How many seats did the Labor Party gain in the 2016 election?
   (d) What is the size of the majority won by the Liberal–National coalition in 2016?
   (e) By the time of the 2019 election, the Coalition was a minority government, with 74 seats to Labor's 69, and 7 cross-benchers. Assuming the cross-benchers retained their seats, how many seats would the Coalition have had to win from Labor to form government in their own right?
   (f) Who won the 2019 election? Did they win a majority in their own right, or have they had to rely on cross-bench members?

# 19.8 Thinking Big research project: Founding a political party

## Scenario

For most of the last 70 years, Australia has had two major political groupings — the Australian Labor Party on one side, and the coalition of the Liberal and National parties on the other. Over 80 per cent of voters would vote for one side or the other. Support for the major parties has been falling in recent years, with minor parties gaining greater support.

Imagine you have decided to establish your own political party. What would be your core beliefs? How would you like to improve Australia? What specific policies would you propose to achieve your aims?




## Task

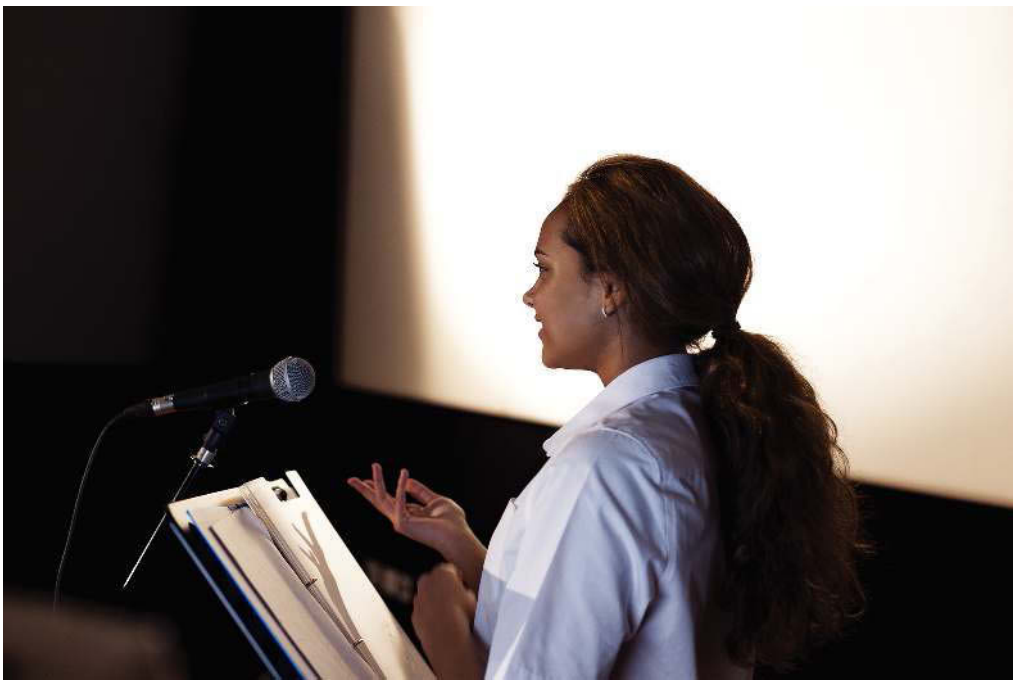
Prepare a policy document for your new political party, outlining your beliefs, policy priorities and vision for Australia.

Your policy document should include:

- your basic beliefs — the principles upon which your party is based
- your policy priorities — the most important things you want to achieve
- policy positions on all major areas of government activity — health, education, taxation, defence, pensions and social services, immigration, the environment, wages and employment, sport, the arts, Indigenous affairs, trade, and any others you particularly wish to address.

## Process

- Open the ProjectsPLUS application in the Resources for this topic. Click on the **Start new project** button to enter the project due date and set up your project group if you wish. You may work individually or in pairs, depending on your teacher's preference. Save your settings and the project will be launched.
- Navigate to the **Research forum**, where you will find starter topics loaded to guide your research. You can add further topics to the Research forum if you wish. In the **Media centre** you will find an assessment rubric and some useful weblinks.
- Use the weblinks to start your research.
  - Examine a selection of existing party platforms to get an idea of the type of statements usually included in the basic beliefs or philosophy of a political party. These are usually very broad principles rather than specific policies for action.
  - These principles should be followed by policy priorities. These are the things you think are most important to make Australia a better place — the changes you would like to make.
  - Next consider a broad range of government activity areas. Provide ideas for how these areas should be run, and ways in which they can be improved. For example, how would you improve the health system, or the welfare and pension system?
- Add your research notes to the relevant topic pages in the Research forum. When you have completed your research, you can print out the **Research report** in the Research forum to easily view all the information you have gathered, if you wish.
- Prepare your policy document, clearly outlining the beliefs, policy priorities and policy positions of your party. Be sure to give your party a name!
- Review your work thoroughly, checking for correct spelling and grammar. When you are happy with your work, present your party policy to the class and submit your policy document to your teacher for assessment.



### on Resources

**ProjectsPLUS** Thinking Big research project: Founding a political party (pro-0197)

# 19.9 Review

## 19.9.1 Key knowledge summary

### 19.2 Australia's political parties

- Political parties are groups of people who share similar opinions and values. Parties compete at election time, each hoping to win enough seats in parliament to form government.
- Major political parties include the Australian Labor Party, The Liberal Party of Australia, the National Party and the Australian Greens.
- Many minor parties have participated in the political process in recent years. These are often centred on one high-profile individual.
- In some electorates, independent members have been elected, usually with a high local profile and strong local community support.
- Minor party members and independent members are not part of the government or Opposition, and sit on the cross-benches in both the Senate and the House of Representatives.

### 19.3 Voting and the federal electoral process

- The Australian electoral system is based on the principles of universal adult suffrage, secret ballot, compulsory voting, regular elections, and preferential and proportional voting systems based on single-member and multi-member electorates.
- Our systems of voting are designed to reflect the will of the voters. This happens through preferential voting, which ensures that the candidate who is preferred by the majority of voters is likely to be elected. Proportional representation is also designed to return candidates who have the greatest support from the greatest number of voters.
- Elections in Australia occur on a Saturday. Voting takes place in polling centres, where individuals present in person, identify themselves, receive ballot papers, fill in their preferences on these papers and place them in the designated ballot boxes.

### 19.4 Influencing your vote

- All those standing for election will conduct political campaigns in order to influence voters to support them.
- Campaigns can include debates by party leaders, as well as public appearances and advertising campaigns.

### 19.5 After the election — the formation of government

- Counting of votes commences immediately after polling centres close on election day.
- Counting of House of Representatives votes occur first, with results communicated to Divisional Returning Officers to be totalled for each electorate. If a candidate fails to gain more than 50 per cent of first preference votes, preferences from other candidates are distributed until a candidate achieves more than 50 per cent.
- Television channels often run programs on election night, providing viewers with updates on the progress of the vote count.
- Senate vote counting follows the counting of lower house votes. This can be a long process, as preferences have to be distributed amongst all those candidates who have not achieved a quota on first preferences.
- Following the vote count, a party or coalition of parties that wins a majority in the House of Representatives becomes the government, its leader becomes Prime Minister, and its leading members become government ministers.
- The largest party not elected to government becomes the Opposition, its leader is leader of the Opposition, and other leading members become shadow ministers.

### 19.6 The role of the prime minister and Cabinet

- The prime minister and Cabinet have an important role to play in developing policies and making decisions on behalf of Australians. Different areas are divided into portfolios, which are managed by frontbenchers (senior members of parliament).
- Backbenchers also have a role to play in policy development as they will often be approached directly by voters with concerns on particular issues.
- Governments often set up inquiries and policy reviews to examine areas of interest or concern, in order to gain public feedback on an issue, and to receive recommendations for future action.

## 19.9.2 Reflection

Complete the following to reflect on your learning.

### 19.9 ACTIVITIES

Revisit the inquiry question posed in the Overview:

**Parliament, elections and opposing parties. Is governing Australia about more than arguing politicians?**

1. Now that you have completed this topic, what is your view on the question? Discuss with a partner. Has your learning in this topic changed your view? If so, how?
2. Write a paragraph in response to the inquiry question, outlining your views.

### on Resources

**eWorkbook** Reflection (doc-31732)
Crossword (doc-31733)

**Interactivity** Choosing a government crossword (int-5435)

### KEY TERMS

**Australian Electoral Commission** an independent body that organises and runs elections in Australia
**coalition** an alliance between two or more political parties, formed to improve their chances of winning an election and forming government
**eligible voters** Australian citizens who are over 18 years old and are on the electoral roll, which is an official register of voters
**formal vote** a ballot paper that has been filled out correctly
**informal vote** a ballot paper that has not been filled out correctly and therefore will not be counted
**portfolio** an area of responsibility given to a minister, such as health, education or defence
**private members' bills** bills that are proposed by members of the House of Representatives on their own behalf rather than on behalf of the government
**quota** in the Senate, refers to the share of votes required to be elected. It is calculated using the total number of votes cast and the number of vacancies to be filled.
**scrutineer** a representative of a parliamentary candidate who attends the counting of votes to ensure the count is fair
**suffrage or franchise** the right to vote

# 20 Australia's justice system and the courts

## 20.1 Overview

Jurisdiction, judges and juries — how does the justice system punish and protect Australian citizens?

### 20.1.1 How does Australia's justice system work?

Australia's justice system values these principles: fair treatment by the courts for everyone, independent judges who are free to make fair decisions, and the right to appeal a decision made by a court. These principles contribute to a democratic and just society.

But how do our justice system and the courts work? Why do we have so many different courts? What different purposes does this variety of courts serve?

Even if we never commit an offence or become involved in a legal dispute ourselves, we could still find ourselves in contact with the court system. This may occur through being a witness to something that might be brought before the courts, or perhaps being called upon to do jury duty, or even just attending court to support someone we know. Our justice system and the courts are important elements of our democratic society, and it is important that we all have a basic understanding of how they work.

**on Resources**

**eWorkbook** Customisable worksheets for this topic

**Video eLesson** Going to court (eles-2362)

**LEARNING SEQUENCE**


**20.1** Overview
**20.2** The court hierarchy
**20.3** The roles of particular courts
**20.4** Different courts, different jurisdictions
**20.5** How the courts make laws
**20.6** **SkillBuilder:** Problem solving and decision making online only
**20.7** Equality before the law
**20.8** The independence of our courts
**20.9** The right of appeal
**20.10** When the system fails
**20.11** **SkillBuilder:** Creating and analysing a survey online only
**20.12** **Thinking Big research project:** Protecting human rights online only
**20.13** **Review** online only


To access a pre-test and starter questions and receive immediate, **corrective feedback** and **sample responses** to every question, select your learnON format at www.jacplus.com.au.

# 20.2 The court hierarchy

## 20.2.1 Levels of courts within the legal system

Our legal system is made up of many different courts, each with different powers and responsibilities. These courts are arranged in different levels, in order of their power and importance. This arrangement is known as a hierarchy. The higher courts, which hear the most serious matters, are at the top of the hierarchy; the lower courts, which hear less serious matters, are at the bottom of the hierarchy.

**FIGURE 1** The higher the court in the hierarchy, the more expensive it will be to bring the case.

## 20.2.2 Criminal cases and civil cases

### Criminal law

Criminal law protects the community from the harmful actions of others. When a person commits a crime, the state **prosecutes** that person by having them taken before a court. Our courts operate under an **adversary system**. This means that two opposing sides present their arguments to an independent umpire — a **judge** or **magistrate**. The prosecuting side (the prosecution) is required to prove the guilt of the person accused of the crime. The accused person has a right to present his or her side of the argument (known as the defence). In criminal cases, a person found to be guilty will be sentenced to receive a punishment, such as imprisonment or a fine.

**FIGURE 2** What happens in criminal cases

### Civil law

Civil law deals with non-criminal disputes between individuals or groups. These can arise in matters related to business dealings, or when a person is harmed by the careless actions of another. Civil cases also operate under the adversarial system, with each side presenting their arguments before an independent judge or magistrate. The person making the complaint is known as the **plaintiff** and the person accused of doing the harm is known as the **defendant**. If the plaintiff is successful, the defendant can be required to provide compensation for the harm done.

An area of law for which a court has responsibility is known as its **jurisdiction**. In criminal cases the higher courts have jurisdiction over the most serious crimes. In civil cases the higher courts have jurisdiction over matters that will affect many people, involve complex legal issues or large sums of money. Cases heard in higher courts will be much more expensive for the community as well as for those bringing the action. If an individual is unhappy with the ruling in a lower court, he or she can apply to have the case heard in a higher court. This process is referred to as 'making an appeal against a court decision'.

**FIGURE 3** What happens in civil cases

## 20.2.3 The lower courts

The lowest court in the Victorian court hierarchy is the Magistrates' Court. There is a relatively large number of these courts across the state because they hear more than 90 per cent of all cases that go to court. In Victoria there are ten Magistrates' Courts in metropolitan Melbourne, and over 40 in regional towns and cities. The Federal Circuit Court of Australia is a lower court that deals with matters relating to laws passed by the federal parliament. In Victoria it sits in Melbourne and Dandenong in the metropolitan area, as well as major regional centres such as Geelong, Bendigo, Morwell and Shepparton. It hears matters relating to family law and child support, bankruptcy, copyright, human rights, industrial law, migration, privacy and trade practice.

**FIGURE 4** The historic courthouse in Bendigo is one of over 40 courthouses used for Magistrates' Court hearings throughout regional areas of Victoria.

## 20.2.4 Intermediate courts

In other states, intermediate courts are generally known as District Courts, but in Victoria the court operating at this level is called the County Court. The County Court hears more serious criminal cases such as armed robbery, serious drug-related offences and serious assaults, including sexual assaults. Murder-related cases are heard in the highest state court, the Supreme Court.

In criminal cases a case will be heard by a judge and a **jury** of 12 people. The jury is required to consider all the facts presented by the prosecution and the defence, and

to decide whether the **accused** is guilty or not guilty. The judge will help the jury if there are complex legal issues to be decided. If the jury decides that the accused is guilty, the judge will determine the appropriate punishment.

Intermediate courts usually have jurisdiction over a wide range of civil disputes, including claims made for workplace and motor vehicle injury, and disputes involving business dealings. A jury is usually not required in a civil case unless either the plaintiff or the defendant requests one. When juries are used they usually consist of between four and seven jurors.

**FIGURE 5** Typical layout of a courtroom

- **A** The judge's associate is a trained lawyer who manages much of the paperwork.
- **B** Anyone whose name is on the electoral roll can be called as a juror. In a criminal case, the jury consists of 12 people. The jury must decide beyond reasonable doubt whether a person is guilty. All the jurors have to agree.
- **C** The prosecutor has to convince the jury that the accused person is guilty. This is done by asking questions of witnesses to draw out relevant information.
- **D** The judge is addressed as 'Your Honour'. The judge listens to arguments presented by the prosecutor and the counsel for the defence, and is not allowed to ask a witness questions (except to clarify a point). The judge has to make sure jury members understand the proceedings and evidence presented. If a jury announces a guilty verdict, the judge decides the sentence.
- **E** The counsel for the defence represents the accused. If the accused pleads guilty, the counsel for the defence presents arguments to try to lessen the punishment. If the client pleads not guilty, defence counsel must convince the judge or jury that the client is innocent.
- **F** The tipstaff helps the judge keep order in the court.
- **G** Witness box, from which people give evidence
- **H** Members of the public, who listen to and observe the court proceedings
- **I** A prison officer from the prison where the accused has been held
- **J** The accused
- **K** Members of the media, who observe proceedings so they can report what happens.

## 20.2.5 Higher courts

The highest court in Victoria is the Supreme Court. It hears the most serious criminal matters, as well as civil matters involving very large sums of money. The Supreme Court is divided into a trial division and an appeal division. (See subtopic 20.3 for more detail on the role of these divisions.)

On a similar level to state Supreme Courts in the Australian court hierarchy are the Federal Court and the Family Court. (The role of the Family Court is discussed in subtopic 20.3.) The Federal Court of Australia has a largely civil jurisdiction, although it can hear criminal matters if they are part of Commonwealth law. As most criminal law is determined by state governments, most criminal cases are heard in state courts. The Federal Court can hear civil disputes involving large businesses that operate in a number of different states, disputes relating to federal consumer protection laws, disputes over customs or taxation issues, or **industrial relations** matters. The Federal Circuit Court is the relevant lower court in the same hierarchy as the Federal Court.

**FIGURE 6** The Australian court hierarchy

| Levels in the hierarchy | Victorian state jurisdiction | Commonwealth jurisdiction |
|---|---|---|
| **Highest Australian court** | High Court of Australia | |
| **Higher courts** | Supreme Court, including Court of Appeal | Federal Court<br>Family Court |
| **Intermediate courts** | County Court | |
| **Lower courts** | Magistrates' Court | Federal Circuit Court |

## 20.2.6 High Court of Australia

The High Court of Australia is our highest court. It performs the following roles:

- It is the highest court of appeal from the state court system.
- It has the power to interpret the Australian Constitution. The court reads, interprets and applies the words of the Constitution in disputes when they arise.
- It resolves disputes between state governments, and between state governments and the Commonwealth Government.

**FIGURE 7** The High Court of Australia in Canberra is at the peak of the court hierarchy.

## Resources

**Interactivity** In the courtroom (int-5656)

### 20.2 ACTIVITY

Use internet resources to investigate the operation of the Federal Circuit Court and the Federal Court of Australia.

1. Identify and explain two areas of law where each court has jurisdiction.
2. Describe one recent case in each court, including the following.
   (a) Who was involved?
   (b) What were the main facts of the case?
   (c) What area of law was involved?
   (d) What was the result of the case?

**Examining, analysing, interpreting**

### 20.2 EXERCISES

**Civics and Citizenship skills key: CS1** Remembering and understanding **CS2** Describing and explaining **CS3** Examining, analysing, interpreting **CS4** Questioning and evaluating **CS5** Reasoning, creating, proposing **CS6** Communicating, reflecting

#### 20.2 Exercise 1: Check your understanding

1. **CS1** Define the following terms in your own words.
   (a) Plaintiff
   (b) Defendant
   (c) Prosecution
   (d) Adversary system
   (e) Jurisdiction
2. **CS1** What is a court hierarchy?
3. **CS1** What is the name of the intermediate court in Victoria?
4. **CS1** What are the three main functions of the High Court of Australia?
5. **CS1** What is the difference between a judge and a magistrate?
6. **CS2** Explain the difference between civil law and criminal law.

#### 20.2 Exercise 2: Apply your understanding

1. **CS6** Do the following cases involve criminal or civil law? Explain your answers.
   (a) You are disturbed by neighbours loudly renovating their property at 2 am.
   (b) Your aunty is convicted of driving with a blood alcohol content of 0.09.
   (c) Your smartphone is stolen by a robber armed with a baseball bat.
   (d) Your strict-vegetarian friend finds a half-eaten prawn in a salad sandwich bought from a café and realises that she has just eaten the other half.
   (e) Your leg has to be set in a plaster cast when you slip on some detergent that has been spilled on the supermarket floor.
2. **CS6** Do you think that a court hierarchy is necessary? Explain your answer.
3. **CS2** In which courts and in which types of cases is a jury required?
4. **CS3** If a person was accused of smuggling guns and ammunition into Australia, in breach of Commonwealth law, which court would hear this criminal case?
5. **CS3** In 1983 there was a dispute between the federal government and the Tasmanian state government over the building of a dam on the Franklin River in south-west Tasmania. Which court would have heard this case?

Try these questions in learnON for instant, corrective feedback. Go to www.jacplus.com.au.

# 20.3 The roles of particular courts

## 20.3.1 Jurisdiction

The efficiency of our legal system is helped by having different courts with different jurisdictions. This allows the judges and magistrates to specialise in particular areas of law, and to apply the law consistently across all cases. It also allows for serious matters to be given the time they need for a fair trial in the higher courts, while less serious cases can be dealt with more quickly and cheaply in lower courts. To illustrate these principles, we examine the state Supreme Court, the Magistrates' Court, and the federal Family Court.

## 20.3.2 The Supreme Court

The Victorian Supreme Court has two main types of jurisdiction: an **original jurisdiction** and an **appellate jurisdiction**. There is a clear separation between these two jurisdictions, with some judges specialising in only hearing appeals, and other judges in only hearing original trials.

### Original jurisdiction

The original jurisdiction of the Supreme Court is carried out by the trial division. It includes both criminal and civil law cases, and the court sits with only one judge. In criminal matters, there will also be a jury of 12 citizens who have to weigh up the facts and decide on the guilt or innocence of the accused. No jury is required if the accused pleads guilty to the charges, and the main role of the judge then is to listen to arguments from the prosecution and the defence relating to the severity of the punishment. Based on these arguments, the judge decides on the length of a prison term or other appropriate penalty.

In its criminal jurisdiction, the Supreme Court will deal with only the most serious crimes such as murder, attempted murder or **manslaughter**.

Similarly, in its civil jurisdiction, the Supreme Court hears only the most serious cases. In the past this meant it heard cases involving disputes over very large sums of money. There was an upper limit on the amount of money that could be involved in civil cases dealt with in the County Court, with all cases above that limit heard in the Supreme Court. Since 2007, there has been no upper monetary limit on the civil jurisdiction of the County Court, so civil cases heard in the Supreme Court tend to be those involving the most complex legal issues. These cases usually require the higher level of legal knowledge and experience of Supreme Court justices to resolve them.

**FIGURE 1** Jury members in criminal trials have to carefully weigh up the evidence to decide whether or not the accused is guilty.

**FIGURE 2** Only civil disputes involving complex legal issues are likely to be heard in the Supreme Court.

### Appellate jurisdiction

As mentioned earlier, if either party is unhappy with a decision in a lower court, that party can make an appeal to a higher court. These appeals are usually heard by the Court of Appeal. The Court of Appeal hears

appeals from intermediate courts and from the trial division of the Supreme Court. When hearing an appeal, the court usually sits with either three or five judges, depending on the seriousness of the case.

**FIGURE 3** When the Supreme Court acts as the Court of Appeal, it usually sits with three or five judges.

## 20.3.3 The Magistrates' Court

Up to 90 per cent of all cases are heard in the Magistrates' Court, which has both criminal and civil jurisdiction.

### Criminal jurisdiction

The criminal jurisdiction of the Magistrates' Court usually covers relatively minor offences, sometimes known as summary offences. These include driving offences; many cases of theft, such as shoplifting; assault cases where the victim has received relatively minor injuries; and public order cases, such as being drunk and disorderly in a public place.

The Magistrates' Court also performs some important roles in more serious criminal cases.

- Most cases heard before the County Court or the Supreme Court take time to prepare, and are expensive to run. Both the prosecution and the defence can take months to organise witnesses and other evidence in readiness for a fair trial. Before resources are dedicated to preparing all this material, it is useful to test whether or not the prosecution case is strong enough to be likely to convince a jury of the guilt of the accused.
- It is also important to find out in advance whether or not the accused is planning to plead guilty or not guilty.
- In our legal system an accused is presumed innocent until proven guilty. In many cases it would be inappropriate to hold an accused in custody for months awaiting a trial.

The Magistrates' Court carries out significant functions in relation to all these issues.

## Bail and remand

When a person is charged with an offence that is serious enough to be heard by an intermediate court or the Supreme Court, a decision has to be made to either detain the accused in custody or release them into the community to await trial. Releasing an accused into the community is known as granting **bail**.

If the arresting police officers believe that the accused presents a danger to the community but the accused wishes to be released, a bail hearing will be held. This hearing will often be held at the Magistrates' Court. Both sides will present their arguments to the magistrate, who will then decide whether to grant bail. If bail is granted, the magistrate may require that a **surety** be lodged with the court, and may also impose conditions on the accused. These can include a requirement that the accused regularly report to their local police station. If bail is not granted, the accused will be **remanded in custody** until the case goes to trial.

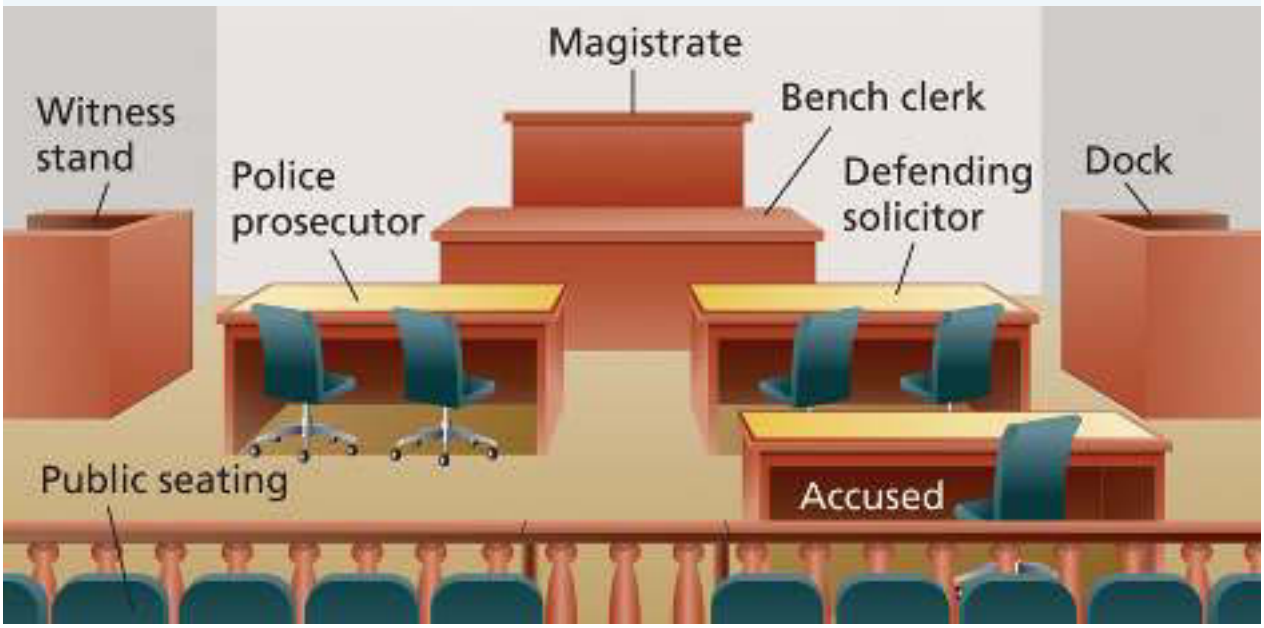
**FIGURE 4** People remanded in custody are held in prison until their case comes to court.

## Committal hearings

A committal hearing is a preliminary hearing held to determine whether or not the prosecution case is strong enough to justify a full jury trial in the Supreme Court or in the County Court. It also provides an opportunity for an accused to indicate whether he or she intends to plead guilty or not guilty. An accused who pleads guilty will be committed to stand trial in the Supreme Court or County Court.

If the accused pleads not guilty, the prosecution is required to present its evidence to a magistrate, and that evidence can be challenged by the defence. The magistrate does not have to decide whether or not the accused is guilty. Instead, the magistrate assesses whether the accused should be committed to stand trial before a judge and jury, or whether the charges should be dismissed because the evidence is insufficient for a trial. The committal hearing also gives the accused a chance to hear details of the prosecution case, possibly encouraging the accused to plead guilty to some or all of the charges. This can ultimately save time and resources when the case eventually goes to trial.

**FIGURE 5** Typical layout of a Magistrates' Court, where minor offences and committal hearings are dealt with



### Civil jurisdiction

A variety of civil matters can be heard in the Magistrates' Court. These are usually of a less serious nature than those matters heard by intermediate courts or the Supreme Court. The jurisdiction of the Magistrates' Court is limited to hearing cases where the amount of money involved does not exceed a prescribed amount. In Victoria these courts can only hear civil matters involving less than $100 000. Civil cases involving sums of money that exceed this amount will be held in higher courts in the hierarchy such as the County Court or the Supreme Court.

## 20.3.4 Family Court of Australia

The Family Court is a federal court that handles disputes over divorce, parenting arrangements, child support, and property disputes following a relationship breakdown. This court was established in 1975 as a result of laws passed by the Commonwealth Parliament. It is on the same level in the court hierarchy as the Supreme Court.

The Family Court sits regularly in all capital cities, as well as major regional cities in each state. The exception is Western Australia, which has its own state-based Family Court. Relationship breakdown can be a very emotional experience for those involved, and particularly for children of the relationship. For this reason, the Family Court operates under a number of principles, including the following:

**FIGURE 6** The Family Court encourages divorcing couples to engage in mediation in the hope of reaching agreement over as many issues as possible.

- The interests and welfare of children are always at the centre of any decisions made by the court, and they are given higher priority than the wishes or preferences of parents.
- The court is required to assume that it is in the child's best interests for both parents to have equally shared parenting responsibility for the child. This does not mean that the child must spend equal time with both parents, but there must be consultation between the parents on issues related to the child's welfare.
- The court encourages separating couples to reach agreement over as many issues as possible. This can include parenting plans and agreed division of property. Reaching agreement in this way can reduce the cost of going to court.
- If a couple is unable to reach agreement, the court will provide support and assistance in this process. The court can order the couple to attend **mediation** in an attempt to resolve some of the issues in dispute. At all stages the court attempts to solve issues without the need for an expensive court hearing.
- If the parties have reached agreement over some issues, they can apply to have this agreement approved by the court. This approval by the court is known as a **consent order**, and it means that the agreement can be legally enforced by both parties.

### 20.3 EXERCISES

**Civics and Citizenship skills key: CS1** Remembering and understanding **CS2** Describing and explaining **CS3** Examining, analysing, interpreting **CS4** Questioning and evaluating **CS5** Reasoning, creating, proposing **CS6** Communicating, reflecting

#### 20.3 Exercise 1: Check your understanding

1. **CS1** Define each of the following in your own words.
   (a) Bail
   (b) Remand
   (c) Surety

(d) Committal hearing
(e) Mediation
(f) Consent order

2. **CS2** Explain the difference between original jurisdiction and appellate jurisdiction.
3. **CS2** What is the purpose of a bail hearing?
4. **CS1** What is the maximum amount of money that can be involved in a civil case heard in the Magistrates' Court?
5. **CS1** What is the maximum amount of money that can be involved in a civil case heard in the County Court?

### 20.3 Exercise 2: Apply your understanding

1. **CS2** Why does the Family Court encourage parties before it to reach agreement on as many issues as possible?
2. **CS6** In which court are the following likely to be heard?
   (a) A murder trial
   (b) An appeal from the Supreme Court
   (c) A minor traffic offence
   (d) A dispute over the division of property in a divorce
   (e) An armed robbery trial
   (f) The preliminary hearing of a rape case
   (g) A civil dispute between business partners involving $100 million
   (h) A case dealing with an aspect of the Australian Constitution
3. **CS2** Explain the purpose of committal hearings in a Magistrates' Court.
4. **CS5** How do committal hearings contribute to the fairness and efficiency of our court system?
5. **CS5** Explain why the Supreme Court is most likely to hear civil cases involving complex legal issues, rather than just those involving a large amount of money.

Try these questions in learnON for instant, corrective feedback. Go to www.jacplus.com.au.

# 20.4 Different courts, different jurisdictions

## 20.4.1 Alternate methods

Going to court can be a very expensive experience, particularly if the legal matter has to be dealt with in a higher court. On many occasions, legal disputes can be solved by alternative methods. We have already seen how the Family Court makes use of mediation as a means of resolving issues before the parties attend a court hearing. There are many other ways in which the legal system makes use of special courts and tribunals, as well as specialised procedures, to deal with particular types of disputes. These can include disputes between consumers and businesses, disputes over human rights and issues of discrimination, and disputes over environmental issues.

## 20.4.2 Consumer law disputes

Australian consumers are protected from being exploited by unscrupulous or dishonest businesses by Australian consumer law. This law is enshrined in the *Competition and Consumer Act 2010*. It was passed by the Commonwealth Parliament and applies in all states and territories.

### How does consumer law protect us?

Australian consumer law gives consumers the right to take legal action if they are the victims of certain types of behaviour by businesses selling them goods or services. In particular, consumers are protected from:

- false and misleading representations in relation to goods or services, including making claims about a product that the seller knows to be untrue
- bait advertising — when products are advertised at a certain price but only a small number are actually sold at that price, as a means of falsely luring customers to the seller's business

- businesses offering gifts or prizes to customers, and then not actually providing them
- referral selling — when a seller offers a special deal to a customer in return for that customer referring other people to the business.

**FIGURE 1** It is illegal to make claims that the seller knows to be untrue.

In addition, consumers have particular rights that are guaranteed in relation to the goods or products they buy. These include the following:

- A guarantee must be given in relation to the ownership of the goods. This means that a seller must have the legal right to sell the goods so that the buyer knows that he or she will become the legal owner once the goods have been paid for.
- Goods must be of an acceptable quality, free from defects, safe and durable.
- Goods must be fit for the purpose for which they would be expected to be used.
- Manufacturers must ensure that repairs and spare parts are available for a reasonable time after the goods are supplied.

**FIGURE 2** Manufacturers must ensure that spare parts are available for a reasonable time after the goods are supplied.

## What action can we take?

Enforcement of consumer rights is carried out by Consumer Affairs Victoria. If a consumer has a complaint against a supplier, the following process is generally recommended:

1. The consumer should attempt to sort out the problem directly with the seller, making it clear what the problem is and requesting that it be fixed. Receipts or other documents should be kept to support the claim.
2. If this fails, the consumer should write a formal letter of complaint to the business and keep a copy.
3. If direct contact with the business does not produce a result, the consumer can take the complaint to Consumer Affairs Victoria. This organisation will contact the business on the consumer's behalf and attempt to resolve the matter.

4. If the business still refuses to fix the problem, the consumer can take the matter to the Victorian Civil and Administrative Tribunal (VCAT). VCAT operates similarly to a court but is generally less formal and cheaper. A small fee usually has to be paid to lodge a claim, but there is no need to have legal representation. The tribunal will usually try to resolve the dispute through mediation, by bringing the parties together to reach agreement.
5. If the parties cannot resolve their differences, the tribunal can hold a hearing to decide the issue. This is less formal than a court hearing, but it has the power to make a decision that is legally binding on both parties.
6. If either party is dissatisfied with the decision of a tribunal, he or she can appeal to the Supreme Court. Of course, this is much more expensive.
7. In some cases, a supplier who breaches Australian consumer law may be guilty of a criminal offence and can be prosecuted in the Magistrates' Court. Consumer Affairs Victoria has the power to bring a criminal prosecution against a business or other supplier that has acted illegally under the provisions of the consumer law. For example, on a number of occasions retailers selling children's toys that have been found to be dangerous have had the toys seized and have been prosecuted.

**FIGURE 3** The buyer should always attempt to sort out the problem directly with the seller before taking legal action.

## 20.4.3 Human rights disputes

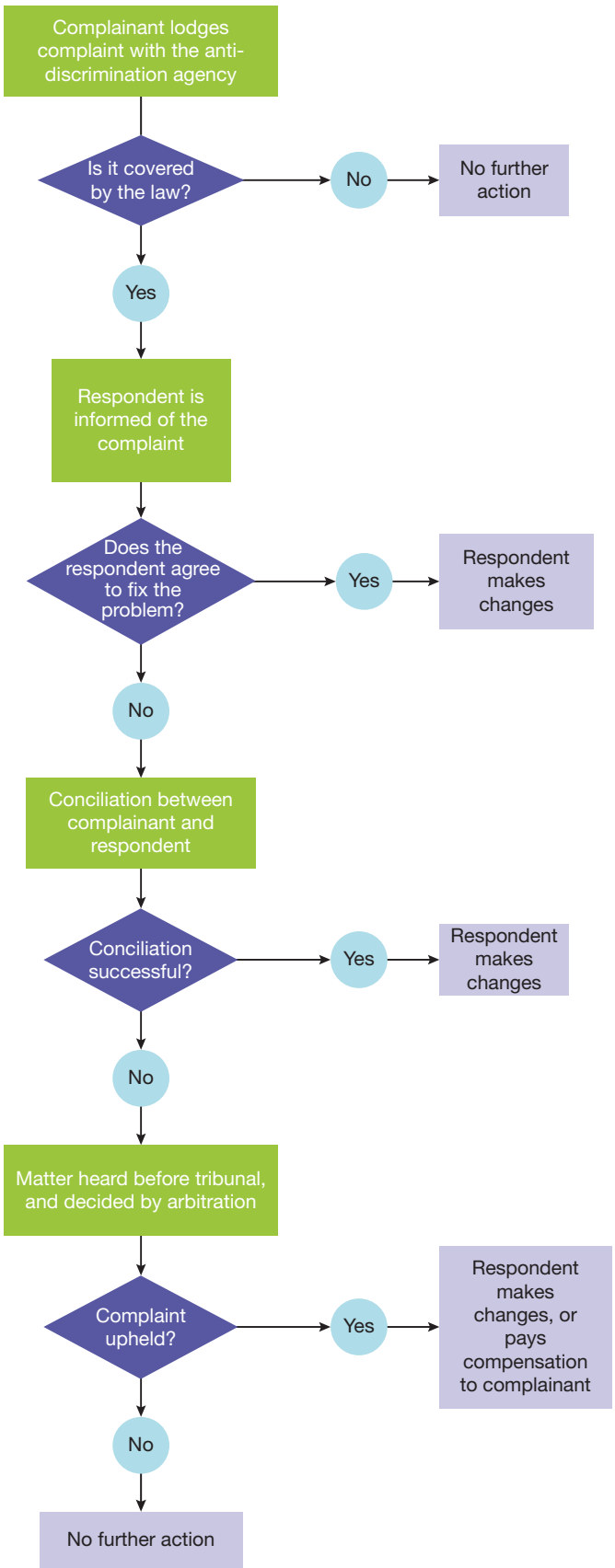
The federal and state governments in Australia have passed laws to protect our human rights. These include equal opportunity and anti-discrimination laws which make it illegal to discriminate against anyone based on characteristics such as their gender, racial or ethnic background, age, religion, marital status or sexual orientation. Each state and territory has its own anti-discrimination agency. In Victoria, this body is the Victorian Equal Opportunity and Human Rights Commission. This body has the dual role of educating the public about human rights and anti-discrimination issues, as well as dealing with complaints.

### Dealing with complaints

There is a standard procedure for dealing with complaints of discrimination or other infringements of human rights. **FIGURE 4** and the following text outline the typical process.

1. A person who believes their rights have been infringed can lodge a complaint with the Victorian Equal Opportunity and Human Rights Commission. This complaint must be in writing and can usually be lodged online, but it may also be necessary to provide evidence of the alleged discrimination. The person lodging the complaint is known as the complainant, and the individual or organisation complained about is known as the respondent.
2. Once a complaint has been lodged, representatives of the agency examine it to see whether it comes within the areas of discrimination covered by the relevant legislation. If it does not, they will contact the complainant to inform him or her that no further action will be taken.
3. If the agency believes that the complainant has been discriminated against, it will contact the respondent and provide a copy of the complaint. The respondent then has the opportunity to fix the problem and the issue is resolved.
4. If the respondent refuses to accept that the alleged discrimination has taken place, the Commission sets up a **conciliation** process. This process brings the two parties together with a conciliator in an attempt to resolve the matter.
5. If the matter cannot be resolved through conciliation, it may then be taken to VCAT.
6. VCAT operates similarly to the courts but is less formal and less expensive. It has the power of **arbitration** over the dispute. This means that both sides can present their arguments to the tribunal, and the tribunal can make a legally binding order to resolve the issue.
7. If the complaint is successful, VCAT can order the respondent to refrain from continuing the discriminatory behaviour. It can also order the respondent to pay a sum of money in compensation to the complainant. If the discrimination was employment related, the tribunal can order a respondent to reinstate the complainant to a position from which he or she was dismissed.

**FIGURE 4** The dispute-resolution process in discrimination complaints or other infringements of human rights



## 20.4.4 Environmental law disputes

The Commonwealth, state and territory governments all have laws in place to protect the environment. These laws need to be enforced when an individual or organisation has carried out actions that could cause pollution or other damage to the environment. Action taken to enforce environmental laws will usually involve administrative action, civil action or criminal action.

### Administrative action

The Victorian state government has set up an organisation that serves to educate the public on environmental issues, to assist businesses in complying with environmental laws, and to investigate possible breaches of those laws. This organisation is known as the Environment Protection Authority (EPA). The EPA has the power to issue infringement notices or penalty notices to any individual, business or other organisation that it believes is doing something which could harm the environment. This type of notice usually requires the polluter to stop the action causing the pollution, and to clean up the land or waterway that has been affected. Failure to do so can then result in legal action being taken.

**FIGURE 5** The EPA can order businesses to stop any action that causes pollution.

### Civil action

If an individual or organisation is accused of causing pollution and fails to take **remedial action** to fix an environmental problem, the EPA can begin legal action. In Victoria, environmental disputes are heard in either the Magistrates' Court or the County Court.

Civil action against a polluter can be taken if the actions causing the pollution are a result of **negligence** or **recklessness**, rather than deliberate or intentional actions. A court can order an individual or organisation to clean up the pollution, or impose a financial penalty to pay for the appropriate authorities to carry out the clean-up. If the pollution results from the normal activities of a business, a court can stop the business from operating until it changes those activities.

### Criminal action

Criminal action can be taken through the courts if there is evidence that an individual or business has deliberately or intentionally caused the pollution. A successful criminal prosecution for intentionally causing environmental damage can lead to heavy fines or even imprisonment for the person responsible, whether as an individual or as a business owner.

### 20.4 ACTIVITY

Use internet resources to investigate the Victorian Equal Opportunity and Human Rights Commission.

**a.** What are its three most important goals or aims?
**b.** What is the structure of the organisation?
**c.** Give two examples of the way in which the Commission attempts to educate the community on anti-discrimination issues.

**Examining, analysing, interpreting**

## 20.4 EXERCISES

**Civics and Citizenship skills key: CS1** Remembering and understanding **CS2** Describing and explaining **CS3** Examining, analysing, interpreting **CS4** Questioning and evaluating **CS5** Reasoning, creating, proposing **CS6** Communicating, reflecting

### 20.4 Exercise 1: Check your understanding

1. **CS1** Outline two examples of behaviour that is illegal under Australian consumer law.
2. **CS2** Describe two ways in which consumers are protected by consumer law.
3. **CS1** Identify three examples of illegal discrimination against a person or group of people.
4. **CS2** Define these terms in your own words and provide an example of each.
   (a) Conciliation
   (b) Arbitration
   (c) Negligence
   (d) Recklessness
5. **CS2** Explain one penalty that a court can impose on a business that is prosecuted for breaching environmental law.

### 20.4 Exercise 2: Apply your understanding

1. **CS2** In which circumstances could a person or organisation have criminal action brought against them for breaking environmental laws?
2. **CS2** What is the difference between a complainant and a respondent?
3. **CS2** Explain the powers of the EPA in dealing with individuals or organisations it believes are causing harm to the environment.
4. **CS5** In disputes involving consumer, human rights and environmental laws, every effort is made to resolve the matter without having to engage in an expensive court case. Explain how this is achieved in the dispute resolution processes of each of these three areas of the law.
5. **CS5** The Environment Protection Authority (EPA) in Victoria has the power to deal with environmental breaches through administrative action. Explain what powers the EPA has in these circumstances, and give a possible advantage of the use of these powers.

Try these questions in learnON for instant, corrective feedback. Go to www.jacplus.com.au.

# 20.5 How the courts make laws

## 20.5.1 Common law

We know that laws are made by parliaments at both the state and federal level, but did you know that the courts can also make laws? Australia's court system was adapted from the British legal system. One of the unique features of that system is the **common law**. The term 'common law' originally meant that the law was common to everyone. Whenever a dispute came before a court, the judge would look at the previous decisions that other judges had made in similar cases. Whenever possible, a judge would try to decide the dispute in the same way as the previous decision. If there was no previous decision, and no parliamentary law that was relevant, the judge could effectively create new law to apply to the case.

## 20.5.2 The doctrine of precedent

The key feature of our legal system that allows the courts to make laws is the doctrine of **precedent**. This means that when a judge is deciding a case, he or she will look at the legal principles applied in similar cases and be guided by the decision in those cases.

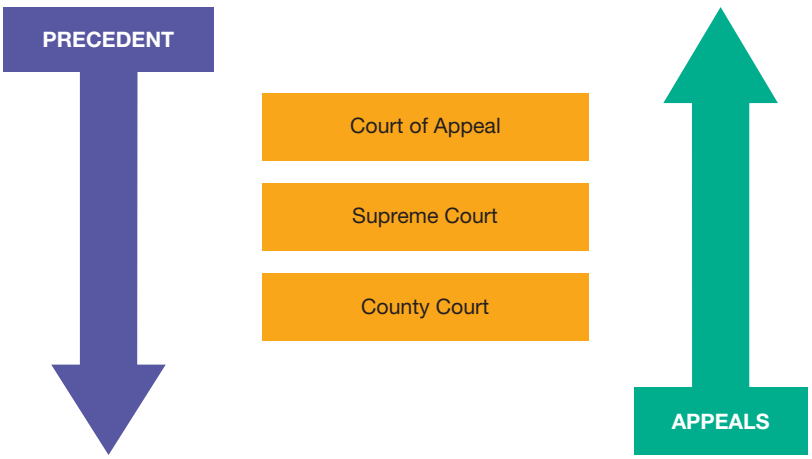
The doctrine of precedent relies on the following set of principles:

- Cases that are similar in facts are decided in a similar manner to provide consistency within the legal system. The previous case provides a precedent for later cases.
- There is a hierarchy of courts, with higher courts having greater authority than lower courts in that hierarchy.

- Lower courts have to make decisions that are consistent with precedents set by higher courts in the same hierarchy. By doing so, they are said to follow the decisions of those higher courts.
- A higher court in the hierarchy has the power to overrule a decision made in a lower court. This may happen because one of the parties to the original case has decided to appeal to the higher court.
- Details of decisions made by higher courts are written down and kept in law reports, which are readily available to all legal practitioners.
- Because parliament is the supreme law-making body, it has the power to overrule any law made by judges in the courts.
- When a new issue comes before a court, the judge has the power to create new law provided that it is not inconsistent with an existing precedent or with relevant legislation.

**FIGURE 1** If there is no existing relevant law, judges can create a new legal rule to settle a dispute.

**FIGURE 2** The court hierarchy allows for appeals to be taken to higher courts, and precedent to be followed by lower courts.



## 20.5.3 What makes a precedent?

Law reports contain details of cases that have been decided previously. Each case report contains the actual words written and spoken by the judge in delivering the decision. The judge will usually include a summary of the facts of the case, and the law that has been applied in reaching a decision. The outline of the law that has been applied is known as the *ratio decidendi*, which is a Latin term meaning 'the reason for the decision'. Sometimes this will be a precedent from a previous case that the judge has found applies to the facts of the case being considered. Sometimes it will simply be the application, or interpretation, of a relevant law passed by parliament.

**FIGURE 3** Previous court decisions are documented in law reports.

On some occasions there will be no relevant precedent and no other law that applies to the facts before the judge. In these cases, the *ratio decidendi* becomes new law and creates a binding precedent that must then be followed in later cases with the same or similar facts.

Sometimes a judge will make other comments about the case. For example, a judge might suggest ways in which the decision could have been different if some of the facts had been different. These comments are known as *obiter dictum*, a Latin term that means 'things said by the way'. Unlike the *ratio decidendi*, statements recognised as *obiter dictum* are not binding on judges in later cases. Nevertheless, if the *obiter dictum* has been delivered by a prominent judge in a higher court, judges in lower courts may gain some guidance from these statements if they can be applied to the facts before them.

### The studded belt case

One example of a precedent being created by the interpretation of an existing law is the studded belt case. In this case, a young man who was wearing a studded leather belt to hold up his trousers was charged with possessing a regulated weapon and found guilty in a Magistrates' Court hearing. He subsequently successfully appealed this verdict in the Supreme Court.

In making his decision, the Supreme Court Justice had to interpret the intention of the Control of Weapons Act. He considered definitions of a weapon, and whether any reasonable person would consider that the wearing of a studded belt would constitute possession of a weapon. He deemed that the young man had a lawful excuse for possessing the belt (it was holding up his trousers!), and that he had no intention of using it as a weapon. The precedent clarified the Weapons Act, by stating that a studded belt is not, in and of itself, a weapon but may become one if there was intent for it to be used in this way. In this case, the Justice deemed there was no such intent, and therefore the young man was not guilty of an offence.

**FIGURE 4** Is a studded belt a weapon? According to precedent set by the Supreme Court, only if there is intent for it to be used in this way.

**on** Resources

**Video eLesson** The ability of the courts to make law (eles-2380)

## 20.5.4 Duty of care — case studies in the application of precedent

We can illustrate how the doctrine of precedent works by examining a series of cases decided in English courts during the late nineteenth and early twentieth centuries. These cases all dealt with questions of people supplying products to other people, and the degree to which the supplier was responsible for the safety of the products supplied. Before these cases, it was generally accepted that a supplier was responsible only to the person with whom he or she had a direct contractual relationship. This meant that the seller owed a **duty of care** only to the person who actually bought the products.

### *George v. Skivington (1869)*

In this case a husband bought some hair shampoo from a chemist, who had made the mixture himself. When he bought the shampoo, the husband made it clear that he was buying it for his wife. When she used it, the woman suffered skin irritation and hair loss, so the husband sued the chemist. Lawyers for the chemist argued that because his contractual relationship was with the husband who had bought the shampoo, and not with the wife, the chemist had no duty of care towards the wife. The judge did not accept this argument, and stated that the chemist owed a duty of care to the ultimate user of the shampoo. Because the husband made it clear that the shampoo was for his wife, the legal relationship that existed between the chemist and the husband should be extended to include the wife, and the chemist owed her a duty of care.

**FIGURE 5** When you use shampoo you are protected by the law — even if someone else bought the shampoo for you.

### *Heaven v. Pender (1883)*

In this case Gray had a contract to paint a ship. The ship was moored in Pender's dock, and Pender provided a platform to be hung over the side of the ship to assist with this task. The plaintiff, Heaven, was employed by Gray to carry out the painting, but while he was doing so the ropes holding the platform broke, leading to Heaven being injured. The court found similarities with *George v. Skivington* in that while no direct contract existed between Pender and Heaven, Pender had a duty to any person who might be required to use the platform. The court held that whenever one person supplies goods or machinery to be used by another person, and there is the likelihood of injury to the person to whom the thing is supplied, there is a duty of care to use ordinary skill and care in relation to the condition or manner of supply. One judge, Brett, went further in *obiter dictum* by suggesting that:

> whenever one person is by circumstances placed in such a position in regard to another ... that if he did not use ordinarycare and skill in his own conduct with regard to those circumstances, he would cause danger or injury to the person or property of the other, a duty arises to use ordinary care and skill to avoid such danger.

**FIGURE 6** The dock owner who supplied the platform was found to have a duty of care to the workman painting the ship.

### *Donoghue v. Stevenson (1932)*

A friend bought May Donoghue a bottle of ginger beer. The drink was in an opaque bottle, so it was not possible to see the contents. Donoghue drank some of the ginger beer, but when the last of the bottle was poured into a glass, the remains of a decomposed snail came out into the glass. Donoghue suffered from illness and shock as a result of drinking the ginger beer, and sued the manufacturer of the ginger beer, Stevenson. There was no direct contractual relationship in this case because it was Donoghue's friend who had actually bought the drink, and had bought it not directly from Stevenson but from a café supplied by Stevenson. The case was eventually decided in favour of Donoghue.

**FIGURE 7** When May Donoghue found a decomposed snail in her bottle of ginger beer, she sued the manufacturer.

The leading judgement was delivered by Lord Atkin, and it is the following words within his judgement that are accepted as the *ratio decidendi* of the case and therefore constitute the precedent that has become law:

> a manufacturer of products, which he sells in such a form as to show that he intends them to reach the ultimate consumer in the form in which they left him with no reasonable possibility of intermediate examination, and with knowledge that the absence of reasonable care in the preparation or putting up of products will result in an injury to the consumer's life or property, owes a duty to the consumer to take that reasonable care.

These words are very similar to the *obiter dictum* in *Heaven v. Pender*. Lord Atkin made it clear that he believed the comments by Brett in that case were a good basis for future law, so he adopted the same principle as his *ratio decidendi* in the case before him. This effectively created new law.

### *Grant v. Australian Knitting Mills (1936)*

Dr Grant purchased a pair of underpants manufactured by Australian Knitting Mills. A chemical was left in the fabric during the manufacturing process, and Grant suffered severe dermatitis as a result of wearing the underpants. He sued the company, and the court found in his favour. The principles of the case of *Donoghue v. Stevenson* were applied, even though that was an English case and Grant's case was heard in an Australian court. Judges in the Australian court system felt the English precedent was a fair and just law, so it became part of Australian common law.

## The law of negligence

The area of law created by the cases just discussed is known as the law of negligence. Negligence is said to occur when a person owes a duty of care to another, but does not act in such a way as to ensure the safety of that person. It is now accepted that suppliers of all goods owe a duty of care to anyone who uses those goods, whether they were the actual buyer or not.

**DISCUSS**

'Judges have used common law processes to bring greater fairness to the law by adapting previous decisions to suit the new facts before them.'

**a.** Suggest an argument to support this case and then a counterargument to represent an opposing viewpoint.

**b.** Which viewpoint do you support? Give reasons.

**[Critical and Creative Thinking Capability]**

## 20.5 EXERCISES

**Civics and Citizenship skills key: CS1** Remembering and understanding **CS2** Describing and explaining **CS3** Examining, analysing, interpreting **CS4** Questioning and evaluating **CS5** Reasoning, creating, proposing **CS6** Communicating, reflecting

### 20.5 Exercise 1: Check your understanding

1. **CS1** What is common law?
2. **CS1** Identify the key principles of the doctrine of precedent.
3. **CS2** In your own words, define:
   (a) duty of care
   (b) negligence.
4. **CS2** What is the difference between the *ratio decidendi* and *obiter dictum?*
5. **CS2** Why are law reports important in helping judges make and apply common law?

### 20.5 Exercise 2: Apply your understanding

1. **CS2** Explain why the court hierarchy is important in the operation of the doctrine of precedent.
2. **CS4** How do you think a judge might decide the following cases?
   (a) A woman buys a new car from a dealer. While preparing the car, a mechanic accidentally damages the brakes and the buyer has an accident. She sues the manufacturer and the dealer.
   (b) A man has a lot to drink at a club. When he goes to leave, the club manager offers to order the man a taxi but he refuses it. While walking home the man staggers onto the road and is injured when a car hits him. He sues the club for negligence.
   (c) A couple buy a house but discover that it is riddled with termites and will need to be demolished. They sue the previous owner, who claims she knew nothing about the termites.
3. **CS3** Before 1869 in English common law, a legal duty of care was only owed between people who had a direct contractual relationship. How did the decision in *George v. Skivington* change this law?
4. **CS5** Explain why the case of *Heaven v. Pender* is a good example of the doctrine of precedent.
5. **CS5** In *Donoghue v. Stevenson* the judge used *obiter dictum* from a previous case to create a new *ratio decidendi*, and therefore a new principle under common law. Explain how this was possible under the principles of the doctrine of precedent.

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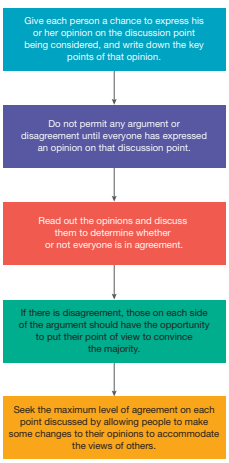
# 20.6 SkillBuilder: Problem solving and decision making

online only

## What is involved in problem solving and decision making?

Problem solving and decision making involve working collaboratively in groups, negotiating and using teamwork to solve an issue and develop a plan for action.




### Select your learnON format to access:

- an explanation of the skill (Tell me)
- a step-by-step process to develop the skill (Show me)
- an activity to allow you to practise the skill (Let me do it).

# 20.7 Equality before the law

## 20.7.1 Fair treatment

Equality before the law is an important and central principle of our legal system. In Australia we believe that all parties are entitled to be treated fairly by a court — regardless of whether they are a victim, an offender or any other participant in the justice system. This does not mean that everyone should be treated in the same way; it means that anyone who comes into contact with the courts should know that they are being treated fairly and without **discrimination**.

## 20.7.2 Discrimination and the courts

Equality before the law is a basic **human right**. Article 7 of the **Universal Declaration of Human Rights** states: 'All are equal before the law and are entitled without any discrimination to equal protection of the law.' Australia signed the International Covenant on Civil and Political Rights in 1991, which includes 'the right to equality before the law and non-discrimination.'

Australia has several laws relating to human rights, discrimination and the need to treat people fairly. Some of the laws made by the Commonwealth Parliament include the *Racial Discrimination Act 1975*, the *Sex Discrimination Act 1984*, the *Disability Discrimination Act 1992*, the *Age Discrimination Act 2004*, and the *Australian Human Rights Commission Act 1986*. Various statutes across the states also define discrimination and protect human rights.

**FIGURE 1** It is against the law to discriminate on the basis of personal characteristics, status or beliefs. This applies to the way that people are treated by the law and by the courts.

It is against the law to discriminate against someone on the basis of their gender, ethnicity, disability, sexual orientation, age, religious affiliation, socioeconomic background, size or nature of family, literacy level or any other prescribed characteristic. The law and the courts must treat everyone fairly regardless of their personal characteristics.

No-one in our country is exempt from our laws. This means that everyone is entitled to have a case heard by an independent and impartial court, and everyone must obey the laws of Australia.

**DISCUSS**

What are the challenges of equality before the law in a culturally diverse country? In what ways does our court system show that it values cultural diversity?

**[Intercultural Capability]**

## 20.7.3 Promoting equality before the law

It is very important that people who come into contact with the justice system believe they are being treated equally and fairly so that confidence in the system is maintained. Judges and courts must be aware of any personal bias or prejudice against any person from a particular background and make sure that this is nullified. This may mean that not everyone is treated in the same way. Some different approaches for dealing with an individual's specific background or circumstances can be seen in **FIGURE 2**.

Respect and courtesy should be shown to everyone in their dealings with the justice system. Discriminatory attitudes have no place in a courtroom. Everyone is entitled to be treated fairly under the law in Australia so that we are all protected from injustice.

**FIGURE 2** Approaches that promote equality before the law

A Permitting people to present their evidence from a different place. *Example:* Allowing people to speak from a hospital bed or stretcher

B Understanding the differing circumstances and needs of people. *Example:* In relation to the timing and length of court appearances, accommodating (where appropriate) people with religious affiliations, childcare responsibilities, children and young people, or people who have a particular type or form of disability

C Avoiding false assumptions about the lifestyle of a person. *Example:* Not making assumptions about the lifestyle of a lesbian or gay man, or a person with low income and/or a high-cost disability

D Knowing and using appropriate terminology. *Example:* Using terminology that does not cause offence or the perception of discrimination

E Using an alternative method of communication for those people that need it. *Example:* Using different communication for children and young people, people with no or limited English, those with a communication disability, or for people who are representing themselves

F Understanding the practices of a specific culture that might influence behaviour in relation to a matter before the court. *Example:* Taking into account the importance of the attitudes, values and behaviour of Indigenous people

G Using a different oath for people who observe a non-Christian religion. *Example:* Taking an oath on the Koran or Torah, or allowing people with no religious affiliation to make an *affirmation* in place of an oath

**DISCUSS**

Is it fair if different people receive unequal punishments for the same crime? Why/why not? Explain your reasons.

**[Ethical Capability]**

## 20.7.4 CASE STUDY: In jail, no fair trial

In March 2014, ABC TV's *Lateline* aired a story about a 23-year-old Aboriginal woman who spent 18 months in a Kalgoorlie jail in Western Australia.

Rosie Anne Fulton was charged with driving offences. She had crashed a stolen car in Western Australia after consuming a large amount of alcohol. Her case was heard in a Kalgoorlie court, where the magistrate declared her unfit to plead as a result of her disability. Ms Fulton was born with foetal alcohol syndrome and has the mental capacity of a small child. She was placed on a prison-based supervision order.

Ms Fulton and her legal guardian, Ian McKinlay, appealed to Northern Territory authorities to house Ms Fulton in a secure care facility near the prison in Alice Springs. This would allow her to stay close to her Alice Springs family and remain in specialist accommodation, built for people with intellectual disabilities and challenging behaviours. However, the application was rejected.

'They're leaving Rosie Anne in prison, neglected, forgotten and ignored,' Mr McKinlay said.

Aboriginal and Torres Strait Islander Social Justice Commissioner Mick Gooda noted that Aboriginal and Torres Strait Islander people are over-represented in the justice system. 'It is a breach of Ms Fulton's human rights which must be urgently addressed,' he said.

The then Disability Discrimination Commissioner Graeme Innes agreed that it was unacceptable to put people in prison for indefinite periods when they have not been found guilty of a crime. 'Prison is simply not an alternative accommodation option for people with disabilities,' he said. 'We launched a report in February which demonstrated the lack of equal access to justice for Australians with disabilities, and this is just one example of a bigger problem.'

**FIGURE 3** Rosie Anne Fulton grew up living in the riverbeds around Alice Springs.

**DISCUSS**

Is there a difference between acting ethically and acting within the law? Which is more important?

**[Ethical Capability]**

### 20.7 ACTIVITY

**a.** Choose one of the courts in your state or territory. Use internet resources (such as the court's website, or an annual review or strategic plan) to find out what the court has done to ensure that everyone is treated fairly. (You might need to find the goal or purpose of the court.) Write down some of the things you see related to equality before the law.

**b.** Use internet resources (including brochures or videos) to identify the services offered by the courts, or offered to those attending court, that ensure everyone is treated fairly. (Look for support and assistance or legal help.) List three of the services you discover. **Examining, analysing, interpreting**

### 20.7 EXERCISES

**Civics and Citizenship skills key: CS1** Remembering and understanding **CS2** Describing and explaining **CS3** Examining, analysing, interpreting **CS4** Questioning and evaluating **CS5** Reasoning, creating, proposing **CS6** Communicating, reflecting

#### 20.7 Exercise 1: Check your understanding

1. **CS1** Identify the ways in which it is against the law to discriminate against someone.
2. **CS1** List two approaches that the justice system could take to treat participants equally and fairly.
3. **CS1** Outline what is meant by the principle of equality before the law.
4. **CS1** What is the name of the international treaty that Australia has signed, which is designed to guarantee equality before the law?
5. **CS1** Identify two pieces of Australian legislation that are designed to protect citizens' rights.

#### 20.7 Exercise 2: Apply your understanding

1. **CS3** Read the 'In jail, no fair trial' case study. In what ways has the justice system discriminated against Rosie Anne Fulton?
2. **CS2** Describe what could happen if the courts did not treat everyone fairly.
3. **CS6** Do you think that everyone who comes into contact with our courts is equal before the law? Justify your answer.
4. **CS6** Write a response debating the topic, 'Everyone is equal before the law.'
5. **CS4** Not all cases of similar crimes receive identical punishments. What factors do you believe could justify the handing down of more or less severe punishments for similar crimes?

Try these questions in learnON for instant, corrective feedback. Go to www.jacplus.com.au.

# 20.8 The independence of our courts

## 20.8.1 An independent judiciary

Independence of the **judiciary** is an important feature of Australia's legal system. This is the principle that our judges and courts need to be kept separate from the other two branches of Australia's government. An independent judiciary ensures that we continue to live in a democratic and just society. Judges and courts should not be subject to political influence from government, or from the political interests of any other person or organisation.

## 20.8.2 Separation of powers

The Australian Constitution supports the idea of the **separation of powers** to allow for three arms of government: a legislative arm, an executive arm and a judicial arm.

- *Legislative arm.* This is the parliament. Its function is to make new laws or to change or remove existing ones. Under the Constitution, parliament is the supreme law-maker. The courts are bound by legislation passed by parliament and by precedent.
- *Executive arm.* This arm of government administers the legislation passed by parliament. Executive power officially lies with the Governor-General or the Governor, who represents the Crown. It is government ministers and the public service who actually exercise this power. For example, the department of health is an Australian public service department which administers the running of Australia's health system. The head of this department reports to the minister for health.
- *Judicial arm.* This is the judiciary and the courts. They make judgements about the law, and are responsible for settling disputes and enforcing the law. The High Court of Australia is responsible for interpreting and applying the Constitution. It makes sure that the other arms of government do not act in a way that is outside the powers granted by the Constitution. The judiciary can for example declare that laws passed by parliament are unconstitutional, or require particular actions if they believe that a branch of government is not performing a constitutional duty.

The rationale behind the separation of powers is that it allows each arm of government to check and balance the powers of the others. This prevents any arm from becoming too powerful and in this way helps maintain a fair and just society.

**FIGURE 1** The separation of powers allows for three arms of government.

## 20.8.3 How we ensure that our judiciary remains independent

Two safeguards in the Constitution protect judicial independence: **security of tenure**, and the way in which judges are appointed.

### Security of tenure

By appointing judges for a long period of time, we expect that they will be free to act independently. Judges who are secure in their position are more likely to decide cases and make rulings objectively even when they know that those decisions might be politically unpopular. Judges are commonly appointed until the age of 70, unless they choose to retire earlier. This makes it less likely that governments will be able to influence the decisions of judges.

**FIGURE 2** Judges are appointed for an extended period of time and in a manner that promotes their independence from the other branches of government.

### The way in which judges are appointed

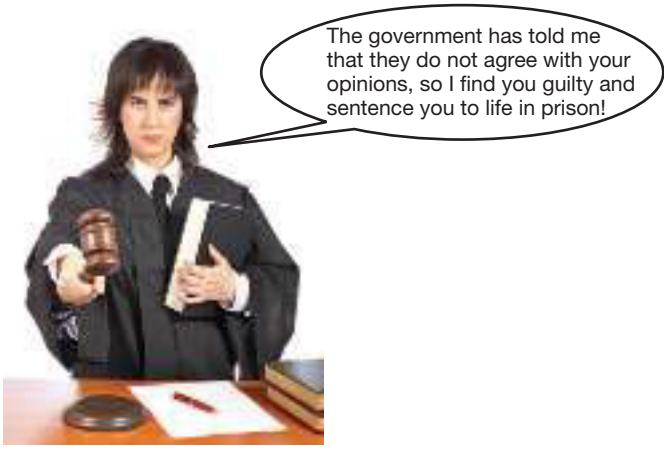
Judges are appointed by the Governor-General (or Governor in each state) acting on the advice of the government. They cannot be removed from office except by the Governor-General (or Governor), following an address from both houses of parliament. Judges cannot be removed from office just because a government disagrees with their decisions in court. Because judges cannot be easily removed by the executive or legislative arm, it is assumed that they can work independently and make decisions without fear of interference.

## 20.8.4 Do we really have an independent judiciary?

Judges and courts which only exist to do what a government wants them to do provide no guarantee of a fair and just society. Australia's judiciary is independent — to an extent. Even though judges and courts have the responsibility of interpreting the law, courts also make laws by establishing legal principles. This encroaches on the responsibility of parliament. Judges can make law through the use of common law but these law-making powers are limited.

Judges are formally appointed by the Governor-General (or Governor), who is part of the executive branch of government. Because this appointment is based on the recommendation of the government, there is a small conflict between the executive and judicial arms. However, this is considered to be a minor conflict and Australia's judiciary is generally thought to be independent.

**FIGURE 3** The judiciary is considered to be independent of the government in Australia, unlike the situation depicted here.




## 20.8 ACTIVITIES

1. Judges often comment on the principle of the independence of the judiciary. Use the internet or newspapers to find an article or commentary written by a judge or magistrate that refers to judicial independence. What opinion does the judge or magistrate hold? **Examining, analysing, interpreting**
2. People in the community (including members of the public, journalists and politicians) often criticise the judiciary. Using the internet or newspapers, find an article or commentary referring to judicial independence that was written by (or quotes) a member of the public, a journalist or a politician. What opinion does this person hold? **Examining, analysing, interpreting**

## 20.8 EXERCISES

**Civics and Citizenship skills key: CS1** Remembering and understanding **CS2** Describing and explaining **CS3** Examining, analysing, interpreting **CS4** Questioning and evaluating **CS5** Reasoning, creating, proposing **CS6** Communicating, reflecting

### 20.8 Exercise 1: Check your understanding

1. **CS1** Define *judiciary*.
2. **CS1** What is the role of the judiciary?
3. **CS2** Outline what security of tenure is and why it is significant in guarding judicial independence.
4. **CS2** Explain how the way in which judges are appointed protects their independence.
5. **CS2** Identify two roles the courts have in the way laws are made and interpreted in Australia.

### 20.8 Exercise 2: Apply your understanding

1. **CS3** Look at **FIGURE 3**. What the judge is saying conflicts with the principle of judicial independence and the separation of powers. Explain why this is the case.
2. **CS5** Outline what the possible consequences might be if Australia's courts lost their independence.
3. **CS5** Explain how the High Court's role in interpreting the Australian Constitution can prevent the parliament from passing laws that may infringe the rights of Australian citizens.
4. **CS5** Over the years a number of members of parliament have been appointed as Justices of the High Court. Outline one possible advantage and one possible disadvantage of this practice.
5. **CS5** 'Rights and freedoms in Australia are protected because no arm of government has absolute power.' Explain how the judicial arm provides the balance required to achieve this principle.

Try these questions in learnON for instant, corrective feedback. Go to www.jacplus.com.au.

# 20.9 The right of appeal

## 20.9.1 Appeals

Any person involved in a court case who is not happy with the outcome of that case has the right to **appeal** the decision. This means they can ask a higher court to review it. However, there are some restrictions on who can appeal and under what conditions a person can appeal.

## 20.9.2 What is the right of appeal?

No legal system is perfect. When a case is heard for the first time, it is possible that a mistake can be made by the magistrate, judge or jury. As a result, the law often allows people to contest a court decision. This is known as the right of appeal. Our court hierarchy allows the decision of a lower court to be reviewed on appeal by a higher court.

All the courts have the ability to hear cases for the first time. This is called original jurisdiction. Some courts have the power to hear appeals from cases that were first held in lower courts. They might completely rehear a case or examine points of law. These courts are known as appeal courts. They have appellate jurisdiction.

An appeal court has the power to decide if the court hearing the case for the first time was correct or mistaken in its decision. The appeal court may agree with the result of the lower court's ruling. If it finds that the lower court's decision was mistaken, it will usually overturn the decision and replace it with its own.

There are several reasons why a party may appeal. These include:

- dissatisfaction with the decision of a court on the grounds of a question of fact
- disagreement with the court on a point of law
- contention over whether the remedy imposed by the lower court reflects the nature of the evidence presented at the trial.

**FIGURE 1** The right to appeal is necessary because our legal system sometimes makes mistakes, and someone can be wrongly sent to jail as a result.

## 20.9.3 Who can appeal?

The person appealing to the court is known as the **appellant** and the person defending the appeal is referred to as the respondent. Who can appeal depends on whether a case involves criminal or civil law.

In a civil case, any party can appeal a decision. Some appeals can only be heard if the court gives permission to the person wanting to appeal. This is called **leave to appeal**.

In a criminal case, only the people who are directly involved in the case can appeal — the accused and the prosecution. Members of the community do not have the right of appeal (this includes victims). Note that:

- the prosecution can only appeal against a sentence; it cannot appeal against a verdict of not guilty
- the accused can appeal against a guilty verdict and a sentence, or apply for leave to appeal against a sentence.

## 20.9.4 How do appeals work?

In Victoria, criminal and civil appeals are dealt with as follows:

- In criminal matters, the County Court hears most appeals from the Magistrates' Court. The Court of Appeal, a division of Victoria's Supreme Court, hears and determines appeals from the County Court and the trial division of the Supreme Court.
- In civil matters, there is no right of appeal from the Magistrates' Court to the County Court. Instead, an appeal from the Magistrates' Court proceeds directly to a single judge of the Supreme Court. Appeals from the County and Supreme Courts are referred to the Court of Appeal.

Appeals from the highest appeal court in each state and territory are heard by the High Court. There is no right of appeal to the High Court. Usually the applicant must obtain special leave from the High Court in order to have the case heard. The High Court normally agrees to hear only a small proportion of the appeals brought to it. It is the final court of appeal.

## 20.9.5 What happens in an appeal?

An appeal will usually only hear legal argument about a specific point, and the court will only consider the evidence that was given at the original trial or sentence. If an appeal against a verdict is successful, the court will either find the appellant not guilty or will order a new trial with a different judge and jury. If an appeal against a sentence is successful, it may be reduced or changed to a different type of sentence.

**FIGURE 2** Appeals can be heard before a single judge or a group of judges (usually two to five), depending on the court and the type of matter being heard. A jury is not used in an appeal.

## 20.9.6 Why do we have the right of appeal?

The appeal process promotes a fair society and protects us all from unjust decisions. If citizens did not have the right of appeal, there could be an increase in cases involving injustice. Parties not satisfied with the outcome of their case would have no opportunity to ask a higher authority to review a decision made by a lower court. The appeal process is therefore important for correcting any mistakes made by lower courts. This supports a democratic and just society.

**FIGURE 3** The High Court is the final court of appeal in Australia.

## 20.9 ACTIVITIES

1. Using the internet or newspapers, look up a case that has gone to appeal. Summarise in writing what the appeal was about and what result was achieved. **Examining, analysing, interpreting**
2. Find the website of a court in the Victorian court hierarchy. Research the process for appealing a court's decision. Present this process in the form of a diagram. **Examining, analysing, interpreting**

## 20.9 EXERCISES

**Civics and Citizenship skills key: CS1** Remembering and understanding **CS2** Describing and explaining **CS3** Examining, analysing, interpreting **CS4** Questioning and evaluating **CS5** Reasoning, creating, proposing **CS6** Communicating, reflecting

### 20.9 Exercise 1: Check your understanding

1. **CS1** What is the right of appeal?
2. **CS1** Why might a party appeal a court's decision?
3. **CS1** Who can appeal a decision and under what circumstances?
4. **CS2** Briefly outline what happens in an appeal.
5. **CS2** Describe the difference between original and appellate jurisdiction.

### 20.9 Exercise 2: Apply your understanding

1. **CS2** Explain the process for appealing a court's decision.
2. **CS5** 'The right of appeal is an important principle of Australia's justice system.' Do you agree or disagree with this statement? Give reasons for your answer.
3. **CS6** Imagine you have been found guilty of a crime that you did not commit. What would happen to you if there was no right of appeal?
4. **CS5** Although the High Court is the highest court of appeal in Australia, relatively few appeal cases are heard by this court. Identify and explain one reason why this is the case.
5. **CS4** Critics of the appeal process say that it allows a guilty person to keep on appealing and avoiding responsibility for their actions. Give reasons as to why you agree or disagree with this view.

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# 20.10 When the system fails

## 20.10.1 Factors that can undermine the system

Our legal system is based on a number of principles that exist to make sure that anyone who makes contact with a court is treated fairly and receives justice. However, the system does not always work perfectly. Several factors can undermine the application of these principles. These include bribery, coercion of witnesses, trial by media and court delays.

## 20.10.2 Bribery

**Bribery** might occur in the justice system if someone tries to offer money, a gift or any other item of value to a judicial officer (such as a judge) or any other public official (such as a police officer) in the expectation that the person receiving the bribe will act in the briber's interests. A person might bribe a juror to make a certain decision, or bribe a witness to present a false testimony or withhold the truth. Note that it is illegal to give or receive a bribe.

Bribery is an offence under common law in many of the states and territories in Australia. Some states also have legislation referring to bribery. Under the Commonwealth *Criminal Code Act 1995*, the offence of bribing a public official is punishable by ten years in prison or a fine of $2.1 million, or both, for an individual. A corporation can be fined $21 million, or three times the value of the benefit its management hoped to gain from the bribe, or 10 per cent of its annual revenue for the 12-month period before the bribe was attempted.

Bribery can undermine the principles of our system of justice. Judges who accept a bribe are no longer independent. They have agreed to alter their behaviour and act in someone else's interests. Witnesses who have been bribed may not present the truth or the full truth, which means that a fair trial will not occur. A jury that reaches a decision after receiving a bribe may reach the incorrect decision.

**FIGURE 1** Bribery can involve money, a gift or any other item of value. It undermines the principles of justice because it prevents the truth or interferes with a correct decision being made.

## 20.10.3 CASE STUDY: The bribe's in the mail

Police investigated a possible attempt to bribe judges in Victoria after several cheques were received in the mail in July 2012. The mail was addressed to judges and court officials at the Victorian Supreme Court. The cheques were discovered through the court's mail-handling security protocols. A court spokeswoman said, 'All envelopes were similar in appearance. Court staff opened one envelope, revealing a cheque made out to the addressee.' It is believed that all the suspicious envelopes opened were found to contain cheques.

## 20.10.4 Coercion of witnesses

**Coercion** of witnesses is against the law. A person must not coerce or attempt to influence a witness in a court case to provide a false testimony, withhold the truth, or avoid turning up to court at all. Witnesses could be intimidated or bullied while attending court, or at their home or place of work by an offender, a family member of the offender or an accomplice of the offender who knows or discovers where the witness lives or works. A court might make an order to stop the threatening or intimidating behaviour, or

to stop the person attempting the coercion from coming near the witness again. The justice system can also offer protection programs if necessary, including protecting the identity of a witness and even relocating a witness.

Coercion of witnesses is covered by different legislation in each state and by the federal *Crimes Act 1914*, where it is referred to as 'corruption of witnesses'. Depending on the state, the charge of threatening, corrupting or influencing a witness can result in sanctions including a fine, good behaviour bond, suspended sentence or prison sentence.

Influencing or coercing a witness can undermine the principles of our justice system. Evidence presented in court will become misleading and an incorrect verdict could result. An accused person who should be found guilty may instead be found not guilty. Conversely, an innocent person may be found guilty. A court trial would not hear the truth and therefore the trial would not be fair. Justice would not be served.

**FIGURE 2** Threatening or intimidating behaviour towards a witness is illegal, whether this occurs inside the court or elsewhere.

## 20.10.5 CASE STUDY: Please don't go to court

An 18-year-old man from Woollamia, New South Wales, was committed for trial in the District Court in February 2014 for influencing a witness to not give evidence in court. He was also charged with perverting the course of justice. Recordings produced by the police revealed that the accused was contacted by an inmate at the South Coast Correctional Facility. The police alleged that the prisoner asked the accused to go to another man's house and tell him not to appear in court to provide evidence relating to another inmate's matter before a court. The man who was the subject of the coercion was ordered to appear in the District Court in March.

**FIGURE 3** It is illegal to contact witnesses in order to influence them to change what they say in court or even to not appear in court.

## 20.10.6 Trial by media

The media, including television and newspapers, will cover court cases. At times, this coverage can have an impact on the accused's reputation by creating widespread opinion regarding the person's guilt or innocence before the trial has occurred or before a verdict has been delivered. This is referred to as **trial by media**. A high-publicity case, where the reporting of events can create a frenzy, can make a fair trial nearly impossible.

In Australia, strict laws regarding contempt of court restrain the media from what it can report after a person is formally arrested or charged. These laws are designed to make sure that the accused receives a fair trial in front of a judge or jury that has not formed an opinion biased by prior media coverage.

Courts take contempt laws very seriously. This is because justice can only occur when courts are able to operate independently, unhindered by outside interference, and are free to make a fair judgement. If the media publishes information about the accused's prior convictions before the end of a trial, disobeys a court order or interviews witnesses, the judge or jury may become prejudiced against the accused. The opportunity to have a fair trial would therefore be lost.

**FIGURE 4** Trial by media can seriously impact an accused's chances of receiving a fair trial.

## 20.10.7 CASE STUDY: Trial by media

3AW radio broadcaster Derryn Hinch was found guilty of contempt of court in 2013 for breaching a suppression order made by a Victorian Supreme Court Justice. Hinch published tweets and blog entries about Melbourne woman Jill Meagher's murderer during court proceedings, referring to the accused's parole status. Melbourne newspapers then published front-page stories outlining the accused's past, claiming that he was going to plead guilty. Hinch was ordered to pay a $100 000 fine, but he refused to pay and spent 50 days in prison instead.

**FIGURE 5** Radio broadcaster Derryn Hinch

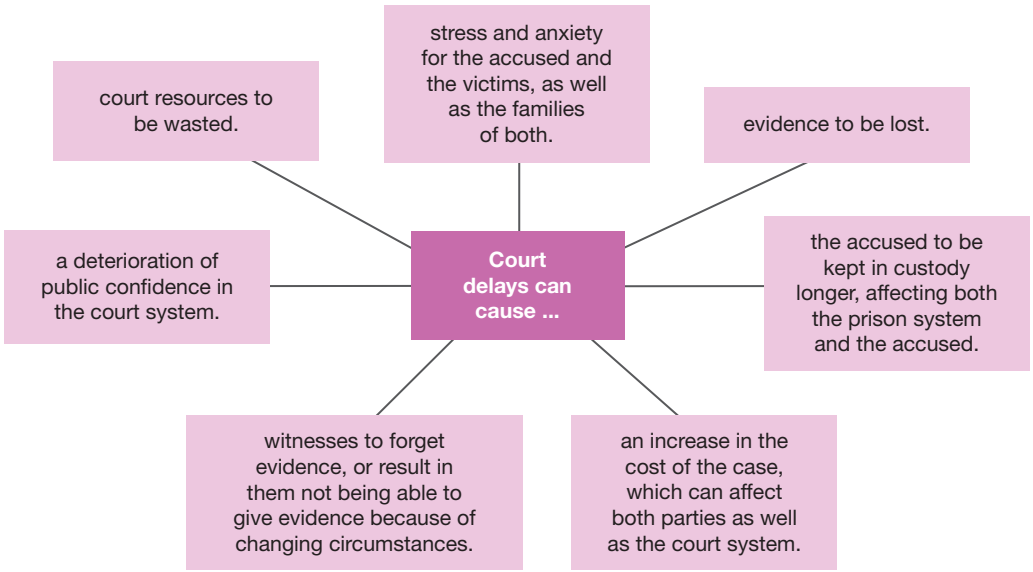
## 20.10.8 Court delays

There is an old saying in law: 'Justice delayed is justice denied.' It suggests that if a person is wronged in some way and a dispute needs to go to court but does not do so in a timely fashion, then there might as well have been no court case at all. Justice has not taken place. A **court delay** can undermine the application of the principles of justice. Yet there is no right in Australia, either under common law or in legislation, to have a court case conducted within a reasonable period of time.

However, the International Covenant on Civil and Political Rights, to which Australia is a signatory, states that anyone charged with a criminal offence is entitled 'to be tried without undue delay'. Numerous reviews and inquiries into court delays have been undertaken to explore why they happen and what can be done about the problem. Some of the problems caused by court delays are illustrated in **FIGURE 6**.

Delays can occur before the trial starts (between the date the case is committed to go to trial and the actual commencement date), or during the trial itself, making the court case drag on longer than necessary.

**FIGURE 6** Problems caused by court delays




There are many reasons for delays that can cause a trial to last longer than necessary. These include:

- either side insufficiently or inadequately preparing its case
- lack of legal representation
- complex evidence and complex cases
- witnesses facing difficulties in getting to court
- either party using delaying tactics when in court.

Delays can also occur simply because the courts have more cases to deal with. This can happen for many reasons, including:

- a rise in the crime rate
- an increase in police numbers
- changes in population
- availability of legal aid
- changes in government policy
- changes in the law.

**FIGURE 7** Delays during trial can occur for various reasons and can undermine the principle of justice that the accused is entitled to be tried without undue delay.

## 20.10 ACTIVITIES

1. Construct a concept map or diagram that explains the impact that bribery, coercion of witnesses, trial by media and court delays have on the justice system. **Reasoning, creating, proposing**
2. Using the internet, newspapers or magazines, find pictures related to one factor that undermines the justice system. Attach the pictures to a page in your notes. Label each picture with one effect the factor has on justice and what can be done to lessen that effect. **Examining, analysing, interpreting**
3. Using the internet or newspapers, find a case involving bribery, coercion of witnesses, trial by media or a court delay. Write down the main facts of the case. **Examining, analysing, interpreting**
4. Working in groups of three or four, plan a video presentation explaining one of the factors undermining the justice system. Your plan should make the video engaging so that it will help viewers fully understand the factor, how it undermines the justice system and what the possible solutions are. Use internet resources and be creative in how you present your plan. **Communicating, reflecting**

## 20.10 EXERCISES

**Civics and Citizenship skills key: CS1** Remembering and understanding **CS2** Describing and explaining **CS3** Examining, analysing, interpreting **CS4** Questioning and evaluating **CS5** Reasoning, creating, proposing **CS6** Communicating, reflecting

### 20.10 Exercise 1: Check your understanding

1. **CS1** Identify the factors that can undermine the principles of justice.
2. **CS1** Outline one example of the way in which bribery can undermine the legal system.
3. **CS1** How has the legal system attempted to deal with the possibility of coercion of witnesses?
4. **CS1** What action do judges sometimes take to avoid trial by media?
5. **CS1** Identify two parties who might be disadvantaged by delays in court proceedings.

### 20.10 Exercise 2: Apply your understanding

1. **CS6** Choose one of the case studies in this section and write a letter to an editor of a newspaper expressing your opinion on the issue in the case study. Clearly identify the issue and explain its key features. Outline what you think should be done to solve the problem.
2. **CS5** What do you believe would be the most appropriate strategy to prevent possible bribery or coercion of witnesses?
3. **CS3** Several years ago, a judge dismissed a jury part-way through a criminal trial and ordered a fresh trial, because one of the jurors had attempted an internet search of newspaper articles relating to the crime. What problem with the system was the judge attempting to overcome?
4. **CS5** 'Justice delayed is justice denied.' What would you interpret to be the meaning of this statement?
5. **CS3** Copy and complete the following table to predict some of the likely outcomes of the situations shown. Suggest what should happen. (The first situation has been completed for you.)

| Situation | Likely outcomes | What should happen |
|---|---|---|
| Vince tells a witness in a murder trial that $100 000 will be transferred to her bank account if she changes what she will say when she is questioned in court. | • If the witness accepts the bribe, the truth of the case may never be heard.<br>• If the witness accepts the bribe and the bribe is discovered, she could be charged with accepting the bribe as well as lying in court (perjury).<br>• If the bribe is discovered, Vince could be charged with bribing a witness or influencing a witness. | • The witness should not accept the bribe.<br>• Vince should not make the offer to pay the witness. |
| Eve offers a judge $250 000 to reduce the sentence for her boyfriend, who has been found guilty of manslaughter. | | |
| Sevilla tells a witness in a court case that her cousin will kill her if she turns up at the trial. | | |
| Michael is a journalist who writes a story proclaiming that Kirby is guilty the day after she has been arrested and charged by the police. | | |

| Situation | Likely outcomes | What should happen |
|---|---|---|
| Chan is representing Hugh in his court case and decides to delay proceedings to the extent possible. | | |

Try these questions in learnON for instant, corrective feedback. Go to www.jacplus.com.au.

# 20.11 SkillBuilder: Creating and analysing a survey

online only

## What is a survey?

A survey is the process of collecting data for the purpose of analysing an issue. It consists of putting a set of questions to a sample group of people. For example, a political party may conduct a survey to find out whether citizens are satisfied with their policies.

### Select your learnON format to access:

- an explanation of the skill (Tell me)
- a step-by-step process to develop the skill (Show me)
- an activity to allow you to practise the skill (Let me do it).

# 20.12 Thinking Big research project: Protecting human rights

online only

## SCENARIO

There are a number of different bodies, both in Victoria and across Australia, that protect human rights and attempt to ensure equality before the law. Your task is to investigate and prepare a presentation on the aims, actions and regulations of one of these organisations.

### Select your learnON format to access:

- the full project scenario
- details of the project task
- resources to guide your project work
- an assessment rubric.

## Resources

**ProjectsPLUS** Thinking Big research project: Protecting human rights (pro-0198)

# 20.13 Review

online only

## 20.13.1 Key knowledge summary

Use this dot point summary to review the content covered in this topic.

## 20.13.2 Reflection

Reflect on your learning using the activities and resources provided.

### on Resources

**eWorkbook** Reflection (doc-31734)
Crossword (doc-31735)

**Interactivity** Australia's justice system and the courts crossword (int-7654)

## KEY TERMS

**accused** the person charged with or on trial for a crime
**adversary system** a system of trial in which the two sides argue their case and the judge or magistrate acts as an independent umpire
**appeal** the request to a higher court to review a decision made by a lower court
**appellant** the person appealing a court decision
**appellate jurisdiction** the power of a court to review a lower court's decision
**arbitration** the process of resolving a dispute by an independent third party, such as a court or tribunal, where the decision is legally binding on the parties
**bail** an agreement to release an accused person into the community while awaiting trial
**bribery** the act of giving money, a gift or any other item of value to a recipient in the expectation that it will alter the recipient's behaviour
**coercion** the practice of forcing someone to act in an involuntary manner by using intimidation or threats, or some other form of pressure
**common law** judge-made law, or law developed by judges through the decisions in actual cases brought before the courts
**conciliation** a process of settling disputes in which a neutral third party (a conciliator) assists the parties to reach agreement. It differs from mediation in that the conciliator can suggest solutions to the parties.
**consent order** a written agreement reached by the parties to a dispute and approved by the court
**court delay** a setback in the legal system that prevents justice from occurring in a timely fashion
**defendant** a person against whom a legal action has been brought
**discrimination** the treatment of an individual in an unfavourable manner based on an actual or perceived personal characteristic protected by the law
**duty of care** a responsibility to ensure the safety of any persons whom we can reasonably foresee might be affected by our actions
**human rights** the basic rights that are considered to be the entitlement of all humans
**industrial relations** refers to the laws and processes that govern the relationships between employers and employees
**judge** a court official who presides over cases in courts higher than a magistrates court or Local Court
**judiciary** the collective name given to the judges who preside over law courts
**jurisdiction** the power or authority of a court to hear specific types of disputes and cases
**jury** in criminal cases, the 12 people who are randomly selected to decide the guilt or innocence of an accused based on the evidence presented in court
**leave to appeal** permission from the court to appeal a decision
**magistrate** a court official who hears cases in the lowest court in the legal system
**manslaughter** the accidental or unintentional killing of one person by another person
**mediation** a process of settling disputes in which a neutral third party (a mediator) assists the parties to reach agreement. Mediators do not offer solutions; they help the parties to reach agreement through their own suggestions.

**negligence** failure to take reasonable care when a person or organisation is legally required to do so
**original jurisdiction** the power of a court to hear and decide a case for the first time
**plaintiff** a person who commences a legal action in a civil case
**precedent** a legal principle that is established by a court in resolving a dispute and is expected to be followed in later cases
**prosecute** to take legal action against a person accused of a crime
**recklessness** continuing on a particular course of action despite realising that doing so might result in harm to others
**remanded in custody** to be held by the authorities until a case is heard in court
**remedial action** action taken to restore a site to its previous or natural condition, or to an equivalent condition
**security of tenure** the constitutional guarantee that an office holder, such as a judge, cannot be removed from office except under exceptional circumstances
**separation of powers** the division of government into the executive, the legislature (parliament) and the judiciary with the aim of providing a system of checks and balances that prevents the excessive concentration of power in one group
**surety** when bail is granted, a sum of money deposited with a court as a guarantee that an accused will abide by the conditions of bail and will appear in court when required to do so
**trial by media** creating widespread opinion regarding a person's guilt or innocence before a trial has occurred or before a verdict has been delivered
**Universal Declaration of Human Rights** a declaration passed by the United Nations outlining the fundamental human rights of all people in the world

# 20.6 SkillBuilder: Problem solving and decision making

## 20.6.1 Tell me

### What is involved in problem solving and decision making?

Problem solving and decision making involve working collaboratively in groups, negotiating and using teamwork to solve an issue and develop a plan for action. In order to do this successfully, you will need to do the following:

- Listen actively to the views of every member of the group.
- Display empathy for the views of others. This means that you have an appreciation for the feelings of others and respect their right to an opinion, even if it is different from your own.
- Negotiate to resolve differences of opinion.
- Arrive at a conclusion in a democratic manner. This can mean having a vote among members of the group, or arriving at a consensus, with everyone agreeing to change their views slightly to reach a conclusion acceptable to everyone.

## 20.6.2 Show me

So how does this work in practice? **FIGURE 1** outlines the procedure for effective problem solving and decision making.

Consider this issue:

As we have seen, many types of disputes are resolved without going to court. Mediation and conciliation are recommended in Family Court disputes, anti-discrimination cases and consumer law cases.

- Is this a fair way of dealing with legal issues?
- What happens if one party feels intimidated in the mediation process?
- Might they give away more than they had intended?
- On the other hand, these processes are much cheaper and can save parties thousands of dollars in legal fees.

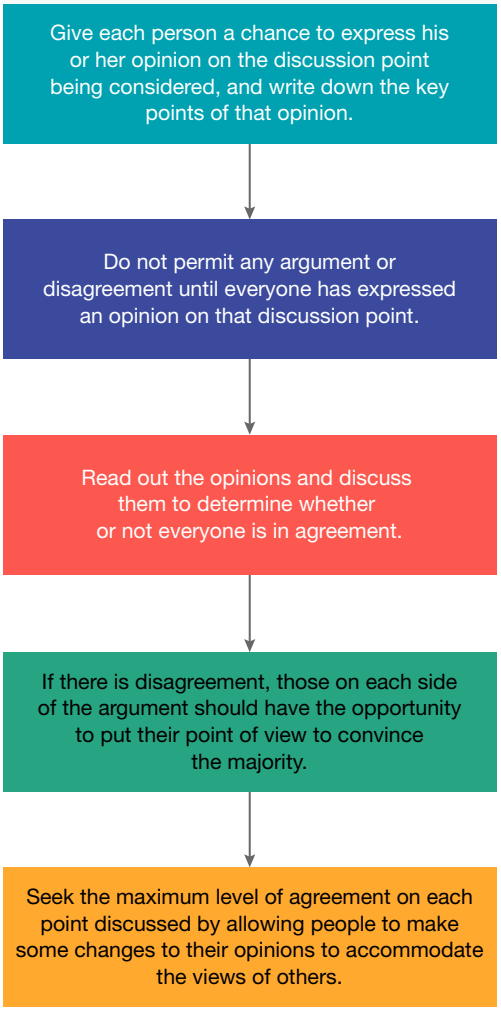
If you had to decide as a group whether or not these alternative measures are fair, or if it would be fairer to have these matters decided by an independent umpire such as a judge or magistrate, how might you reach a conclusion that is agreeable to all?

We can use the process outlined in **FIGURE 1** to work through this issue.

Form into discussion groups to consider the following key points:

1. What are the benefits and disadvantages of going through a process of mediation?
2. What are the benefits and disadvantages of conciliation?
3. What are the benefits and disadvantages of taking the matter to court?
4. Does the more active role of a conciliator make this process less open to manipulation by one of the parties than mediation?

**FIGURE 1** The procedure for problem solving and decision making



5. Would it be fairer to have an independent person arbitrate on the matter?
6. Does the lower cost of the mediation or conciliation make up for the lack of an independent umpire?

Tackle each discussion point one at a time and use the procedure illustrated in **FIGURE 1** to structure your discussion. Take it in turns within your group to keep notes about each point.

### DISCUSS

Reflect on your participation in the group discussion. How easy was it to come to a consensus? What role did you play in the group? How could you have made more effective contributions? In what ways could the group have improved its communication and decision making? **[Personal and Social Capability]**

## 20.6.3 Let me do it

Complete the following activities to practise your skills.

### 20.6 ACTIVITIES

1. Use the procedure in **FIGURE 1** to consider the following issue:
   Law-making by the courts has provided the flexibility that allows new law to be made when there is no other law available to cover the issue at hand. Nevertheless, judges are not democratically elected in the way members of parliament are. Would it not be better to have all laws made by democratically elected members of parliament who are accountable to the voters?
   Discussion points could include:
   (a) What are the advantages and disadvantages of law-making by the courts, both for individuals before the courts and for our society as a whole? (You may need to further research aspects of law-making by the courts to be able to provide useful examples. There is plenty of material available online.)
   (b) What are the advantages and disadvantages of law-making by parliament, particularly in a democratic society?
   (c) Are there changes you believe could improve the system, such as closer cooperation between parliament and the court system? How might this work?
   (d) If you do not see a need for change, how can you convince others to support the current system?
   (e) What ideas can you propose that would take advantage of the best features of law-making through the courts and law-making by a democratically elected parliament?
2. Reflect on your participation in the group discussion:
   - How easy was it to come to a consensus?
   - What role did you play in the group?
   - How could you have made more effective contributions?
   - In what ways could the group have improved its communication and decision making?

   Write a paragraph or two to summarise your experience and outline how your skills in problem solving and decision making have developed through this process.

# 20.11 SkillBuilder: Creating and analysing a survey

## 20.11.1 Tell me

### What is a survey?

A survey is the process of collecting data for the purpose of analysing an issue. It consists of putting a set of questions to a sample group of people. For example, a political party may conduct a survey to find out whether citizens are satisfied with the party's policies.

### How is a survey useful in Civics and Citizenship?

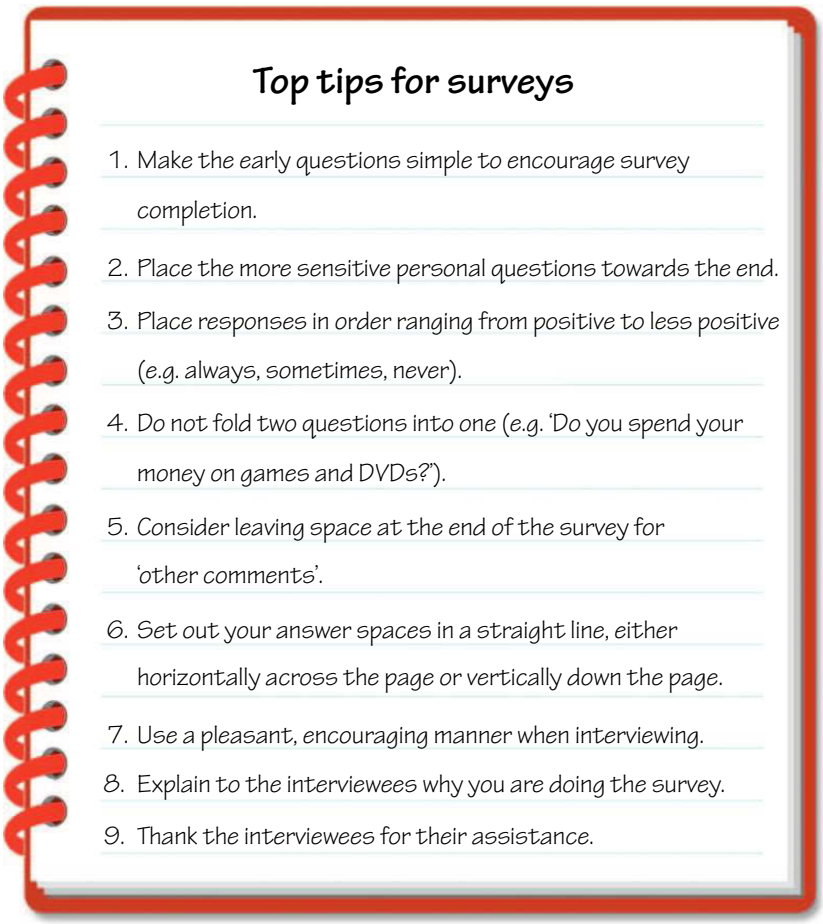
Surveys are an efficient way of collecting information from a large number of respondents. The questions can range widely to reveal people's attitudes, values, opinions and beliefs on political or legal issues.

A good survey:

- has a clear written introduction
- has simple questions early on
- places more sensitive personal questions towards the end
- leaves enough room for all the questions to be answered
- is of reasonable length
- is well presented
- is clearly analysed once responses are collected.

**FIGURE 1** outlines more tips on creating a good survey.

**FIGURE 1** Survey tips



## 20.11.2 Show me

### How to design a survey

#### You will need:

- a sheet of lined paper
- a pen
- questions that you would like to investigate.

#### Procedure

#### Step 1

Decide what you want to learn. You need to clearly decide your goals or your survey results will be unclear.

#### Step 2

Decide whom you want to survey. Will your target group include both young people and adults, or just young people? How many people will you survey? Generally, the more people you survey, the more reliable your results will be.

#### Step 3

Decide what method you will use to collect the data. Consider factors such as cost, speed and whether sensitive information is involved. Survey methods include:

- personal interviews
- telephone survey
- mail survey
- email survey
- internet/intranet webpage survey.

**FIGURE 2** Personal interviews may be conducted in a variety of places, such as at shopping centres or outside theatres. Personal interviews usually cost more to conduct than other survey methods.

### Step 4

Design your survey. Start with a friendly introduction to encourage people to complete the survey. Work out your questions. There are two main types of survey questions.

- Closed questions ask the respondent to select an answer from a range of options.
- Open questions allow the respondent to record their thoughts about an issue. Look at the examples provided in the **FIGURE 3** sample survey for ideas.

Try to keep your survey short and your questions simple. Make sure the layout is attractive and easy to follow.

**FIGURE 3** A sample survey form

#### RATING SCALE

How would you rate the performance of our courts? Please circle one response.

**Excellent** **Good** **Fair** **Poor**

#### AGREEMENT SCALE

How much do you agree with the following statements? Please tick one response.

| | Strongly agree | Agree | Disagree | Strongly disagree |
|---|---|---|---|---|
| The courts treat everyone fairly. | | | | |
| Australia's judges are independent. | | | | |

#### MULTIPLE CHOICE

Please circle one response.

**Age:** 12–14 15–16 17–18 Over 18

#### OPEN-ENDED

Why do we allow people to appeal court decisions?

### Step 5

Conduct a small trial of your survey to make sure the questions are clear and achieve your goals. Make any necessary changes.

### Step 6

Conduct your survey and collate the results. These can then be analysed for patterns or anything unusual. When you analyse the results, consider working out percentages. For example: the females aged 12–16 surveyed spend 10 per cent of their money on computer games, while the males aged 12–16 spend 25 per cent.

## 20.11.3 Let me do it

Complete the following activities to practise your skills.

### 20.11 ACTIVITIES

1. In a small group, design and conduct a survey. It is to be a paper-based survey carried out by personal interview. Note that paper surveys should allow enough room for interviewees to write their answers.
   (a) In your group, select one of the following topics for your survey:
   - equality before the law
   - independent judiciary
   - right of appeal.

   (b) Follow the steps outlined in this SkillBuilder to prepare for and conduct your survey. Read the list of tips for survey preparation in **FIGURE 1** to help ensure your survey is effective.
   (c) Practise your interview skills in your group. Work out how to introduce yourself to the interviewee and explain the purpose of the interview. Decide whether you will give the interviewees the survey and a pen to write down their answers, or whether you will read out the questions and record the responses yourself.
2. Analyse and present your survey results.
   (a) After you have collected responses to your survey, collate the completed surveys. In your group, complete the following tasks.
      i. Graph the responses to the closed questions.
      ii. Read through the responses to the open questions to get a feel for what people are saying.
      iii. Categorise the comments into different groups. The categories you develop are up to you. There may be some comments that do not fit a category.
      iv. Look carefully at the comments in each category. Can you see any patterns?
      v. Compare the comments in each category to your closed questions data. Can you see any patterns here?

   (b) Use a software program such as PowerPoint to prepare a slide show of your results.
   (c) Arrange a time with your teacher to present your slide show to your class. Give each class member a copy of your survey at the start of your presentation.
3. Reflect on your skills development by answering the following questions.
   (a) How did you develop questions for your survey?
   (b) Was it easy to sort out the information you collected? What was easy and what was hard?
   (c) What did you discover about people's views on your topic?
   (d) Can you make any conclusions about what you discovered about your topic?
   (e) Did you discover any problems with your survey design? If so, what were they and how would you improve your survey for future use?

# 20.12 Thinking Big research project: Protecting human rights

## Scenario

There are a number of different bodies, both in Victoria and across Australia, that protect human rights and fight for equality before the law. Most of these do much more than simply process complaints. As an active citizen, it is important that you have an understanding of such entities.

## Task

Your task is to investigate and prepare a PowerPoint presentation on either the Australian Human Rights Commission (AHRC) or the Victorian Equal Opportunity and Human Rights Commission (VEOHRC).

Your presentation should include:

- the goals or aims of the organisation
- the structure and operating principles
- positive actions taken by that organisation to educate the public and promote principles of fairness and equality
- complaints processes and methods of dispute resolution
- examples of some issues that have been dealt with by that organisation
- your assessment of how successful that organisation has been in meeting its goals.

## Process

- Open the ProjectsPLUS application in the Resources for this topic. Click on the **Start new project** button to enter the project due date and set up your project group if you wish. You will complete your presentation individually, but you may work with a partner to swap ideas and share research tasks, if your teacher approves. Save your settings and the project will be launched.
- Navigate to the **Research forum**, where you will find starter topics loaded to guide your research. You can add further topics to the Research forum if you wish. In the **Media centre** you will find an assessment rubric and some useful weblinks.

- Examine the websites of the Australian Human Rights Commission (AHRC) and the Victorian Equal Opportunity and Human Rights Commission (VEOHRC), and select one that you believe you are best able to report on. Gather information on each of the dot points outlined in the **Task** section.
- Add your research notes to the relevant topic pages in the Research forum. When you have completed your research, you can print out the **Research report** in the Research forum to easily view all the information you have gathered, if you wish.
- Prepare your PowerPoint, including images, tables or diagrams as appropriate, to add interest and clarity to your presentation. Break down your information into specific points that can be presented in the PowerPoint format. Remember that each PowerPoint slide represents a summary point, and you should have more information to present than is summarised on the slide, so you should have more detail at your disposal. Prepare a set of detailed notes to refer to as you give your presentation.
- Review your work thoroughly, checking for correct spelling and grammar. When you are happy with your work, present your research to the class and submit your PowerPoint presentation to your teacher for assessment.

on Resources

**ProjectsPLUS** Thinking Big research project: Protecting human rights (pro-0198)

# 20.13 Review

## 20.13.1 Key knowledge summary

### 20.2 The court hierarchy

- Courts have both civil and criminal jurisdiction.
- All courts fit within a court hierarchy. The lower courts deal with less serious matters, and intermediate and higher courts have jurisdiction over more serious matters.
- A court hierarchy allows for a person to appeal to a higher court if he or she is unhappy with the ruling in a lower court.

### 20.3 The roles of particular courts

- The Victorian Supreme Court has both original and appellate jurisdiction.
- Magistrates' Courts are located in metropolitan Melbourne and in regional cities and towns, and hear around 90 per cent of all cases.
- As well as hearing less serious cases, Magistrates' Courts conduct committal hearings on more serious criminal matters to test whether the prosecution has a strong case against the accused.
- Magistrates' Courts also make decisions in relation to the granting of bail to those accused of crimes.
- The Family Court of Australia has jurisdiction over all matters relating to divorce and relationship breakdown.

### 20.4 Different courts, different jurisdictions

- Disputes relating to consumer law can be heard by the Victorian Civil and Administrative Tribunal, which will usually attempt to resolve the matter through mediation before conducting a formal hearing.
- The Victorian Equal Opportunity and Human Rights Commission provides a complaint resolution procedure to help resolve issues of discrimination. The Commission attempts to use a process of conciliation to resolve these disputes.
- The Victorian Environmental Protection Authority has the power to order individuals or organisations to stop polluting and to clean up, but can also initiate civil or criminal proceedings if the polluter does not comply with the orders.

### 20.5 How the courts make laws

- Judges will follow precedents set in previous cases, particularly those precedents set in a higher court.
- When there is no relevant legislation and no existing precedent, judges can make new law when they decide a case brought before them.
- Once new common law has been developed within a court hierarchy, judges in future cases will tend to follow the precedent that has been set.

### 20.7 Equality before the law

- Equality before the law means that people who come into contact with the justice system should be treated equally and fairly, and be able to see that this is the case.
- There are several approaches that courts can take to deal with people from different backgrounds, such as those with minority racial, ethnic or cultural backgrounds, to ensure they are treated fairly.

### 20.8 The independence of our courts

- The Australian Constitution supports the concept of three separate arms of government — the legislative, executive and judicial arms.
- The separation of powers ensures that judges (the judicial arm) are not subject to political influence from the legislative arm or the executive arm of government.
- Judges have security of tenure once appointed, so that they cannot be influenced by government or politics when making their decisions.

### 20.9 The right of appeal

- A party may appeal a court's decision when they are dissatisfied with the decision on the grounds of a question of fact, or if they disagree with the court on a point of law.
- In a civil case, any party can appeal a decision, but some appeals can only be heard if the court gives permission to the person wanting to appeal.
- In a criminal case, only the people who are directly involved in the case can appeal (the accused and the prosecution), and the prosecution can only appeal against a sentence.

### 20.10 When the system fails

- The courts attempt to ensure that everyone who comes before them receives justice, but this does not always work perfectly.
- Factors undermining the application of the principles of justice include bribery, coercion of witnesses, trial by media, and court delays.

## 20.13.2 Reflection

Complete the following to reflect on your learning.

### 20.13 ACTIVITIES

Revisit the inquiry question posed in the Overview:

**Jurisdiction, judges and juries. How does the justice system punish and protect Australian citizens?**

1. Now that you have completed this topic, what is your view on the question? Discuss with a partner. Has your learning in this topic changed your view? If so, how?
2. Write a paragraph in response to the inquiry question, outlining your views.

### on Resources

**eWorkbook** Reflection (doc-31734)
Crossword (doc-31735)

**Interactivity** Australia's justice system and the courts crossword (int-7654)

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**trial by media** creating widespread opinion regarding a person's guilt or innocence before a trial has occurred or before a verdict has been delivered
**Universal Declaration of Human Rights** a declaration passed by the United Nations outlining the fundamental human rights of all people in the world

# 21 Identity, the media and global connectedness

## 21.1 Overview

I am an Australian. What does this mean in our multicultural society and what influences our Australian identity?

### 21.1.1 Introduction

For tens of thousands of years, Australian society existed without significant influence from the outside world. There is evidence of Indigenous Australian communities trading with their northern neighbours for the best part of 50 000 years. However, living in relative geographical isolation, Australian Indigenous society developed a distinct, yet varied culture free from external influences. This changed with the arrival of European settlers who brought with them their own culture and traditions. For over 200 years, successive waves of immigration have continued to bring new cultures, traditions and customs to Australia, creating a complex tapestry of national identity. The impact of external influences on Australian culture and identity has continued to grow, fuelled in many ways by the influence of popular culture and media. In this topic, we will investigate the development of Australian identity in the context of the global community. We will discuss how Australian identity has evolved and examine the drivers behind this evolution.

#### Resources

**eWorkbook** Customisable worksheets for this topic

**Video eLesson** Australia's role in a global community (eles-2365)

#### LEARNING SEQUENCE


**21.1** Overview
**21.2** Australian democracy and global connections
**21.3** Shaping Australian identity
**21.4** Attitudes to diversity
**21.5** Participating in civic life
**21.6** **SkillBuilder:** Debating an issue
**21.7** **Thinking Big research project:** Don't stereotype me!
**21.8** **Review**


To access a pre-test and starter questions and receive immediate, **corrective feedback** and **sample responses** to every question, select your learnON format at www.jacplus.com.au.

# 21.2 Australian democracy and global connections

## 21.2.1 Active citizenship

Like many countries in the world, Australia is a representative democracy. In this system, eligible voters elect officials to make decisions on their behalf and on behalf of their communities. Australia's various levels of government facilitate civic life and ensure the safety, freedom and rights of individuals and communities. In order to be active participants in this democratic society, Australian citizens are obliged to fulfil a range of responsibilities. Chief among these is our obligation to follow the rule of law and to demonstrate behaviours that are aligned with Australian values. Yet as members of a global community, Australians must also be mindful of our responsibilities as global citizens. In this subtopic, we will learn more about our responsibilities as both Australian and global citizens and consider whether it is possible to meet both sets of duties equally.

## 21.2.2 Multiculturalism and pluralism

You may have heard or perhaps sung the song *I am Australian* many times, but have you ever stopped to think about the lyrics? Australia is a unique country in that the vast majority of its citizens were, at some stage during their history, immigrants. The only true Australians are Aboriginal and Torres Strait Islander people whose ancestors have walked these lands for tens of thousands of years. So while we are 'one', we are also 'many'.

According to the 2016 census, one-third of Australians were born overseas and 49 per cent were either born overseas or have at least one parent who was born overseas. It is this cultural diversity that defines Australia as a **multicultural** society, but further, it is our acceptance of all people's right to maintain their individual cultural traditions, languages and faiths that defines us as a **pluralist** society. In our pluralist Australian society, there is no expectation that those from minority groups need to abandon their heritage, beliefs, customs or culture in order to be considered Australian — the situation is quite the opposite! There is an expectation that cultural differences are respected and that everyone should demonstrate tolerance and understanding.

### on Resources

**Weblink** I am Australian

## 21.2.3 Rights and responsibilities of Australian citizens

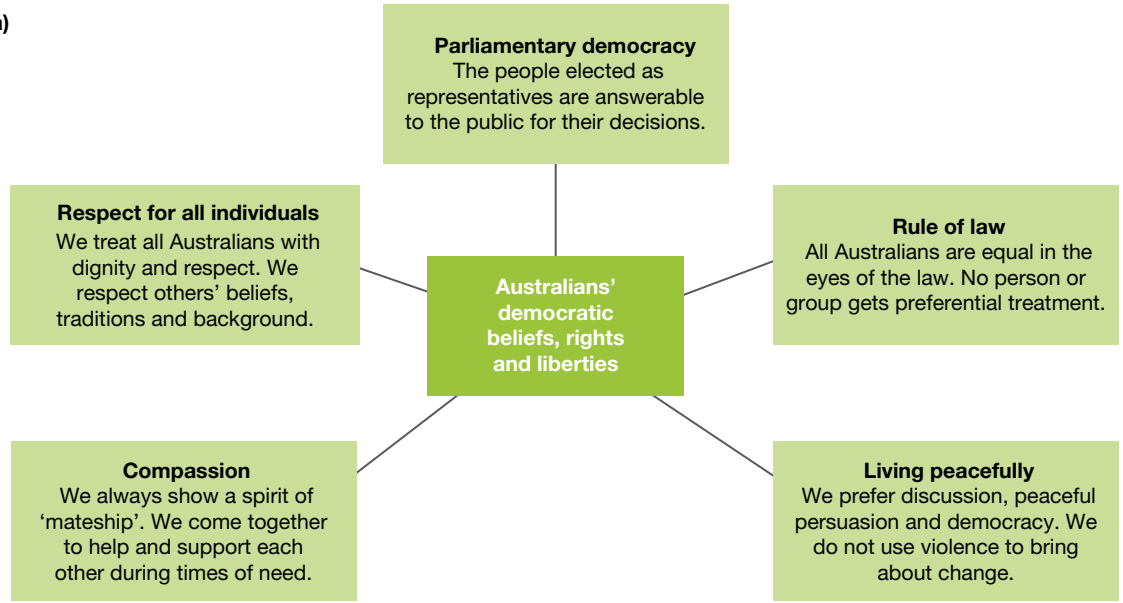
As citizens in a pluralist society, it is our responsibility to embody the values and demonstrate behaviours that are characteristic of pluralism. Each Australian citizen has rights and responsibilities which, if upheld, can protect and foster pluralism within our society. According to the Australian Department of Home Affairs the responsibilities of an Australian citizen are to:

- behave in accordance with Australia's democratic beliefs
- respect the rights and liberties of Australia
- follow and obey the law
- vote in federal and state or territory elections, and in referendums
- defend Australia if necessary
- serve on jury duty if summoned.

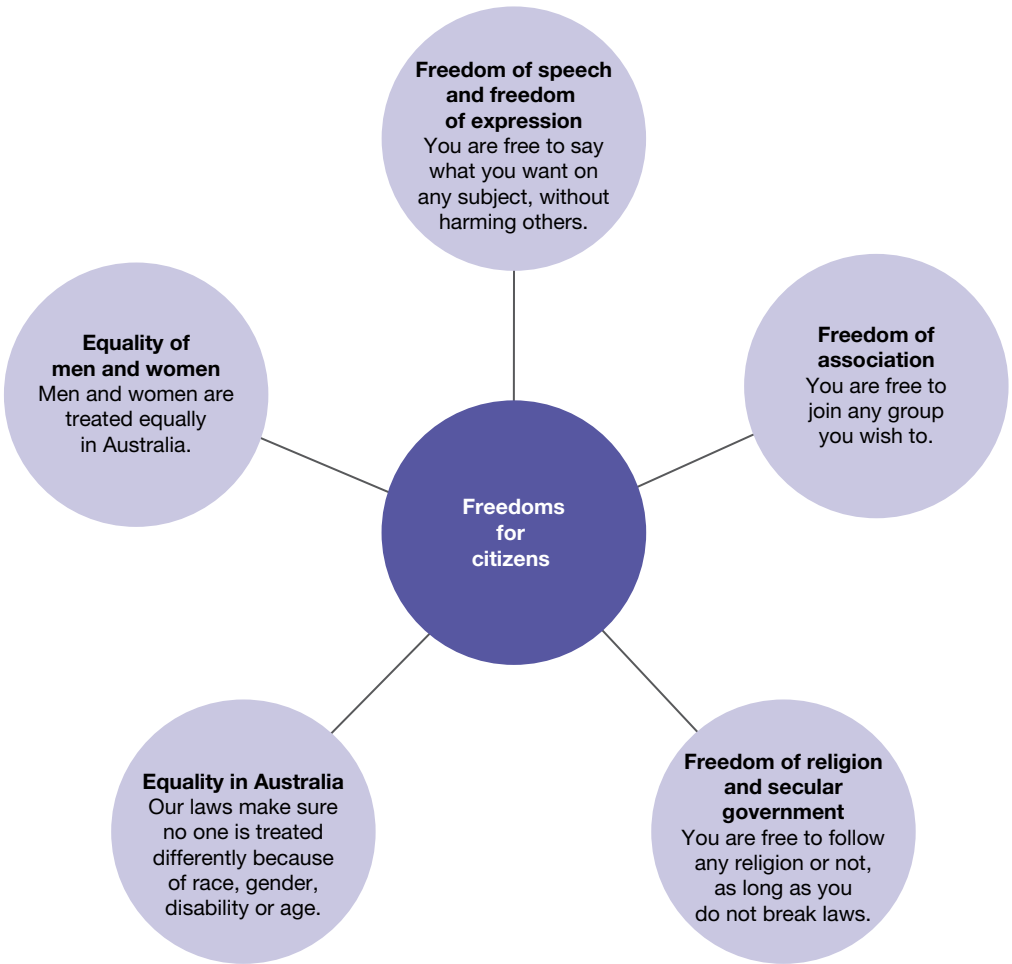
**FIGURE 1** outlines some of the rights, beliefs and freedoms of Australian citizens. These are the rights and responsibilities we have as Australian citizens. However, as our country is part of the global community, we also need to consider our role as global citizens.

**FIGURE 1** Rights, beliefs and liberties of Australian citizens, as outlined by the Department of Home Affairs

**(a)**




**(b)**



## 21.2.4 Global citizenship

Just as our Australian citizenship comes with certain obligations, so too does our membership of the global community. These responsibilities are listed in **FIGURE 2**.

**FIGURE 2** What is a global citizen?

According to Oxfam International, a global citizen is someone who:

- is aware of the wider world and has a sense of their own role as a world citizen
- respects and values diversity
- has an understanding of how the world works economically, politically, socially, culturally, technologically and environmentally
- is outraged by social injustice
- participates in and contributes to the community at a range of levels from local to global
- is willing to act to make the world a more sustainable place
- takes responsibility for their actions.

As you can see from **FIGURE 2**, being an active global citizen is no easy task, especially when you consider that active global citizens also need to be active citizens of their own countries! However, to maintain the strength and cohesion of our communities, it is important that we have an understanding of our roles and a willingness to participate.

### DISCUSS

'Our responsibilities as Australian citizens are more important than our global citizenship responsibilities.' Do you agree or disagree with this statement? Why? **[Ethical Capability]**

### 21.2 EXERCISES

**Civics and Citizenship skills key: CS1** Remembering and understanding **CS2** Describing and explaining **CS3** Examining, analysing, interpreting **CS4** Questioning and evaluating **CS5** Reasoning, creating, proposing **CS6** Communicating, reflecting

#### 21.2 Exercise 1: Check your understanding

1. **CS1** Define *representative democracy*.
2. **CS1** How does pluralism differ from multiculturalism?
3. **CS1** What proportion of Australians were born overseas or have a parent who was born overseas?
4. **CS1** In a pluralist society, what are new migrants encouraged to do?
5. **CS2** What similarities and differences are there between our responsibilities as Australian citizens and global citizens?

#### 21.2 Exercise 2: Apply your understanding

1. **CS5** Consider the idea of Australia as a pluralist society. Provide three examples of pluralism in action in Australia.
2. **CS5** Are there any rights or responsibilities that you would remove from the list and **FIGURE 1** diagrams in section 21.2.3? Justify your response.
3. **CS5** Are there any rights or responsibilities that you would add to those shown in **FIGURE 1**? Explain.
4. **CS6** Which do you believe are more important — our responsibilities as Australian citizens or our responsibilities as global citizens? Explain your response.
5. **CS6** Provide your own definition of what it means to be a global citizen.

Try these questions in learnON for instant, corrective feedback. Go to www.jacplus.com.au.

# 21.3 Shaping Australian identity

## 21.3.1 Our diverse sense of identity

Because ours is a pluralist society, it is difficult to define Australian identity. The identity of a pluralist society will, by definition, be as diverse as the backgrounds of its citizens. Australian identity has evolved over time and continues to evolve today. Our history has featured several waves of immigration which have brought new cultures, traditions and beliefs to our shores. Each wave has contributed to the diverse cultural identity that we see in Australia today. We see evidence of these changes in different aspects of daily life including food, music and fashion. In this subtopic we will consider how waves of immigration have contributed to the evolution of Australian identity.

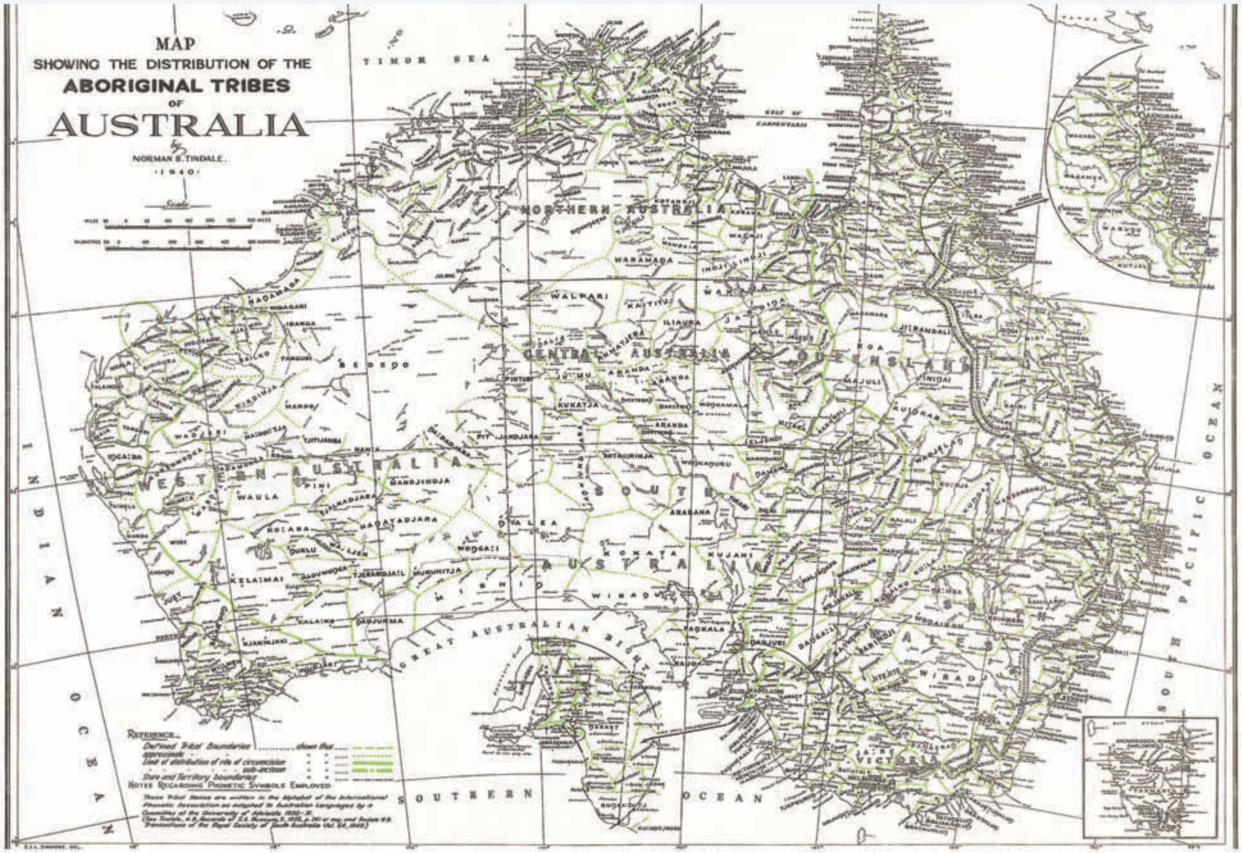
**FIGURE 1** Shaped by waves of immigration, Australia's diverse cultural identity continues to develop.

## 21.3.2 The evolution of Australian identity: Indigenous Australians

Our investigation of Australian identity begins with the first Australians. One of several mistakes made by early European settlers was the assumption that Indigenous Australian communities lacked an identifiable culture. Since the Indigenous way of life bore little resemblance to British culture, the settlers claimed that Aboriginal culture must not exist. This false claim lay the foundation of the British claim of ***terra nullius***. Yet for tens of thousands of years before European settlement, Australia had indeed been occupied by a people with complex social structures and cultural traditions. Indigenous habitation of Australia began at least 60 000 years ago, with the first Australians arriving via a land bridge that once connected Australia with Papua New Guinea.

For thousands of years, Indigenous populations flourished with a culture characterised by strong family connections and deep spiritual connection with the land. As Indigenous people spread across the country, more than 500 nations developed with distinct geographic boundaries. Despite some cultural and language differences that existed between these nations, they were linked by key ideological themes including **kinship** and connection to country. Kinship was, and still is, a central principle of Indigenous culture. An individual's place within the kinship system established their relationship to others and their responsibilities and duties to their community. This sense of civic responsibility can still be seen in contemporary Australian culture.

**FIGURE 2** Map showing the language, tribal and nation groups of Aboriginal Australian peoples c. 1940




***Source:*** *Map Showing the Distribution of the Aboriginal Tribes of Australia*, Norman B. Tindale, 1940. Users of this map should be aware that certain words, terms or descriptions may be culturally sensitive and may be considered inappropriate today, but may have reflected the creator's attitude or the period in which they were written. Borders and terminology used may be contested in contemporary contexts.

Land or 'country' has a special meaning in Indigenous cultures and refers to more than simply a physical location. While natural environments and the resources they contain can be used by humans, they are also sacred places that must be protected and preserved for the future. In this way, we can see Indigenous culture as the origin of the close connection that many Australians have with their natural environment.

## 21.3.3 The evolution of Australian identity: European settlement

It could be argued that the impact of European settlement in Australia has had the biggest influence on the evolution of Australian identity. The arrival of the First Fleet in 1788 and the subsequent development of colonial settlements across Australia significantly altered the country's physical and cultural landscapes. While interactions between European settlers and Indigenous Australians may have begun peacefully, settlers' marginalisation of Indigenous people, combined with cultural differences and a lack of understanding, soon led to conflict. Competition for resources, resistance against the Europeans and the introduction of European diseases decimated Indigenous communities. By 1798, it is estimated that Australia's Indigenous population had been reduced by 90 per cent. Not only did these interactions have a horrific impact at the time, but they have continued to influence Indigenous communities, leaving a legacy of disadvantage and marginalisation. Unfortunately, we still see aspects of this disadvantage in Indigenous communities today, as detailed in **TABLE 1**; measurements of wellbeing for Indigenous Australians are lower than that of non-Indigenous Australians in all indicators listed.

**TABLE 1** Differences in wellbeing statistics for Indigenous and non-Indigenous Australians (2016)

| Wellbeing indicator | Indigenous Australians | Non-Indigenous Australians |
|---|---|---|
| Male life expectancy | 71.6 years | 80.2 years |
| Female life expectancy | 75.6 years | 83.4 years |
| High school completion rate | 62% | 86% |
| Employment to population rate (15–64-year-olds) | 48% | 75% |
| Median weekly income | $542 | $852 |

It is important to remember the negative impacts that European settlement had on Indigenous communities. We also need to consider the other ways in which this period of Australian history influenced the evolution of our national identity. British colonisation of Australia left our country with significant links to Britain, particularly in regard to aspects of popular culture. British sport, literature, music, customs and traditions were all very much a part of Australian life. In fact, it was our connection to Britain, as a member of its empire, which directly led to Australia's involvement in World War I.

## 21.3.4 The evolution of Australian identity: The bonds of war

Over 400 000 Australians enlisted in the First Australian Imperial Force (AIF) during World War I, with 60 000 losing their lives. The horrors of war left many soldiers with physical and psychological scars. Some soldiers found it difficult to return to their previous jobs and lives and it took the entire country time to recover as a nation. Amidst the hardship of war, however, came one of the most frequently discussed parts of Australia's cultural identity – the concept of mateship.

**FIGURE 3** The experience of Australian soldiers at Gallipoli during World War I has long been associated with the concept of Australian mateship.

The word *mateship* is commonly associated with Australian '**diggers**' who fought in World War I, and more specifically, at Gallipoli. The word itself conjures images of soldiers risking their own lives to help injured comrades. However, the concept of mateship and even the use of the word 'mate' in Australia originated a long time before World War I. The word *mate* has its origins in the Germanic word *gemate*, which refers to people 'eating at the same table'. 'Mate' was also used frequently in a naval context and more broadly in colonial Australia as well. The concept of mateship in Australian culture gained prominence in the early twentieth century through the works of poets such as Henry Lawson. The romantic view of mateship was further enshrined in Australian culture through stories of war and resilience.

Australia's involvement in World War II also had significant cultural impacts. This marked the beginning of a close relationship between Australia and the United States of America. To strengthen its position in the Pacific, the US established naval bases in Queensland. At the height of this operation, more than 150 000 US soldiers were based in Australia. Their presence began to influence trends in fashion, music, technology and other customs. By the end of 1944, nearly two-thirds of Australian imports were sent from the US. Soon, it was America, rather than Britain, that would have the strongest influence on Australian culture and identity.

The cultural impacts of war on Australian identity are also evident in the waves of migration that have been precipitated by various twentieth-century conflicts. For a significant part of the twentieth century, immigration to Australia was closely restricted by the now controversial *Immigration Restriction Act (1901)* or, as it was widely known, the White Australia Policy. Under this policy, it was extremely difficult for immigrants from non-European countries to settle in Australia. The policy was relaxed after World War II and finally abolished in 1973 under the Whitlam Government. **TABLE 2** summarises the relationship between global conflicts and immigration patterns.

**TABLE 2** Flows of migrants to Australia associated with world conflicts

| Conflict | Origin of migrants |
|---|---|
| World War II | Europe |
| Vietnam War | Vietnam, Cambodia |
| Cold War | USSR: Russia, Ukraine, Baltic states |
| Various African civil conflicts | South Africa, Sudan, Somalia |

## 21.3.5 Influences in the twenty-first century

Australian identity has also been influenced by global events that have occurred in the early part of the twenty-first century. The impacts of the horrific terror attacks committed in the US on 11 September 2001 were felt across the world, including in Australia. Not only were strict and controversial anti-terror laws introduced by the federal government, but an underlying feeling of fear began to seep into Australian society. The 2002 Bali bombings, in which 88 Australians were killed, and the 2014 Lindt Café siege in Sydney, in which two hostages and the lone gunman were killed, also contributed to the development of a tense social climate. Times of crisis caused by these events are difficult for governments and communities to manage. While the safety of Australian citizens is paramount, we must also ensure that such events do not inflame racial tensions or lead to **xenophobia**.

The Lindt Café siege was carried out by a man who claimed allegiance to a terrorist organisation with **Islamic** links. In the aftermath of this event, many Australians took to Twitter to combat rising anti-Islamic sentiment. Using the hashtag #illridewithyou, users offered to accompany any Muslim person who might feel threatened while taking public transport. Over 150 000 tweets were posted with this hashtag, symbolising solidarity between Muslim and non-Muslim Australians. This example also provides an example of the positive societal role that social media can play when used in such a manner.

**DISCUSS**

In a land characterised by diversity, is it possible to devise a universal concept of what it is to be Australian?

**[Intercultural Capability]**

## 21.3.6 Social media and Australian identity

The rapid development of technology, especially information communication technology and social media platforms, has also had a significant impact on Australian identity and on democracy within Australia. Many of these impacts have been positive, and have provided a voice to marginalised groups of society and raised awareness of social, political and environmental issues.

The use of hashtags on Twitter to group similar posts together is one example of how an issue or event can gather traction across Australia and the world. In 2018, half of the top ten Australian Twitter hashtags referred to social or political issues, including the top ranked hashtag, #AusPol. Other issues included the political instability of the federal government, referenced by #LibSpill (ranked number 4); the ever-present concerns of global environmental issues such as #climatechange (number 6); the controversy caused by the government's refugee policy referenced by #Nauru (number 8); and #MeToo — the global call to arms for women's rights (number 9). Unregulated use of social media, however, can also allow the dissemination of misinformation and false representations of cultural groups. We will investigate the impacts of the misuse of media – both social media and its traditional forms – in the next subtopic.

**FIGURE 4** The #MeToo movement was a worldwide phenomenon calling out male sexual harassment and assault of women.

### 21.3 EXERCISES

**Civics and Citizenship skills key: CS1** Remembering and understanding **CS2** Describing and explaining **CS3** Examining, analysing, interpreting **CS4** Questioning and evaluating **CS5** Reasoning, creating, proposing **CS6** Communicating, reflecting

#### 21.3 Exercise 1: Check your understanding

1. **CS1** For how long have humans lived in Australia?
2. **CS1** What are two of the central themes of Indigenous Australian culture?
3. **CS2** Describe the three ways in which European settlement led to the death of so many Indigenous Australians.
4. **CS2** Explain the connection between Australia's involvement in global conflicts and changing cultural influences.
5. **CS2** How has social cohesion been threatened by events in the twenty-first century?

#### 21.3 Exercise 2: Apply your understanding

1. **CS2** Why is it difficult for a pluralist society such as Australia to have a singular national identity?
2. **CS5** Aboriginal culture has a strong connection to natural environments. Explain how this connection can be seen in Australian culture today.
3. **CS5** Refer to **TABLE 1**.
   (a) Which of the statistics listed do you believe is the most concerning? Why?
   (b) Suggest one strategy that could be used to address the issue you identified in part (a).
4. **CS5** What evidence of British cultural influence still exists in Australia today?
5. **CS6** Social media is a divisive influence on Australian society and should be banned immediately. Do you agree or disagree with this statement? Explain your response.

Try these questions in learnON for instant, corrective feedback. Go to www.jacplus.com.au.

# 21.4 Attitudes to diversity

## 21.4.1 Influences on opinions

Consider how you form opinions about music. Maybe you'll hear a song you like on the radio, or maybe a friend will play you a song that they've heard before, or perhaps you simply grew up listening to the music in your parents' collection. All these factors influence your taste in music, your musical opinion. Now consider how you form opinions about different groups in Australian society. Are you influenced by what you hear and read, by what your friends tell you, or by the way in which you have been raised? It is natural for your opinions to be influenced by all of these factors. What you read, hear and watch is largely determined by the media you consume, whether it is traditional forms of media such as newspapers, radio and television, or modern media such as the internet and social media platforms. In this subtopic, we will investigate how different social groups can be represented in the Australian media and how this can influence social cohesion.

## 21.4.2 The representation of social groups in Australian media

**Stereotypes** exist due to the way social groups are represented in the media. Our perceptions of these groups are heavily influenced by what we watch on television and read in newspapers and on social media. So influential are these sources of information that they can often override our existing knowledge of social groups. We can see the influence of stereotypes in the results of the following two studies.

A 2018 Deakin University report found that over a third of news stories about minority communities portrayed them in a negative light. Another study investigated the ways in which elderly people are represented by the Australian media. The results of this survey are shown in the **FIGURE 1** graphic. Words that appeared more frequently appear larger in this image. These two studies remind us that we need to think critically about the way that social groups are represented in the Australian media and consider the impacts these representations can have.

**FIGURE 1** Perceptions of how older people are portrayed in the media

Stereotypes can have a significant impact in societies regardless of the way that they are created or perpetuated. Most stereotypes have negative connotations and are based on only a small part of a social group's true identity. By accepting a stereotype, we limit ourselves in developing a true understanding of different cultures. We exaggerate cultural and religious differences and forget the similarities we may share. In this way, stereotypes can undermine cohesion in Australian society.

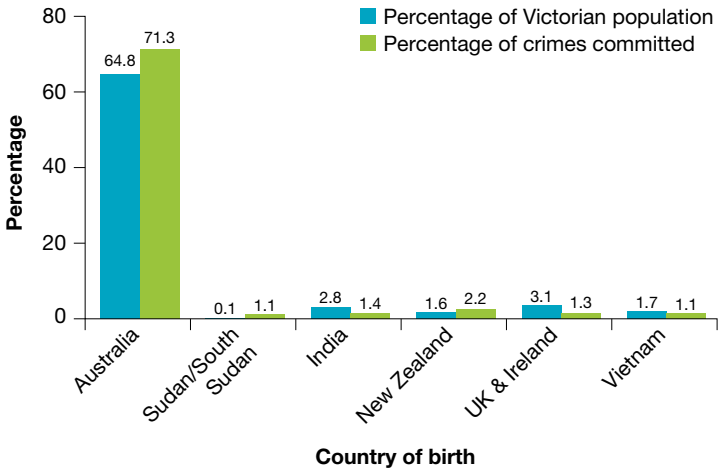
## 21.4.3 CASE STUDY: The crisis that wasn't — African gang violence in Melbourne

The issue of African gang violence gained prominence in the media after a confrontation between groups of African youths at Melbourne's Moomba festival in 2016. Some of the 37 youths arrested at this brawl were linked to a gang known as 'Apex'. Although this gang included people from a range of nationalities, the name Apex quickly became synonymous with African gang violence. Over the following months, multiple media outlets — particularly newspapers and talk-back radio stations — began to focus on the issue. Headlines such as 'The New Menace', 'Apex — Out of Control' and 'No wonder we don't feel safe' were seen across Melbourne newspapers and current affairs shows. The issue also became politicised when state and federal politicians began commenting on the so-called crisis. Malcolm Turnbull, then prime minister, called African gang violence in Melbourne '... a real concern' and former Home Affairs Minister, Peter Dutton, claimed that Victorians were '... scared to go out to restaurants'. The reality of the situation was far from the crisis portrayed by some media outlets. Further, the nationality and cultural background of perpetrators of crimes seemed only to be mentioned by the media when African youths were involved. County Court Chief Judge Peter Kidd highlighted this issue, stating that '... the media chose to report on those issues [related to African violence] ... creating a false impression'.

A closer look at the crime data reveals a lack of statistical evidence for many of the claims made by media outlets. Between April 2017 and March 2018, 73.5 per cent of the unique offender population (those people alleged to have committed crimes) were born in Australia and New Zealand. People born in Sudan accounted for only 1.1 percent. Due to the small population size of the Sudanese community, offenders appear over-represented in this crime data. It was this fact that some media outlets chose to ignore in their reporting.

The African gang violence issue is one example of how social groups can be misrepresented in the media. The misrepresentation of this issue inflamed some xenophobic attitudes towards people of African descent and decreased social cohesion in communities in Melbourne and other major Australian cities. This is an important reminder of the need to think critically when we consume information from all forms of media, especially when this information relates to the representation of cultural groups.

**FIGURE 2** Crimes committed in Victoria by country of birth




***Source:*** Crime Statistics Agency Victoria, 2017; Australian Bureau of Statistics, 2016

## 21.4 EXERCISES

**Civics and Citizenship skills key: CS1** Remembering and understanding **CS2** Describing and explaining **CS3** Examining, analysing, interpreting **CS4** Questioning and evaluating **CS5** Reasoning, creating, proposing **CS6** Communicating, reflecting

### 21.4 Exercise 1: Check your understanding

1. **CS1** How are stereotypes created?
2. **CS2** How can stereotypes undermine social cohesion in Australia?
3. **CS1** What is the main danger of accepting a stereotype?
4. **CS2** Explain how the African gang issue began.
5. **CS1** People from which background committed the most crimes between April 2017 and March 2018?

### 21.4 Exercise 2: Apply your understanding

1. **CS6** Do you believe stereotypes can be useful in any way? Explain your view.
2. **CS2** Why did politicians become involved in the African gang issue?
3. **CS5** The real crime statistics regarding African gang violence were readily available; why do you think some media outlets chose not to publish this data?
4. **CS6** Explain how we can combat negative stereotypes when they appear in the media.
5. **CS6** Imagine you were a newspaper reporter asked to write an article about the African gang crisis.
   (a) How would you have approached this article?
   (b) What sources would you have used in your research?

Try these questions in learnON for instant, corrective feedback. Go to www.jacplus.com.au.

# 21.5 Participating in civic life

## 21.5.1 Making a contribution

A cohesive society requires citizens to embody a country's values and fulfil their responsibilities as active members of that society. As well as fulfilling their official responsibilities, members of a community can also foster social cohesion by being active participants in civic life. Such participation can be simple and seemingly inconsequential activities such as being courteous and polite members of society. Stopping in the street to help someone who has dropped a bag, or pulling over to help someone fix a flat tyre, are both examples of positively contributing to civic life, albeit on an individual scale. Citizens and members of a community can also make such contributions on a larger scale. In this subtopic we will investigate some of the ways in which people contribute to civic life, and by doing so, increase social cohesion.

**FIGURE 1** There are many ways to make a positive contribution to civic life.

## 21.5.2 CASE STUDY: Working for the common good

Many people go beyond their basic civic responsibilities and dedicate significant time and effort to working for the **common good**. The concept of the common good refers to an outcome that benefits an entire society or community. One example of someone who works to achieve a goal that is for the common good is a social entrepreneur — someone who identifies a particular issue and develops a product or service designed to address a perceived need in that area. Anna Donaldson is one such social entrepreneur, whose not-for-profit enterprise, Lively, aims to provide training and employment opportunities for young people, while addressing the issue of social isolation among older Australians. The interview below explains Anna's motivation and her work.

### AN INTERVIEW WITH SOCIAL ENTREPRENEUR, ANNA DONALDSON

**Interviewer:** When and why did you start Lively?

**Anna:** I started Lively shortly after finishing my Arts degree at university. While I was at uni I had been volunteering as a life-story writer for elderly people, and I was introduced to an older lady who was very isolated and alone. It really opened my eyes to how many older people live out the last years of their lives in loneliness, and it struck me that something had to be done about it. Meanwhile, I was growing increasingly concerned about youth unemployment and the lack of work opportunities available for young people. One day I had a light-bulb moment over breakfast and saw an opportunity to bring the two problems together into one solution. From there, I just had to make Lively happen!

**Interviewer:** Why did you choose a not-for-profit structure?
**Anna:** The main difference between a for-profit and **not-for-profit organisation** is ownership. In a for-profit company, individuals own the business (or a part thereof), and the profits the business makes go directly to them. In a not-for-profit company, no individuals own the business, and if the business makes a profit then all that profit goes straight back into growing the business instead of being distributed to owners. I didn't start Lively to make money for myself – I started it to make a positive difference in the community. And to be a for-profit business would have probably meant that many older people who needed our help would not have been able to afford it. So I chose a not-for-profit structure, which has enabled us to access grants and other types of funding to start up and grow the business, while keeping the services as affordable as possible for people who need help.

**FIGURE 2** Anna Donaldson (left) created Lively to address social isolation, youth unemployment and to foster connections between younger and older Australians.

**Interviewer:** What have been the most satisfying and the most challenging aspects of establishing and running your business?
**Anna:** The most satisfying aspect has been seeing the positive difference that Lively has made in the lives of so many young and older people, and knowing that I and our team are ultimately responsible for that. It's also incredibly satisfying to see something that started out as nothing more than an idea in your mind grow into fruition – there's great personal pride that comes with that, and a real sense of achievement. But it's definitely very challenging too! As an entrepreneur you are often out of your comfort zone, learning on the go and working incredibly hard for what can sometimes seem like very little payoff or progress in the early days. Starting a business takes time, and it can feel very slow to begin with. Keeping on going through all the ups and downs is definitely one of the biggest challenges, but it's well worth it if you do!

## 21.5.3 Fostering interfaith understanding and social justice

Not-for-profit organisations (NFPs) such as Lively, detailed in the section 21.5.2 case study, are an example of organisations that work for the common good. As the name suggests, these organisations are not motivated by financial gain. Instead, NFPs set out to achieve goals that are usually focused on social, environmental or political issues.

Another example is Stand Up, a small NFP that operates mainly in Melbourne and Sydney, working to foster interfaith understanding and social justice. With a focus on social justice and care for Indigenous and refugee communities, Stand Up seeks to foster stronger relationships between and within different parts of Australian society. Stand Up aims to facilitate social cohesion through education programs and leadership workshops, both for affected communities and for school students. By educating both groups of people, Stand Up hopes to increase understanding and foster more positive social relationships. What makes Stand Up unique is that it is staffed almost entirely by people from the Jewish community and it runs its program primarily in Jewish schools. In this way, Stand Up addresses issues of social justice at the same time as it attempts to foster stronger interfaith bonds in the community.

**FIGURE 3** Stand Up teaches English classes as part of its refugee support programs.

## 21.5.4 The role of NGOs

**Non-government organisations (NGOs)** are another important group that works towards goals based on the common good. Australian NGOs must be accredited by the Department of Foreign Affairs and Trade to receive government grants and support. The majority of Australian NGOs are classified as operational NGOs. This means that they actively plan and implement projects on a local, national or global scale. One such operational NGO is the Fred Hollows Foundation (FHF). The founder of this organisation, Dr Fred Hollows, dedicated his life to combating treatable eye disease and blindness in Australian Indigenous communities. From humble beginnings in which Dr Hollows performed most of the surgeries himself, the foundation is now active in many countries across Asia, Africa and the Middle East. Although the FHF employs doctors and other medical professionals, regular Australians can also contribute to its programs through volunteer work and donations. In this way, NGOs such as the FHF provide an opportunity for all members of Australian society to contribute to their community either directly or indirectly.

### 21.5 EXERCISES

**Civics and Citizenship skills key: CS1** Remembering and understanding **CS2** Describing and explaining **CS3** Examining, analysing, interpreting **CS4** Questioning and evaluating **CS5** Reasoning, creating, proposing **CS6** Communicating, reflecting

#### 21.5 Exercise 1: Check your understanding

1. **CS1** Provide three examples of how someone can be an active participant in civic life.
2. **CS2** Describe the concept of the common good.
3. **CS3** What is the goal of Lively and how does this goal relate to the common good?
4. **CS2** What does an operational non-government organisation do?
5. **CS2** Explain how people can contribute to the operation of a non-government organisation?

#### 21.5 Exercise 2: Apply your understanding

1. **CS2** Why is it important for members of a community to contribute to civic life?
2. **CS6** Why would a largely Jewish organisation be interested in helping new immigrants from Africa?
3. **CS2** How can non-government organisations in Australia receive funding?
4. **CS6** If you were to start a new non-government organisation, what would you focus on and what kinds of projects would you implement?
5. **CS6** 'The work completed by small-scale not-for-profits is not as important as that completed by multinational non-government organisations.' To what extent do you agree with this statement? Explain your view.

Try these questions in learnON for instant, corrective feedback. Go to www.jacplus.com.au.

# 21.6 SkillBuilder: Debating an issue

online only

### What is a debate?

Debating turns arguing into a sport, complete with set positions, rules and a points system. In a regular debate, two teams of three debaters argue opposing sides of an issue. This issue is presented as a statement that can be researched, analysed and then debated. For example: 'Stereotypes decrease social cohesion.' After hearing all six speakers, judges decide which side spoke the best and presented the most convincing arguments.

### Select your learnON format to access:

- an explanation of the skill (Tell me)
- a step-by-step process to develop the skill (Show me)
- an activity to allow you to practise the skill (Let me do it).

# 21.7 Thinking Big research project: Don't stereotype me!

online only

## SCENARIO

The presence of stereotypes in a community can have negative impacts on social cohesion. By misrepresenting cultural or social groups, stereotypes can inflame cultural and social tensions and divide communities. Your task is to develop an advertising campaign that seeks to address the negative implications of stereotyping within Australian society.

### Select your learnON format to access:

- the full project scenario
- details of the project task
- resources to guide your project work
- an assessment rubric.

### on Resources

**ProjectsPLUS** Thinking Big research project: Don't stereotype me! (pro-0199)

# 21.8 Review

online only

## 21.8.1 Key knowledge summary

Use this dot point summary to review the content covered in this topic.

## 21.8.2 Reflection

Reflect on your learning using the activities and resources provided.

### on Resources

**eWorkbook** Reflection (doc-31736)
Crossword (doc-31737)

**Interactivity** Identity, the media and global connectedness crossword (int-7655)

## KEY TERMS

**common good** something that is in the interest or to the benefit of everyone
**digger** an Australian or New Zealand soldier, particularly used with reference to those who served in World War I
**Islamic** relating to the Muslim religion, Islam
**kinship** a multi-faceted social system that prescribes Indigenous peoples' responsibilities to others and the land
**multicultural** describes a society in which the cultures and traditions of many different groups coexist and are encouraged
**non-government organisation** (NGO) a group or business that is organised to serve a particular social purpose at local, national or international level, and operates independently of government

**not-for-profit organisation** a group or business that puts any profit towards its social purpose rather than returning profits to owners
**pluralist** describes a society that accepts all people's right to maintain their individual cultural traditions, languages and faiths
**stereotype** widely held but oversimplified idea of a type of person or thing
***terra nullius*** ('land belonging to no-one') in Australia, the legal idea that since no-one was 'using' the land when the first Europeans arrived, it could be claimed by the British Crown
**xenophobia** extreme fear, distrust or hatred of foreigners

# 21.6 SkillBuilder: Debating an issue

## 21.6.1 Tell me

### What is a debate?

Debating turns arguing into a sport, complete with set positions, rules and a points system. In a regular debate, two teams of three debaters argue opposing sides of an issue. This issue is presented as a statement that can be researched, analysed and then debated. For example: 'Stereotypes decrease social cohesion.' After hearing all six speakers, judges decide which side spoke the best and presented the most convincing arguments.

### Why is debating useful?

Formal debating is not like a discussion you may have with your family or friends. A debate requires you to have properly investigated an issue and to have considered both sides of the argument. Not only does debating develop your communication skills, it also teaches you the importance of research and preparation. Many politicians, lawyers and businesspeople often remark that their involvement in school debating competitions helped develop skills and confidence that they use today.

## 21.6.2 Show me

### How to prepare for a debate

A formal debate follows a set of rules. In a debating contest (for example, in school) there are two teams of three speakers, each of whom plays a defined role. One team argues in favour of the topic (the affirmative team) and the other team argues against the topic (the negative team). You can prepare for a debate by following the steps below.

#### Step 1

Form a team of three people. Find out whether your team is to debate in favour of or against the topic. As a team, examine the topic carefully and discuss what you think it is about. You may need to use a dictionary to find a definition of key words contained in the topic statement.

#### Step 2

Work out what arguments support your team's case. List them in order of importance.

#### Step 3

Work out what arguments do not support your team's case. This will help you to anticipate what your opponents will say.

#### Step 4

Carry out research to help fully develop your arguments. As part of your research, consider interviewing other students and the adults you know to learn their attitudes to the issue.

#### Step 5

1. Divide the arguments you have collected among the members of the team.
2. Decide which team members will be the first, second and third speaker. Agree on what each member will say.

## Conduct of the debate

The members of each team take it in turn to present their arguments in three to four minutes. The affirmative team's first speaker starts the debate. The following case study illustrates how a formal debate is conducted.

### Affirmative team

The first speaker should:

1. greet the audience
2. state which team they are representing and what the topic is
3. introduce the other members of their team, their role and the team's view
4. argue the team's case and state how the second speaker will build on this case.

The second speaker should:

1. explain how his or her speech will build on the affirmative team's view
2. argue against (rebut) the first speaker from the negative team
3. add new examples to support the affirmative team's view.

The third speaker should:

1. argue against (rebut) the negative team's case
2. summarise the main arguments of the debate
3. restate the affirmative view, explaining why it is the stronger case
4. avoid introducing new arguments.

Permissions clearance pending

### Negative team

The first speaker should:

1. introduce the team members, describe their role and the team's view
2. state that the negative team doesn't accept the affirmative team's view of the topic
3. argue against (rebut) the points made by the first speaker of the affirmative team
4. state how the second negative speaker will build on the team's case.

The second speaker should:

1. explain how his or her speech will build on the negative team's view
2. argue against (rebut) the two previous speakers from the affirmative team
3. add new examples to support the negative team's view.

The third speaker should:

1. argue against (rebut) the affirmative team's case
2. summarise the main arguments of the debate
3. restate the negative view, explaining why it is the stronger case
4. avoid introducing any new material.

Permissions clearance pending

## Elements of a good debate

A good debate:

- has members from each team taking turns to present their cases
- starts with the first speaker from each team introducing their team and their team's view
- continues with the second speakers rebutting the previous speakers and adding new examples to support their team's view
- finishes with the third speakers rebutting the other team's case, summarising the main arguments and restating their team's view
- has arguments that only take three to four minutes.

## 21.6.3 Let me do it

Complete the following activities to practise this skill.

### 21.6 ACTIVITIES

With the assistance of your teacher, your class will participate in a series of debates. The debates will involve the topics listed below.

1. Divide your class into teams, each containing three debaters. Ensure that there is an even number of teams.
2. Competing teams will then choose a topic from the following list.
   (a) There is no difference between a typical Australian and a stereotypical Australian.
   (b) There are no positive effects of stereotypes on society.
   (c) Media should be more responsible for the ways it portrays social groups.
   (d) Community and religious groups serve no purpose in society.
   (e) The world was a better place before globalisation.
   (f) As a global identity develops, national identities become less important.
3. Prepare for your debate, ensuring that each speaker's role is clearly defined as explained in this SkillBuilder.
4. Over a series of classes, conduct your debates in class, with your fellow classmates filling the role of adjudicators.

# 21.7 Thinking Big research project: Don't stereotype me!

## Scenario

The presence of stereotypes in a community can have negative impacts on social cohesion. Stereotypes can inflame cultural and social tensions and divide communities by misrepresenting groups within our society. Unfortunately, stereotypes are commonly found in traditional forms of media in Australia. Negative stereotypes are also reinforced on social media, which can be poorly regulated.

## Task

Your task is to develop an advertising campaign that seeks to address the negative implications of stereotyping within Australian society. You are free to use whatever format you deem appropriate for this task but you must also include a written brief explaining your chosen direction and format. Your final submission should include your planning documentation, copies of your advertisements and a written justification of your advertising strategy.

Follow the steps in the **Process** section to complete this task.

## Process

- Open the ProjectsPLUS application in the Resources for this topic. Click on the **Start new project** button to enter the project due date and set up your project group. Working with a partner or in a group of three will allow you to swap ideas and share responsibility for the project. Save your settings and the project will be launched.

- Navigate to the **Research forum**, where you will find starter topics loaded to guide your research. You can add further topics to the Research forum if you wish. In the **Media centre** you will find an assessment rubric and some useful weblinks to get you started.
- In your group, brainstorm some ideas for your advertising campaign. Start by thinking about what you want to *say* and about *what*. What type of stereotype do you want to tackle (e.g. ageist, gender-based, cultural)? You may like to use a mind map to organise your brainstorming. The focus of your planning should be the question: *What impact does the portrayal of stereotypes in Australian media have on Australian society?* Remember, you will need to submit your planning documents as part of your final work, so be sure to complete these thoroughly.
- Add any relevant notes to the appropriate topic pages in the Research forum. When you have completed your research, you can print out the **Research report** in the Research forum to easily view all the information you have gathered, if you wish.
- Once you have decided on your message, you can turn your attention to the format of your campaign. Possible formats include: a poster, radio or television commercial, or social media campaign. You may prepare materials for more than one format if you wish.
- If you are recording an audio advertisement for radio, or a video advertisement for television or social media, make sure that you are completely prepared before you start recording. Write out your script and rehearse thoroughly before commencing recording.
- Write a justification for your advertising strategy. This should explain your campaign's message and its intended audience, as well as a discussion of what you hoped to achieve by creating your campaign.
- Present your advertising campaign in class and submit your planning documents, transcripts/copies of your advertisements and your strategy justification to your teacher for assessment.

## Resources

**ProjectsPLUS** Thinking Big research project: Don't stereotype me! (pro-0199)

# 21.8 Review

## 21.8.1 Key knowledge summary

### 21.2 Australian democracy and global connections

- Australia's various levels of government facilitate civic life and ensure the safety, freedom and rights of individuals and communities.
- We have various rights and responsibilities both as Australian citizens and global citizens.
- Australia is a multicultural, pluralist society in which differences are respected, and tolerance and understanding are expected.

### 21.3 Shaping Australian identity

- Australia's sense of identity has evolved from the time when Indigenous Australians developed their own unique culture, through influences such as:
  - European settlement
  - war
  - waves of migration
  - terror attacks.
- It is important to ensure that negative events do not inflame racial tensions or lead to xenophobia.
- Social media can provide a platform for positive interactions and allow for the sharing of information. There are many examples of hashtag movements that have garnered popular support and raised awareness of social issues.

### 21.4 Attitudes to diversity

- Our views can be influenced by a range of factors including the people around us and the media we consume.
- Stereotypes exist due to the way social groups are represented in the media. Our perceptions of these groups are heavily influenced by what we watch on television and read in newspapers and on social media.
- Most stereotypes have negative connotations and are based on only a small part of a social group's true identity.
- Stereotypes can undermine cohesion in Australian society by limiting our capacity to develop a true understanding of different cultures.

### 21.5 Participating in civic life

- A cohesive society requires citizens to embody a country's values and fulfil their responsibilities as active members of that society.
- The concept of the common good refers to an outcome that benefits an entire society or community.
- Social entrepreneurs are an example of people who work to achieve a goal that is for the common good — they identify a particular issue and develop a product or service designed to address a perceived need in that area.
- Not-for-profit organisations set out to achieve goals that are usually focused on social, environmental or political issues.
- Non-government organisations actively plan and implement projects on a local, national or global scale.

## 21.8.2 Reflection

Complete the following to reflect on your learning.

### 21.8 ACTIVITIES

Revisit the inquiry question posed in the Overview:

**I am an Australian. What does this mean in our multicultural society and what influences our Australian identity?**

1. Now that you have completed this topic, what is your view on the question? Discuss with a partner. Has your learning in this topic changed your view? If so, how?
2. Write a paragraph in response to the inquiry question, outlining your views.

### on Resources

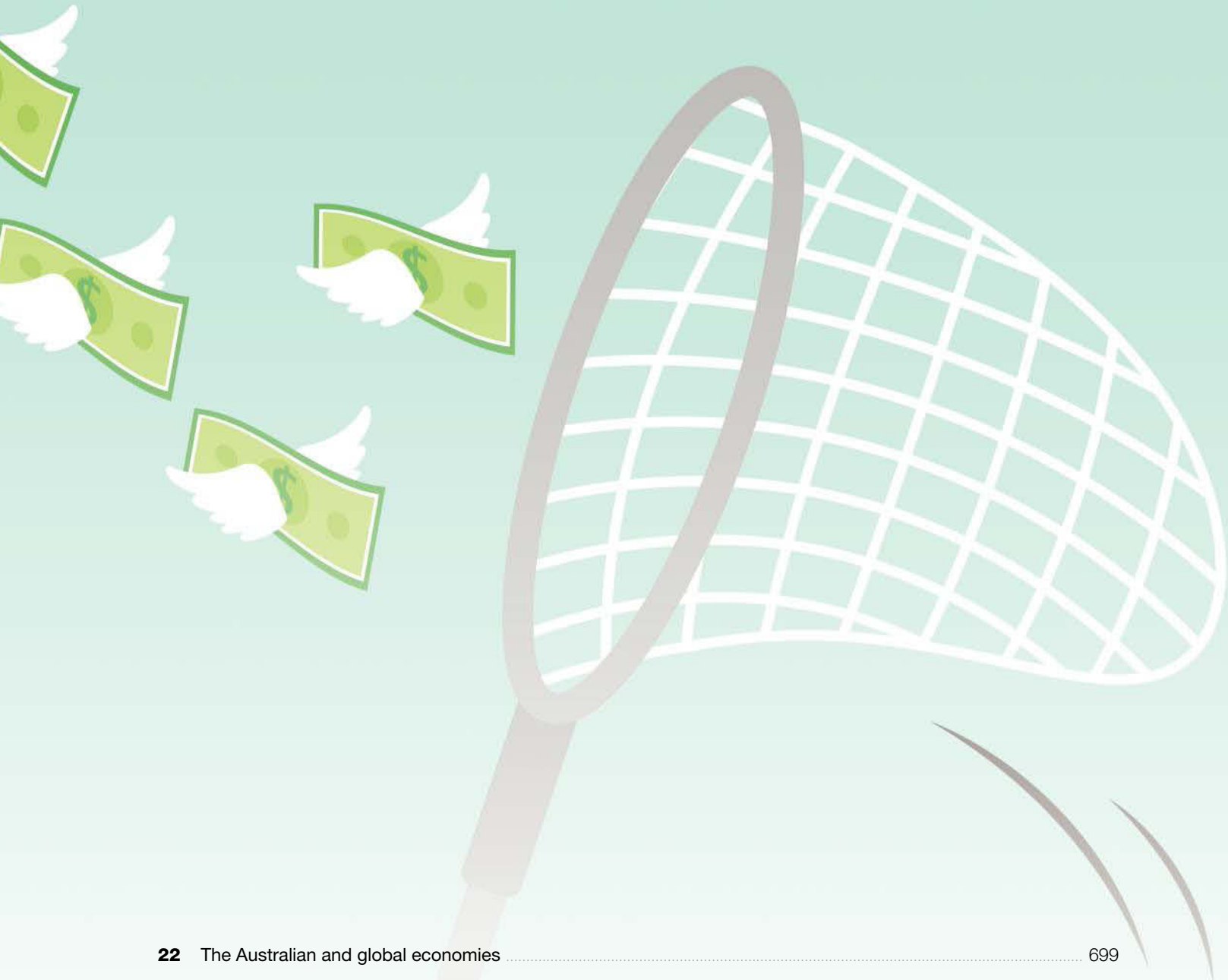
**eWorkbook** Reflection (doc-31736)
Crossword (doc-31737)

**Interactivity** Identity, the media and global connectedness crossword (int-7655)

### KEY TERMS

**common good** something that is in the interest or to the benefit of everyone
**digger** an Australian or New Zealand soldier, particularly used with reference to those who served in World War I
**Islamic** relating to the Muslim religion, Islam
**kinship** a multi-faceted social system that prescribes Indigenous peoples' responsibilities to others and the land
**multicultural** describes a society in which the cultures and traditions of many different groups coexist and are encouraged
**non-government organisation** (NGO) a group or business that is organised to serve a particular social purpose at local, national or international level, and operates independently of government
**not-for-profit organisation** a group or business that puts any profit towards its social purpose rather than returning profits to owners
**pluralist** describes a society that accepts all people's right to maintain their individual cultural traditions, languages and faiths
**stereotype** widely held but oversimplified idea of a type of person or thing
***terra nullius*** ('land belonging to no-one') in Australia, the legal idea that since no-one was 'using' the land when the first Europeans arrived, it could be claimed by the British Crown
**xenophobia** extreme fear, distrust or hatred of foreigners

# ECONOMICS AND BUSINESS




**22** The Australian and global economies ..... 699

**23** Managing financial risk ..... 742

**24** Being enterprising ..... 759

**25** Participants in the changing work environment ..... 776

# 22 The Australian and global economies

## 22.1 Overview

**Markets, sectors, growth and trade: how are the economies of the world similar, different and interconnected?**

### 22.1.1 Our needs and wants

We satisfy our needs and wants by acquiring goods and services. Our economic system is designed to produce the goods and services necessary to satisfy those needs and wants. However, the Australian economic system cannot produce all the goods and services we desire, so Australia is engaged in trading relationships with countries all over the world. In fact, all advanced economies rely on trade as a means of generating economic growth. This flow of goods and services between countries, and the money flows that accompany this trade, have increased global interdependence between the trading countries' household, business, financial and government sectors. As a result, what happens in one country affects the activities of similar sectors in many other countries. This is because we consider the world to be a 'global economy'. This process of growing interdependence between countries is known as globalisation.

**on Resources**

**eWorkbook** Customisable worksheets for this topic

**Video eLesson** What is economics? (eles-0253)

**LEARNING SEQUENCE**


22.1 Overview
22.2 Participants in the Australian economy
22.3 Objectives of the Australian economy
22.4 Indicators of economic performance
22.5 Trade with other economies
22.6 Imports and the Australian economy
22.7 Global events and the Australian economy
22.8 **SkillBuilder:** Questioning and research online only
22.9 Globalisation and the international economy
22.10 Global supply chains
22.11 Transnational corporations
22.12 **SkillBuilder:** Developing graphs from tables online only
22.13 **Thinking Big research project:** An international menu online only
22.14 **Review** online only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# 22.2 Participants in the Australian economy

## 22.2.1 Who and what is part of our economy?

We know that the Australian economy is the total of all activities undertaken for the purpose of the production, distribution and consumption of goods and services in our country. This leads us to two questions:

1. *Who or what carries out all these activities to achieve this purpose?* We need to examine exactly who participates in the economy to achieve the production, distribution and consumption of goods and services. The major participants in the Australian economy include the household sector, the business sector, the financial sector and the government sector.
2. *What activities are undertaken in achieving this purpose?* We need to examine what each of those participants does to achieve this purpose, or what roles each of them performs in our economic system.

We will now examine each participant and the roles they play in the economy.

## 22.2.2 Household sector

The household sector is a term used by economists to refer to the total of all consumers in the economy. Of course, every person in the economy is a consumer — we all acquire goods and services to satisfy our needs and wants. As well as acquiring goods and services, the household sector provides the **labour** required by the business sector to produce those goods and services. Whether we consider ourselves part of the household sector or part of the business sector depends on the economic role we are performing at the time. When buying goods and services, we are part of the household sector. When at work, we are part of the business sector.

Members of the household sector make decisions about the particular goods and services they desire to satisfy their needs and wants. The amount of goods or services that consumers are willing and able to purchase at a particular point in time is known as consumer or household *demand*. If businesses wish to be successful, they need to respond to this demand. A business producing goods or services that do not meet consumer demand is likely to fail. While we can all identify food, clothing and shelter as basic needs that households demand, it is not always so easy to identify the *types* of food, clothing and shelter that will most successfully satisfy those needs.

**FIGURE 1** Members of the household sector receive wages for their labour, and use the money they receive to buy goods and services to satisfy their needs and wants.

## 22.2.3 Business sector

The business sector is made up of a large number of producers, all seeking to provide goods and services to satisfy the needs and wants of households. In order to do so, businesses make use of **resources**. Economists classify resources into four categories:

- land
- labour
- capital
- enterprise.

These are sometimes also called *factors of production*.

### Land

'Land' is the word used by economists to refer to all the raw materials and other natural resources that go into the production of goods and services. It is a broad concept that includes minerals dug up from the earth, food crops ready for processing, timber harvested from forests, and raw fibres such as wool or cotton that are available for processing into clothing. Australia's diverse and abundant resource base has been an important source of export earnings for the Australian economy. Some of the most important export commodities for Australia include iron ore, coal, natural gas, gold, beef and wheat.

**FIGURE 2** In economics, 'land' refers to all the raw materials and other natural resources that go into the production process, including minerals that have been dug up from the earth.

### Labour

Labour, as we have seen, is the human skills and effort required in the production process. It includes the physical effort contributed by a builder or process worker in a factory, and the intellectual skills applied by a computer programmer. Businesses usually rely on the household sector to provide them with labour. In return, businesses pay wages which are used by consumers to purchase goods and services from the business sector.

### Capital

Capital is defined as all the equipment (machinery, buildings, tools) used by human labour in the process of production. For example, an accountant uses a computer, a bricklayer uses a trowel and a farmer uses a plough. In a supermarket, capital includes the actual building; shelving for storing goods for sale; refrigerators and freezers; trolleys and baskets for collecting goods; and the cash registers, scales, barcode readers and EFTPOS facilities used at the checkouts.

**FIGURE 3** In economics, 'capital' refers to all equipment used in a production process.

### Enterprise

Enterprise is the ability to recognise the demand for new goods or services, and to start up a new business or expand an existing business to attempt to satisfy that demand. It also includes the ability to organise the resources necessary to produce the goods and services required, and a willingness to take the risks that can accompany these decisions. A person who demonstrates these abilities is sometimes known as an entrepreneur. People such as Google founder Larry Page and Facebook founder Mark Zuckerberg are regarded as entrepreneurs.

## 22.2.4 The relationship between households and business

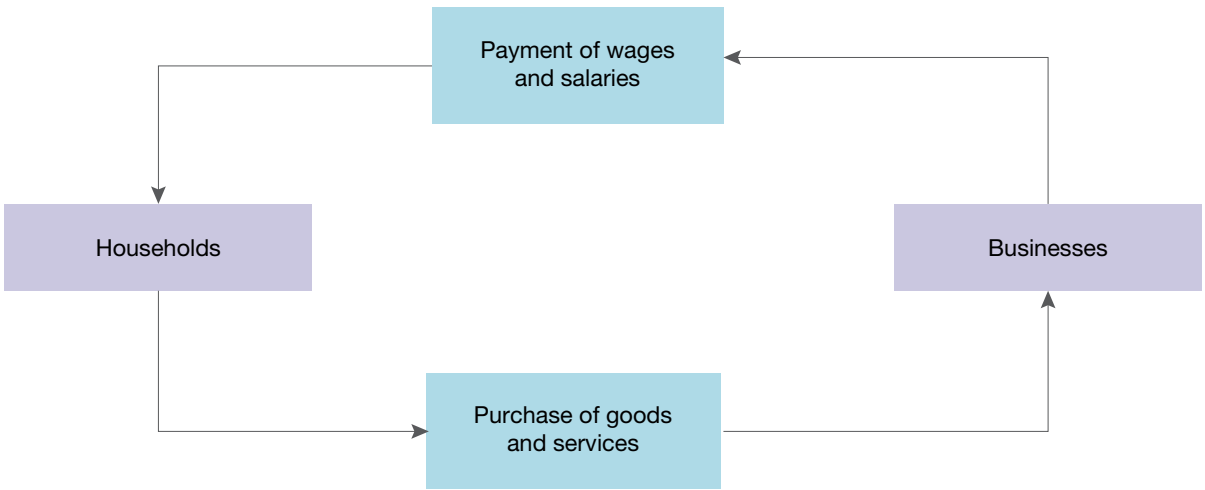
The household sector and business sector depend heavily on each other. The household sector depends on the business sector to provide employment and wages, as well as the goods and services needed to satisfy demand. The business sector depends on the household sector to provide it with labour, as well as the consumers to purchase the goods and services produced. We can examine the relationship between the business sector and the household sector by looking at the model shown in **FIGURE 4**. It demonstrates how labour is exchanged for money, and how that money is used to purchase goods and services.

**FIGURE 4** The interrelationship between consumers and business

1 Businesses are producers that make or supply goods and services that are distributed to households.
2 Consumers use money and cards to purchase goods and services.
3 Consumers are usually also employees, who provide businesses with their labour in the production of goods and services.
4 Employees receive money in the form of wages for their labour.

We can simplify this model by removing the flow of goods and services, and simply showing the flow of money between households and businesses (see **FIGURE 5**). This focuses on the financial relationship between consumers and producers in our economic system. Economists sometimes refer to this as a circular flow diagram because it illustrates how money circulates in the economy.

**FIGURE 5** The circular flow of money between households and businesses in the Australian economy



## 22.2.5 The financial sector

Both the household and business sectors rely on a functioning financial sector. As the name suggests, the financial sector is concerned with money. In order to understand the role of the financial sector, we first need to examine the functions of money in our economy.

Money performs four very important functions in our economic system:

1. *Medium of exchange* — money allows us to pay for goods and services because it is accepted by everyone in our economy in exchange for goods and services. Hence employees exchange their labour for money, and businesses accept money in exchange for the goods and services they supply.
2. *Measure of value* — money allows us to put a price on the goods and services we exchange. The price is a measure of what we believe the goods or services to be worth when compared to other goods and services.
3. *Store of value* — money allows us to save our income or wealth for spending at a later date because it holds its value.
4. *Standard of deferred payment* — money allows us to purchase goods and services on credit, with both buyer and seller knowing exactly how much has to be paid at a later date.

**FIGURE 6** Money performs four important economic functions.

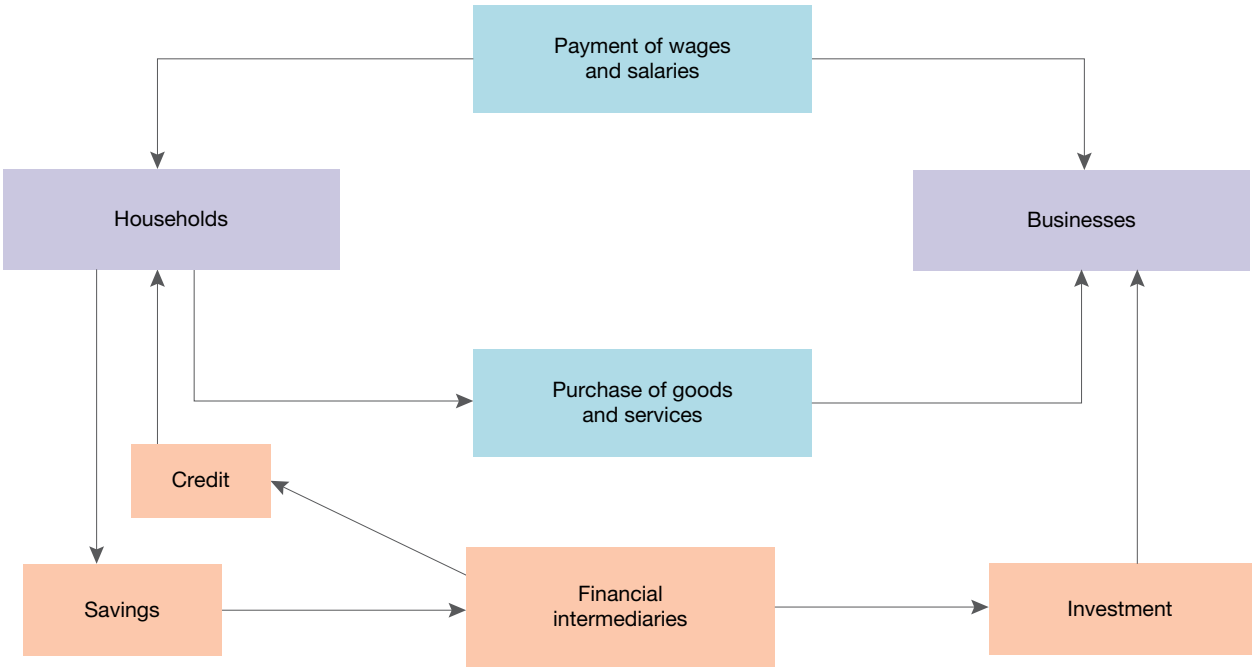
The financial sector is made up of a number of **financial intermediaries**. These include banks and other similar organisations, such as **superannuation funds**. Financial intermediaries receive deposits and then use this money to lend out to others who need to borrow money. Most businesses will borrow money, particularly when they need to expand the business. This may involve buying new equipment or moving to larger premises. Money spent in this way is known as **investment** in capital. This is how financial intermediaries enable accumulated savings, collected from thousands of depositors, to be directed towards business growth. As businesses grow they can employ more people, and the people they employ in turn have more money to spend on goods and services.

**FIGURE 7** Financial intermediaries can direct savings into investment, which funds the growth of businesses.

In addition to providing the business sector with funds for investing in business growth, banks and other financial intermediaries provide credit to households. When consumers make a large purchase such as a house or car, it is usually easier to borrow the money to buy the item immediately (known as buying on credit) than to save up for years to pay cash for it. When purchasing a house or land, most people take out a **mortgage loan**. This enables the house purchaser to borrow to pay for the property now, and pay back the loan in instalments over a relatively long period of time (often 25 years). The size of the housing market depends on the amount of money available for mortgage loans. If more people can buy houses, more new houses can be built and therefore more jobs created in the construction industry.

By adding financial intermediaries to the circular flow diagram, we can see how the financial sector participates in the economy. As shown in **FIGURE 8**, banks and other financial intermediaries receive savings from households. They use this money to lend to businesses for investment, and also lend the money back to households in the form of credit.

**FIGURE 8** The circular flow of money between households, businesses and financial intermediaries in the Australian economy




## 22.2.6 The government sector

Another significant participant in our economic system is the government. In Australia that refers to the federal government based in Canberra, the state and territory governments based in capital cities, and local councils across the country. In addition to using money to spend on consumption or accumulate in savings, households and businesses pay money to government in the form of taxes and receive certain goods and services from the government. The government plays an important role in the economy for a number of reasons:

1. The amount of money taken by the government in taxes can affect the amount of money consumers have available to spend on goods and services. High levels of taxation can leave consumers with less to spend, and businesses cannot grow as quickly and therefore employ as many people as they might if taxation was lower.
2. Money collected in taxes can be used to provide welfare payments in the form of pensions and unemployment benefits. Such payments allow many people to purchase more goods and services as consumers, thereby providing more income to businesses and creating more jobs as businesses grow.
3. Money collected in taxes from households and businesses can be used to provide essential services. By spending money on building roads, schools and hospitals, the government is also providing money for the businesses that do the actual building and thereby helping those businesses to grow and employ more people.

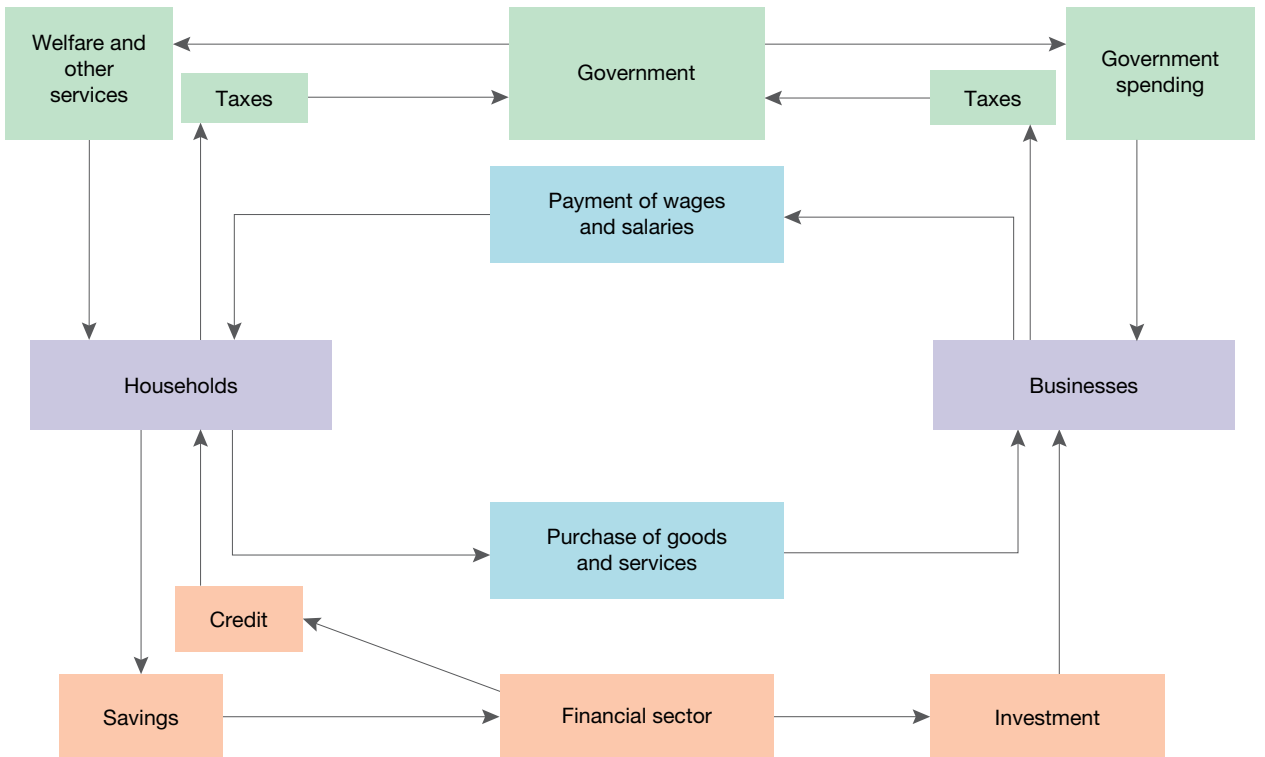
### DISCUSS

A high level of taxation gives the government more money to provide welfare payments and essential services — such as schools, hospitals and roads — whereas a low level of taxation gives individuals more money to spend as they would like. Do you think the current balance we have is right? **[Personal and Social Capability]**

**FIGURE 9** When a government pays businesses to build facilities such as hospitals, it helps those businesses to grow and employ more people.

By adding government to the circular flow diagram, we can see how the government sector participates in the economy. As shown in **FIGURE 10**, households and businesses pay taxes to the government. Some of this money comes back to households in the form of welfare payments such as pensions, or as services such as education and healthcare. Some of it comes back to businesses when the government buys goods and services from them, or pays them to build roads, schools and hospitals.

**FIGURE 10** The circular flow of money between households, businesses, financial intermediaries and government in the Australian economy



### 22.2 ACTIVITIES

1. Use online resources to locate information on the Australian taxation system, and identify and explain three different types of taxes that are collected by the federal government. **Examining, analysing, interpreting**
2. Use online resources to locate information regarding the Australian government's areas of spending. Identify and explain three areas where the federal government spends money. **Examining, analysing, interpreting**

### 22.2 EXERCISES

**Economics and Business skills key: ES1** Remembering and understanding **ES2** Describing and explaining **ES3** Examining, analysing, interpreting **ES4** Questioning and evaluating **ES5** Reasoning, creating, proposing **ES6** Communicating, reflecting

#### 22.2 Exercise 1: Check your understanding

1. **ES1** Define the following terms and provide an example of each.
   (a) Labour
   (b) Resources
   (c) Consumer demand
   (d) Financial intermediary
   (e) Investment
2. **ES1** What do economists mean when they use the following words?
   (a) Land
   (b) Capital
3. **ES2** Why are the household sector and the business sector dependent on each other?
4. **ES2** Explain each of the four functions of money, and provide an example of each.
5. **ES2** How do financial intermediaries help markets to operate?

#### 22.2 Exercise 2: Apply your understanding

1. **ES2** Explain the concept of *demand* and its importance to the business sector.
2. **ES2** Explain why it is important to consider the government sector as part of the Australian economy.
3. **ES2** Explain one way in which a government can influence the economy.
4. **ES2** Circular flow diagrams show how resources and money move around the economy. Explain why these diagrams are considered circular.
5. **ES6** Examine the circular flow diagram in **FIGURE 10** and predict what impact each of the following might have on the level of goods and services sold by Australian businesses:
   (a) Households decide to save a larger proportion of their income.
   (b) Financial intermediaries make it easier for consumers to acquire credit cards.
   (c) Governments decide to increase the level of taxation for households.
   (d) Governments increase the level of welfare payments.

Try these questions in learnON for instant, corrective feedback. Go to www.jacplus.com.au.

# 22.3 Objectives of the Australian economy

## 22.3.1 Satisfying needs and wants efficiently

As individuals and as a society, our needs and wants will always be greater than our means of satisfying all those needs and wants. This is the fundamental problem facing any economy, no matter how wealthy it is. Economists refer to this as the problem of **relative scarcity**. This problem cannot be completely solved or eliminated, but its impact can be minimised by ensuring the most efficient use of resources. The objectives of the Australian economy are to satisfy the greatest range of needs and wants by efficiently producing as many goods and services as possible. This is accomplished by addressing three key economic questions.

## 22.3.2 Key economic questions

All the participants in the Australian economy — consumers, producers, financial intermediaries and the government — make choices to minimise the impact of the relative scarcity of resources and to maximise the range of needs and wants that can be satisfied. Put together, these choices determine the answers to the following questions:

- *What to produce?* What goods and services should be produced, and in what quantities?
- *How to produce?* What methods should be used to produce those goods and services?
- *For whom to produce?* To whom should those goods and services be distributed?

### What to produce?

How does our economic system help producers decide what goods and services to supply, and in what quantities to supply them? This is determined largely by trial and error. A producer may make certain goods or services available to consumers in the expectation that these will satisfy the needs and wants of those consumers. If the goods or services fail to sell, the producer will probably go out of business. When a business is successful in selling to consumers, other businesses will attempt to enter the same **market**, making or selling those goods or services that consumers have shown they wish to buy.

**FIGURE 1** Changes in the market for cars saw the closure of the three remaining car manufacturers in Australia during 2017.

In our economy, markets largely determine which businesses are likely to be successful. Factors that can influence markets include:

- *Established habits and experience*. Producers know from people's existing behaviour that there will always be a demand for certain types of goods or services. Families need to buy food on a regular basis, so a supermarket in a new suburb may well be successful. Most communities will need services such as medical and dental surgeries, schools, hairdressers and trades such as plumbers and electricians.
- *Changing tastes and preferences*. Changing consumer tastes and preferences influence what is produced, and in what quantities. An example of this is the market for Australian-made cars. For many years, family sedans and wagons such as the Holden and Falcon were Australia's best selling cars. Car manufacturing was so successful that Toyota and other car manufacturers also set up factories in Australia. Over time, consumers' preferences changed and smaller imported cars became more popular. As a result, car manufacturing in Australia ceased in 2017.
- *Marketing and advertising*. Any business introducing a new product or service into the market needs to ensure that consumers are aware of its availability. Advertising is designed to inform consumers of new products and to convince them to buy a particular product instead of an alternative. Online advertising through search engines such as Google has increased dramatically, and an online presence is essential for most businesses these days.
- *Technological change*. As a society, we have become very enthusiastic about new technology. Whenever a new model iPhone is released into the marketplace, consumers queue outside their nearest Apple store to be the first to buy it. Consumers monitor new developments in technology, and many will quickly replace outdated products with newer models. Producers can be quite confident that improvements in technology will quickly attract buyers to new goods and services.

**FIGURE 2** Improvements in technology often persuade consumers to update their existing gadgets.

## DISCUSS

Technology companies, such as Apple and Samsung, encourage users to buy the latest models of their products every year, even if the improvements over last year's model are small. This can have a negative effect on the environment, as thousands of unwanted or broken products end up going to waste. Should consumers or technology companies look to change their behaviour? **[Critical and Creative Thinking Capability]**

## How to produce?

The production of goods and services involves a combination of resources — land (raw materials), labour and capital (equipment). A factory producing frozen vegetables will be set up with different types of capital equipment. These include machines that cook the vegetables, and others that pack and seal them in plastic packaging before freezing them. The same factory will employ workers to control those machines and perhaps carry out other tasks such as managing the process. The raw materials are the vegetables that are processed during production, as well as the materials used in packaging.

Competition from rival producers encourages businesses to keep their costs as low as possible. If new equipment becomes available that works more efficiently, it may be worthwhile for a business to change its methods of production to take advantage of the new equipment. The use of robotics-based equipment has increased dramatically in factory production. In most cases it enables the factory to employ fewer workers, reducing wage costs and allowing the prices of products to be kept at a level where they can compete in the marketplace. The use of self-service checkouts in supermarkets is designed to have a similar effect.

**FIGURE 3** The use of self-service checkouts is aimed at keeping costs down.

## For whom to produce?

Our economic system has to determine how to distribute goods and services to consumers. It makes use of markets and prices as a means of doing this. As we have seen, the basic model of the circular flow of income involves the household sector exchanging labour with the business sector for money in the form of wages. Those wages are then used to purchase goods and services from the business sector. So goods and services are distributed to those who are willing and able to pay the prices asked for them, although governments can intervene in these markets to ensure that the most disadvantaged in our society are able to have some of their needs and wants satisfied.

**FIGURE 4** Prices can have a strong influence on which goods and services consumers will be able to buy.

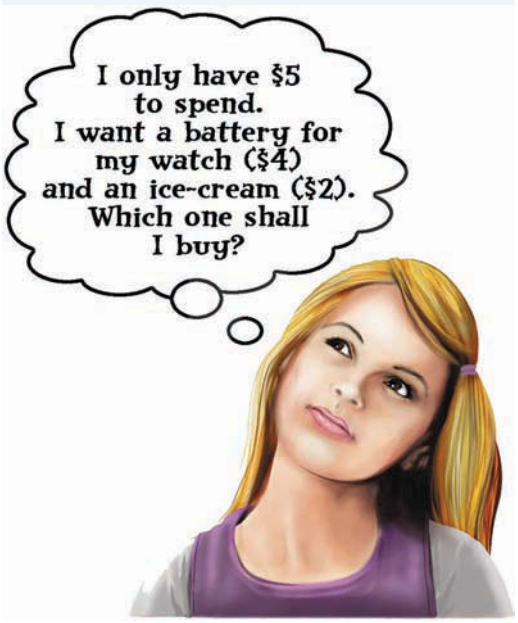
The quantities of goods and services that can be purchased by any household will depend on the levels of wages received. If wages across the economy are relatively low compared to prices, relatively large numbers of people may be living in poverty because they cannot afford to buy necessities. If prices are relatively low compared to wages, households will be able to buy more goods and services and fewer people will live in poverty. The choices and decisions made by businesses about the wages they pay and the prices they charge affect the whole economy and determine to whom goods are distributed.

## Opportunity cost

Whenever we make a choice between two or more alternatives, we may gain the benefits of the alternative we choose but we lose any benefits that may have come from choosing differently. Consider the following scenario:

You are hungry and thirsty on your way home from school, and have only $7 to spend. A burger is going to cost $5, a drink $3 and a small serving of fries $3. If you choose the burger, you will have to give up the fries and drink; if you choose the fries and drink, you miss out on the burger, which will satisfy your hunger more. To an economist, the real cost of choosing the burger is not the $5 you spend, but missing out on the opportunity of enjoying the fries and drink. In the same way, the real cost of choosing the drink and fries is the opportunity to enjoy the burger. This is known as **opportunity cost**. When choices are made in the economy — regardless of whether they relate to what goods and services to produce, how to produce them, or to whom to distribute these goods and services — it is important to weigh up the opportunities that are lost before making a final choice.

**FIGURE 5** There is an opportunity cost associated with all economic choices.



## 22.3 EXERCISES

**Economics and Business skills key: ES1** Remembering and understanding **ES2** Describing and explaining **ES3** Examining, analysing, interpreting **ES4** Questioning and evaluating **ES5** Reasoning, creating, proposing **ES6** Communicating, reflecting

### 22.3 Exercise 1: Check your understanding

1. **ES2** Why are choices needed in an economy?
2. **ES1** Outline the three key questions that have to be answered based on the choices made by all participants in the economy.
3. **ES1** What is a market?
4. **ES1** Identify three ways in which markets can help determine what to produce within the economy.
5. **ES2** Explain what is meant by 'for whom to produce?'

### 22.3 Exercise 2: Apply your understanding

1. **ES3** How can competition influence decisions made by a business about how to produce the goods or services it supplies?
2. **ES2** Explain how wages and prices work together to determine to whom goods and services are distributed in the economy.
3. **ES2** What do economists mean by the term 'opportunity cost'? Explain why opportunity cost is a natural result of relative scarcity.
4. **ES3** For each of the following businesses, explain how land, labour and capital are combined to produce goods and services:
   (a) Motor vehicle manufacturer
   (b) Fruit and vegetable shop
   (c) House construction business
   (d) Pizza shop
   (e) Electricity supplier
5. **ES5** Selecting one of the businesses from question 4, give an example of opportunity cost that the business owner(s) might face.

Try these questions in learnON for instant, corrective feedback. Go to www.jacplus.com.au.

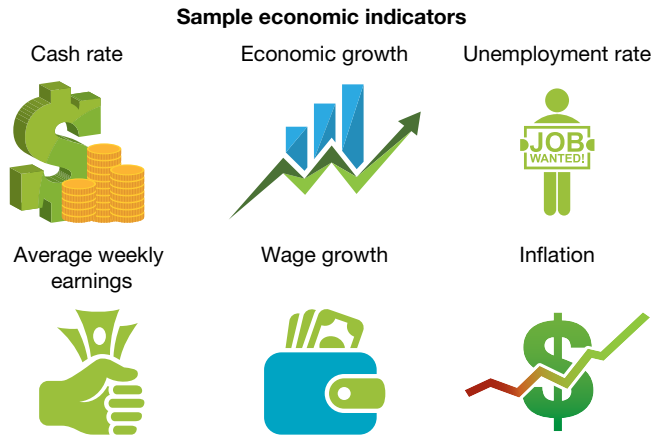
# 22.4 Indicators of economic performance

## 22.4.1 Indicators of economic performance

Have you ever tried to measure your own performance at school? If so, what indicators did you use? Perhaps you considered some of the following: your attendance rate, your homework completion rate, the marks you received for tests and assignments, comments on your report, and any awards you may have received. Each of these indicators provide an insight into how well you are performing at school. You may have performed very well in some of the indicators and not so well in others.

Similarly, if you play a sport, you could measure the performance of your team. What kinds of indicators would give you information about how well your team is performing?

**FIGURE 1** A range of indicators can provide information about the performance of the economy.




The performance of Australia's economy can also be measured by considering a range of economic indicators (see **FIGURE 1**). Each indicator provides a snapshot of the economy at a particular point in time and helps identify strengths and weaknesses within it.

As **FIGURE 1** shows, there are numerous indicators of economic performance. We will examine the following key indicators:

- economic growth
- unemployment
- inflation
- alternative indicators (e.g. sustainability, development, happiness).

## 22.4.2 Economic growth

Each day we consume a range of goods and services. This consumption ranges from the food we eat, to the transport we use to get to school, to the electricity required to charge our devices. Businesses within the Australian economy attempt to meet the demands of consumers. As the demands of customers change, businesses must offer new or modified products and services to ensure that they continue to meet the needs of customers. In addition, population increases mean that production levels must also increase to satisfy demand.

**FIGURE 2** Economic growth occurs when an economy increases the volume of goods and services produced.

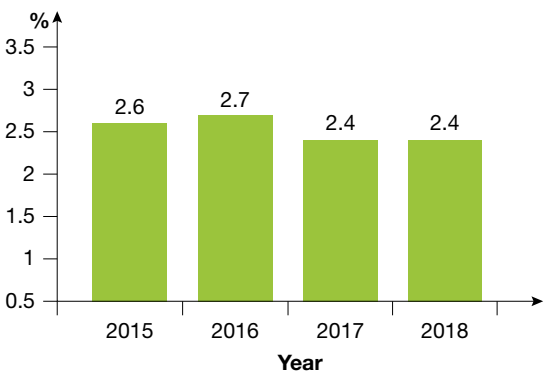
Economic growth is defined as the real growth in the volume (value) of goods and services produced by an economy over a period of time.

The most common method used to measure economic growth is by calculating the rate of growth of gross domestic product (GDP). GDP is the total value of goods and services produced in an economy over a certain period of time — for example a quarter or a year. This figure can be determined by comparing the GDP of one year with that of the previous year. The change in GDP from year to year is expressed as a percentage.

Generally, an acceptable rate of increase in GDP is 3–4 per cent per year. If the level of growth is less than 3 per cent, this indicates slow growth. If the level of growth is higher than 4 per cent, it may mean that the economy is growing too quickly and the growth may not be sustainable. **FIGURE 4** shows Australia's annual GDP growth rate from 2015 to 2018.

**FIGURE 3** The change in GDP per year indicates the level of growth in the economy.

**FIGURE 4** Australia's annual GDP growth rate, 2015–2018



## 22.4.3 Unemployment

As a student you may have already thought about the type of job you would like to have as an adult. You may even have a part-time job now. Employment is important because it allows us to earn an income so that we can buy goods and services to improve our quality of life. Most people are able to secure employment. However, for a variety of reasons, others may not. Those people who are not employed but are actively looking for work are called 'unemployed'.

**FIGURE 5** Unemployed people are those who don't have a job but are actively looking for work.

The unemployment rate is an important indicator that provides an insight into the performance of the Australian economy. It tells us what percentage of the total labour force is without a job but actively looking for work. Before trying to calculate the unemployment rate, it is important to understand the following key terms:

- *Employed person* — any person who works more than one hour per week
- *Unemployed person* — a person without a job who is actively looking for work
- *Total labour force* — the total of all employed people plus all unemployed people

The unemployment rate is calculated using the formula below:

$$\text{Unemployment rate } (\%) = \frac{\text{number of unemployed}}{\text{total labour force}} \times \frac{100}{1}$$

Consider the following Australian Bureau of Statistics (ABS) employment data for February 2019:

| Number of people employed | Number of people unemployed | Total labour force (employed + unemployed) |
|---|---|---|
| 12 762 800 | 673 100 | 13 435 900 |

Using the above information, we can calculate the unemployment rate. Once calculated, the unemployment rate is expressed as a percentage:

$$\text{Unemployment rate } (\%) = \frac{\text{number of unemployed}}{\text{total labour force}} \times \frac{100}{1}$$

$$= \frac{673\,100}{13\,435\,900} \times \frac{100}{1}$$

$$= 5.01\%$$

As you can see from the example above, the unemployment rate is 5.01 per cent. This is slightly higher than the 5 per cent target that the Australian government sets for the unemployment rate. While the government recognises that there will always be some level of unemployment, it implements a range of policies and programs in an attempt to reduce the unemployment rate.

**FIGURE 6** The government implements a range of programs to help people find jobs.

## 22.4.4 Inflation

The price of products and services is one of the most important considerations for us as consumers. All consumers wish to purchase good quality products for a reasonable price. When the price of a product rises, we may ask questions such as: why has the price increased? Should I still buy this product? Are there alternative products that I could purchase? Increases in the prices of goods and services mean we are not able to buy as much with our money. This may impact on our quality of life.

When there is a general increase in prices across the economy, this is known as **inflation**. Inflation is considered a negative thing for both the government and for consumers, as it results in consumers being able to purchase less with their money.

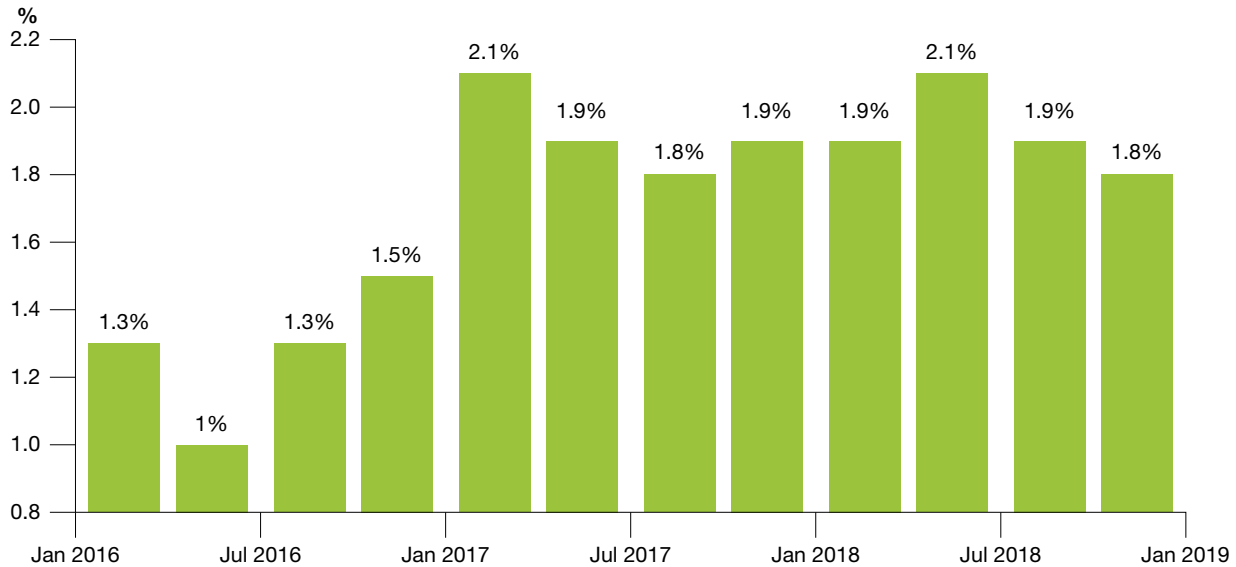
To measure inflation, the ABS calculates the Consumer Price Index (CPI). This is done by gathering data on the prices of goods and services in the economy. The CPI measures the average change in retail price of a 'basket of goods and services' over a certain period of time.

The 'basket of goods and services' contains over 80 000 items. All of the items fit into one of the following categories:

- food and non-alcoholic drinks
- alcohol and tobacco
- clothing and footwear
- housing
- furnishings, household equipment and services
- health
- transport
- communication
- recreation and culture
- education
- insurance and financial services.

The inflation rate tells us about the change in the price of goods and services in the economy. For example, the inflation rate for the period January 2018 to December 2018 was 1.8 per cent. This means that over that time period, the average prices of goods and services increased by 1.8 per cent. The government tries to manage inflation carefully and sets a target of between 2 and 3 per cent for the inflation rate. **FIGURE 7** provides information about Australia's inflation performance between January 2016 and January 2019.

**FIGURE 7** Australia's inflation performance, January 2016–January 2019



## 22.4.5 Alternative indicators (e.g. development, liveability and happiness)

So far, we have considered a number of quantitative indicators which tell us about the performance of the Australian economy. These include economic growth, unemployment and inflation. As well as these indicators, there are a range of alternative indicators that attempt to provide a more complete picture of the performance of the economy. They measure a variety of things such as: the level of wellbeing of people in a country, how liveable a particular city or country is, and the level of happiness of people in different countries throughout the world.

**TABLE 1** identifies three of these alternative indicators and provides a brief overview of each of them.

**TABLE 1** Alternative indicators which attempt to provide a more complete picture of the performance of the Australian economy.

| Alternative indicator | Overview |
|---|---|
| Human Development Index (HDI) | The United Nations Human Development Index (HDI) is a global indicator that compares the wellbeing of people in different countries. It considers positive and negative things about each country and generates a statistical index number. When a country's index number rises, it means there has been an improvement in the living standards of the country. |
| Global Liveability Ranking | This indicator attempts to rank cities throughout the world in terms of their 'liveability'. In order to rank the cities, a number of factors are considered, such as safety, healthcare, population density, infrastructure and the state of the environment. Australian cities such as Melbourne, Adelaide and Sydney have consistently been ranked in the top ten most liveable cities in the world. |
| The World Happiness Report | The World Happiness Report was first published in 2012 and ranks 156 countries by their level of happiness. It considers a range of factors such as Gross Domestic Product (GDP), people's freedom to make decisions about their own lives, the level of social support, and life expectancy. **TABLE 2** shows the countries that were ranked in the Top 15 for the 2016–18 period in the World Happiness Report 2019. |

**TABLE 2** The world's 15 happiest countries, 2016–2018

| Rank | Country |
|---|---|
| 1 | Finland |
| 2 | Denmark |
| 3 | Norway |
| 4 | Iceland |
| 5 | Netherlands |
| 6 | Switzerland |
| 7 | Sweden |
| 8 | New Zealand |
| 9 | Canada |
| 10 | Austria |
| 11 | Australia |
| 12 | Costa Rica |
| 13 | Israel |
| 14 | Luxembourg |
| 15 | United Kingdom |

***Source:*** World Happiness Report, 2019

### 22.4 ACTIVITY

Undertake research in order to describe each of the following types of unemployment.

**a.** Cyclical unemployment
**b.** Seasonal unemployment
**c.** Structural unemployment
**d.** Frictional unemployment
**e.** Hidden unemployment

**Examining, analysing, interpreting**

## 22.4 EXERCISES

**Economics and Business skills key: ES1** Remembering and understanding **ES2** Describing and explaining **ES3** Examining, analysing, interpreting **ES4** Questioning and evaluating **ES5** Reasoning, creating, proposing **ES6** Communicating, reflecting

### 22.4 Exercise 1: Check your understanding

1. **ES1** Define the term *gross domestic product* (GDP).
2. **ES1** Who is included as part of the labour force?
3. **ES1** Define *inflation.*
4. **ES1** Explain how unemployment figures are calculated.
5. **ES1** Define *economic growth*.

### 22.4 Exercise 2: Apply your understanding

1. **ES2** Explain why GDP is a useful measure to determine the level of economic growth.
2. **ES2** Explain how the Consumer Price Index (CPI) is used to measure inflation.
3. **ES2** Explain why alternative indicators such as the Human Development Index (HDI) are important.
4. **ES3** Calculate the unemployment rates in the table below.

| | Number of people employed | Number of people unemployed | Total labour force | Unemployment rate |
|---|---|---|---|---|
| (a) | 3 500 000 | 200 000 | 3 700 000 | |
| (b) | 15 750 000 | 1 500 000 | 17 250 000 | |

5. **ES6** Traditional economic indicators don't consider all factors that contribute to our living standards. Explain the notion that non-material living standards, and their measurement, are just as important as material living standards.

Try these questions in learnON for instant, corrective feedback. Go to www.jacplus.com.au.

# 22.5 Trade with other economies

## 22.5.1 Changing trading partners

Australia has been involved in trade with other nations since European settlement. During the nineteenth century, the Australian colonies were a major source of agricultural products such as wool, and minerals such as gold, for Britain and its empire. In recent years Australia has developed strong trading links with our Asian neighbours: four of our five most important trading partners are now in Asia.

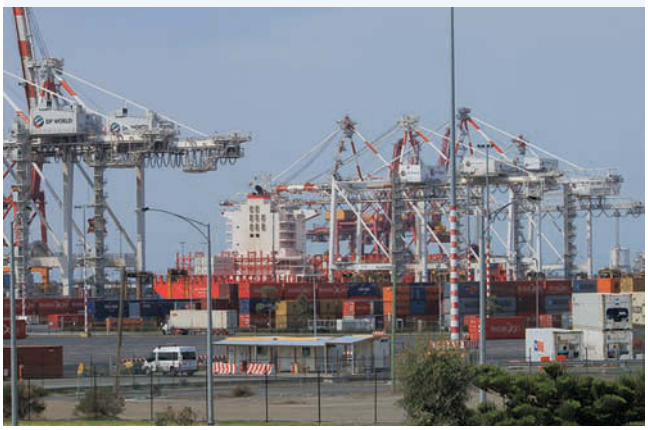
## 22.5.2 Trade and the Australian economy

Australia is an open economy, meaning that we trade in goods and services with other countries. Australian businesses sell **exports** to both consumers and producers in other countries. Australian consumers buy **imports** that have been manufactured in other parts of the world and brought into this country.

International trade can affect our economic system in a number of ways:

- Australia has a relatively small population, so if overseas consumers are willing to buy the goods and services we produce, this can help our local businesses to grow and employ more people. A significant proportion of jobs in Australia are directly or indirectly connected with the production of exports.

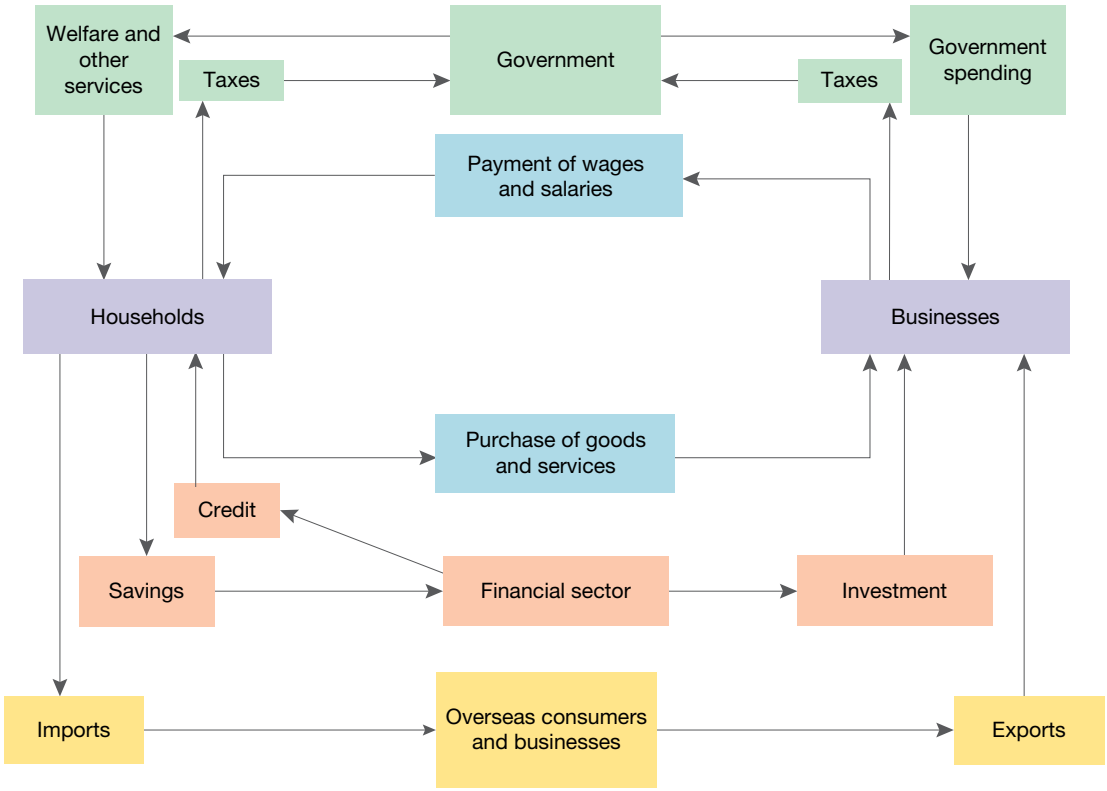
**FIGURE 1** Australia imports many goods from overseas and exports to many other countries.



- Some products cannot be made here as efficiently as they can be in other countries. A lot of the highly sophisticated machinery used in factories here is imported. However, such machinery can help local factories remain competitive by producing goods more cheaply.
- Imported goods are sometimes cheaper than locally produced goods, so local producers can find it difficult to compete with imported products. Some local producers may even be forced to close down. Australian clothing and footwear manufacturing has declined since the 1980s as cheaper imports from Asian countries have increased dramatically. While this may not be good for those Australian manufacturers, it is a positive trend for consumers because they have access to cheaper clothing.

By adding overseas trade to the circular flow diagram, we can see how overseas consumers and producers participate in the Australian economy. As shown in **FIGURE 2**, we can see that households spend money buying imports from overseas businesses, while businesses can earn money from exporting goods and services to overseas consumers. Exports are good for the Australian economy because they bring money into our market system, while imports take money out of the country and pay it to overseas businesses.

**FIGURE 2** The circular flow of money between households, businesses, financial intermediaries, government, and overseas consumers and businesses in the Australian economy




If we consistently spend more on imports than we earn from exports, money will continue to flow out of the country. Ultimately this will leave us poorer as a nation. Ideally, we want to sell enough exports to provide us with the extra money needed to pay for the goods and services we need to import. If we have more money flowing into Australia from exports than we have flowing out to pay for imports, this additional money can add to our wealth as a nation.

## 22.5.3 Trade with the Asia region

As a relatively wealthy and advanced economy, Australia is an important trading nation for countries in the Asia region. As illustrated in **TABLE 1**, in 2017–18 over 82 per cent of Australia's trade with our top ten trading partners was with Asian countries. Six of our top ten trading partners were Asian countries, including four of the top five.

**TABLE 1** Australia's trade with our top ten trading partners in 2017–18

*Trade with Asia*

| Position | Country | Exports A$ million | % | Imports A$ million | % | Total trade A$ million | % |
|---|---|---|---|---|---|---|---|
| 1 | China | 123 274 | 51.5 | 71 346 | 42.7 | 194 620 | 47.9 |
| 2 | Japan | 51 328 | 21.5 | 26 267 | 15.7 | 77 595 | 19.1 |
| 4 | South Korea | 23 628 | 9.9 | 28 764 | 17.2 | 52 302 | 12.9 |
| 5 | India | 21 145 | 8.8 | 7971 | 4.8 | 29 116 | 7.2 |
| 8 | Singapore | 13 164 | 5.5 | 14 610 | 8.8 | 27 774 | 6.8 |
| 9 | Thailand | 6610 | 2.8 | 18 078 | 10.8 | 24 688 | 6.1 |
| | Total | 239 149 | 100.0 | 166 946 | 100.0 | 406 095 | 100.0 |

*Non-Asian trade*

| Position | Country | Exports A$ million | % | Imports A$ million | % | Total trade A$ million | % |
|---|---|---|---|---|---|---|---|
| 3 | United States | 21 424 | 41.4 | 48 752 | 50.3 | 70 176 | 47.2 |
| 6 | New Zealand | 14 370 | 27.8 | 13 905 | 14.4 | 28 275 | 19.0 |
| 7 | United Kingdom | 11 757 | 22.7 | 16 036 | 16.6 | 27 792 | 18.7 |
| 10 | Germany | 4170 | 8.1 | 18 185 | 18.8 | 22 355 | 15.0 |
| | Total | 37 419 | 100.0 | 74 856 | 100.0 | 112 275 | 100.0 |

*Asian and non-Asian trade*

| | Exports A$ million | % | Imports A$ million | % | Total trade A$ million | % |
|---|---|---|---|---|---|---|
| Trade with Asia | 239 149 | 82.2 | 166 946 | 63.3 | 406 095 | 73.2 |
| Non-Asian trade | 51 721 | 17.8 | 96 878 | 36.7 | 148 599 | 26.8 |
| Total | 290 870 | 100.0 | 263 824 | 100.0 | 554 694 | 100.0 |

***Source:*** Data derived from *Australia's trade at a glance*, Department of Foreign Affairs and Trade

Let us examine the importance of China as our largest trading partner. As you can see from **TABLE 1**, the value of our exports to China is A$123 274 million. This represents 51.5 per cent of our exports to Asia, and is almost 73 per cent more than the value of imports from that country. The largest proportion of our exports to China is made up of iron ore and coal, which China buys to fuel its industrial growth. Japan and South Korea are also large buyers of Australian mineral resources. The value of our exports adds to Australia's wealth; we are able to use the money we earn from selling our exports to pay for the goods and services that we import from other countries.

More than 82 per cent of the value of our exports in 2017–18 was earned from selling to Asian countries. This money was particularly important because most of our non-Asian trade involved much higher levels of imports than exports. When we compare the value of exports with the value of imports, we can calculate Australia's **balance of trade**. If the value of exports is greater than the value of imports in a particular period of time, we are said to have a *trade surplus* for that period. If the value of imports is greater than the value of exports, we are said to have a *trade deficit*. We can see from **TABLE 1** that in 2017–18 Australia had an overall trade surplus with our ten largest trading partners. When we look at trade with individual countries, we see that we had a trade surplus with some of them and a trade deficit with others.

## on Resources

**Weblink** Department of Foreign Affairs and Trade

### 22.5 ACTIVITY

Use the **Department of Foreign Affairs and Trade** weblink in the Resources tab to answer the following.

**a.** Which goods make up most of Australia's imports from China, Japan and Thailand?
**b.** Which goods make up most of Australia's exports to the United States and New Zealand?
**c.** Which goods make up most of Australia's imports from the United Kingdom and Germany?

**Examining, analysing, interpreting**

### 22.5 EXERCISES

**Economics and Business skills key: ES1** Remembering and understanding **ES2** Describing and explaining **ES3** Examining, analysing, interpreting **ES4** Questioning and evaluating **ES5** Reasoning, creating, proposing **ES6** Communicating, reflecting

#### 22.5 Exercise 1: Check your understanding

1. **ES2** Explain why countries trade.
2. **ES1** What is the difference between exports and imports?
3. **ES2** Explain the impact of international trade on the flow of money in the Australian economy.
4. **ES2** Explain what is meant by *trade deficit*.
5. **ES2** Explain what is meant by *trade surplus*.

#### 22.5 Exercise 2: Apply your understanding

1. **ES3** Identify one benefit and one disadvantage of exporting goods to other countries.
2. **ES3** Identify one benefit and one disadvantage of importing goods into Australia from other countries.
3. **ES3** Australia generally has a trade deficit. Analyse why this occurs.
4. **ES3** Examine **TABLE 1** and answer the following:
   (a) Why was Australia's trade with China in 2017–18 of greater benefit to our economy than our trade with the United States?
   (b) With which country did Australia have its greatest trade deficit in 2017–18? Justify your answer.
   (c) With which country did Australia have its greatest trade surplus in 2017–18? Justify your answer.
5. **ES4** In 2017–18, Australia had a trade surplus with only four of our top ten trading partners and a trade deficit with the other six. Should we regard this is a serious problem? Explain your answer.

Try these questions in learnON for instant, corrective feedback. Go to www.jacplus.com.au.

# 22.6 Imports and the Australian economy

## 22.6.1 Imports all around us

You may not realise it, but you have been living with and consuming imported products all your life. In fact, if your parents used disposable nappies, you would have come into contact with imports the day you were born. But have you ever stopped to think about what effects imports have on the Australian economy? It can be argued that money going out of Australia to pay for imports is likely to reduce our wealth. Yet many imported goods are cheaper than those locally produced, allowing us to buy more and make our money go further.

As previously discussed, an import is a good or service that is produced overseas and then brought into Australia. Businesses bring imports into the country and then sell them to other businesses or directly to the public. When we travel and spend money on an overseas holiday, this has the same effect on the economy as importing goods and services. In this case we are taking our money to other countries to spend on goods and services there rather than physically bringing the products to our country. The economic effect is that the money goes to overseas businesses, so the impact on the Australian economy is the same.

Similarly, when overseas tourists come to Australia and spend their money, this has the same impact on our economy as exporting goods and services. In this case, money from overseas consumers is coming into Australia and being paid to Australian businesses just as if those businesses had sent their products overseas. Economists sometimes refer to the spending of money by Australians overseas as 'invisible imports' and the spending of money here by overseas visitors as 'invisible exports'.

**FIGURE 1** The spending of money by overseas tourists in Australia is an invisible export.

You will find imported products in most shops. Check the shelves in your local supermarket, or go into any store selling electrical goods. Look at the labels on the clothes in your wardrobe or other products you have bought recently. Most businesses carry a range of products that are made both locally and overseas. Imported products can also be bought online, bypassing local businesses that import goods to sell to Australian consumers.

**FIGURE 2** Consumers can find imported goods in almost every store.

## 22.6.2 From whom do we import?

Australian imports come from all over the world. Globalisation allows us to buy overseas products in local stores or in our own homes using the internet.

As we can see from **TABLE 1**, over 50 per cent of our imports in the 2017–18 financial year came from six of our ten largest trading partners. Our top 15 sources of imports accounted for 78 per cent of the total value of all imported goods.

**TABLE 1** Australia's top 15 goods and services trade partners, 2017–18

| | Goods and services imported | |
|---|---|---|
| **Country of origin** | **A$ million** | **% share** |
| China | 71 346 | 18.0 |
| United States of America | 48 752 | 12.3 |
| South Korea | 28 674 | 7.3 |
| Japan | 26 267 | 6.6 |
| Germany | 18 185 | 4.6 |
| Thailand | 18 078 | 4.6 |
| United Kingdom | 16 036 | 4.1 |
| Singapore | 14 610 | 3.7 |
| New Zealand | 13 905 | 3.5 |
| Malaysia | 12 562 | 3.2 |
| Italy | 9131 | 2.3 |
| Indonesia | 8384 | 2.1 |
| India | 7971 | 2.0 |
| France | 7416 | 1.9 |
| Vietnam | 6946 | 1.8 |
| **Total top 15** | **308 263** | **78.0** |
| Other | 87 137 | 22.0 |
| **Total** | **395 400** | **100.0** |

## 22.6.3 What goods and services do we import?

**TABLE 2** shows the top ten imports of goods and services into Australia in 2017–18. Although it only made up 10.7 per cent of total imports by value, the largest single import was the invisible import of Australians travelling and spending money overseas. While we are used to seeing imported clothing and home electrical goods in our shops, neither of these types of imports were included in the top ten in 2017–18.

**FIGURE 3** Most electrical goods sold in Australia, such as TV sets, are imported.

**TABLE 2** Australia's top ten goods and services imports in 2017–18 (A$ million)

| Rank | Commodity | A$ million | % share |
|---|---|---|---|
| 1 | Personal travel (excl. education) services | 42 496 | 10.7 |
| 2 | Passenger motor vehicles | 23 299 | 5.9 |
| 3 | Refined petroleum | 21 655 | 5.5 |
| 4 | Ships, boats & floating structures | 14 897 | 3.8 |
| 5 | Telecom equipment & parts | 13 412 | 3.4 |
| 6 | Crude petroleum | 11 738 | 3.0 |
| 7 | Goods vehicles | 10 181 | 2.6 |
| 8 | Freight transport services | 9431 | 2.4 |
| 9 | Computers | 8836 | 2.2 |
| 10 | Medicaments (incl. veterinary) | 7169 | 1.8 |
| | **Total top ten** | **163 114** | **41.3** |
| | Other | 232 283 | 58.7 |
| | **Total** | **395 400** | **100.0** |

## 22.6.4 Why do we import goods and services?

Australia imports many products, and does so for many reasons. Australian producers may not make a product as efficiently as it is made in another country, or a particular raw material may not be produced in sufficient quantities to satisfy demand. Australia began mining its own reserves of petroleum in the 1960s, but production peaked in the year 2000 and has been in decline ever since. As a result the importation of both crude and refined petroleum has steadily increased since then, amounting to 8.5 per cent of all imports in 2017–18. Similarly, the importation of passenger motor vehicles and goods vehicles amounted to 8.5 per cent of imports in 2017–18 and, with the closure of Australia's motor industry in 2017, this percentage is likely to increase.

**FIGURE 4** Motor vehicles and petroleum are among the many imported products sold in Australia.

## 22.6.5 How do imports affect the economy?

In 2017–18, Australia's income from goods and services exports was higher than its spending on imports, resulting in a trade surplus. The same was the case in the 2016–17 financial year. However, in many other years, Australia's spending on imports has been higher than income earned from exports. Bringing imports into the country has both positive and negative effects for consumers and producers. These are outlined in **TABLE 3**.

**TABLE 3** Economic effects of imports

| Positive effects | Negative effects |
|---|---|
| • There is an enormous range of goods and services for consumers to buy.<br>• Australian producers are forced to make goods and services using resources in the most efficient way because they have to compete against cheaper imported products.<br>• Importing goods from other countries encourages those countries to buy our exports.<br>• Australian workers may move overseas and learn other languages and cultures.<br>• More trade between countries encourages peaceful relationships and cultural exchanges. | • Australian jobs may be lost to countries with cheaper labour costs.<br>• Imported resources may lower employment opportunities for Australian workers.<br>• Australian industries find it difficult to compete with the lower production costs of some overseas countries. This leads to a closure of industries and loss of skills.<br>• Money leaves the country to circulate overseas, rather than in Australia, affecting the exchange rate of the Australian dollar.<br>• Harmful animal species as well as diseases, such as bird flu, may be brought into the country in various ways. |

### DISCUSS

Overall, do you think that imports have a positive or negative effect? Why? Think about all of the effects of importing goods and services, from the increased range on offer, to the environmental consequences, and the impact on Australian workers. **[Critical and Creative Thinking Capability]**

### 22.6 ACTIVITY

Design an advertisement (webpage or poster) to encourage consumers to buy Australian products. In presenting your advertisement design to the class, explain why you believe it could work. **Reasoning, creating, proposing**

### 22.6 EXERCISES

**Economics and Business skills key: ES1** Remembering and understanding **ES2** Describing and explaining **ES3** Examining, analysing, interpreting **ES4** Questioning and evaluating **ES5** Reasoning, creating, proposing **ES6** Communicating, reflecting

#### 22.6 Exercise 1: Check your understanding

1. **ES1** Define *imports*.
2. **ES3** Which countries were our top three sources of imports in 2017–18?
3. **ES3** Which type of goods made up our largest percentage of imports by value in 2017–18?
4. **ES2** Identify two reasons why Australia imports goods and services from overseas.
5. **ES3** Identify the region of the world where the majority of our imports are sourced, and provide a reason why this is the case.

### 22.6 Exercise 2: Apply your understanding

1. **ES2** What is meant by the terms *invisible imports* and *invisible exports*?
2. **ES2** Explain how purchasing imported goods can:
   (a) improve our standard of living
   (b) reduce our standard of living.
3. **ES3** Provide five examples of imports that you and your family purchase regularly. Identify their countries of origin.
4. **ES3** Name three stores in your local area and list some of the imported products they stock.
5. **ES6** What type of imports do you think will increase in Australia in years to come? Justify your response.

Try these questions in learnON for instant, corrective feedback. Go to www.jacplus.com.au.

# 22.7 Global events and the Australian economy

## 22.7.1 Positive and negative effects

Today all countries are connected to a greater extent than ever before in human history. International trade has contributed to economic growth and the generation of wealth in all nations that engage in the import and export of goods and services. Developments in travel and communications have made trade easier and broken down many traditional barriers between countries. While we have benefited in many ways from these connections with other countries, there have also been some detrimental effects. The ease of travel between countries has seen the rapid international spread of infectious diseases, while the widespread use of electronic communication has made internet fraud and identity theft much easier for criminal groups.

**FIGURE 1** International flights have made travel between countries quick and easy, but they come with risks such as the possibility of spreading contagious diseases across the globe.

## 22.7.2 Our interconnected world

The growth of trade between almost all countries has created greater economic interdependence between those countries. As a result of this interconnectedness, both positive and negative economic events can spread quickly between trading partners. The economic growth of China since the 1980s has had a beneficial effect on many other countries that trade with it. On the other hand, problems with housing loans that began in the United States in 2006 eventually spread to many other countries, creating a global financial crisis.

## The growth of the Chinese economy

Since the early 1980s, the Chinese government has pursued a number of policies designed to bring about rapid economic growth. Economic growth is measured by increases in a country's **gross domestic product (GDP)**. As GDP is the total value of all goods and services produced in a country in any given year, the rate by which GDP increases each year is effectively the rate of economic growth of that country. From 1979 until 2010, China's average annual GDP growth was 9.9 per cent. Since 2010, the rate of growth has slowed somewhat, with a rate of 6.3 per cent recorded for 2018. One way in which the Chinese have been able to achieve this level of growth is through a rapid expansion in trade with other countries. As a result of this policy China has become the world's largest trading nation, with a total trade value of US$4.1 trillion in 2017.

China has set out to increase its manufacturing capacity in order to provide all the goods and services required by its own huge population and also to export to other countries. It has had to import large quantities of raw materials from other countries, including the materials to build hundreds of new factories and the fuel to power them. Countries such as Australia have benefited enormously from this growth in the Chinese economy. As we have seen, China is Australia's largest export customer, buying large quantities of Australian iron ore and coal. For a roughly 10-year period from the mid 2000s, this generated a mining boom in Australia that contributed significantly to our growth in GDP.

Australia also imports large quantities of consumer goods from China, particularly clothing and other textile products, as well as increasing quantities of electronic goods and other home appliances. Most of these are produced more cheaply than we can produce them ourselves, so Australian consumers benefit from paying lower prices for a wide variety of goods imported from China.

**FIGURE 2** China produces high-quality electronic products more cheaply than we can in Australia.

## Global financial crisis (GFC)

During the early years of this century, many US banks lent money in mortgage loans to people who were ultimately unable to repay the amount they had borrowed. In 2006 and 2007 a fall in US house prices left many of these people with houses that were valued less than the money owing on their mortgage loans. When large numbers of them defaulted on their loans and had to abandon their houses, many of the banks and other financial intermediaries lost a lot of money, severely damaging the reputation of the US financial system. This led to a tightening of credit: banks lent less money and there was a slowing in growth of the United States economy. In 2008 the US economy went into **recession**. Around 9 million people lost their jobs in the following two years.

**FIGURE 3** Many US home owners had to abandon their mortgaged homes when house prices fell dramatically during 2006 and 2007.

In response to the problems in the US banking system, other banking systems throughout the world placed restrictions on lending. This led to a recession throughout much of the rest of the world. In many European countries GDP declined by as much as 10 per cent, with some countries experiencing even greater decreases in economic growth and high levels of unemployment. Recession was largely avoided in Australia because the government rapidly increased spending, injecting more money into the circular flow and stimulating economic growth.

The global financial crisis (GFC) of 2008 and 2009 occurred because of the close connections between the economic and financial systems of most of the world's countries. International trade and the flow of money between nations means that events that occur in one country can have an influence on the economic conditions in other countries — for better or worse.

## 22.7.3 Natural disasters

A natural disaster can have a serious economic impact on a country. When houses and businesses are destroyed, money and resources are needed to repair and replace them. These resources cannot therefore be used for other purposes. In February 2009 the Black Saturday bushfires in Victoria caused damage to the Victorian economy valued at more than $5 billion. In January 2011, floods in Queensland damaged many homes and businesses, and also devastated a great deal of valuable farming land. The resulting shortages forced up food prices all over Australia.Rail lines and coal mines were also damaged. Drought throughout much of New South Wales, Queensland and South Australia in 2018 led to farmers needing government assistance to continue on the land. In February 2019, serious flooding in Queensland destroyed farmland and livestock, threatening future food supplies and placing farmers and graziers under significant financial stress. Natural disasters in other countries can also affect the Australian economy, particularly if they occur in the Asia region to which we are so closely tied.

**FIGURE 4** The Queensland floods affected food prices all over Australia, as well as some of our export industries.

### The 2011 Japanese earthquake and tsunami

In March 2011 the largest earthquake ever to hit Japan occurred under the ocean to the country's east, causing a 40-metre tsunami. As many as 18 000 people are believed to have died. Tens of thousands of buildings were destroyed, and a meltdown at the Fukushima nuclear power station led to serious radioactive pollution. There was an immediate slowdown in the growth of the Japanese economy, but the international economy was also seriously affected. Japan is a major trading nation and the world's third largest economy. Japanese cars, computers and electronics products are assembled in many factories around the world, and they rely on parts imported from Japan. The slowdown in the Japanese economy had an impact on many Japanese-owned businesses globally.

Japan is Australia's second largest trading partner, so an event as dramatic as the 2011 tsunami had an impact on Australia's economy, although the effects were largely short term. These effects were positive as well as negative:

- The slowdown in the Japanese economy resulted in a reduction in demand for Australian exports such as coal, iron ore and beef. However, the reconstruction effort in Japan eventually led to a rise in demand for steel, so many of these exports subsequently increased.

- Pollution from the Fukushima nuclear power station raised concerns about the safety of the food supply in that area. This led to a rise in imports of food into Japan. As a significant supplier of food to Japan, Australia exported more food to that country in the period after the tsunami.
- The nuclear meltdown also caused Japan to reassess its reliance on nuclear power. As a result, it has been making greater use of coal- and gas-fired power stations. This is likely to result in a higher demand for coal and liquefied natural gas (LNG) from Australia. The 13 million tonnes of LNG exported from Australia to Japan in 2010 rose to 24.8 million tonnes in 2016–17.

**FIGURE 5** The destruction caused by the 2011 tsunami had an impact on Japan's trading partners as well as on its own economy.

## 22.7 EXERCISES

**Economics and Business skills key: ES1** Remembering and understanding **ES2** Describing and explaining **ES3** Examining, analysing, interpreting **ES4** Questioning and evaluating **ES5** Reasoning, creating, proposing **ES6** Communicating, reflecting

### 22.7 Exercise 1: Check your understanding

1. **ES1** Define each of the following:
   (a) recession
   (b) gross domestic product (GDP).
2. **ES2** Identify one way in which the greater interconnectedness of countries can have a detrimental effect.
3. **ES2** Outline one way in which the greater interconnectedness of countries can have a positive effect on Australia.
4. **ES2** Explain what is meant by *global financial crisis*.
5. **ES2** Explain how natural disasters can affect the Australian economy in:
   (a) a positive manner
   (b) a negative manner.

### 22.7 Exercise 2: Apply your understanding

1. **ES2** Describe two factors that have led to the greater interconnectedness of countries.
2. **ES2** How has Chinese economic growth benefited the Australian economy?
3. **ES2** Why did a fall in house prices in the United States lead to the global financial crisis of 2008–09?
4. **ES2** Explain one effect the Japanese earthquake and tsunami of 2011 had on the Australian economy.
5. **ES5** Northern Queensland has been subject to cyclones over the years. The same area has large numbers of sugar and banana plantations, and coal mines. The area provides sugar and bananas for the Australian domestic market, and refined sugar and coal for export. What impact do you think serious cyclone damage in this area would have on:
   (a) the price of bananas in Australian supermarkets
   (b) Australia's export trade with our Asian neighbours
   (c) the sugar plantation industry in India
   (d) the Australian confectionary manufacturing industry?

Try these questions in learnON for instant, corrective feedback. Go to www.jacplus.com.au.

# 22.8 SkillBuilder: Questioning and research

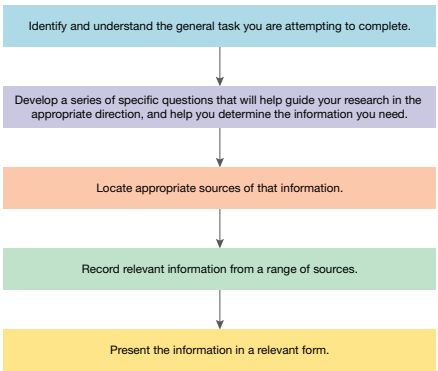
online only

### What are the steps in carrying out research?

Carrying out effective research involves an organised process of identifying your research issue, developing specific questions to explore the issue, then finding sources of information to answer your questions.

**Select your learnON format to access:**

- an explanation of the skill (Tell me)
- a step-by-step process to develop the skill (Show me)
- an activity to allow you to practise the skill (Let me do it).




# 22.9 Globalisation and the international economy

## 22.9.1 The economic issues of globalisation

Globalisation provides the means for increased interaction between the consumers, producers, workers and governments in one country's economy with their counterparts in the economies of other countries. Many people use the term 'globalisation' to describe the strengthening economic ties between nations, and the resulting trade and investment opportunities. Some use it to refer to the increasing exchanges between nations at the social, political, cultural and technological levels. For others, globalisation refers to our ability to rapidly communicate with and travel to other regions of the world. In this topic we focus on the economic issues associated with globalisation and the way they affect all participants in the global economy.

## 22.9.2 What are the benefits of globalisation?

Globalisation can be a driving force for economic growth (an increase in the size of the economy as measured by gross domestic product). As countries encourage free trade with other countries, new markets are created. Selling more products increases company profits, and this means companies can afford to hire more workers. As a result, both companies and workers become wealthier, and the standard of living improves. As discussed previously, a trade surplus with our trading partners will result in an increase in wealth coming into the country and contributes to the circular flow of money.

Trade helps to ensure that resources are used efficiently to produce goods and services. It enables nations to specialise in the products that they make efficiently or grow naturally. At the same time, producers competing on a global rather than national level must operate efficiently to keep prices competitive. This increased focus on efficiency and cost savings provides flow-on benefits for both producers and consumers.

**FIGURE 1** Greater choice and an increased variety of goods and services is a flow-on benefit of globalisation for consumers.

## 22.9.3 What is the downside of globalisation?

Globalisation can create unfair working conditions for many workers in poor countries. Large **transnational corporations (TNCs)**, for example, may shift their production factories to poorer countries where they can hire labour more cheaply. These workers may be forced to work long hours in unsafe and unhealthy factory environments for a very small wage. Workers in the home country of the TNC may lose their jobs altogether.

As well as choosing countries that have cheaper labour, TNCs may also choose to locate in countries where environmental regulation is less stringent. This may result in exploitation of natural resources and damage to the natural environment, often with little or no benefit flowing on to local communities.

TNCs also have the ability to undercut prices charged by competitors, often forcing smaller producers to close down. This results in job losses, less competition and less choice for consumers. Removal of competition can then allow TNCs to raise product prices.

**FIGURE 2** A downside of globalisation is the deplorable working conditions faced by many workers in poorer countries.

**DISCUSS**

Critics of TNCs who exploit labour laws by providing poor conditions and low wages for their workers often stage boycotts of the goods and services these companies provide. Do you think this is an effective strategy to put pressure on these companies? What else could be done to force a change in this behaviour?

**[Ethical Capability]**

## 22.9.4 Who oversees the global market?

A number of international organisations oversee the flow of goods, services and finance around the world. These include:

- the *World Trade Organization (WTO)*. Established in 1995, the WTO administers the rules of international trade. It is an influential organisation that has the power to rule on international trade disputes.
- the *International Monetary Fund (IMF)*. Established after World War II, the IMF's main function is to provide an orderly way of financially assisting developing countries.
- the *Organisation for Economic Co-operation and Development (OECD)*. The OECD develops economic and social policy for its members. Its 36 member countries include Australia, Japan, Korea, New Zealand and countries in Europe and North America.

## 22.9.5 What does globalisation mean for Australia?

Globalisation has affected our country in many ways:

- Many Australian companies now operate internationally, increasing their profits by selling their goods and services worldwide. Some have established their production centres in regions such as Asia to reduce labour costs.
- Globalisation has forced Australian farmers to compete at a global level to sell products such as wheat and wool. Previously they could rely on selling their crops and stock to established trading partners.
- Overseas investment by Australian companies helps to create employment and wealth in those overseas countries. Similarly, investment in Australia by overseas companies may create growth and employment opportunities that improve our standard of living.
- Importing a huge variety of goods and services allows consumers greater choice, usually at cheaper prices. Overseas-made products in almost every Australian home include electrical goods, food items, clothing and footwear, numerous television programs and even the family car.

**FIGURE 3** Globalisation in the form of shipping goods to or from other countries has advantages for Australian businesses and consumers.

## 22.9.6 Is globalisation environmentally sustainable?

As the world population grows, demand for goods and services increases. Meeting this demand requires greater use of renewable and non-renewable natural resources. The manufacturing processes involved in producing ever-increasing quantities of goods results in increased pollution levels and many dangerous by-products. Other serious environmental problems associated with meeting increased demand include ozone layer depletion, destruction of old-growth forests, extinction of many plant and animal species, and climate change.

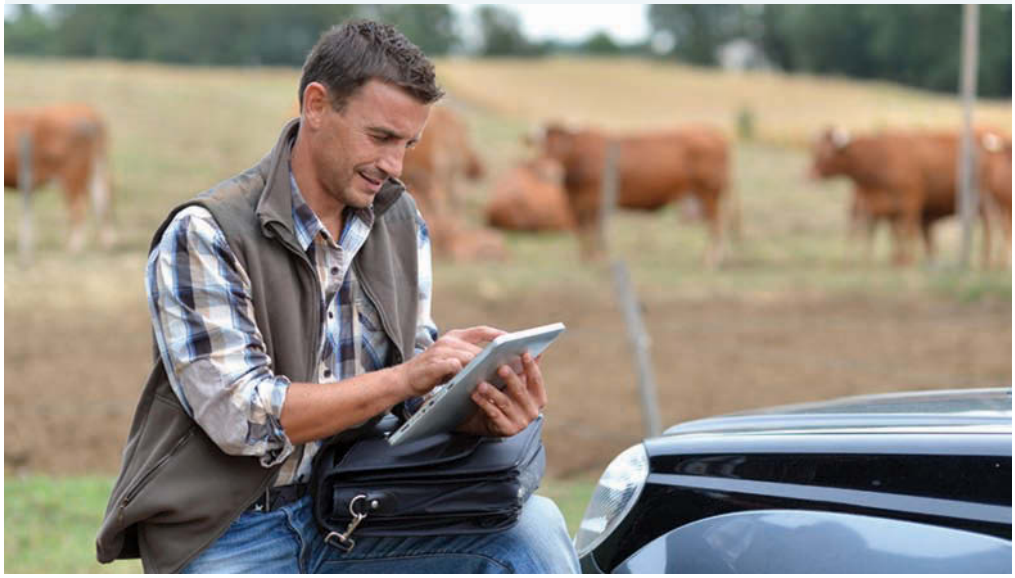
Both consumers and producers are becoming increasingly aware of the need for environmental sustainability.

**FIGURE 4** Clear-felling forests helps to meet rising demands for timber. It also reduces the availability of tree hollows in old-growth forest needed by some Australian species as their habitat.

## 22.9.7 How does the internet benefit globalisation?

The internet allows huge amounts of information to be accessed or shared very quickly, facilitating the exchange of information and ideas between individuals, businesses and governments around the world. As e-commerce (commercial transactions such as advertising, buying and selling on the internet) increases, isolated groups such as rural exporters will be able to operate more competitively. This will provide growth opportunities for many country towns and out-of-the-way remote businesses that might otherwise have difficulty in reaching a large market.

**FIGURE 5** Greater access to the internet enables even small or isolated businesses to compete efficiently in a globalised market.



## on Resources

**Weblinks** Globalisation
What is globalisation?
Fashion factories

## 22.9 EXERCISES

**Economics and Business skills key: ES1** Remembering and understanding **ES2** Describing and explaining **ES3** Examining, analysing, interpreting **ES4** Questioning and evaluating **ES5** Reasoning, creating, proposing **ES6** Communicating, reflecting

### 22.9 Exercise 1: Check your understanding

1. **ES1** In your own words, define *globalisation*.
2. **ES1** Identify one international organisation that oversees global markets and outline its main function.
3. **ES1** List three advantages and three disadvantages of globalisation.
4. **ES2** Identify and explain two negative impacts of globalisation on the Australian economy.
5. **ES2** Identify and explain two positive impacts of globalisation on the Australian economy.

### 22.9 Exercise 2: Apply your understanding

1. **ES2** In what ways has globalisation placed additional pressures on the environment?
2. **ES3** Identify one product that you or a family member have purchased online recently from an overseas supplier.
   (a) What was the name of the online retailer supplying the product?
   (b) Which country did the product come from?
   (c) Is the product available from shops locally?
   (d) Why did you or the family member decide to use the internet to purchase this product?
3. **ES6** 'Many countries are being too heavily influenced by external culture and language, particularly US culture, and are losing unique elements of their traditional culture.' Think of the number of products we buy that have originated in the United States, including fast food, films, music and TV programs that are now available worldwide. Do you agree or disagree with the view that globalisation risks damaging local cultures in smaller countries? Give reasons for your answer.
4. **ES6** 'Not only is our economy better off through globalisation but culturally we have improved as well.' Comment on this statement.
5. **ES6** 'Globalisation builds relationships.' Explain what this means and how this can benefit the world.

Try these questions in learnON for instant, corrective feedback. Go to www.jacplus.com.au.

# 22.10 Global supply chains

## 22.10.1 Land, labour and capital

In the globalised economy, the manufacture of many goods that we purchase is not restricted to one country. All goods are manufactured using a combination of raw materials (known to economists as land), human skill and effort (labour), and factory buildings and equipment (capital). Manufacturing today can have different combinations of these three resources located in many different parts of the world, with the final product sold in a variety of different countries.

The combination of different resources, businesses and information that moves a product or service from producer to consumer is known as the supply chain, and one of the major concerns of any transnational corporation is supply chain management.

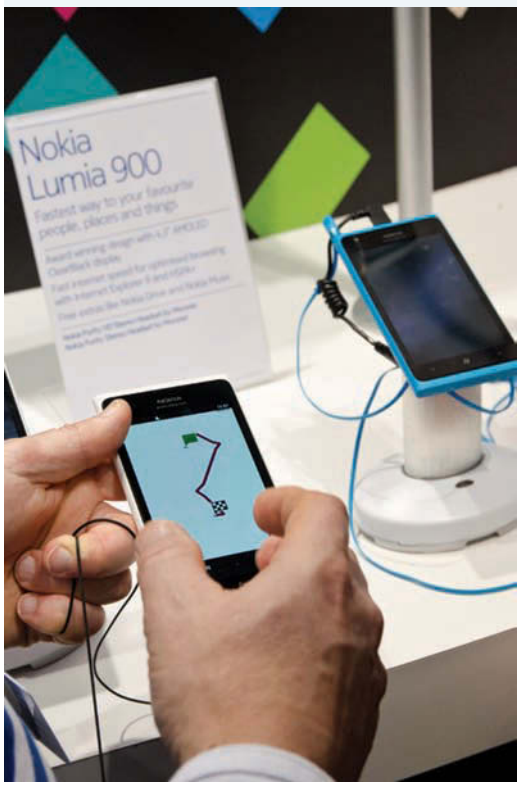
Raw materials have to be sourced from various parts of the world, and these raw materials may then be processed in a number of different countries. The manufacturing steps may occur in several locations before the finished product is available for sale. Supply chain management can be illustrated by examining the production of the mobile phone. The manufacture of a mobile phone is a worldwide process, with countries from every continent involved.

## 22.10.2 CASE STUDY: Supply chain management — Nokia

Nokia is one of the best known and successful mobile phone brands in the world, but it has not always produced mobile phones. It is a Finnish company that has been in operation since 1865, producing a variety of goods including cables, toilet paper and rubber boots.

In the early 1990s, Nokia reinvented itself and started focusing on technology in the mobile phone industry. With this change in focus the company began operations as a transnational business, operating factories and selling its product worldwide. This transformation did not come without its problems. The popularity of mobile phones and the Nokia brand meant that in 1996 the company did not have the factories capable of producing the number of phones demanded. In response, it began the globalisation of the Nokia operation, with a particular emphasis on updating its supply chain management.

**FIGURE 1** The popularity of Nokia phones prompted the company to globalise its operations.




### Raw materials

The electronic and electromechanical components of a mobile phone require a variety of minerals, sourced from all over the world. Copper for internal wiring comes mainly from Chile, Australia and Peru, although this important metal is also supplied by other countries in South America, Asia and Africa. Other minerals such as cobalt and tantalum from central Africa, and zinc, mercury and nickel from Africa, Asia, South America and Australia are all required in phone manufacturing. Plastics for the phone cases have to be processed as a by-product of petroleum from the Middle East and other oil-producing regions.

**FIGURE 2** Many of the minerals used in mobile phones are mined in Africa.

## Production of components

Nokia originally made its mobile phones in Finland but because it was unable to meet demand, opened factories in other locations around the world. For many years, Nokia in Finland made a number of phone components itself and purchased other components from around a hundred different specialist manufacturers, as well as a large number of software suppliers. Electronic circuits, liquid crystal displays, cases and batteries were all then shipped from different parts of the world to be assembled into mobile phones.

## Assembly

From 2011, with the increasingly competitive nature of the smartphone market, Nokia was forced to further restructure its operations. In 2012 it closed its last factory in Finland, and its phones were then produced (in some cases under licence by other manufacturers) in a number of factories throughout Asia, Europe, and North and South America (see **FIGURE 3**).

**FIGURE 3** Nokia handset factories

The assembly of Nokia handsets in various factories worldwide was in response to a demand by telecommunications companies in different countries for telephones with key features under their particular brand. Nokia would take orders from the carriers (such as Vodafone) into their production system and make hundreds of thousands of specialised phones for each carrier. This meant that a carrier could have a unique faceplate with its own logo, or with specialised software installed.

Having become a highly successful transnational corporation, sourcing materials, manufacturing and assembling mobile phones across the globe, in 2013 Nokia sold its phone devices and services division to Microsoft. This meant that the division became part of the Microsoft transnational corporation, and its supply chain became integrated with that of Microsoft worldwide.

Subsequent restructuring, sales and acquisitions have seen the Nokia mobile phone brand continue to be a world leader — in more recent years under the ownership of HMD global, where Nokia phone manufacturing continues in factories located across the globe.

## 22.10.3 Responsibility and sustainability issues in supply chain management

When businesses source supplies and materials from a number of different countries, there are a range of issues that may arise. The issue of legal compliance is important, as large transnational companies must abide by the laws of the country in which they are operating. Above and beyond these legal requirements is the concept of corporate social responsibility. Some businesses will choose to operate in other countries because the laws regarding labour, wage rates, mining and the environment are less strict and they want to take advantage of these laws. In terms of supply chain management, businesses should ensure that they treat employees and contractors appropriately and that any waste that results from their operations is disposed of in a manner that doesn't harm the environment.

Corporate social responsibility is the obligation a business has, over and above its legal responsibilities, to the wellbeing of employees and customers, shareholders and the community, as well as to the environment. Ensuring sustainability is an important element among these responsibilities. Sustainability refers to the ability of a country or a business to meet the needs of its citizens now without jeopardising the ability of the country to meet those needs in the future. Mining, forestry, fishing and farming need to preserve resources so they can be used now but still be available for use in the future.

In sourcing materials and labour from various countries around the world, businesses need to ensure that their processes are ethical, responsible and sustainable in both human and environmental respects.

### on Resources

**Weblink** Supply chain

### 22.10 ACTIVITIES

1. Use the **Supply chain** weblink in the Resources tab to learn how Microsoft ensures responsible sourcing in their supply chain. Create an infographic to outline the key elements of Microsoft's approach.
   **Examining, analysing, interpreting**
   **Reasoning, creating, proposing**
2. Investigate another transnational corporation that operates throughout the world and identify the key elements of its supply chain. (For example, you could research Nestlé or Ford, or use the internet to find examples of others.) Present your information in the form of a flowchart or map.
   **Examining, analysing, interpreting**
   **Reasoning, creating, proposing**

## 22.10 EXERCISES

**Economics and Business skills key: ES1** Remembering and understanding **ES2** Describing and explaining **ES3** Examining, analysing, interpreting **ES4** Questioning and evaluating **ES5** Reasoning, creating, proposing **ES6** Communicating, reflecting

### 22.10 Exercise 1: Check your understanding

1. **ES1** What are the three elements in the production of goods?
2. **ES1** What is a supply chain?
3. **ES2** Why did Nokia have to globalise its phone manufacturing business?
4. **ES2** Identify three different raw materials that are used in the production of mobile phones and the countries where these materials are sourced.
5. **ES2** Explain one benefit to a business of operating as a transnational company.

### 22.10 Exercise 2: Apply your understanding

1. **ES2** Explain what is meant by *sustainability*.
2. **ES3** Transnational companies are often accused of not acting in a socially responsible manner. Explain social responsibility and analyse this statement.
3. **ES5** Corporate social responsibility is an issue that many consumers consider when purchasing goods and services. Describe how consumers may apply their views on social responsibility to their purchases.
4. **ES5** Describe how businesses should respond to consumer concerns over social responsibility and the global supply chain.
5. **ES3** Analyse how a developing country may welcome transnational businesses.

Try these questions in learnON for instant, corrective feedback. Go to www.jacplus.com.au.

# 22.11 Transnational corporations

## 22.11.1 What is a TNC?

A transnational corporation (TNC) is a business that produces and sells its products in a number of countries throughout the world. TNCs have their headquarters in one country and they establish subsidiaries in other countries. The subsidiaries are located in countries that provide the resources and conditions necessary for them to operate. TNCs represent the highest level of involvement in global business, where national borders do not represent barriers to trade. TNCs conduct a large percentage of their business outside of their home country.

**FIGURE 1** Neon signs in London advertising TNCs

## 22.11.2 Worldwide assets and sales

TNCs come in many different forms. Sanyo, McDonald's, Unilever, Ford, News Corporation and BHP Billiton are just a few of the well-known foreign and Australian transnational corporations.

The degree to which a business is a genuine transnational company can be measured by examining the proportion of its sales that occur outside its home country. **TABLE 1** shows ten of the largest transnational corporations and the percentage of their sales that occur outside their home countries.

**TABLE 1** Ten largest TNCs by percentage of sales that occur outside home countries.

| Company | Home country | Overseas sales as a percentage of total sales |
|---|---|---|
| Nestlé | Switzerland | 97.8 |
| Vodafone | Britain | 88.3 |
| Siemens | Germany | 85.3 |
| British Petroleum (BP) | Britain | 79.8 |
| Volkswagen | Germany | 78.3 |
| Honda | Japan | 77.7 |
| Total (oil) | France | 76.9 |
| Exxon Mobil | USA | 73.0 |
| GDF Suez (electricity) | France | 65.6 |
| Toyota | Japan | 60.8 |

***Source:*** Table based on information from the UN Committee on Trade and Development (UNCTAD)

Many of these corporations have factories and assembly plants spread around the world. For example, car manufacturer Toyota has manufacturing or assembly plants in 27 different countries spread across Europe, North and South America, Asia and Africa, in addition to its home base in Japan. A substantial proportion of Toyota's employees work in countries other than Japan, and in 2012 it became the first motor manufacturing company to produce more than 10 million cars in one year worldwide. Oil companies such as Exxon Mobil and BP drill for oil in different locations across the world and have oil refineries in many countries. French energy company GDF Suez owns electricity generation assets around the world, including a number of gas-fired power stations in Western Australia and South Australia.

**FIGURE 2** A Toyota dealership in Lithuania

## 22.11.3 The biggest and richest

Some of the largest transnational corporations have annual revenues that exceed the GDP of many countries. In 2018, a number of companies reported revenue figures greater than many countries' GDP. US retail giant, Walmart, earned enough revenue to be ranked 24th in the world by GDP. Volkswagen would be ranked 43rd and Apple 47th if they were countries rather than corporations. The top ten transnational corporations by revenue for 2017 are shown in **TABLE 2**.

**TABLE 2** Top ten transnational corporations by revenue, 2017

| | Company | Home country | Activity | Revenue (US$ million) |
|---|---|---|---|---|
| 1 | Walmart | USA | Retail | 485 900 |
| 2 | State Grid | China | Electricity supply | 315 200 |
| 3 | Sinopec Group | China | Oil and gas | 267 500 |
| 4 | China National Petroleum | China | Oil | 262 600 |
| 5 | Toyota Motor | Japan | Car manufacture | 254 700 |
| 6 | Volkswagen | Germany | Car manufacture | 240 300 |
| 7 | Royal Dutch Shell | Netherlands/Britain | Oil | 240 000 |
| 8 | Berkshire Hathaway | USA | Finance/investment | 223 700 |
| 9 | Apple | USA | ICT | 215 600 |
| 10 | Exxon Mobil | USA | Oil | 205 000 |

## 22.11.4 Some positives and negatives of TNCs

In 2016, 69 corporations were on the list of the top 100 **economic entities** of the world. If the wealthiest TNCs have revenue greater than many small to medium countries, they have enormous power. If a TNC uses this power in the best interests of the people of those countries in which it operates, those people can benefit enormously:

- Investment from TNCs brings money and therefore economic growth into the country.
- Parent companies and their subsidiaries may share intellectual property such as design and technology concepts. This helps less developed economies become more advanced. The flow of ideas and talent is also supported by the movement of staff between countries, even though they remain employed by the same TNC.
- The standard of living of people in less developed countries can be improved as jobs are created.
- Transnational corporations sometimes contribute towards the provision of new transport links to service their premises, and this can be of benefit to the local community.

**FIGURE 3** This railway line in the Pilbara in Western Australia is an example of a transport link built by a transnational mining company.

- When a transnational company builds a new factory, this can stimulate other businesses in the surrounding area. Businesses supplying raw materials, equipment and components to the factory can benefit.

On the other hand, if the transnational company does not act ethically, there may be very little that the government of a host country can do simply because of the financial power wielded by the large company. Some transnational corporations have been found to have acted in ways that have exploited host countries and their people:

- Transnational corporations often set up production in countries that have high levels of poverty and low wages. They often employ young children, pay workers the minimum amount possible, and provide very little in the way of safe working conditions or employee benefits such as meal breaks, sick pay, holiday pay or superannuation.
- Profits are often returned to the home country rather than being used to benefit the economy of the host country.
- Many transnationals will bring their own managerial and skilled staff with them, leaving only menial work for the local population.
- Many transnational corporations have a poor record in environmental matters. They often exploit the laxity of environmental regulations in the host country to pollute the air and waterways there.
- Transnational companies often use complex systems of **transfer pricing** to avoid paying tax on profits earned in the host country. This means that the government of the host country does not gain much additional revenue from the operations of the TNC.

**FIGURE 4** This young boy working in a textile factory in India is making clothes to supply a transnational clothing company.

## 22.11.5 Regulating the activities of TNCs

As a result of international concerns over the activities of some TNCs, the United Nations identified some key responsibilities for the largest transnational corporations:

- Do not use forced or compulsory labour.
- Respect the rights of children to be protected from economic exploitation.
- Provide a safe and healthy working environment.
- Pay workers enough to ensure an adequate standard of living for them and their families.
- Recognise the rights of employees to join unions and other collective bargaining organisations.

### on Resources

**Weblink** Tax Justice Network

### 22.11 ACTIVITY

Use the **Tax Justice Network** weblink in the Resources tab to learn more about the issues associated with taxing corporations, and then use this information to answer the following.

**a.** Identify two reasons why it is important to tax transnational corporations.
**b.** What is the difference between tax evasion, tax avoidance and tax cheating?
**c.** Explain the international system that currently exists to oversee the taxing of transnational corporations.
**d.** Give an example of the way in which transfer pricing is used to avoid tax.
**e.** Explain one possible solution to the current problem of TNCs avoiding tax.

**Examining, analysing, interpreting**
**Reasoning, creating, proposing**

### 22.11 EXERCISES

**Economics and Business skills key: ES1** Remembering and understanding **ES2** Describing and explaining **ES3** Examining, analysing, interpreting **ES4** Questioning and evaluating **ES5** Reasoning, creating proposing **ES6** Communicating, reflecting

#### 22.11 Exercise 1: Check your understanding

1. **ES1** Define the term *transnational corporation* and provide three examples.
2. **ES2** What is an economic entity? Give two examples.
3. **ES3** Which TNC is the most internationalised in the world, and what percentage of its sales occur outside its home country?
4. **ES2** What type of economic or business activity involves most of the largest transnational corporations? (*Hint:* Refer to **TABLE 2**.)
5. **ES2** What is *transfer pricing* and what is the impact of its use by some TNCs?

#### 22.11 Exercise 2: Apply your understanding

1. **ES2** Explain three possible advantages and three possible disadvantages for a host country of having a transnational corporation set up a factory or other operation in its territory.
2. **ES6** What do you think might happen if the government of a relatively poor country decided to change the laws to collect more tax from TNCs operating within its borders?
3. **ES5** Why do you think the United Nations thought it necessary to draw up a code to govern TNC behaviour?
4. **ES5** What short-term and long-term benefits do you think could result for a TNC that always behaved ethically and respected human rights?
5. **ES3** A difficulty with TNCs is policing their activities when they breach local laws. Analyse why this may be a problem for some countries.

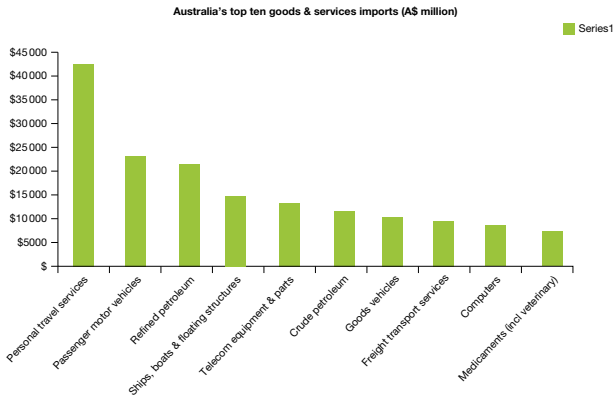
Try these questions in learnON for instant, corrective feedback. Go to www.jacplus.com.au.

# 22.12 SkillBuilder: Developing graphs from tables

online only

## Why develop graphs from a table?

A picture is worth a thousand words! While a table of data can provide useful information, presenting this data as a graph can make the information more accessible and easier to read. Spreadsheet software such as Excel can be used to create graphs from tables, and the process is very simple.




### Select your learnON format to access:

- an explanation of the skill (Tell me)
- a step-by-step process to develop the skill (Show me)
- an activity to allow you to practise the skill (Let me do it).

# 22.13 Thinking Big research project: An international menu

online only

## SCENARIO

Australia is part of the world economy. Our access to goods and services from overseas has increased exponentially in recent years, so our choices are greater and more varied. You will design a 3-course dinner menu, analyse where your ingredients are sourced from and prepare a report describing how the development of the global economy has impacted our daily lives.

### Select your learnON format to access:

- the full project scenario
- details of the project task
- resources to guide your project work
- an assessment rubric.

## Resources

**ProjectsPLUS** Thinking Big research project: An international menu (pro-0200)

# 22.14 Review

online only

## 22.14.1 Key knowledge summary

Use this dot point summary to review the content covered in this topic.

## 22.14.2 Reflection

Reflect on your learning using the activities and resources provided.

### on Resources

**eWorkbook** Reflection (doc-31738)
Crossword (doc-31739)

**Interactivity** The Australian and global economies crossword (int-7656)

## KEY TERMS

**balance of trade** the difference between the value of a country's exports and the value of its imports over a specific period of time
**economic entity** any person or organisation engaged in economic activity. It could be an individual, a household, a business, a government or a country.
**exports** goods and services sold by local businesses to overseas consumers
**financial intermediary** any organisation that takes deposits from those with surplus funds and makes those funds available to borrowers
**gross domestic product** (GDP) the value of all the goods and services produced within a country in a given period of time (usually a year). It is often used as an indicator of a country's wealth.
**imports** goods and services purchased by local consumers from overseas businesses
**inflation** a general rise in prices across all sectors of the economy
**investment** the use of money to purchase equipment or premises for the establishment of a new business or the expansion of an existing business
**labour** the human skills and effort required to produce goods and services
**market** any organised exchange of goods, services or resources between buyers and sellers
**mortgage loan** money advanced to a person for the purchase of a house or other property, where the property itself is used as security for the loan. This means the bank or other lender can take possession of the property if the borrower fails to make the regular repayments.
**opportunity cost** what you have to give up if you choose to do A rather than B; the value of the next best alternative that is given up whenever a choice is made
**recession** a period of decline in economic growth when GDP decreases
**relative scarcity** the economic problem of having unlimited needs and wants with only limited means to satisfy them
**resources** the land, labour, capital and enterprise used to produce goods and services that satisfy needs and wants. Production usually requires a combination of these resources.
**superannuation fund** an account that holds and invests superannuation contributions made by employees, their employers or the government, for eventual distribution to help fund an individual's retirement
**transfer pricing** when one subsidiary of a transnational corporation charges another subsidiary for providing goods or services, often resulting in profits being moved between different countries to avoid the payment of tax on those profits
**transnational corporations (TNCs)** large business organisations that have a home base in one country and operate partially or wholly owned businesses in other countries

# 22.8 SkillBuilder: Questioning and research

## 22.8.1 Tell me

### What are the steps in carrying out research?

Carrying out effective research involves an organised process of identifying your research issue, developing specific questions to explore the issue, then finding sources of information to answer your questions.

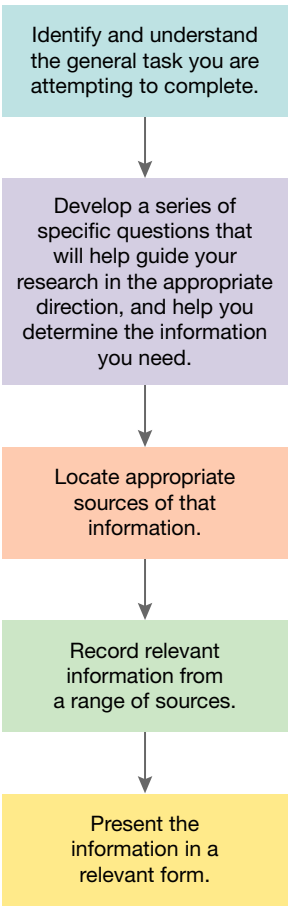
The steps in **FIGURE 1** can provide a useful guide for your research process.

## 22.8.2 Show me

Imagine you have been asked to investigate Australia's trade with China. You need to find out details of the major imports and exports between the two countries and any recent changes that have occurred in the trade relationship.

1. Your first step is to clearly identify the essential task. This could be expressed as: 'Prepare a report on Australia's trade with China. Include details of the major exports and imports, recent trends in our trade relationship with that country, and the value of this trade to the Australian economy.'
2. Now break this down into a series of more specific questions. These could include:
   a. What are Australia's major exports to China?
   b. What are the values and/or percentages of these exports?
   c. What are our major imports from China?
   d. How are these imports broken down, from most important to least important?
   e. Which areas of trade have been growing most rapidly over the past few years, and which have been in decline?
   f. How does trade with China affect the Australian economy? What are the benefits, and what are the disadvantages?
3. The next step is to locate appropriate sources. By entering the search term 'Australian trade with China' in your favourite search engine, you will be presented with a number of sources. Look for reliable sources relevant to your area of research. For investigating Australia's trade relationships, the Department of Foreign Affairs and Trade (DFAT) website would be a highly reputable source.
4. A Wikipedia entry is often found at or near the top of the list of sources, and many students will be familiar with this resource. There is no problem with using Wikipedia as one of your sources — so long as you remember that it is not always reliable, and any information gathered from Wikipedia should always be checked against another source to make sure it is accurate. To help ensure that your information is correct, it is a good idea to use at least two sources to answer each question.
5. Keep your questions beside you as you read each source, and note the location of material that provides answers. You can select and print some text, and then highlight those sentences or paragraphs that provide answers to your questions. Sometimes a complete answer to a question may be found in several places in a piece of text. Be sure to highlight all relevant text, and indicate with a number which question the information answers.
6. When you are satisfied that you have found answers to all the questions, you need to write the answers in order, using your own words as much as possible. Then use your answers to present your information in the required form. This may be a report to the rest of the class, an essay to be marked by your teacher, a PowerPoint presentation, or any other appropriate format.

**FIGURE 1** How to carry out your own research



## 22.8.3 Let me do it

Complete the following activity to practise your skills.

### 22.8 ACTIVITY

Using the process in the Show me section and **FIGURE 1** as a model, research and prepare a report on Australia's trade with one of these Asian countries: Japan, South Korea, India, Singapore or Thailand. Your report should include details of goods and services traded, recent trends or changes in that trade, and the importance of that trade to the Australian economy.

# 22.12 SkillBuilder: Developing graphs from tables

## 22.12.1 Tell me

A picture is worth a thousand words! While a table of data can provide useful information, presenting this data as a graph can make the information more accessible and easier to read. Spreadsheet software such as Excel can be used to create graphs from tables, and the process is very simple.

## 22.12.2 Show me

Using **TABLE 2** 'Australia's top ten goods and services imports in 2017–18 (A$ million)' from subtopic 22.6, we can carry out the steps outlined below to create a graph from the table data.

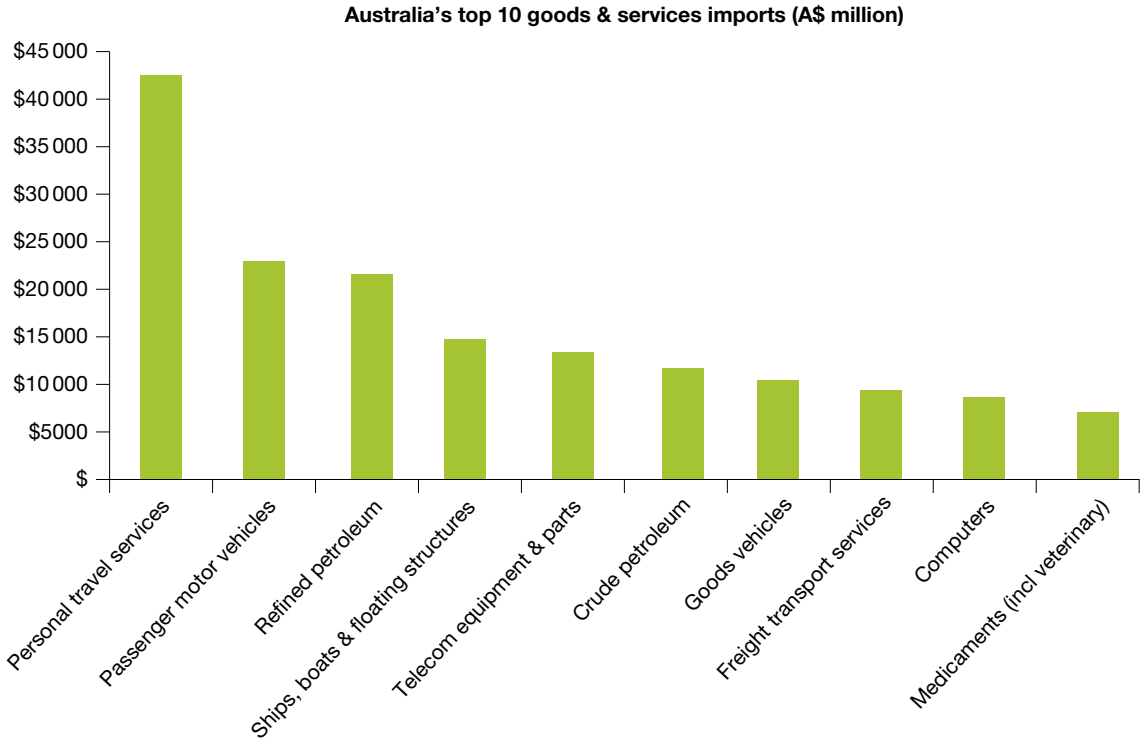
**TABLE 2** Australia's top ten goods and services imports in 2017–18 (A$ million)

| Rank | Commodity | Value (A$ million) | % share |
|---|---|---|---|
| 1 | Personal travel (excl. education) services | 42 496 | 10.7 |
| 2 | Passenger motor vehicles | 23 299 | 5.9 |
| 3 | Refined petroleum | 21 655 | 5.5 |
| 4 | Ships, boats & floating structures | 14 897 | 3.8 |
| 5 | Telecom equipment & parts | 13 412 | 3.4 |
| 6 | Crude petroleum | 11 738 | 3.0 |
| 7 | Goods vehicles | 10 181 | 2.6 |
| 8 | Freight transport services | 9431 | 2.4 |
| 9 | Computers | 8836 | 2.2 |
| 10 | Medicaments (incl. veterinary) | 7169 | 1.8 |
| | **Total top 10** | **163 114** | **41.3** |
| | Other | 232 283 | 58.7 |
| | **Total** | **395 400** | **100.0** |

1. Open a new Excel file.
2. Copy the ten categories of imports into the first column. You may need to make the column wider to fit the text.
3. Next to each category of imports, copy the value of each of these imports in the second column.
4. Select all cells in the column with the figures and convert to dollars by clicking on the dollar sign in the number formatting section of the 'Home' toolbar.
5. Select both columns, and click on the 'Insert' tab. You will then see the 'Charts' creation section of the toolbar.
6. Click on the 'Insert column or bar chart' icon, and the column graph menu will drop down. You can choose various formats of column graphs to present your data, including 2D and 3D options.
7. Click on your selected format (in this case, use 2D column) and the data will be presented as a column graph in the centre of the Excel page.
8. Click anywhere within the boundary of the graph and the 'Chart Tools' toolbar will appear at the top of the page. Click on the 'Design' tab to change the design of your graph, including the colour of the columns.

9. Click on the 'Chart title' to type in a title for the graph.
10. Your finished graph will present a comparison of the different categories of imports as shown in **FIGURE 1**.

**FIGURE 1** Graph showing Australia's top ten goods and services imports in 2017–18 (A$ million)




## 22.12.3 Let me do it

Complete the following activity to practise your skills.

### ACTIVITY

Apply the process outlined in the Show me section to create graphs from three other tables in this topic:

- subtopic 22.6, **TABLE 1** Australia's top 15 goods and services trade partners, 2017–18
- subtopic 22.11, **TABLE 1** Ten largest TNCs by percentage of sales that occur outside home countries
- subtopic 22.11, **TABLE 2** Top 10 transnational corporations by revenue, 2017.

# 22.13 Thinking Big research project: An international menu

## Scenario

Australia is part of the world economy. As globalisation has taken hold, the decisions we make affect other economies, and the actions and decisions of other economies similarly have an impact on us. Our access to goods and services from overseas has increased exponentially in recent years and so our choices are greater and more varied.

## Task

Design a three-course menu for a dinner party to be hosted at your house. The meal should comprise an entrée, main course and dessert. You will then:

- conduct research into the country of origin of your menu ingredients
- prepare a world map to show where ingredients are sourced
- design a menu to place on your dinner table, which will outline the source ingredients and provide a brief report on how the development of the global economy impacts on our daily life.

Follow the steps detailed in the **Process** section to complete this task.

## Process

- Open the ProjectsPLUS application in the Resources for this topic. Click on the **Start new project** button to enter the project due date and set up your project group if you wish. You may work individually or in pairs, depending on your teacher's preference. Save your settings and the project will be launched.
- Navigate to the **Research forum**, where you will find starter topics loaded to guide your research. You can add further topics to the Research forum if you wish. When you have completed your research, you can print out the **Research report** in the Research forum to easily view all the information you have gathered.
- In the **Media centre** you will find an assessment rubric to guide your work and some weblinks that will provide a starting point for your research.
- Use recipe books or cooking sites online to choose your entrée, main course and dessert, then prepare a list of ingredients needed (pre-packaged meals are not permitted).

- Research online or at your local shops to complete a table like the one below, detailing information about your ingredients (an example has been completed for you).

| Menu item | Ingredient | Made by | Country of origin |
|---|---|---|---|
| Chocolate mousse (dessert) | Caster sugar | CSR (Colonial Sugar Refinery) a division of Wilmar | Australia |
| | | | |
| | | | |
| | | | |

- On a blank world map, place a small symbol to represent the various ingredients on each of the countries from which your ingredients are sourced.
- Design and create a menu to place on your dinner table, for your guests. Include information about where your ingredients are sourced, and a short report on how the development of the global economy impacts our daily life.

## Resources

**ProjectsPLUS** Thinking Big research project: An international menu (pro-0200)

# 22.14 Review

## 22.14.1 Key knowledge summary

### 22.2 Participants in the Australian economy

- The household sector makes decisions about which goods and services to purchase, and provides labour for businesses.
- The business sector is made up of a large number of producers, all seeking to provide goods and services to satisfy the needs and wants of households.
- Businesses make use of land, labour and capital to produce goods and services to sell to consumers.
- Financial intermediaries perform an important role because they enable accumulated savings to be directed towards business growth.
- Government plays an important role in the economy because households and businesses pay money to government in the form of taxes, and receive particular types of goods and services in return.

### 22.3 Objectives of the Australian economy

- The economic system aims to answer three key questions: what to produce, how to produce and for whom to produce.
- Whenever we make a choice between two or more alternatives, we may gain the benefits of the alternative we choose, but we lose any benefits that may have come from choosing the next best alternative. This is known as opportunity cost.

### 22.4 Indicators of economic performance

- Indicators such as economic growth, unemployment and inflation provide us with information about the performance of the Australian economy.
- The circular flow diagram represents the flow of money between households, businesses, financial intermediaries, government, and overseas consumers and businesses.

### 22.5 Trade with other economies

- Australia is a trading nation — it exports goods and services to other countries, and Australian businesses and consumers import goods and services from overseas.
- The balance of trade is the difference between the value of a country's exports and its imports over a specific period.
- Australia's largest trading partner is China, with other Asian countries making up four of our five top trading partners.
- Trade and other connections between countries mean that events in one part of the world can affect economies in other countries.

### 22.6 Imports and the Australian economy

- Increased trade between nations has helped to fuel economic growth and assist poorer countries to achieve higher standards of living.
- Australia relies heavily on imported goods brought in from countries all around the world.
- Over 50 per cent of our imports in the 2017–18 financial year came from six of our ten largest trading partners, while our top 15 sources of imports accounted for almost 80 per cent of the total value of all imported goods.
- Australia imports goods and services because our local producers may not make a product as efficiently as it is made in another country, or a particular raw material may not be produced in sufficient quantities to satisfy demand.

### 22.7 Global events and the Australian economy

- International trade has contributed to economic growth and the generation of wealth in all nations that engage in the import and export of goods and services. There are also negative effects of increased global connectedness, such as the rapid international spread of infectious diseases and the rise of internet fraud and identity theft.

- As a result of global interconnectedness, both positive and negative economic events can spread quickly between trading partners.
- The growth in the Chinese economy has had a significant impact on the global economy, with countries such as Australia benefiting from increased trade with China.
- The mortgage finance collapse that started in the US in 2006–07 soon spread throughout the world, becoming known as the global financial crisis of 2008–09.
- Natural disasters can have serious impacts on countries' economies, with funds needing to be allocated to relief and rebuilding therefore being unavailable to be used in other ways. International trade may also be impacted by these events.

### 22.9 Globalisation and the international economy

- Globalisation provides the means for increased interaction between consumers, producers, workers and governments in one economy with their counterparts in other economies.
- Globalisation has also led to the growth of large transnational corporations, many of which have used their power to exploit workers in poorer countries.
- Australia has benefited from globalisation because of the overseas demand for our mineral resources and the access to cheaper imported products for consumers. On the downside, cheaper imports have led to the closure of many of our own manufacturing industries.
- Globalisation has created a great deal of environmental damage throughout the world, leading to the international community becoming more aware of the need for sustainability and environmental protection.

### 22.10 Global supply chains

- In globalised manufacturing industries, raw materials, components and machinery can come from a variety of sources from all over the world, making supply chain management a major task for transnational corporations.
- Mobile phone manufacturer Nokia is an example of a company that had to set up factories all over the world to satisfy demand for its products.
- Environmental sustainability and the ethical treatment of workers in poorer countries are issues that must be considered in the supply chain management of all transnational corporations.

### 22.11 Transnational corporations

- Transnational corporations are large business organisations that have their home base in one country and operate partially owned or wholly owned businesses in other countries.
- Many of the most globalised TNCs conduct more than 70 per cent of their business outside their home country.
- Some of the largest transnational corporations have annual revenue that is larger than the GDP of many countries. This can give them greater power and influence than these countries, and lead to exploitation of these countries and their people.
- Transnational corporations can bring many benefits to countries in which they operate, such as employment and new technology.
- Some TNCs have been found to be acting unethically by not paying enough tax in countries in which they operate, by paying low wages and by not providing safe and healthy working conditions.

## 22.14.2 Reflection

Complete the following to reflect on your learning.

### 22.14 ACTIVITIES

Revisit the inquiry question posed in the Overview:

**Markets, sectors, growth and trade. How are the economies of the world similar, different and interconnected?**

1. Now that you have completed this topic, what is your view on the question? Discuss with a partner. Has your learning in this topic changed your view? If so, how?
2. Write a paragraph in response to the inquiry question, outlining your views.

### on Resources

**eWorkbook** Reflection (doc-31738)
Crossword (doc-31739)

**Interactivity** The Australian and global economies crossword (int-7656)

### KEY TERMS

**balance of trade** the difference between the value of a country's exports and the value of its imports over a specific period of time
**economic entity** any person or organisation engaged in economic activity. It could be an individual, a household, a business, a government or a country.
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**financial intermediary** any organisation that takes deposits from those with surplus funds and makes those funds available to borrowers
**gross domestic product** (GDP) the value of all the goods and services produced within a country in a given period of time (usually a year). It is often used as an indicator of a country's wealth.
**imports** goods and services purchased by local consumers from overseas businesses
**inflation** a general rise in prices across all sectors of the economy
**investment** the use of money to purchase equipment or premises for the establishment of a new business or the expansion of an existing business
**labour** the human skills and effort required to produce goods and services
**market** any organised exchange of goods, services or resources between buyers and sellers
**mortgage loan** money advanced to a person for the purchase of a house or other property, where the property itself is used as security for the loan. This means the bank or other lender can take possession of the property if the borrower fails to make the regular repayments.
**opportunity cost** what you have to give up if you choose to do A rather than B; the value of the next best alternative that is given up whenever a choice is made
**recession** a period of decline in economic growth when GDP decreases
**relative scarcity** the economic problem of having unlimited needs and wants with only limited means to satisfy them
**resources** the land, labour, capital and enterprise used to produce goods and services that satisfy needs and wants. Production usually requires a combination of these resources.
**superannuation funds** an account that holds and invests superannuation contributions made by employees, their employers or the government, for eventual distribution to help fund an individual's retirement
**transfer pricing** when one subsidiary of a transnational corporation charges another subsidiary for providing goods or services, often resulting in profits being moved between different countries to avoid the payment of tax on those profits
**transnational corporations (TNCs)** large business organisations that have a home base in one country and operate partially or wholly owned businesses in other countries

# 23 Managing financial risk

## 23.1 Overview

Spend, save or invest? What are the ways to minimise financial risk and hold onto your hard-earned money?

### 23.1.1 Balancing risks and rewards

Rock climbing is a risky activity. If you do it with no safety equipment, your risk of having a serious accident increases. Wearing safety equipment minimises the risk, but it is still not as safe as staying on the ground. However, staying on the ground can be less rewarding than climbing. Like rock climbing, making financial decisions can be risky but those risks can be minimised. A wise money manager knows that making financial decisions requires balancing the financial risks against the rewards through appropriate risk-management strategies.

#### Resources

**eWorkbook** Customisable worksheets for this topic

**Video eLesson** Managing risk (eles-2386)

#### LEARNING SEQUENCE


**23.1** Overview
**23.2** Banks and other deposit-taking institutions
**23.3** Different types of investment
**23.4** Protection from financial risk
**23.5** Managing debt
**23.6** **SkillBuilder:** Reading a sharemarket chart online only
**23.7** **Thinking Big research project:** Share investment — a risky business? online only
**23.8** **Review** online only


To access a pre-test and starter questions and receive immediate, **corrective feedback** and **sample responses** to every question, select your learnON format at www.jacplus.com.au.

# 23.2 Banks and other deposit-taking institutions

## 23.2.1 The changing nature of banks

In 1973 the Australian government started the process of deregulation — removing some of the strict rules regarding how banks operated in Australia. The government allowed foreign banks to open branches and a range of alternative financial institutions, such as building societies, credit unions and superannuation funds, arose to compete with the banks. This deregulation continues today, with further changes to result from the completion of the Royal Commission into Misconduct in the Banking, Superannuation and Financial Services Industry in 2019.

**FIGURE 1** Deregulation of the banking sector in Australia has allowed foreign banks to enter the market and compete with local banks.

The Australian Prudential Regulation Authority (APRA) oversees authorised deposit-taking institutions (ADIs): banks, credit unions and building societies. ADIs are authorised to take deposits from customers under the *Banking Act 1959*. Deposit-taking institutions pool these deposits. This means they put them together and then lend them to individuals and businesses in the form of loans and **mortgages**.

## 23.2.2 Banks

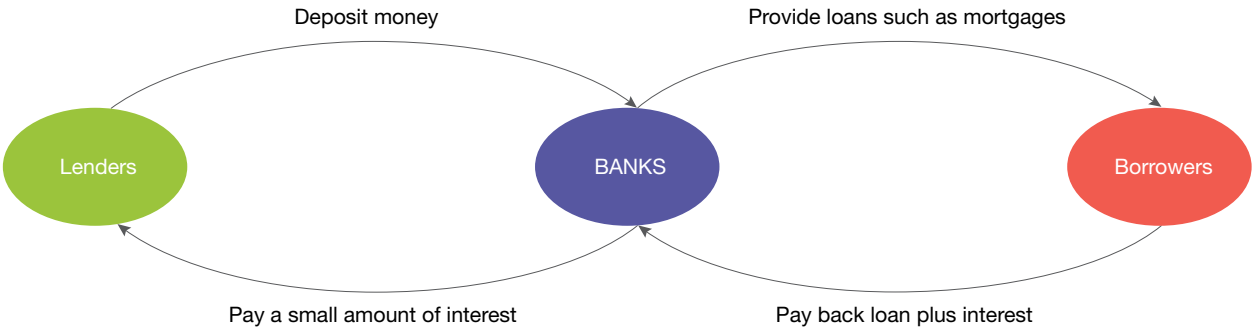
Banks offer a wide range of financial services to all participants in the Australian economy — accepting deposits; offering credit cards, cheques, overdrafts, investment and savings accounts; and lending money through personal and business loans and mortgages. Banks also provide other typical banking services such as internet banking, automatic teller machines (ATMs) and financial advice.

A bank savings account is an easy and safe place for people to keep their money. This type of account allows you to deposit money and make withdrawals. In return for your deposits, the bank pays you money known as **interest**. The amount of interest paid depends on the type of account, the number of times interest is paid into the account each year and the amount of money in the account.

A bank is a business that wants to make a profit, so it accepts money as savings (deposits) at a lower interest rate and lends that money at a higher interest rate. Depending upon the type of savings account you hold, your interest earnings could be anywhere from 0.2 per cent up to around 3 per cent. For borrowing, interest payments vary depending on the type of borrowing, and can range between around 3.5 per cent on a variable mortgage and over 13 per cent on some credit cards.

**FIGURE 2** ATMs are one of the many services offered by banks.

**FIGURE 3** Banks act as intermediaries between lenders and borrowers.




## 23.2.3 Credit unions

A credit union is a financial institution that is owned and operated entirely by its members. Credit unions provide a range of products and services that are similar to those offered by banks. These include accepting deposits, offering personal and home loans, and providing payment services such as credit cards. To open an account with a credit union, you have to be an 'eligible' member. Every credit union has its own rules for determining eligibility, but it sometimes means that you have to belong to an industry affiliated with the credit union or be related to an eligible member. Because a credit union is focused on the financial wellbeing of its members, maximising profit is not its main objective.

**FIGURE 4** People's Choice Credit Union is owned by its members. Its purpose is to help members save and borrow money.

## 23.2.4 Building societies

Like credit unions, building societies are owned and operated by their members. As their name suggests, building societies historically supported their members in purchasing homes. In more recent times, building societies have expanded to offer similar services to banks. As deposit-taking institutions, building societies accept deposits from customers and provide loans and payment services. There are now less than ten building societies in Australia because many of them have converted to or merged with banks.

**FIGURE 5** Building societies originally helped their members to buy homes, but over time they have become more like banks.

### on Resources

**Weblink** APRA

### 23.2 ACTIVITIES

1. Use the **APRA** weblink in the Resources tab to find one Australian-owned bank, one foreign-owned bank, one credit union and one building society. **Examining, analysing, interpreting**
2. Working in groups, use magazines and newspapers or internet resources to find pictures representing the three types of deposit-taking institutions (banks, credit unions and building societies). Paste the pictures onto poster paper and correctly label each one. Write a brief description of each type of deposit-taking institution. Alternatively, create a short PowerPoint presentation, with one slide for each institution. **Examining, analysing, interpreting** **Reasoning, creating, proposing**
3. Construct a diagram showing how deposit-taking institutions pool savings and lend them to individuals and business. **Reasoning, creating, proposing**

## 23.2 EXERCISES

**Economics and Business skills key: ES1** Remembering and understanding **ES2** Describing and explaining **ES3** Examining, analysing, interpreting **ES4** Questioning and evaluating **ES5** Reasoning, creating, proposing **ES6** Communicating, reflecting

### 23.2 Exercise 1: Check your understanding

1. **ES1** What is an authorised deposit-taking institution?
2. **ES2** Define *mortgage*.
3. **ES2** Explain what is meant by *interest*.
4. **ES2** Define *loan*.
5. **ES2** Explain why banks offer low interest rates on savings but charge higher interest rates on loans.

### 23.2 Exercise 2: Apply your understanding

1. **ES5** Outline what might happen if banks, credit unions and building societies could no longer collect deposits.
2. **ES3** Interest is often referred to as 'a reward for risk'. Explain what this means.
3. **ES3** Distinguish between a bank and a credit union.
4. **ES2** Explain why banks charge a lower rate of interest on mortgages than they do on personal loans.
5. **ES2** How has deregulation assisted consumers looking to borrow money or invest?

Try these questions in learnON for instant, corrective feedback. Go to www.jacplus.com.au.

# 23.3 Different types of investment

## 23.3.1 Saving for the future

There are many different types of investment that enable people to accumulate savings for the future. Some Australians choose to buy properties (such as a house, apartment or land) as investments. As property prices generally increase over time, so too does the value of their investment. Others choose to buy shares or invest in term deposits or managed funds.

**FIGURE 1** The largest investment most people will ever make is buying their own home.

### DISCUSS

Property prices rise and fall at various times. Property prices in Melbourne and Sydney hit their peak in 2017 but have since suffered falls of around 7 per cent and 11 per cent respectively. These fluctuations mean people's ability to buy their own home also fluctuates. Do you think property should be an investment to accumulate savings?

**[Personal and Social Capability]**

## 23.3.2 Shares

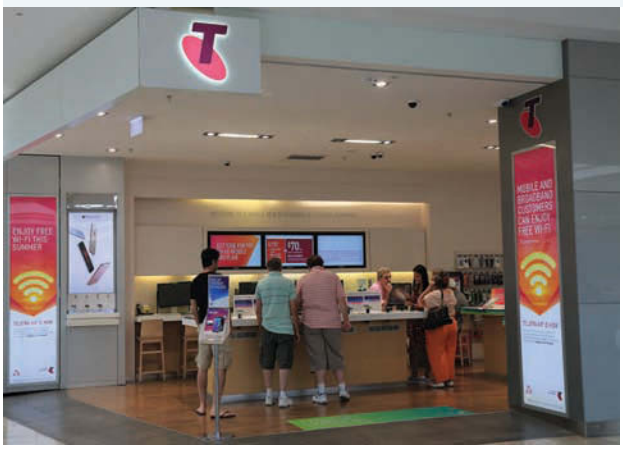
Buying **shares** means buying a certain number of units of ownership in a company. A person who owns shares in a company is a shareholder of that company. Some people might buy thousands of shares, others only a few. As the value of a company's shares goes up or down, so too does the value of the shareholder's investment. Owning shares allows you to benefit from the company's profits, which can be given to you as **dividends** or as extra shares. You may also benefit from **capital growth** if the value of your shares increases.

Buying and selling shares takes place in the **sharemarket**. In Australia, such transactions take place on the Australian Securities Exchange (ASX), which was formed in 1987 by amalgamating the six capital-city stock exchanges. A stockbroker has direct access to the market for trading shares and, for a small fee, acts as an **agent** who buys and sells shares for others. The fee is known as brokerage.

It is important to diversify your investments so that all your 'eggs' are not in one basket if anything goes wrong. The Australian sharemarket makes this easier by offering a wide choice of companies in which to invest. There are over 2000 companies listed on the ASX. These companies are involved in a wide range of industries that cover most sectors of the economy, from financial services to manufacturing and health care. Investing in a range of companies spreads the risk. Investing in shares also gives you flexibility. Shares can be bought and sold quickly — you can sell shares and generally have access to your money in three days or less.

**FIGURE 2** The electronic display board of the Australian Securities Exchange shows the prices of shares traded at the exchange.

**FIGURE 3** On the Australian Securities Exchange, shares can be purchased in companies such as Telstra, Qantas, Seven West Media and Woolworths.



## 23.3.3 Term deposits

One place to keep large sums of money is in a fixed-term deposit. All major banks offer term deposit accounts where you can place your money for a fixed period of time. The time can range from one month to five years. The banks offer a higher rate of interest on such deposits compared with at-call deposits that can be withdrawn at any time.

Term deposits are considered to be low-risk investments because the bank assures the return, but the return tends to be lower than that obtained from owning other types of investments such as shares. The funds in the term deposit are locked away until the end of the term unless you choose to make an early withdrawal, in which case penalty fees will be charged. You therefore need to select an account whose term and rate of interest best suit your needs.

## 23.3.4 Managed funds

Some people choose to invest in managed funds. These are portfolios of shares, property, public infrastructure, private equity and other investments that are chosen by a professional fund manager. Investing in a managed fund spreads the risk over different types of investment. Decisions about what to invest in are made by a professional, but this also means that investors have no say in the fund's investment decisions.

Most funds have entry and exit fees, and some have monthly fees. It can also be difficult to access your money quickly. Investing in a managed fund is therefore a good choice if you are happy to put your money into an investment and leave it there for a long period.

**FIGURE 4** In a managed fund, a professional fund manager invests the money pooled from many individual investors into a range of assets, including shares and property.

### 23.3 ACTIVITY

Use internet resources to find information about term deposits from two banks. Imagine that you wish to invest $5000 for 12 months. Compare the two term deposits by considering the following criteria: interest rates, when interest is received, account fees, application fees. Present your findings in a table. Decide which bank you would invest with.

**Examining, analysing, interpreting**

### 23.3 EXERCISES

**Economics and Business skills key: ES1** Remembering and understanding **ES2** Describing and explaining **ES3** Examining, analysing, interpreting **ES4** Questioning and evaluating **ES5** Reasoning, creating, proposing **ES6** Communicating, reflecting

#### 23.3 Exercise 1: Check your understanding

1. **ES1** What is the ASX?
2. **ES1** What are dividends? What do they mean for an investor?
3. **ES2** What is the difference between a term deposit and a managed fund?
4. **ES1** Place the terms *financial sector* and *health care sector* in the following sentence.
   When an individual buys shares in a pharmaceutical company they are investing in the _____, and when they buy shares in an insurance company they are investing in the _____.
5. **ES2** In your own words, explain why people invest in shares.
6. **ES2** Briefly outline the benefits and risks of:
   (a) share ownership
   (b) term deposits
   (c) managed funds.

#### 23.3 Exercise 2: Apply your understanding

1. **ES5** What do you think might happen if the price of shares you own fell to zero?
2. **ES2** Explain why investing in shares is considered risky.
3. **ES2** What is meant by the expression *managed fund*, and why do people invest in them?
4. **ES5** Share prices rise and fall on a daily basis. Provide one reason why share prices of a company may rise and one reason why they might fall.
5. **ES3** Compare the returns available on a term deposit and the return available from shares. Analyse why they are different.

Try these questions in learnON for instant, corrective feedback. Go to www.jacplus.com.au.

# 23.4 Protection from financial risk

## 23.4.1 Looking after your money

People invest in order to earn a positive return on their money. Making any sort of investment involves a **financial risk**. Some financial decisions can have completely unexpected or unwanted outcomes. Thankfully, there are ways that consumers can protect themselves against risks.

## 23.4.2 Financial risks

There are many types of financial risk (see **FIGURE 1**). The basic risk is that the value of the investment will fall and the person making the investment will lose everything. Note that making any sort of investment involves a risk. The only way to avoid risk altogether is to not invest money at all. However, doing so means that you miss out on any potential rewards.

Scams and identity theft are also financial risks. Let us examine these two financial risks in more detail.

### Scams

A scam is a dishonest scheme to trap you into parting with your money. The range of scams is limited only by the imagination of scammers themselves. Generally, scams fall under two categories:

- an attempt to convince you to give the scammer money in return for the promise to do something — a promise the scammer never intends to complete in full if at all
- the use of unscrupulous means to gain access to your personal details such as credit card information, bank account numbers and passport details. This is referred to as identity theft.

Some common scams are shown in **FIGURE 2**.

Scams are often successful because they look genuine. Scammers are also very skilled at manipulating people emotionally. To avoid being a victim of a scam, you should make the effort to research any offers made to you. Always ask questions and think carefully before making any decision.

**FIGURE 1** Types of financial risk

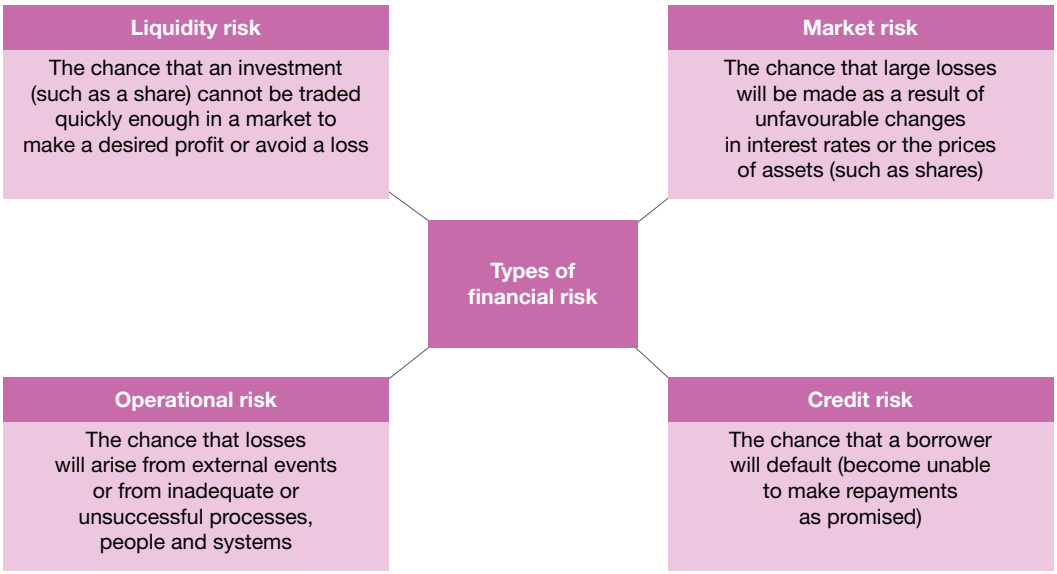
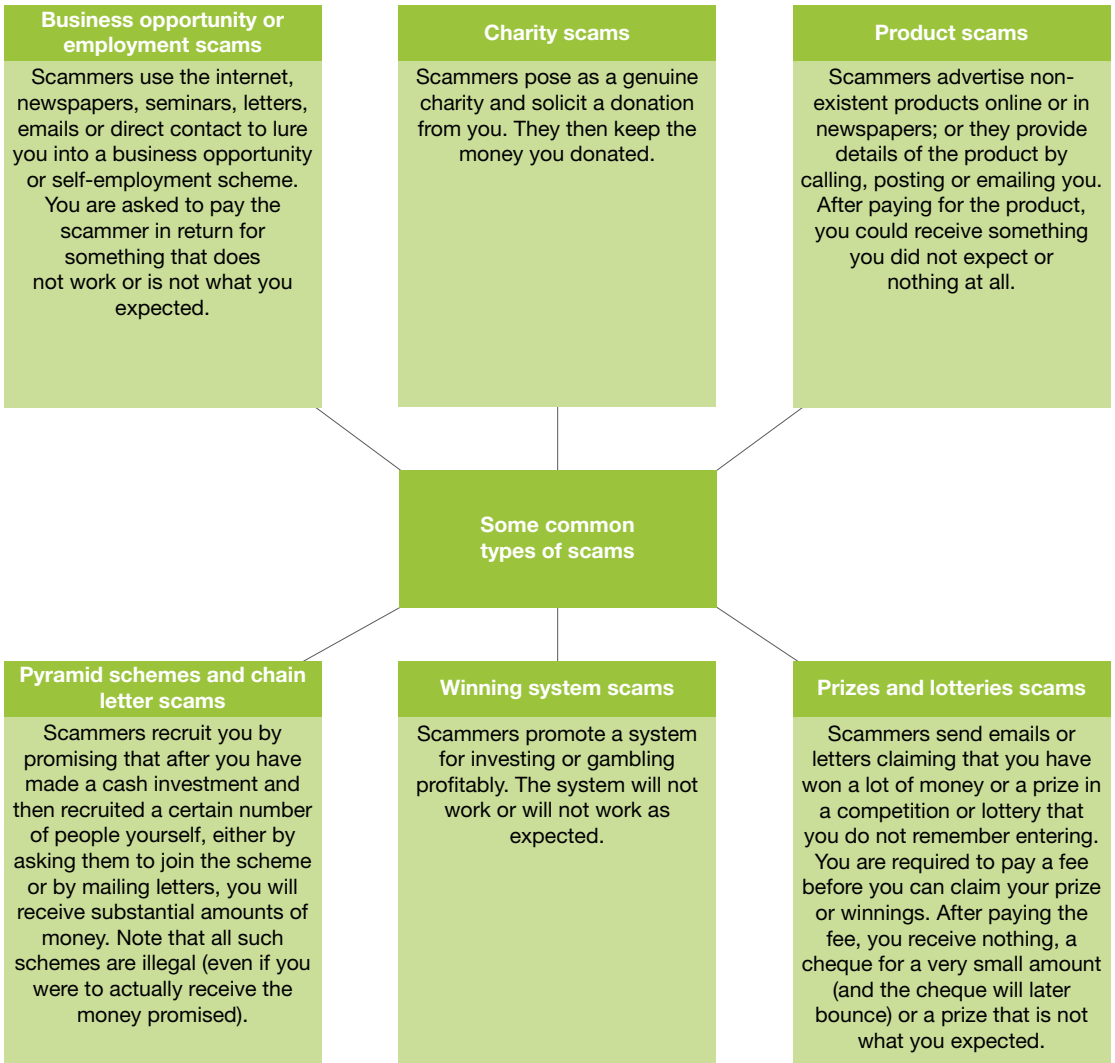



**FIGURE 2** Some common types of scams



### Identity theft

Identity theft is a growing problem worldwide. It occurs when someone illegally obtains your personal details, such as bank account numbers, and uses those details to commit **fraud**. The identity thief uses your stolen identity to do the following things in your name:

- borrow money
- open a new credit card account
- buy goods.

Anyone who provides personal information to an unsecured website when shopping online risks becoming a victim of identity theft. If the online seller asks you for additional information such as your email address or phone number, do not provide them unless you are confident the seller can be trusted.

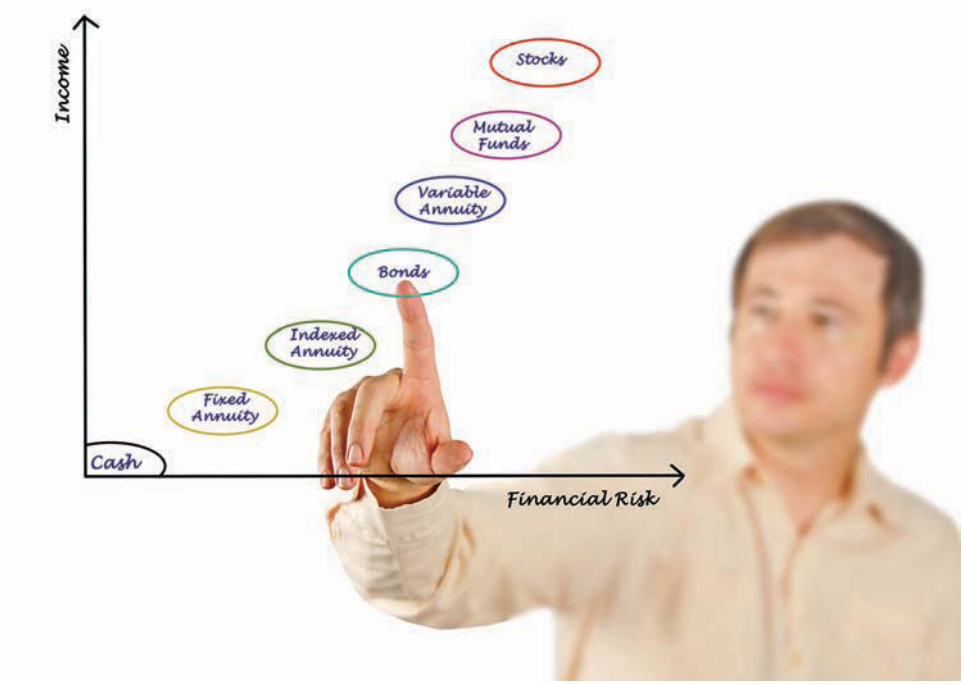
A growing number of consumers have had their identity stolen through phishing. In this type of fraud, you are sent an email that looks like it comes from a trusted source, such as a bank. The thieves ask you for information that may seem reasonable, such as your account number and PIN (personal identification number). To avoid being a victim of phishing, you should be suspicious of any email that makes an urgent request for your personal financial details. Do not click on links within the email or reply to any pop-up screen that asks you for personal details.

## 23.4.3 Protecting yourself from financial risk

There are many ways that consumers can protect themselves from financial risk:

- Make informed decisions and seek advice from qualified financial advisers.
- Be aware that all investments involve some level of risk, and understand the need to weigh up risk and return.
- Diversify by investing in a wide range of assets. You could invest in several different shares and have the rest of your money split between term deposits, property and managed funds.
- Have insurance, savings and **superannuation**.

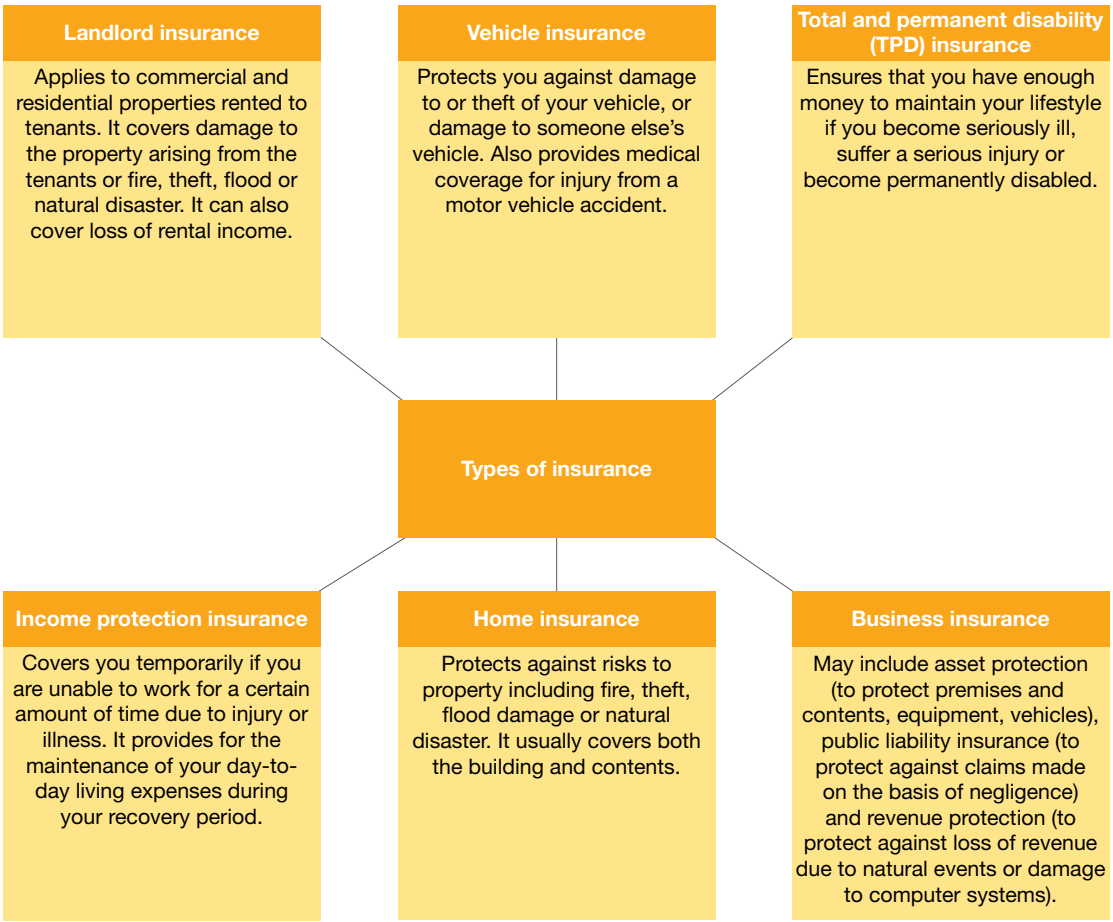
**FIGURE 3** One way of protecting yourself from financial risk is to invest in a range of different assets with varying levels of risk.



## Insurance

Taking out **insurance** protects you financially from any unexpected losses. Some common types of insurance are illustrated in **FIGURE 4**.

**FIGURE 4** Types of insurance




## Savings

You can reduce financial risk by having savings — funds from which to draw when things go wrong. You save by earning more money than you spend. Savings are usually kept in savings accounts, term deposits or any of the other investments explored in this topic. As the case study 'Australians struggling to save' explains, recent research indicates that many Australians struggle to save any money.

### Superannuation

When a person retires, they may be able to access an **age pension** in order to survive. This is an amount provided by the federal government to help an elderly person meet their basic needs. It does not allow for a luxurious or comfortable lifestyle, especially if debts have been accumulated. As a result, a person may need to work longer or sell assets in order to generate the cash flow required.

You can make sure that you have a good lifestyle in retirement, and protect yourself from having to watch every dollar you spend, by taking advantage of superannuation. This is a compulsory savings scheme whereby employers contribute an additional percentage of an employee's **gross wage** into a **superannuation fund**. Employees can also choose to contribute to this fund, thus increasing the overall amount they will receive on retirement. How much employees choose to contribute is up to them. There are laws in place that determine when you are eligible to access your superannuation savings. Recent changes have made it attractive to remain working until at least the age of 60.

## 23.4.4 CASE STUDY: Australians feeling more comfortable with finances

Since 2011, ME Bank has been producing *The Household Financial Comfort Report*, which details how Australians feel about their level of comfort in terms of savings, income and debt. The report prepared for the six months ended December 2018 showed Australia's financial comfort gap had narrowed for the first time in seven years, with most households feeling better about their finances despite significant falls in residential property and share markets.

Income gains, easing living costs, increased cash savings and reduced overspending were key drivers in households' rising levels of financial comfort.

**FIGURE 5** ME Bank conducts a survey to gauge Australians' level of financial comfort.

The number of households saving each month increased 3 points to 51 per cent in the past six months — its equal-highest level since the survey began — with the estimated average amount savers are putting away increasing 7 per cent to $862 per month. Meanwhile, the estimated average amount overspenders drew down on savings or credit each month decreased 28 per cent to $453 per month.

### 23.4 ACTIVITY

Ask your teacher to invite a guest speaker to talk to your class about the importance of having a lifetime savings plan, and to explain why superannuation is so important. Write down one or two questions you could ask if given the opportunity.

**Questioning and evaluating**

### 23.4 EXERCISES

**Economics and Business skills key: ES1** Remembering and understanding **ES2** Describing and explaining **ES3** Examining, analysing, interpreting **ES4** Questioning and evaluating **ES5** Reasoning, creating, proposing **ES6** Communicating, reflecting

#### 23.4 Exercise 1: Check your understanding

1. **ES1** Identify two examples of financial risk.
2. **ES1** Suggest one way that you might protect yourself from each of the financial risks you identified in question 1.
3. **ES2** Max did not do any security checks when he made an online purchase of a new computer game. Explain why Max could fall victim to identity theft.
4. **ES2** Patrick was surprised to receive an email from his bank. The email message read: 'We regularly verify our customer accounts. We were unable to verify your information. Please click here to update and verify your account information.' Explain why Patrick should be suspicious of this email. Advise him what to do next.
5. **ES2** Choose one type of insurance and explain how it can protect you from financial risk.
6. **ES2** Read the case study 'Australians feeling more comfortable with finances' in this subtopic and answer the following questions.
   (a) Explain why more Australians currently feel more comfortable about their financial position.
   (b) Why is it important to have savings?
7. **ES2** Why is it so important to be ready for retirement? What options are there for people who have not saved for retirement?

### 23.4 Exercise 2: Apply your understanding

1. **ES5** What might happen if you had no insurance?
2. **ES5** What are some of the consequences of being ill-prepared for retirement?
3. **ES3** Analyse two options that are available for people who have not saved for retirement.
4. **ES2** Explain what is meant by *superannuation* and why it is important to start putting money into superannuation early in life.
5. **ES6** Being informed and making informed decisions can minimise risk. Write a paragraph discussing this statement.

Try these questions in learnON for instant, corrective feedback. Go to www.jacplus.com.au.

# 23.5 Managing debt

## 23.5.1 Making good decisions

Are you the type of person who burns through money fast? Money is great to have but it won't last long unless you make wise choices. If you keep track of your money and spending habits, you can become a wise money user and make your money work for you. Continuing to borrow money can land you in trouble.

**FIGURE 1** The temptation to spend money is everywhere.

## 23.5.2 Good and bad debt

When you borrow money or owe money to someone, you are said to be in **debt**. You have a financial obligation to repay the borrowed money. Debt can be a good thing if it is used to leave you better off in the long term. A mortgage, where you borrow money to purchase a home or property, is an example of good debt. Taking out a student loan or a loan to start a new business are also examples of good debt. These are borrowings to invest in assets that will grow in value over time.

Some adults and young people get into a lot of debt. Reasons for this include unemployment, illness, the rising cost of living, gambling and the overuse of credit cards. Unfortunately, instead of reducing expenditure and paying off debts, there is a temptation to borrow more money. This can lead to out-of-control or spiralling debt.

The bad news is that the consequences of debt can be very serious. A person who cannot keep up with payments for the purchase of a car, for example, faces having the vehicle **repossessed**. They may get some of their money back, but there is no guarantee.

**FIGURE 2** Excessive debt can cause stress, reduce savings and affect your ability to borrow money in the future.

In really serious situations, a person who has many debts and no way of repaying them faces personal **bankruptcy**. This is a formal, legal way of saying that the person cannot pay their debts.

The period of bankruptcy usually lasts for three years, but it can affect the rest of your life. Some consequences are:

- Your credit rating is affected and you may find it difficult to borrow money.
- It can affect employment opportunities.
- Your residence may have to be sold to help pay your debts.

## 23.5.3 How to manage debt

Now for the good news! There are steps you can take to overcome being in debt. The first step is to face up to the problem instead of hoping it will go away. Make a list of your essential expenses and those that are optional. Avoid spending money on optional expenses. Buy only what you can afford without having to borrow. Lastly, work out a plan to repay the debt and stick to it. Prepare a **budget** to clearly track your income and expenses and determine how much you can put towards paying off the debt each week or month.

**FIGURE 3** Gabrielle is aged 15 and is in debt. She borrowed $40 from her brother for some clothes she 'just had to have'. Now she has discovered she owes $100 for call costs from her mobile phone. She feels sick with worry and is scared to tell her parents.

## 23.5.4 Saving

There is no mystery about managing money, managing debt and building personal wealth. It's just a matter of regular saving. You can save money if you have more money coming in than you have going out. It requires only a simple maths calculation to work it out:

$40 income – $20 expenses = $20 remaining that can be saved

Wise money managers know that saving money:

- gives them more independence and security
- gives them a sense of satisfaction
- helps them pay for unexpected expenses
- avoids the need to borrow money and the worry about repaying the debt
- helps them plan for buying big items, such as a bike or a car.

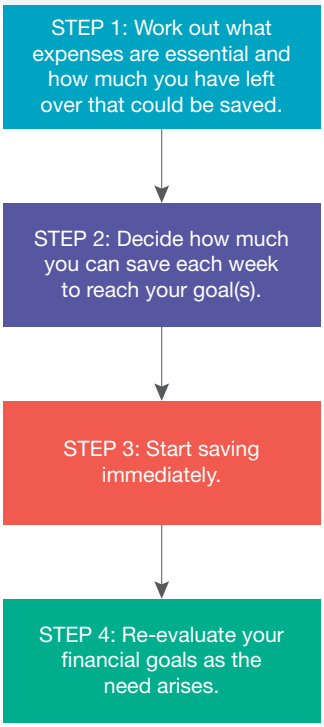
It is easier to save money if you have clear financial goals in mind. The good thing about setting goals is that they give you a purpose for saving. Goals should be realistic and specific. For example, your goal might be 'to save $100 in six months to reduce my debt.'

Saving money is a bit like an exercise program. You need to have a plan and stick to it to make a difference. You should aim to save a minimum of 10 per cent of your income. That means you should put aside 10 cents out of every dollar you earn. Alternatively, you might decide to save a specific amount, such as $10 per week.

Use the following steps in **FIGURE 4** as a guide to work out your savings plan.

Once you have made the decision to develop a savings plan, your debt should gradually fall. When you have reduced your debt to a satisfactory level, an easy and safe place to keep your extra money is in a savings account. Once your savings have built up, you may wish to consider other forms of investment, such as term deposits, managed funds, shares or property.

**FIGURE 4** Developing a savings plan



## DISCUSS

Many people wish they were better at saving their money. How do you deal with the temptation to spend versus the desire to save? Do you have any tips for how to become a more effective saver?

**[Personal and Social Capability]**

## on Resources

**Weblink** Savings goal calculator

## 23.5 ACTIVITIES

1. Use the **Savings goal calculator** weblink in the Resources tab to calculate how long it would take you to save $5000 if you started with $500 and saved $100 a month at an interest rate of 5 per cent. Write down the amount of time it would take to reach your goal. Experiment with other numbers.
   **Examining, analysing, interpreting**
2. With a partner, create a brochure for parents on money management. The aim of the brochure is to encourage parents to teach their children to be moneywise and to manage debt. It should state why it is important for young people to be able to save and suggest how parents can be positive role models for their children. Add any tips you think would be helpful. **Examining, analysing, interpreting**

## 23.5 EXERCISES

**Economics and Business skills key: ES1** Remembering and understanding **ES2** Describing and explaining **ES3** Examining, analysing, interpreting **ES4** Questioning and evaluating **ES5** Reasoning, creating, proposing **ES6** Communicating, reflecting

### 23.5 Exercise 1: Check your understanding

1. **ES1** What is debt?
2. **ES2** Briefly outline the difference between good and bad debt.
3. **ES2** Explain three consequences of getting into too much debt.
4. **ES1** How can you manage debt?
5. **ES2** Explain what a budget is.

### 23.5 Exercise 2: Apply your understanding

1. **ES2** Explain how a budget can be used to minimise debt.
2. **ES5** Consider the scenario in the **FIGURE 3** caption. Advise Gabrielle what steps to take to pay off her debts.
3. **ES1** Outline two consequences of filing for bankruptcy.
4. **ES3** Distinguish between needs and wants and explain how savings can assist in managing your wants.
5. **ES5** 'Everyone will have debt at some stage. The key is to manage it.' Analyse this statement.

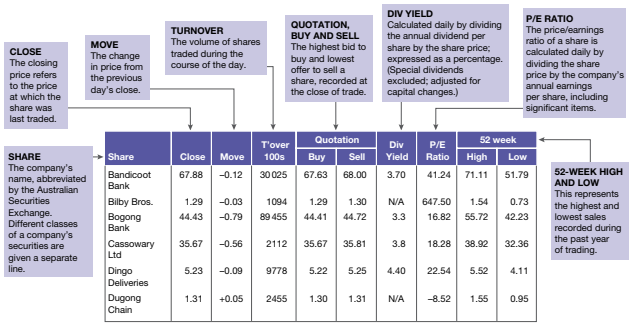
Try these questions in learnON for instant, corrective feedback. Go to www.jacplus.com.au.

# 23.6 SkillBuilder: Reading a sharemarket chart

online only

## What is a sharemarket chart?

A sharemarket chart provides information on how shares are performing. It is one form of reporting changes in the sharemarket. Sharemarket charts are available in newspapers, on television and radio news, and on the internet.




### Select your learnON format to access:

- an explanation of the skill (Tell me)
- a step-by-step process to develop the skill (Show me)
- an activity to allow you to practise the skill (Let me do it)
- questions to consolidate your understanding of the skill.

### on Resources

**Weblink** ASX listed companies

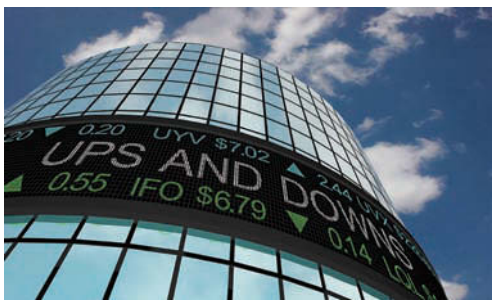
ASX

# 23.7 Thinking Big research project: Share investment — a risky business?

online only

## SCENARIO

All manner of people invest in shares, in the hope that the business will do well and the share value will increase over time. However, buying shares can be a risky business, as they can also fall in value and this can occur quickly, sometimes leading to severe economic consequences. You will research and write a report on investing in shares, with reference to five companies of your own choosing. Is the potential reward worth the risk?




### Select your learnON format to access:

- the full project scenario
- details of the project task
- resources to guide your project work
- an assessment rubric.

### on Resources

**ProjectsPLUS** Thinking Big research project: Share investment — a risky business? (pro-0201)

# 23.8 Review

online only

## 23.8.1 Key knowledge summary

Use this dot point summary to review the content covered in this topic.

## 23.8.2 Reflection

Reflect on your learning using the activities and resources provided.

### on Resources

**eWorkbook** Reflection (doc-31740)
Crossword (doc-31741)

**Interactivity** Managing financial risk crossword (int-7657)

## KEY TERMS

**age pension** regular payments made to elderly people to support them in retirement
**agent** a person acting for another in a business transaction
**bankruptcy** a legal process that declares that a person cannot pay their debts and allows them to make a fresh start
**budget** an itemised estimate of income and expenses for a given period
**capital growth** an increase in the value of an asset
**debt** a financial obligation to repay money owed
**dividends** company profits paid to shareholders, in cash or in additional shares, in proportion to the number of shares they already own
**financial risk** the chance that a financial decision may result in a loss or inadequate return
**fraud** a criminal offence where one person deliberately tricks another to gain personal advantage
**gross wage** a person's wage or salary before it is taxed by the government
**insurance** an arrangement where an insurer promises to compensate the insured person for specific potential losses in the future in exchange for a periodic payment called a premium
**interest** an amount that is paid regularly for the use of borrowed money, usually expressed as an annual percentage of the sum of money lent (the interest rate)
**mortgage** money advanced by a bank, credit union or building society to a person for the purchase of a house or other property. The property itself is used as security for the loan, allowing the lender to seize the property if the borrower fails to make the regular repayments.
**repossession** a legal process by which an item can be reclaimed to cover the cost of a debt
**sharemarket** a market for trading shares in listed companies; also called a stockmarket
**shares** units of ownership in a company that entitle the possessor of the shares (the shareholder) to a proportion of any profits that the company makes
**superannuation** a retirement fund mandated by the government
**superannuation fund** an account that holds and invests superannuation contributions made by employees, their employers or the government, for eventual distribution to help fund an individual's retirement

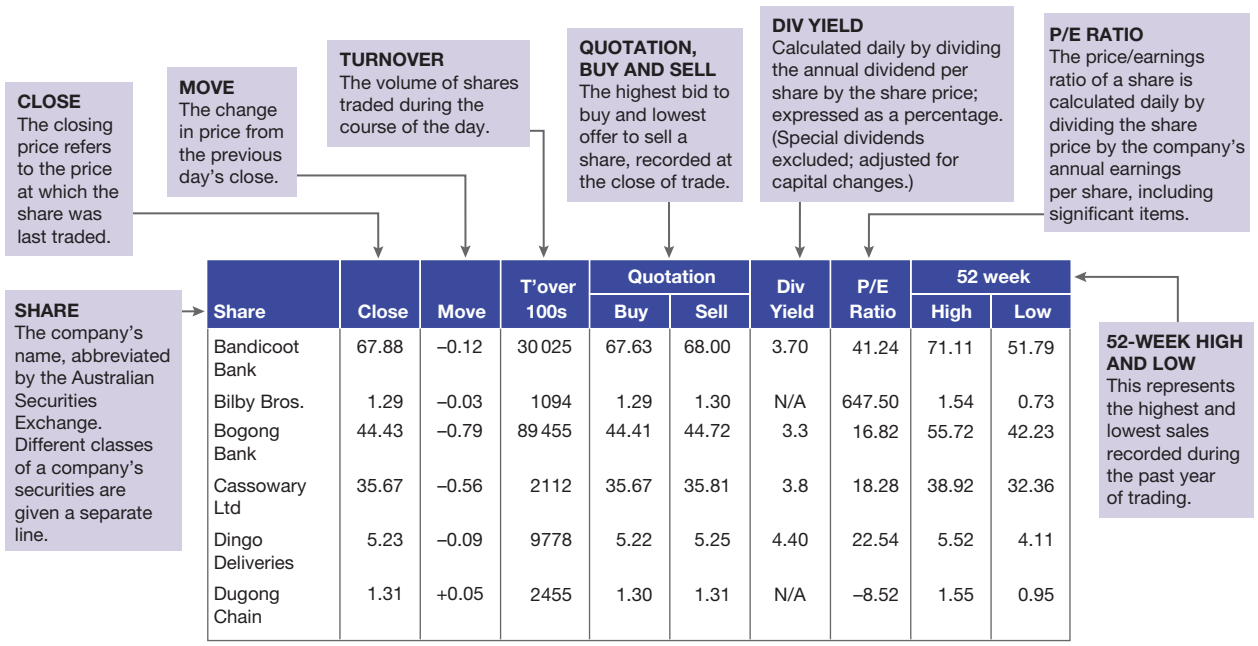
# 23.6 SkillBuilder: Reading a sharemarket chart

## 23.6.1 Tell me

### What is a sharemarket chart?

A sharemarket chart provides information on how shares are performing. It is one form of reporting changes in the sharemarket. Sharemarket charts are available in newspapers, on television and radio news and on the internet. Many factors are included in a sharemarket report, and not all media may provide data on the same factors. An example of a sharemarket chart is shown in **FIGURE 1**.

**FIGURE 1** Reading a sharemarket chart




| Share | Close | Move | T'over 100s | Quotation | | Div Yield | P/E Ratio | 52 week | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Buy | Sell | | | High | Low |
| Bandicoot Bank | 67.88 | –0.12 | 30 025 | 67.63 | 68.00 | 3.70 | 41.24 | 71.11 | 51.79 |
| Bilby Bros. | 1.29 | –0.03 | 1094 | 1.29 | 1.30 | N/A | 647.50 | 1.54 | 0.73 |
| Bogong Bank | 44.43 | –0.79 | 89 455 | 44.41 | 44.72 | 3.3 | 16.82 | 55.72 | 42.23 |
| Cassowary Ltd | 35.67 | –0.56 | 2112 | 35.67 | 35.81 | 3.8 | 18.28 | 38.92 | 32.36 |
| Dingo Deliveries | 5.23 | –0.09 | 9778 | 5.22 | 5.25 | 4.40 | 22.54 | 5.52 | 4.11 |
| Dugong Chain | 1.31 | +0.05 | 2455 | 1.30 | 1.31 | N/A | –8.52 | 1.55 | 0.95 |

Some of the factors included in charts and other reports are: information on share prices, changes in price and percentage price changes. For example, when a sharemarket chart mentions 'net change', it is referring to the difference between the current end-of-day share price and that of the same share on a previous day.

Other factors that a sharemarket chart usually includes are the share names, symbols, dividend rates and percentage yields. The dividend rate refers to the return per share a company pays to shareholders over a given period, while the percentage yield refers usually to the annual income per share, expressed as a percentage of the cost of the share.

### How are sharemarket charts useful?

Just as a weather report informs people about conditions outside and helps them decide whether to put on a coat (or take off their jumper) for outdoors, similarly a sharemarket chart tells you about the conditions in the sharemarket and helps you decide whether to buy (or sell) shares.

An important reason why an investor should be able to read a sharemarket chart is that it provides important information needed to make decisions about investments. Information about movements in shares enables investors to decide whether to hold, sell or buy shares in any of the 2000 companies listed on the Australian Securities Exchange, or become involved in other sharemarket investments.

Furthermore, in a sharemarket chart, the amount of shares sold and the highest and lowest prices for such shares may be included. This information is relevant for most investors, economists and advisers because it helps them in their sharemarket analysis.

## 23.6.2 Show me

### How to read a sharemarket chart

#### Procedure

#### Step 1

Recognise the type of sharemarket chart.

Look carefully at the chart heading and the headings of the columns to know what it is showing.

- Some charts divide listed companies into indices according to types such as industrial, metals and mining, energy and so on. This allows people to compare the financial performance of one company against other companies in the same sector by displaying the figures in one index.
- Other charts show the performance of the top 20, 50, 100, 200 or 300 listed companies, giving a more accurate general picture of the way the sharemarket is moving.
- For an overall picture of worldwide share price movements, other charts indicate the general picture in stock exchanges in the United States, Japan and elsewhere around the world.

#### Step 2

Learn the meaning of column headings.

Use an economics dictionary, glossary or the key (which accompanies the chart) to find out what each column is showing.

#### Step 3

Look at the data.

- Each listed company has a unique three-letter symbol, for ease of location in online charts or in daily newspapers. (Use the **ASX listed companies** weblink in the Resources tab to see the companies listed on the Australian Securities Exchange.)
- Use a ruler to help you read accurately across the columns.
- A '+' sign in front of a 'Move' number means that the value of a share rose against the previous day's closing value.
- A '−' sign indicates that the share value fell against the previous day's closing value.
- Online links allow people to find recent and past financial information about any listed company, using tables and interactive charts.

#### Step 4

Analyse the data.

- Examine the size of changes in data for a share from one period to another.
- Look for trends in the movement of shares in general or of particular shares.
- Compare shares to see how well or poorly one has performed against others.
- Use graphs and online interactive data to further analyse and compare data.

#### Step 5

Make predictions.

- Consider whether a trend will continue, change pace or change direction.
- Apply your knowledge of current economic events to judge their likely effects on particular shares.

**on** Resources

**Weblink** ASX listed companies

## 23.6.3 Let me do it

Complete the following activity to practise your skills.

### 23.6 ACTIVITY

If hoping to invest in a company, it is often a good idea to check the performance of other companies in the same sector. Use the **ASX** weblink in the Resources tab to find a list of companies operating in the financial sector. Select four companies for that sector — one that you are considering investing in, and three competitors — then answer the following questions.

**a.** Which companies are you looking at? Write down the name and code of each company.
**b.** How does the current share price of each company compare with its highest price within the last year?
**c.** Which company had the highest share price for the day and over the last year?
**d.** Which company recorded the greatest range between highest and lowest sales price for its shares over the last year?
**e.** Compare the number of rises and falls and identify whether, overall, bank shares rose or fell on the day.
**f.** Explain why figures for one day are not necessarily a good basis on which to buy or sell shares.
**g.** Using the code for the company whose shares you would consider buying, download or copy a graph showing its share price movements over a longer period, and explain how this might affect your initial decision.
**h.** Summarise your findings for the four companies and justify whether the company you are interested in presents a good investment opportunity.

### on Resources

**Weblink** ASX

# 23.7 Thinking Big research project: Share investment — a risky business?

## Scenario

Shares are an ownership interest in a public company. Shareholders invest their money in these shares hoping that if the company does well, some of the profits will be returned to them in the form of dividends, or the value of the shares will increase over time and they will make a profit if and when they sell these shares at a later date.

All manner of people invest in shares. However, buying shares can be a risky business as they often fall in value and this can occur quickly, in some cases leading to severe economic consequences such as the Great Depression and the Global Financial Crisis. Is the potential reward worth the risk?

## Task

You will research and write a report on investing in shares, with reference to five companies of your own choosing. Your report *for each company* should include:

- details of the industry in which the business operates
- a summary of what the business does and when it was established
- where the business is based and how many people it employs
- details of any major announcements made by the company in the past 12 months
- a graph showing the share price of the company over a 10-day period (or other timeframe as determined by your teacher)
- an assessment of whether or not the company is a good investment, and why.

Follow the steps detailed in the **Process** section to complete this task.

## Process

- Open the ProjectsPLUS application in the Resources for this topic. Click on the **Start new project** button to enter the project due date and set up your project group if you wish. You may work individually or in pairs, depending on your teacher's preference. Save your settings and the project will be launched.
- Navigate to the **Research forum**, where you will find starter topics loaded to guide your research. You can add further topics to the Research forum if you wish. When you have completed your research, you can print out the **Research report** in the Research forum to easily view all the information you have gathered.
- In the **Media centre** you will find an assessment rubric to guide your work and some weblinks that will provide a starting point for your research.
- Use the weblinks provided to watch the videos and gain an insight into how the decline of the stock market caused the Great Depression and/or the Global Financial Crisis. Use your understanding of the concept of financial risk through investing in shares to inform your report writing.
- Use the **Australian Securities Exchange (ASX)** weblink to select five companies you may be interested in. Some companies that may be of interest include:
  - Woolworths
  - JB Hi-Fi
  - Commonwealth Bank
  - Qantas
  - Telstra
  - Capilano Honey
  - BHP
- For each of the five companies you choose, gather the details outlined in the **Task** section.
- Compile your report. Remember to include your five graphs, and any other images you choose, to add interest to the report. Check thoroughly to ensure you have used correct spelling and grammar, and that you have completed all elements listed in the **Task** section. When you are happy with your work, submit your report to your teacher for assessment.

## Resources

**ProjectsPLUS** Thinking Big research project: Share investment — a risky business? (pro-0201)

# 23.8 Review

## 23.8.1 Key knowledge summary

### 23.2 Banks and other deposit-taking institutions

- Making financial decisions has both risks and rewards.
- The risks involved in managing your money and making investments can be minimised by smart and sensible decision making.
- There are many types of financial institutions in Australia including banks, credit unions and building societies.

### 23.3 Different types of investment

- You need to be aware of the different options available to you in financial institutions and financial products.
- Investments such as property, term deposits, shares and managed funds are all options to increase your return.
- Different types of investment all have different levels of risk and reward.

### 23.4 Protection from financial risk

- It is important to be aware of and cautious about financial risks such as scams and identity theft.
- Insurance, savings and superannuation all help you protect yourself from financial risk and plan for the future.

### 23.5 Managing debt

- Debt can be good or bad debt, but always needs to be managed wisely.
- Some consequences of debt can be very serious and include:
  - your credit rating being affected, making it difficult to borrow money
  - employment opportunities potentially being affected
  - your house having to be sold to help pay debts.
- Debt can be managed through devising and implementing a realistic savings plan.

## 23.8.2 Reflection

Complete the following to reflect on your learning.

### 23.8 ACTIVITIES

Revisit the inquiry question posed in the Overview:

**Spend, save or invest? What are the ways to minimise financial risk and hold onto your hard-earned money?**

1. Now that you have completed this topic, what is your view on the question? Discuss with a partner. Has your learning in this topic changed your view? If so, how?
2. Write a paragraph in response to the inquiry question, outlining your views.

### on Resources

**eWorkbook** Reflection (doc-31740)
Crossword (doc-31741)

**Interactivity** Managing financial risk crossword (int-7657)

## KEY TERMS

**age pension** regular payments made to elderly people to support them in retirement
**agent** a person acting for another in a business transaction
**bankruptcy** a legal process that declares that a person cannot pay their debts and allows them to make a fresh start
**budget** an itemised estimate of income and expenses for a given period
**capital growth** an increase in the value of an asset
**debt** a financial obligation to repay money owed
**dividends** company profits paid to shareholders, in cash or in additional shares, in proportion to the number of shares they already own
**financial risk** the chance that a financial decision may result in a loss or inadequate return
**fraud** a criminal offence where one person deliberately tricks another to gain personal advantage
**gross wage** a person's wage or salary before it is taxed by the government
**insurance** an arrangement where an insurer promises to compensate the insured person for specific potential losses in the future in exchange for a periodic payment called a premium
**interest** an amount that is paid regularly for the use of borrowed money, usually expressed as an annual percentage of the sum of money lent (the interest rate)
**mortgage** money advanced by a bank, credit union or building society to a person for the purchase of a house or other property. The property itself is used as security for the loan, allowing the lender to seize the property if the borrower fails to make the regular repayments.
**repossession** a legal process by which an item can be reclaimed to cover the cost of a debt
**sharemarket** a market for trading shares in listed companies; also called a stockmarket
**shares** units of ownership in a company that entitle the possessor of the shares (the shareholder) to a proportion of any profits that the company makes
**superannuation** a retirement fund mandated by the government
**superannuation fund** an account that holds and invests superannuation contributions made by employees, their employers or the government, for eventual distribution to help fund an individual's retirement

# 24 Being enterprising

## 24.1 Overview

Having a great idea to help your business can be great, but is it worth taking the risk of trying it out?

### 24.1.1 The need for enterprising behaviour

The Australian economy is interconnected with the global economy, presenting opportunities as well as challenges. Globalisation has resulted in Australian businesses now having to compete on a global scale. As a result, businesses are constantly looking for an advantage or an 'edge' over their competitors. For many businesses this edge comes from being able to produce goods or deliver services at a cheaper price than their competitors. For other businesses, their edge comes from being innovative and demonstrating enterprising behaviour, such as:

- developing new technologies that other businesses don't have
- creating new products that previously did not exist
- undertaking research and development and coming up with new ways of manufacturing existing or new products
- using brand new manufacturing processes.

All these factors ultimately affect the working and business environment. One such aspect is the expectation placed on employees.

Businesses attempt to recruit employees who not only have the suitable qualifications and skills for a job, but who also demonstrate **enterprising behaviours**. An enterprising employee is one who may be creative, inquiring, innovative, risk-taking, good at problem solving, and willing to try new ways of doing things and accept the consequences of failure. Employees with these skills often find new ways of doing things which help a business become more successful. Enterprising employees help establish a workplace culture that is focused on learning and innovation. These enterprising employees often become **entrepreneurs** and establish their own businesses.

### on Resources

**eWorkbook** Customisable worksheets for this topic

**Video eLesson** Being enterprising (eles-3498)

### LEARNING SEQUENCE


**24.1** Overview
**24.2** Entrepreneurial behaviours
**24.3** Famous entrepreneurs
**24.4** Encouraging entrepreneurial behaviours within businesses
**24.5** **SkillBuilder:** Creating a mind map
**24.6** **Thinking Big research project:** The next big thing!
**24.7** **Review**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# 24.2 Entrepreneurial behaviours

## 24.2.1 Identifying an entrepreneur

On a cold night in Paris in 2008, two friends were unable to find a taxi to get them home. Surely, they thought, there had to be an easier way than calling and waiting for a taxi that might never arrive. They began to discuss the opportunities that new technologies presented to revolutionise the transport industry. After significant research and a lot of trial and error, Travis Kalanick and Garrett Camp created Uber in 2010. The two friends used their creativity and enterprise to come up with a truly unique idea for a business.

Although it started out small, Uber has grown rapidly and now exists in over 400 cities worldwide. By the end of 2015, the business was valued at well over $50 billion. Kalanick and Camp were not afraid to think big. While most of us recognise Uber as a transport service, its founders say that it is more than that. They describe Uber primarily as a technology business — this shows that they are leaving their options open for other ventures that may arise from their original idea.

**FIGURE 1** Entrepreneurial Uber co-founders Travis Kalanick and Garrett Camp came up with a unique idea and took a risk in order to make it a reality.

Not everyone knows how to turn their idea into a business. People such as Kalanick and Camp, who are willing to take a risk and have the qualities required to turn an idea into a successful business, are called entrepreneurs. An entrepreneur's ideas and methods are often groundbreaking and innovative. While there is significant personal and financial risk involved for an entrepreneur, a successful business venture can create huge rewards and profit.

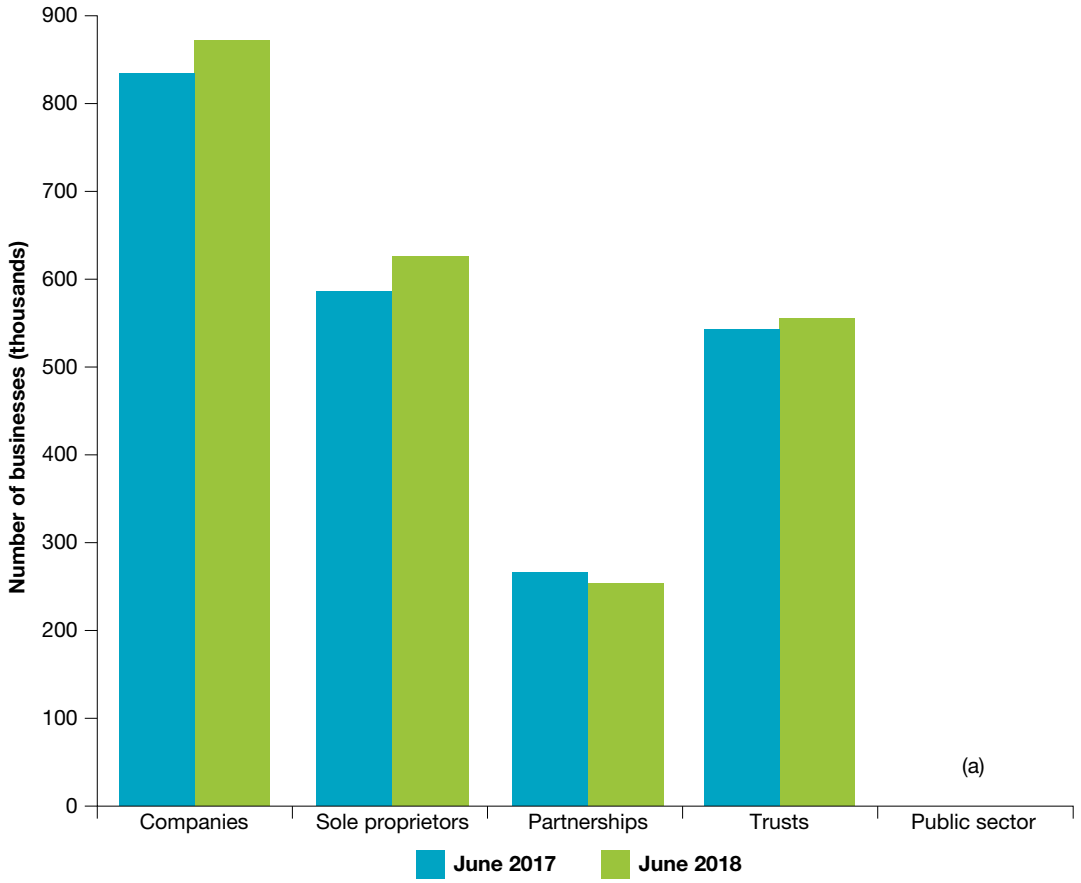
Any person can be an entrepreneur. However, typically entrepreneurs:

- have innovative ideas and act on them
- network with people who may be able to assist with their ideas
- look for opportunities to promote their ideas
- thrive on the challenge of creating their own successful ideas
- make money out of solving problems and selling their ideas
- start up their own businesses.

## 24.2.2 Business owner or entrepreneur?

As you know, there is a large number of businesses operating in Australia. Many of these businesses are large companies owned by shareholders. Many others, however, are micro- and small businesses, owned by and operated as either sole traders (also known as sole proprietors) or partnerships. **FIGURE 2** shows the different types of businesses operating in Australia and the numbers of each.

**FIGURE 2** Australian businesses by type of legal organisation




(a) There were 393 actively trading public sector businesses in June 2017 and 375 in June 2018.

***Source:*** Source ABS 8165.0: *Counts of Australian Businesses*

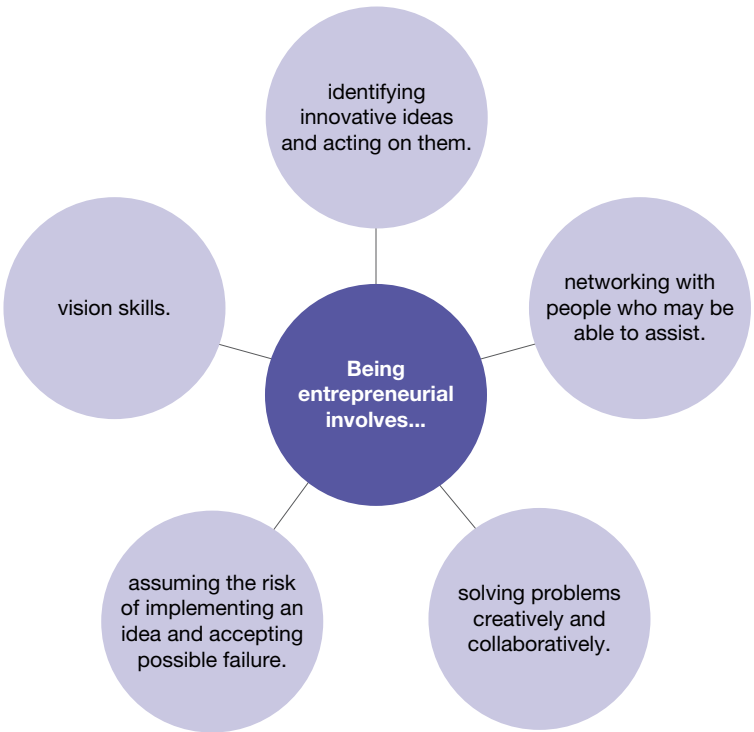
For many people, the terms 'business owner' and 'entrepreneur' mean one and the same thing. They believe that any person who establishes a business is an entrepreneur. Looking at **FIGURE 2,** would you consider all of the people operating businesses as sole proprietors or in partnerships to be entrepreneurs? While there are many similarities between a business owner and an entrepreneur, there are also some differences. In particular, the behaviours and skills that an entrepreneur brings to a business are what sets them apart from ordinary business owners. These behaviours and skills are outlined in the next section.

Business owners tend to be content with simply running a business on a day-to-day basis so that it makes a profit. They prefer to minimise risks and make calculated decisions so that the outcome is reasonably clear. Entrepreneurs, on the other hand, do much more than that. They take measured risks in order to find new and improved ways of doing things. They are focused on constantly learning, updating their skills, innovating and being creative.

## 24.2.3 Entrepreneurial behaviours and skills

**FIGURE 3** identifies some of the important behaviours and skills of entrepreneurs. Each of these behaviours and skills is outlined below.

**FIGURE 3** Behaviours and skills of an entrepreneur




### Identifying innovative ideas and acting on them

Travis Kalanick and Garrett Camp, co-founders of Uber, identified a great idea. Their idea was innovative, unique, and took into account modern technologies and the needs of consumers. Not only did they identify the idea, but they set about acting on it. At times we all have what we think are great ideas. However, the key is coming up with an idea that will have broad appeal to consumers, potentially not only in Australia but also worldwide.

### Networking with people who may be able to assist

While entrepreneurs often come up with a great idea, they may not have all of the skills or resources needed to implement it and make it profitable. An important skill of entrepreneurs is to be able to connect and network with others. This may be necessary to attract money to fund the idea — as was the case with Uber — or to take advantage of the technical skills of others.

## Solving problems creatively and collaboratively

Entrepreneurs are creative in their approach to solving problems. Consider again the example of Uber. One solution to the problem of a limited supply of taxis could have been to start another taxi company. A person who chose this option may be considered a business owner. Kalanick and Camp, however, were creative in their approach to solving this particular problem. They came up with a solution that was completely unique. This skill of creative problem solving is what makes the difference between a business owner and an entrepreneur.

**FIGURE 4** The ability to solve problems creatively is a key attribute of entrepreneurs.

## Assuming the risk of implementing an idea and accepting possible failure

There is a degree of risk involved in implementing any idea. This risk can be both financial and personal. An entrepreneur must usually invest some of their own money in order to implement their idea, although venture capitalists (individuals willing to provide finance) may invest funds in ideas that they think may be profitable. While the rewards and profits may be great if the idea is successful, entrepreneurs also run the risk of losing their money. Like anything in life, it is often necessary to take measured risks in order to achieve great things.

## Vision skills

People with vision skills don't react to new ideas and ways of doing things — they create them! Vision skills allow an entrepreneur to identify possible trends in a market and create goods and services that might satisfy future customer needs. In the globalised business world in which we operate, it is important for entrepreneurs to be constantly scanning the business environment for new opportunities that may arise.

**FIGURE 5** Vision skills allow an entrepreneur to identify possible trends in a market and create goods and services which might satisfy future customer needs.

## DISCUSS

Many of the most well-known individuals in business failed on several occasions before they finally succeeded. Why do you think this is? What do people learn from failure? **[Critical and Creative Thinking Capability]**

Australians are well known for their entrepreneurial behaviours and have a proud history of inventing useful and necessary products that have improved Australia's economy and changed the world. Some of these are listed below.

- In 1961 David Warren created the 'black box' flight recorder, used in all planes around the world.
- In 1999 Professor Fiona Wood patented her 'spray-on skin' for use in treating burn victims.
- In 1962 Dr Mark Lidwill created the first impromptu pacemaker for a newborn baby.
- Two Australian brothers, Lars and Jens Rasmussen, developed the platform for Google Maps.
- In 1939 Howard Florey, with a team of scientists, purified penicillin from mould, for which he won the Nobel Prize in Physiology or Medicine in 1945.
- Polymer banknotes were developed by the Reserve Bank and the CSIRO, and began circulation in 1988.
- In 1978 Professor Graeme Clark tested a 'bionic ear' and created cochlear implants.
- In 1889 Arthur James Arnot patented the first electric drill.
- Ben Lexcen created the winged keel for the yacht Australia II, which debuted in 1983 in the America's Cup.

- In 1992 the CSIRO and Dr John O'Sullivan developed wi-fi technology.
- In 2006 Professor Ian Frazer developed a vaccine for cervical cancer, now marketed as Gardasil and Cervarix.
- In 2013 a Melbourne medical research institution, Mercy Health, developed a blood test aimed at assisting in the prevention of stillbirths. They identified a method of analysing elements of a mother's blood that indicate oxygen and nutrient deprivation in the foetus.
- In 2018 collaboration between the Victorian government, RMIT University, Swinburne University of Technology, Professor Peter Blamey and Professor Elaine Saunders led to the release of the modular self-fit hearing aid – the first hearing device with a modular design allowing users with severe dexterity issues to self-manage their hearing aids.

With each innovation, new employment opportunities arise and jobs are created; these workers earn income which then increases their buying power, thus promoting a healthy economy. All sectors of the economy experience a flow-on effect, from manufacturing, to marketing, education, or even medical fields and service sectors. Business environments change as well; employees are introduced to new ways of working, new hours of work, and new activities while at work.

If we consider the example of Uber once more, one of the truly amazing things about this business has been the way that it has created new business opportunities for other entrepreneurs. Uber has revolutionised the way that consumers and producers interact by using mobile technology to deliver services 'on demand'. Things that we would previously have had to leave the house to obtain can now be delivered on demand.

Since the creation of Uber, many parts of our economy have become 'Uberfied'. Businesses that use a similar model to Uber have sprung up in other industries, such as massage therapy, babysitting, dog walking and legal services. As you can see, the creativity and enterprise of Travis Kalanick and Garrett Camp has greatly influenced other businesses in our economy.

### 24.2 ACTIVITY

Research and describe the steps you would need to take to create and register a business.

**Examining, analysing, interpreting**

### 24.2 EXERCISES

**Economics and Business skills key: ES1** Remembering and understanding **ES2** Describing and explaining **ES3** Examining, analysing, interpreting **ES4** Questioning and evaluating **ES5** Reasoning, creating, proposing **ES6** Communicating, reflecting

#### 24.2 Exercise 1: Check your understanding

1. **ES1** Define the term *entrepreneur.*
2. **ES3** What entrepreneurial qualities do Travis Kalanick and Garrett Camp possess?
3. **ES1** Other than Uber, name another entrepreneur or business that has come up with a great business idea.
4. **ES2** Explain the difference between an entrepreneur and a business owner.
5. **ES2** Explain why vision skills are important for an entrepreneur.

#### 24.2 Exercise 2: Apply your understanding

1. **ES2** Explain why being an entrepreneur can be risky.
2. **ES2** Explain why being an entrepreneur can be rewarding for the individual and the economy.
3. **ES4** Which of the five entrepreneurial behaviours and skills described in this unit of work do you consider to be the most important? Provide reasons to support your decision.
4. **ES6** Think of one situation in which you solved a problem creatively. Describe the situation and your creative solution to the problem.
5. **ES2** Explain how Uber has revolutionised the way that consumers and producers interact.

Try these questions in learnON for instant, corrective feedback. Go to www.jacplus.com.au.

# 24.3 Famous entrepreneurs

## 24.3.1 Brian Singer and Doug Warbrick (Rip Curl)

Rip Curl is an iconic Australian brand that was established in the backyard of surfers Brian Singer and Doug Warbrick. The business was established in 1969 in Victoria, initially to produce surfboards. Around the time of Rip Curl's establishment there was a shift from longer surfboards to the more common shortboards that we see today. This meant that there was a lot of experimentation with surfboard design, and Singer and Warbrick wanted to be part of it. They saw an opportunity in the surfboard market and were prepared to try their luck by starting a business.

**FIGURE 1** Brian Singer and Doug Warbrick saw an opportunity in the surfboard market and were prepared to take it.

One of the strengths of Rip Curl throughout its existence has been the willingness of its owners to consult and interact with customers. In addition, Singer and Warbrick had extensive knowledge of the colder conditions in Victorian waters and the resulting needs of their consumers — namely, wetsuits to keep them warm in the colder surf conditions. They quickly realised that while there were many competitors producing a range of different surfboards, very few were producing wetsuits. They identified this opportunity in the market and went to work.

When asked in an interview how Rip Curl began, Brian Singer responded: 'We were just looking for a quid to fund our next surfing holiday.' While Rip Curl's beginnings were fairly humble, the business has become an international success. From the late 1970s, the business began selling their wetsuits overseas.

Today, Rip Curl products are made and sold in a range of countries all over the world, including Argentina, Brazil, Canada, Chile, France, Israel, Indonesia, Peru, South Africa and the United States.

When Singer and Warbrick first founded Rip Curl, they didn't consider themselves to be entrepreneurs. However, from observing their actions and success, it is clear that they demonstrated many characteristics of entrepreneurs. They came up with great ideas, were willing to take a risk to implement those ideas, and were also willing to be flexible. While they acknowledge that part of their success can be attributed to good luck and timing, their entrepreneurial abilities also played a significant role in their success.

**FIGURE 2** One of the strengths of Rip Curl throughout its existence has been the willingness of its owners to consult and interact with customers.

## 24.3.2 Fred DeLuca (Subway)

Fred DeLuca demonstrated enterprising behaviours from a very young age. As a child, he would collect plastic drink bottles which he would exchange for money so that he could buy comic books. After reading the comic books, he would sell them to his friends so that he could buy more comic books. While these early signs may have pointed to a life as an entrepreneur for Fred DeLuca, few would have predicted that he would go on to create Subway, the global fast-food company.

In 1965, DeLuca borrowed $1000 from a family friend, Peter Buck, with the aim of making some money to fund his studies at college. Armed with the loan from his friend and an idea to create a healthier fast-food outlet, he went about creating his business. Even DeLuca would have found it hard to believe that his first store would eventually pave the way for a global business with over 44 000 outlets in more than 110 countries.

**TABLE 1** The top 10 countries by number of Subway stores

| Rank | Country | Number of stores |
|---|---|---|
| 1 | United States | 26 971 |
| 2 | Canada | 3258 |
| 3 | United Kingdom | 2166 |
| 4 | Brazil | 2092 |
| 5 | Australia | 1456 |
| 6 | Mexico | 1043 |
| 7 | Russia | 641 |
| 8 | Germany | 622 |
| 9 | China | 562 |
| 10 | India | 559 |

***Source:*** Subway US website, 2016

Subway Australia's website provides the following facts about the global fast-food empire:

- The first store was opened in Connecticut (USA) in August 1965.
- By 1974 there were 16 stores throughout Connecticut.
- The first Subway store in Australia opened in 1988 in Perth.
- By February 2018, there were over 1400 Subway outlets in Australia.
- There are more than 44 000 Subway outlets in over 110 countries worldwide.

**FIGURE 3** Starting out with a loan of $1000 from a friend, Fred DeLuca created Subway. The business now has franchises throughout the world.

## 24.3 ACTIVITY

Research one successful entrepreneur not already examined in this subtopic. Use your research to:

**a.** identify the entrepreneur or business
**b.** outline the business idea
**c.** describe the entrepreneurial skills and behaviours of the person(s)
**d.** explain why the entrepreneur or business has been successful. **Examining, analysing, interpreting**

## 24.3 EXERCISES

**Economics and Business skills key: ES1** Remembering and understanding **ES2** Describing and explaining **ES3** Examining, analysing, interpreting **ES4** Questioning and evaluating **ES5** Reasoning, creating, proposing **ES6** Communicating, reflecting

### 24.3 Exercise 1: Check your understanding

1. **ES1** What was the impetus for Rip Curl founders Brian Singer and Doug Warbrick in starting up their business?
2. **ES1** What are some of Rip Curl's strengths that have helped its success?
3. **ES1** Which market did Rip Curl cleverly tap into once they realised that many businesses were producing surfboards?
4. **ES1** What evidence is there to suggest that Subway is now a global business?
5. **ES2** Explain why Fred DeLuca can truly be considered an entrepreneur.

### 24.3 Exercise 2: Apply your understanding

1. **ES6** Think of one person you know who you believe to be entrepreneurial (it may be a friend or family member).
   (a) Outline the characteristics of this person that makes them entrepreneurial.
   (b) Explain why one of those characteristics is important.
   (c) Do Fred DeLuca, Brian Singer and Doug Warbrick display the characteristic you selected? If so, in what ways do they display this it?
2. **ES6** Consider the following statement: 'If there were no entrepreneurs, there would be no innovation in society.' Write a paragraph discussing your view.
3. **ES3** Starting a sandwich shop is considered tough. What distinguishes Subway from a local sandwich shop?
4. **ES5** Consider a local business. List five things that the owner of the business could do to develop it into a global business.
5. **ES6** 'Becoming an entrepreneur is easier now because of the internet.' Analyse this statement.

Try these questions in learnON for instant, corrective feedback. Go to www.jacplus.com.au.

# 24.4 Encouraging entrepreneurial behaviours within businesses

## 24.4.1 The rise of the intrapreneur

The modern business environment is changing more rapidly than ever before. Globalisation, technology and changing consumer demands have meant that businesses throughout the world have had to be more responsive to change. Even the largest and most well-established businesses can no longer assume that they will always be successful. All businesses — large and small — must accept that change is inevitable. The most successful businesses are those that initiate change rather than simply respond to it.

This need for businesses to initiate and respond to change has paved the way for the **intrapreneur**. An intrapreneur is an employee of a business who demonstrates the qualities and skills of an entrepreneur. Intrapreneurs focus on creativity and innovation in an attempt to find new and improved ways of doing things within a business. Management encourages intrapreneurs to take risks and accept failure.

**FIGURE 1** An intrapreneur is an employee of a business who demonstrates the qualities and skills of an entrepreneur.

## 24.4.2 Business strategies to encourage entrepreneurial behaviours

Every business is completely different. Factors such as business size, industry sector and the skills of employees may affect the types of strategies used to encourage entrepreneurial behaviours. Naturally, a larger business may have more resources with which to foster entrepreneurial behaviours. However, because of their size, smaller businesses often find it easier to be flexible and therefore can be more innovative in their approach to solving problems. Some of the common strategies used by businesses to encourage entrepreneurial behaviours are identified in **FIGURE 2**.

**FIGURE 2** Some common strategies used by businesses to encourage entrepreneurial behaviours

Businesses often use a combination of these strategies in an attempt to encourage entrepreneurial behaviours in their organisation. Each of these strategies is examined in more detail below.

## 24.4.3 Encouraging a culture of innovation

How many Post-it Notes do you think you might have used in the past year? Post-it Notes are one of the most well-known products created by 3M — a business that has worked hard to truly develop a culture of innovation. But how? What practical measures have 3M put in place to encourage a culture of innovation?

3M's culture of innovation begins with their recruitment of staff. They have a philosophy that says, 'hire good people and leave them alone'. This philosophy clearly identifies the value that 3M places on hiring the right people and giving them the freedom and flexibility they need to come up with innovative ideas for new products.

**FIGURE 3** The Post-it Note is a product of the business 3M, a company that encourages innovation.

3M recognises that the greatest investment they can make is in their employees. They hold the view that if your people grow, then your business will also grow.

Companies that encourage a culture of innovation give employees time to explore their own ideas without worrying too much about failure. Employees must be allowed to be honest and should be encouraged to share new ideas. 3M is one such company that allows employees to use part of their work time to explore new ideas — this will be discussed further in the next section.

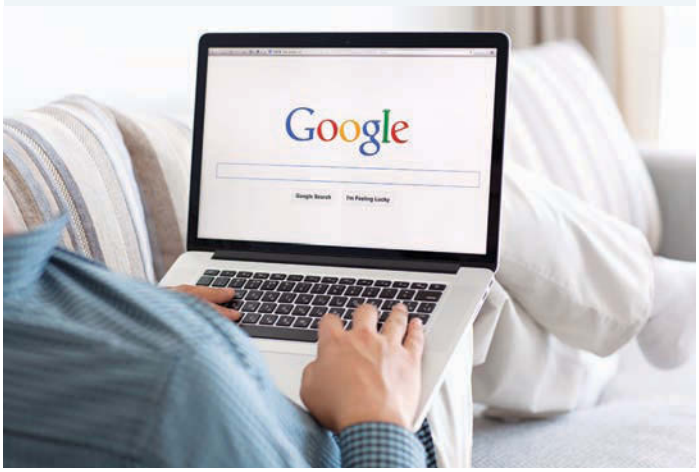
While today it is common in the modern business environment for businesses to encourage a culture of innovation and entrepreneurship, this was not always the case. In the past, many employers and managers thought that creativity and innovation might distract employees from their main tasks. Common strategies now used by businesses to encourage a culture of innovation include:

- employee time
- decentralisation of decision-making
- training and development
- rewards.

## 24.4.4 Employee time

Google is now one of the most well-known and profitable businesses in the world. For many people, whenever they have a question, they go to Google to find an answer. A lot of people communicate using Google's email system, Gmail. Google has revolutionised the way in which we access information. But how did they develop such innovative technological services? One part of the answer is in the way the business is structured and in how its employees are treated.

**FIGURE 4** Google has a '20% time' rule, which allows employees to spend 20 per cent of their time working on anything they think will benefit the business.




In order to encourage entrepreneurship and innovation amongst staff, Google implemented what is known as the '20% time' rule. This rule allows employees to spend 20 per cent of their time working on any project they think will benefit the business. The initiative was developed in order to provide employees with some time and flexibility at work, with the hope that great ideas would result from it. While there is no expectation that staff engage in the '20% time' initiative, many of them do. Another key aspect of the program is that failure is both accepted and embraced. Failure is recognised as a key part of innovation. Google products that have emerged from the '20% time' rule include Gmail and Google News.

3M is another business that has a policy of 'employee time' to foster entrepreneurship amongst staff. The Post-it note was developed as a result of this policy. Similarly to Google, 3M have a '15% Culture' whereby staff can spend 15 per cent of their work time on ideas that interest and excite them. This allows employees to take ownership of their ideas and contribute more meaningfully to the business.

## 24.4.5 Decentralisation of decision-making

Traditionally, many businesses have had very rigid organisational structures. This means that a business has many levels of management. Consider the organisation of your school. You probably have some or all of the following: principal, deputy principal, curriculum coordinator, year coordinators, subject coordinators and classroom teachers. While each school may have different positions with different titles, the reality is that there are many levels of management, and decision-making is usually centralised with these managers. Businesses are no different.

While having many levels of management is not a bad thing in itself, it may mean that employees do not have a sense of control and ownership over their work and it may inhibit their entrepreneurial instincts. Increasingly, businesses have attempted to remove layers of management within their organisations in an attempt to save money and empower staff. This has resulted in the decentralisation of decision-making. By this, we mean that decisions are increasingly being made by employees, not just managers.
Some of the main benefits of decentralised decision making include:

- Employees are empowered to make decisions and find new, creative ways to solve problems.
- Management can focus on major decisions.
- Decisions are made by many people with different skills and perspectives.
- Employees are able to work without direct supervision from management.
- It helps build the skills of employees and therefore prepares them for possible promotion opportunities.

**FIGURE 5** Decentralised decision-making empowers employees to find new ways to solve problems.

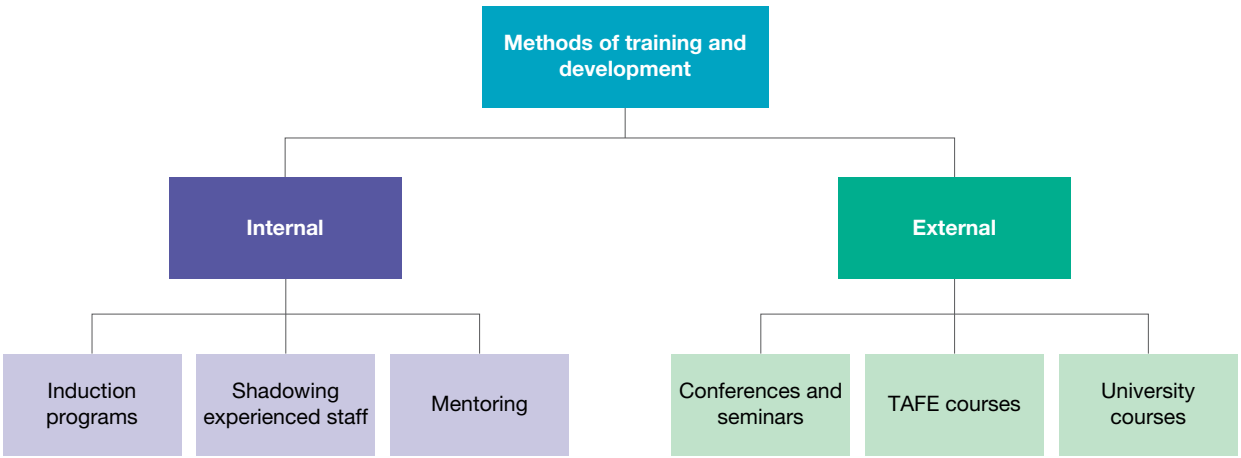
## 24.4.6 Training and development

Training and development are important tools used by businesses to encourage entrepreneurial behaviours. These processes are aimed at improving the performance of employees and allowing them to do their jobs more effectively. Improving the knowledge and skills of employees through training and development can be very powerful in encouraging entrepreneurial behaviours. More knowledgeable and skilled employees are often able to find creative and innovative ways of solving problems. Training is something that should be ongoing and can take place at many different stages, including:

- *prior to getting a job.* Some jobs require people to have a TAFE qualification, university degree or some other type of formal qualification such as a driving licence.
- *when beginning a job*. Many employers run an induction program to introduce employees to the culture and practices of their business.
- *upon receiving a promotion*. When employees receive a promotion, they may require extra knowledge and skills.

Training and development can take place both within a business (internal) and outside of a business (external). Depending on the nature of the business and the needs of their employees, a combination of both may be used. Some of the main methods of training and development are identified in **FIGURE 6**.

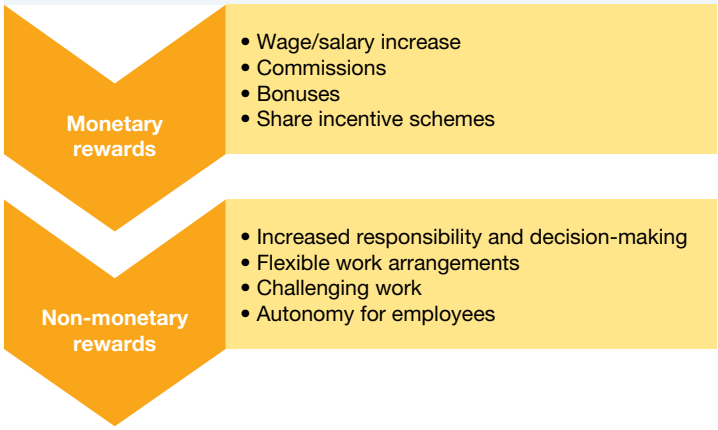
**FIGURE 6** Internal and external training and development methods




## 24.4.7 Rewards

Some people believe that creativity, innovation and entrepreneurship cannot be fostered or encouraged simply through the use of rewards. They believe that entrepreneurship is **innate**, and that rewards may actually inhibit creativity and innovation. However, many businesses have a range of reward systems that are designed to encourage entrepreneurial behaviours. Good rewards systems should be tailored to suit the specific needs of the business and its employees. Rewards can be monetary or non-monetary in nature, and a reward that motivates one employee may not have the same impact on other employees. Various types of reward are identified in **FIGURE 7**.

**FIGURE 7** Monetary and non-monetary rewards




One example of a business with a clear rewards policy is 3M. Their policy involves giving awards to staff to recognise their work and achievements. The Innovator Award is given to employees who have successfully used their '15% Culture' time to create a new product, or to enhance an existing product. This reward system aims to encourage creativity, innovation and entrepreneurship among employees.

**FIGURE 8** 3M uses rewards systems to encourage entrepreneurial behaviours among its employees.

### DISCUSS

Creativity is seen by many employers as the most desirable trait that they look for in employees, but it is also one of the most difficult to define and measure. How do you think you could measure creativity?

**[Critical and Creative Thinking Capability]**

## 24.4 ACTIVITY

Undertake research on one business that has tried to develop a culture of innovation among its staff. Use your research to:

**a.** identify the business
**b.** outline the products and services delivered by the business
**c.** describe the strategies the business has used to encourage a culture of innovation
**d.** recommend some strategies that you think would further assist the business in developing a culture of innovation.

**Examining, analysing, interpreting**

## 24.4 EXERCISES

**Economics and Business skills key: ES1** Remembering and understanding **ES2** Describing and explaining **ES3** Examining, analysing, interpreting **ES4** Questioning and evaluating **ES5** Reasoning, creating, proposing **ES6** Communicating, reflecting

### 24.4 Exercise 1: Check your understanding

1. **ES1** Why do businesses need to encourage entrepreneurial behaviours?
2. **ES1** Define the term *intrapreneur*.
3. **ES1** Identify three strategies used to encourage entrepreneurial behaviours.
4. **ES2** Explain how a business can encourage a culture of innovation.
5. **ES2** Explain the benefits for businesses of decentralising their decision-making.

### 24.4 Exercise 2: Apply your understanding

1. **ES2** Explain how training and development can encourage entrepreneurial behaviours.
2. **ES4** Is Google's '20% time' rule an effective way to maximise the output of employees? Provide some arguments for and against the policy.
3. **ES6** 'A person is either entrepreneurial or not, and no amount of reward can influence that.' Do you agree or disagree with this statement? Provide reasons to support your response.
4. **ES3** 'Providing employees with time to be "entrepreneurial" is a risk.' Write a paragraph analysing this statement.
5. **ES6** Explain how you might use a period of time equivalent to Google's '20% time' in your school day.

Try these questions in learnON for instant, corrective feedback. Go to www.jacplus.com.au.

# 24.5 SkillBuilder: Creating a mind map

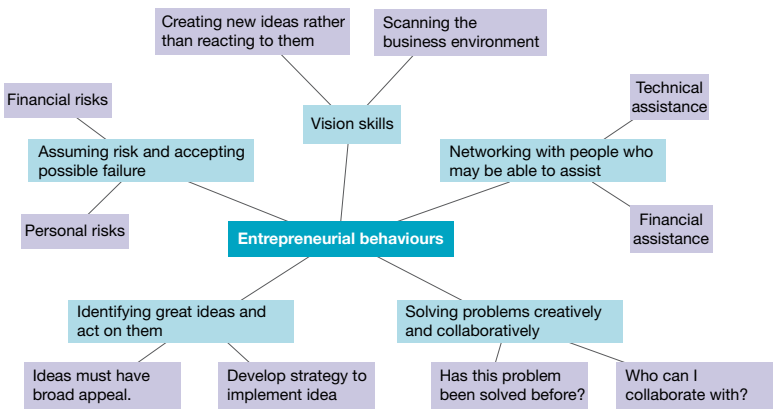
online only

### What is a mind map?

A mind map is a visual tool that is used to organise and present large amounts of information. It can be used for a range of tasks such as note-taking and organising research for an assignment.

### Select your learnON format to access:

- an explanation of the skill (Tell me)
- a step-by-step process to develop the skill (Show me)
- an activity to allow you to practise the skill (Let me do it).



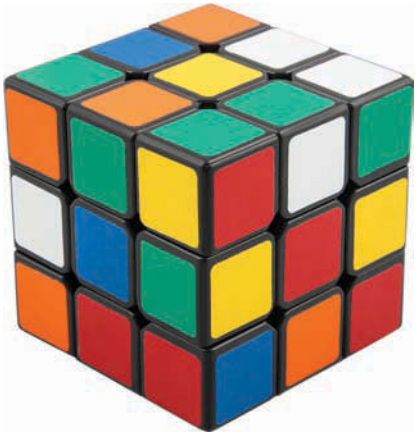
# 24.6 Thinking Big research project: The next big thing!

online only

## SCENARIO

Fads come and go. Every now and then a new item hits the shops and creates a sensation — it becomes the 'must have' item that everybody wants.

You will investigate past fads and bring your entrepreneurial talents to the fore to devise a new product designed to grab the attention of a specific target market. Can you create the next big thing?



### Select your learnON format to access:

- the full project scenario
- details of the project task
- resources to guide your process work
- an assessment rubric.

### on Resources

**ProjectsPLUS** Thinking Big research project: The next big thing! (pro-0202)

# 24.7 Review

online only

## 24.7.1 Key knowledge summary

Use this dot point summary to review the content covered in this topic.

## 24.7.2 Reflection

Reflect on your learning using the activities and resources provided.

### on Resources

**eWorkbook** Reflection (doc-31742)
Crossword (doc-31743)

**Interactivity** Being enterprising crossword (int-7658)

## KEY TERMS

**enterprising behaviours** behaviours which an enterprising individual will possess, including being creative, inquisitive, innovative, imaginative and good at problem solving
**entrepreneur** a person who organises a business venture, and assumes the financial risks associated with it, usually in the hope of making a profit
**innate** inborn, an inherent characteristic, rather than being developed through experience
**intrapreneur** an employee of a business who demonstrates the qualities and skills of an entrepreneur

# 24.5 SkillBuilder: Creating a mind map

## 24.5.1 Tell me

A mind map is a visual tool that is used to organise and present large amounts of information. It can be used for a range of tasks such as note-taking and organising research for an assignment. Mind mapping usually starts with a central idea or question, which then branches out to related concepts or terms. A mind map allows you to show the links and connections between the concepts that you are exploring.

There are many different ways to construct a mind map and you should refine your mind mapping to suit your personal needs. When creating a mind map, some things that you can include are:

- key questions
- major terms and concepts
- images and different colours
- connective arrows to link concepts and to show relationships.

There are a wide variety of online mind mapping tools that can be easily accessed. While these can be useful, it is often just as effective to create a mind map with a pen and paper.

A mind map has some major advantages over traditional note-taking.

- It allows for complex concepts to be easily broken down.
- It allows for ideas to be represented visually, which may make them easier to remember.
- It allows you to more easily show connections or relationships between concepts.
- It allows you to look at a concept at a glance.

## 24.5.2 Show me

Imagine you have been asked to create a mind map to visually represent the major behaviours and skills of an entrepreneur. The five key skills/behaviours in this example will be:

1. vision skills
2. identifying great ideas and acting on them
3. solving problems creatively and collaboratively
4. assuming risk and accepting possible failure
5. networking with people who may be able to assist.

The information above can be represented in a mind map like the one in **FIGURE 1**.

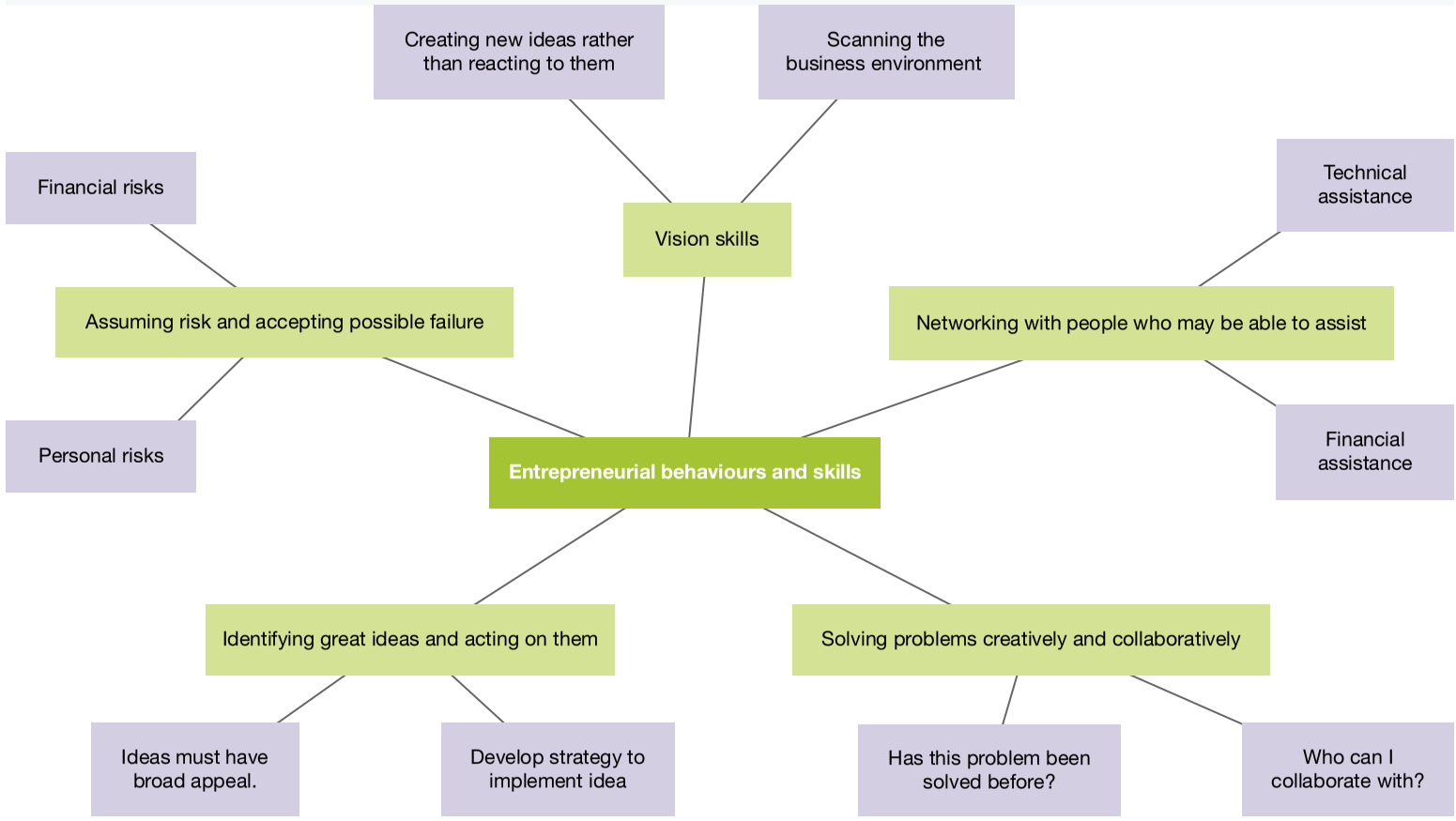
## 24.5.3 Let me do it

Complete the following activity to practise your skills.

### 24.5 ACTIVITY

Using the process in the Show me section as a model, construct a mind map to visually represent the common strategies used by businesses to encourage entrepreneurial behaviours. The mind map in **FIGURE 1** may assist you in getting started.

**FIGURE 1** Mind map representing entrepreneurial behaviours and skills

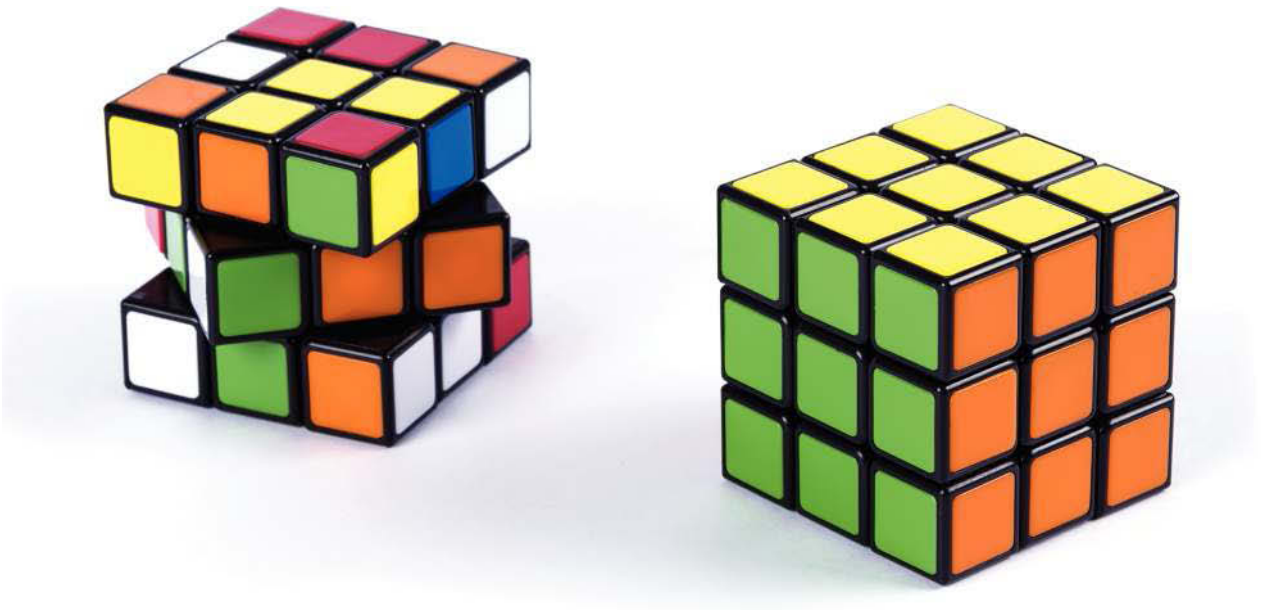


# 24.6 Thinking Big research project: The next big thing!

## Scenario

Fads come and go. Every now and then a new item hits the shops and creates a sensation, becoming the must-have item that everybody wants.

You will investigate past fads and bring your entrepreneurial talents to the fore to devise a new product designed to grab the attention of a specific target market. Can you create the next big thing?



## Task

You will need to complete the following elements for your project.

- Conduct research and prepare a brief report on five fad items.
  - What were they?
  - What did they do?
  - When were they introduced?
  - Who made them?
- Design a new fad product.
- Create a report detailing:
  - the type of market your product is targeted at
  - what the product would be used for
  - what is unique about your product and why it would be successful
  - costing details — how much it would cost to make and for how much you would sell it.

## Process

- Open the ProjectsPLUS application in the Resources for this topic. Click on the **Start new project** button to enter the project due date and set up your project group. Working with a partner will allow you to swap ideas and share responsibility for the project. Save your settings and the project will be launched.

- Navigate to the **Research forum**, where you will find starter topics loaded to guide your research. You can add further topics to the Research forum if you wish. When you have completed your research, you can print out the **Research report** in the Research forum to easily view all the information you have gathered.
- In the **Media centre** you will find an assessment rubric to guide your work and some weblinks that will provide a starting point for your research.
- Conduct research and decide upon the five fad items you will report on. For each item, compile the information outlined in the Task section. Find an image or create your own illustration of each item to include in your report.
- Design your new product — create a diagram showing how the item works, to be included in your report. You might like to create a prototype of the item if you are able to, and if time allows.
- Identify your market, the product's use(s), its unique features and why it would be successful. Write up this information in your report.
- Develop your product costing and add to your report.
- Check your report thoroughly to ensure you have used correct spelling and grammar, and that you have completed all elements listed in the **Task** section. When you are happy with your work, present your 'next big thing' to the class and submit your report to your teacher for assessment.

on Resources

**ProjectsPLUS** Thinking Big research project: The next big thing! (pro-0202)

# 24.7 Review

## 24.7.1 Key knowledge summary

### 24.2 Entrepreneurial behaviours

- Enterprising behaviours are exhibited in people who are: creative, inquiring, innovative, risk-taking, good at problem solving, and willing to try new ways of doing things and accepting the consequences if they fail.
- Businesses are increasingly looking to employ people who display enterprising behaviours.
- A person who is willing to take a risk and has the qualities required to turn an idea into a successful business is called an entrepreneur.
- Being entrepreneurial involves a range of skills such as:
  - identifying innovative ideas and acting on them
  - networking with people who may be able to assist
  - solving problems creatively and collaboratively
  - assuming the risk of implementing an idea and accepting possible failure
  - vision skills.
- Travis Kalanick and Garrett Camp (co-founders of transport company Uber) have revolutionised the way that consumers and producers interact.

### 24.3 Famous entrepreneurs

- In establishing Rip Curl, Brian Singer and Doug Warbrick relied on their knowledge of the surfing world and a willingness to interact with customers.
- Fred DeLuca demonstrated enterprising behaviours from a very young age and went on to create global business Subway, which now has over 44 000 outlets in over 110 countries.

### 24.4 Encouraging entrepreneurial behaviours within businesses

Strategies that businesses can use to encourage entrepreneurial behaviours include:

- encouraging a culture of innovation
- employee time
- decentralisation of decision-making
- training and development
- rewards.

## 24.7.2 Reflection

Complete the following to reflect on your learning.

### 24.7 ACTIVITIES

Revisit the inquiry question posed in the Overview:

**Having a great idea to help your business is one thing, but is it worth taking the risk of trying it out?**

1. Now that you have completed this topic, what is your view on the question? Discuss with a partner. Has your learning in this topic changed your view? If so, how?
2. Write a paragraph in response to the inquiry question, outlining your views.

### on Resources

**eWorkbook** Reflection (doc-31742)
Crossword (doc-31743)

**Interactivity** Being enterprising crossword (int-7658)

## KEY TERMS

**enterprising behaviours** behaviours which an enterprising individual will possess, including being creative, inquisitive, innovative, imaginative and good at problem solving
**entrepreneur** a person who organises a business venture, and assumes the financial risks associated with it, usually in the hope of making a profit
**innate** inborn, an inherent characteristic, rather than being developed through experience
**intrapreneur** an employee of a business who demonstrates the qualities and skills of an entrepreneur

# 25 Participants in the changing work environment

## 25.1 Overview

Employers provide jobs and employees do the work. Is that all there is to the Australian workplace?

### 25.1.1 The changing workplace

In order to appreciate the changes in Australia's contemporary work environment, it is useful to investigate the workplaces of the past. One hundred or so years ago, Australian workplaces looked dramatically different to the way they do now. In 1914, the Australian economy largely relied on the agricultural and manufacturing sectors. Although many women actively participated in the workforce, these industries mainly employed men.

Fast-forward 50 years and Australian workplaces had undergone significant change. By 1964, Australia's reliance on the agricultural industry had declined thanks to a post–World War II focus on manufacturing and trade. The production of motor vehicles, metals and textiles increased significantly during this period. Workplaces at this time were typically small and family run, although some larger companies had begun to develop their influence.

Move forward another 55 years or so, and dramatic changes to the Australian workplace have again taken place. Although the agricultural industry remains strong, the Australian manufacturing industry has found itself unable to compete with cheaper overseas competitors, resulting in the closure of Australian-based operations of long-established manufacturers such as Holden, Ford and Toyota. Technological developments have made modern workplaces more dynamic and flexible. As Australia's place in the global economy continues to develop, there is no doubt that our workplaces will change to follow suit.

**on Resources**

**eWorkbook** Customisable worksheets for this topic

**Video eLesson** The changing work environment (eles-2388)

**LEARNING SEQUENCE**


**25.1** Overview
**25.2** Australian workplace participants
**25.3** Changing roles of employees
**25.4** Employer responsibilities
**25.5** Government responsibilities
**25.6** **SkillBuilder:** Preparing a résumé
**25.7** **Thinking Big research project:** Workplace evolution presentation
**25.8** **Review**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# 25.2 Australian workplace participants

## 25.2.1 Who is in the workplace?

You could be forgiven for assuming that the Australian workplace involves only two groups of people — employers and employees. Our nation's work environments are much more complex than this simple relationship. Trade unions and governments have a significant impact on the nature of Australian workplaces. The ways in which these groups function and interact with each other form the basis of Australian work environments and, on a larger scale, our country's economy. In this topic, we identify and examine the participants in the Australian workplace.

**FIGURE 1** The major participants in the Australian workplace

## 25.2.2 Employees

In the coming months, many of you will enter the Australian workforce for the first time. Some of you probably already have. Whether you flip burgers at the local fast-food shop, stack shelves at the supermarket or work in some other retail business, you are part of the Australian workforce. An employee is someone who works for another person or entity in return for financial compensation. This work may vary in a number of ways including the nature of the work completed, the level of responsibility and the time spent completing the work. Whether you work as a server at the drive-through at McDonald's or as the company's **chief executive officer (CEO)**, you are an employee of McDonald's. Although their roles and responsibilities differ greatly, both the server and the CEO undertake specific jobs and are paid for their time and effort.

**FIGURE 2** A McDonald's server and the company's CEO, Steve Easterbrook. Their jobs are very different but both are employees of the same company.

As of February 2019, more than 12.7 million Australians were working as employees. This figure equates to just over half of Australia's total population. Casual, seasonal, part-time and full-time employment are all included in this calculation. An increasing number of employees are looking for more flexible working conditions. It is estimated that just under 31 per cent of Australia's workforce is employed on a casual or contract basis. Although this kind of work provides employees with more flexibility, casual work does not come with the same rights and benefits as part-time or full-time employment.

## 25.2.3 Employers

A diverse range of employers exists within Australia. As at June 2018, there were more than 875 000 employing businesses in Australia. The majority of these were small businesses with only 1–4 employees. The full breakdown of employing businesses in Australia is shown in **TABLE 1**.

**TABLE 1** Number of businesses (by size) in Australia as at June 2018

| Number of employees | Number of businesses in Australia |
|---|---|
| 1–19 | 823 551 |
| 20–199 | 50 338 |
| 200+ | 3855 |
| **Total** | **877 744** |

***Source:*** Data derived from ABS 8165.0 — *Counts of Australian businesses, including entries and exits* (June 2013 to Jun 2018)

From the smallest self-run business to the largest **multinational company**, all employers in Australia are subject to the same responsibilities and requirements. These include the provision of:

- a safe workplace
- adequate financial compensation for work completed
- necessary and relevant education and training
- contributions to superannuation
- essential rights to employees (such as adequate breaks and supervision).

A number of government organisations hold employers to these responsibilities. The most influential of these is the Fair Work Commission (FWC). There have been several versions of the FWC including Fair Work Australia and the Australian Industrial Relations Commission. The Fair Work Commission ensures that employees' rights are protected and that employers comply with Australian employment law. It also acts as a tribunal for employees who feel their employers have failed in the discharge of their responsibilities.

## 25.2.4 Trade unions

The history of trade unions can be traced back to the merchants guilds of the Renaissance. In those organisations, workers who held the same job banded together to organise their industry, set prices, agree upon standard practices and protect the rights of their members. Australian trade unions play a similar role. They are organisations of workers who actively seek better pay, safer working conditions and increased job security. It is not compulsory for workers in a particular industry to join a union, although it is strongly encouraged by union members.

A union with a large number of active members can place more pressure on governments and employers than a smaller union. This pressure usually takes the form of **industrial action**, which can include strikes and work bans. Industrial action can be brief and isolated, or it can continue for days or weeks — even years in extreme cases. The longest industrial action in Australia occurred in 1946 and lasted for three years. It started when Aboriginal pastoral workers in Western Australia's Pilbara region refused to work until they were properly paid and provided with safe working conditions. Participation in industrial action is one way in which trade unions can affect the Australian workplace. Through this mechanism, they can be a crucial part of the Australian working environment.

**FIGURE 3** Teachers protesting for higher wages and better conditions at Rod Laver Arena in Melbourne

## 25.2.5 Governments

Federal, state and local governments also play a crucial role in the Australian workplace. By setting and enforcing employment standards, our governments are one of the most important components of the Australian working environment. The regulation of minimum wages, leave and superannuation entitlements are just some examples of these standards. Government projects both create and sustain employment in Australian states and territories. All three levels of government are involved in the planning and implementation of new projects. Regardless of whether these projects involve the construction of new infrastructure or the creation of new training programs, they will generate jobs. Although private enterprise also generates jobs and helps set standards in certain industries, governments often have greater power and influence over job markets.

### 25.2 ACTIVITIES

Research an industrial action in Australian history. Write a summary of the dispute, answering the following questions:

- What was the dispute about?
- Who was involved in the dispute?
- What kind of industrial action was taken?
- How was the dispute resolved?

**Examining, analysing, interpreting**

### 25.2 EXERCISES

**Economics and Business skills key: ES1** Remembering and understanding **ES2** Describing and explaining **ES3** Examining, analysing, interpreting **ES4** Questioning and evaluating **ES5** Reasoning, creating, proposing **ES6** Communicating, reflecting

#### 25.2 Exercise 1: Check your understanding

1. **ES1** What proportion of Australia's population is currently employed in casual, part-time or full-time work?
2. **ES1** When did the first trade unions begin and what was their purpose?
3. **ES2** What is the main role of governments in the Australian workplace?
4. **ES3** Suggest reasons why someone would choose:
   (a) casual work over part-time/full-time work
   (b) part-time/full-time work over casual work.
5. **ES2** Explain the role of the Fair Work Commission.

#### 25.2 Exercise 2: Apply your understanding

1. **ES3** Copy **TABLE 1** from this subtopic and add a column titled 'Percentage of all Australian businesses'. For this new column, you will need to take each category of business and calculate the percentage of Australian businesses that fall into that category. For example, what percentage of Australian businesses have 1–19 employees? Complete this calculation for each category in the table.
2. **ES2** Describe the role played by trade unions in the workplace.
3. **ES2** Explain the benefit to employees of joining a trade union.
4. **ES3** Analyse how governments may assist in maintaining a work environment that benefits all parties.
5. **ES6** 'The bigger the business, the easier it is to manage the workplace.' Do you agree with this statement? Justify your response.

Try these questions in learnON for instant, corrective feedback. Go to www.jacplus.com.au.

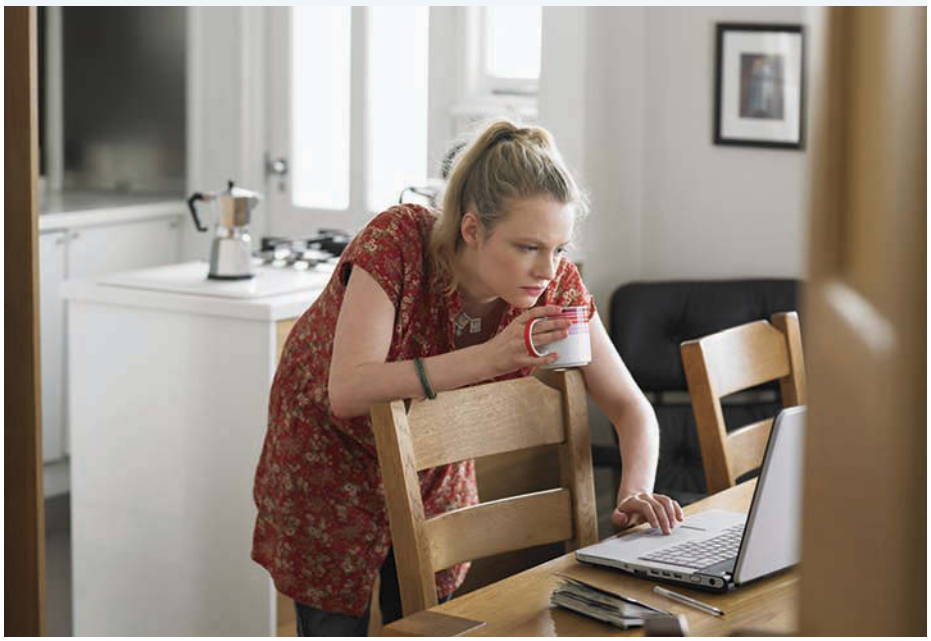
# 25.3 Changing roles of employees

## 25.3.1 The impact of competition and technology

As dynamic and ever-changing environments, modern workplaces look dramatically different from those of the past. Ask your grandparents about the jobs they used to have. Many will tell you that they worked for only one or two companies during their entire career. This is extremely unusual in modern Australian workplaces. By the time you retire, you are likely to have worked for more than 20 employers!

With increased competition for business and jobs, a lot is expected of employees in the Australian economy. Technological developments facilitate and encourage the fluidity of modern workplaces. Through the use of internet and smartphone technology, for example, employers may expect their staff to regularly check emails and respond to customers at all times of the day. This same technology allows employees to work from multiple locations and have more flexible working conditions. In this subtopic, we investigate how the Australian work environment continues to change and the impact such change is having on employees and their families.

**FIGURE 1** As employers respond to increased competition, they demand more of their employees.



**DISCUSS**

As mentioned, it is now expected that most people entering the workforce will work for more than 20 employers by the time they retire. In an ever-changing work environment in which you are likely to have many jobs, what skills do you think are most likely to help you succeed in your working life? **[Personal and Social Capability]**

## 25.3.2 Employee roles

An employee's primary objective is to help their employer's business succeed. The specific role of an employee will depend on the nature of the business and the position they hold. The duties of an employee are usually detailed in a **position description** or outlined in their employment contract. Minimum targets or objectives may also be listed by employers in a contract. Once an employee signs a contract, they are legally bound to meet any targets and fulfil their obligations to the employer.

Employees are also required to follow company values and adhere to company policies. These policies often include ethical and behavioural guidelines as well as more straightforward requirements such as the wearing of a uniform. In addition to these legal obligations, employees are expected to demonstrate positive workplace qualities. These include engaging in effective teamwork, acting responsibly and showing initiative.

**FIGURE 2** An employee's primary objective is to help their employer's business succeed.

### Intrapreneurship

Employers constantly seek a **competitive advantage** in their industries. As a result, it is now expected that employees will actively seek ways to improve not only their own roles, but also the general functioning of the entire business. An employee who develops their own ideas for the financial benefit of their employer is known as an **intrapreneur** (see topic 24, subtopic 24.4). There are often financial incentives and rewards for employees who demonstrate intrapreneurship, but employees also receive non-financial rewards, such as the opportunity to use a broader set of skills and show creativity in the workplace. The benefits of these last two points should not be underestimated.

## 25.3.3 Increased competition

The global economy is an uncertain place for many businesses. While some companies have remained successful in these tough economic conditions, many more have been forced to scale back their operations and **retrench** staff. Toyota, Ford, and Holden have closed their manufacturing operations in Australia, with the resultant loss of over 4000 jobs. Telstra has also shed staff in recent years, and in 2018 National Australia Bank (NAB) announced they would cut 4000 jobs over 3 years. Even the Australian Bureau of Statistics (which provides the majority of statistics for this topic) axed 100 jobs in 2018. Refer to **TABLE 1** to see the number of retrenchments by industry in 2013.

**TABLE 1** Retrenchments by industry (2013)

| Industry | Number of persons retrenched (rounded to nearest hundred) |
|---|---|
| Agriculture, forestry and fishing | 5400 |
| Mining | 15 400 |
| Manufacturing | 39 900 |
| Electricity, gas, water and waste services | 8700 |
| Construction | 64 700 |
| Wholesale trade | 14 700 |
| Retail trade | 40 400 |
| Accommodation and food services | 29 200 |
| Transport, postal and warehousing | 23 100 |
| Information media and telecommunications | 6700 |
| Financial and insurance services | 12 200 |
| Rental, hiring and real estate services | 7500 |
| Professional, scientific and technical services | 33 500 |
| Administrative and support services | 15 400 |
| Public administration and safety | 18 100 |
| Education and training | 12 300 |
| Health care and social assistance | 20 100 |
| Arts and recreation services | 3400 |
| Other services | 10 400 |
| **Total** | **381 400**[a] |

[a]Difference due to rounding errors
***Source:*** ABS 6105.0 — *Australian labour market statistics* (July 2014) NB: This is the most recent data available for this statistic.

The possibility of retrenchment in Australia has always been very real. When redundancies occur, competition for job vacancies increases. There is always only a finite number of job vacancies in the economy. As at February 2019 the number of job vacancies in Australia was 244 900, an increase of 1.1 per cent from November 2018. A higher number of retrenchments results in a higher number of people applying for these vacant positions. Such increased competition has both positive and negative consequences. Employers often see this competition in a positive light — it can result in a higher quality of applicants and more dedicated employees. Employees are more likely to see this competition in a negative light — it can increase workplace stress and also result in longer periods of unemployment if they lose their jobs. In this way, competition for employment can dramatically influence an employee in the workplace.

With job insecurity rising and the threat of retrenchment ever present, employees find themselves under increased pressure to perform in their positions. Many feel compelled to work longer hours and push themselves harder in order to prove their worth to their employers. This may create stressful and unsustainable workplaces, and have an adverse impact on employees' personal lives.

### 25.3.4 A global workplace

Imagine you're happily working at your desk in the near future when your boss calls you into her office and says, 'How would you like to work in our New York office for six months?' The emergence of a truly global economy means that opportunities like this occur every day. If you are lucky enough to work for a multinational company, it is possible that you will be asked to visit or work in a number of locations around the world. In 2017 alone, over $1.3 trillion was spent by individuals and companies on business trips. This remarkable figure reflects the changing nature of modern working environments. Employees are frequently presented with incredible opportunities which further their career and expose them to new places and cultures.

#### 25.3 EXERCISES

**Economics and Business skills key: ES1** Remembering and understanding **ES2** Describing and explaining **ES3** Examining, analysing, interpreting **ES4** Questioning and evaluating **ES5** Reasoning, creating, proposing **ES6** Communicating, reflecting

#### 25.3 Exercise 1: Check your understanding

1. **ES1** What kind of document describes the specific duties and responsibilities of an employee?
2. **ES1** What are the positive impacts of a global economy on employees?
3. **ES2** Why do you think it is important for businesses to send employees on business trips?
4. **ES2** Explain the benefit for an employee to spend time working overseas.
5. **ES2** How has increased competition for jobs affected the Australian workplace?

#### 25.3 Exercise 2: Apply your understanding

1. **ES2** What is an intrapreneur? Provide an example in your answer.
2. **ES3** **TABLE 1** shows the number of retrenchments by industry in 2013. Use the data in the table to answer the following questions:
   (a) Which three industries shed the most jobs?
   (b) Provide a likely explanation for the downturn in each of these industries.
3. **ES5** In question 2, you used the data from **TABLE 1** to rank the three worst performing industries. Now use the same data to predict which other industries are showing negative signs. Once you have identified these struggling industries (choose at least three), suggest what governments could do to rectify these patterns.
4. **ES2** Describe the benefit to businesses of an increasing number of job applicants for each job vacancy.
5. **ES3** Analyse how retrenchment may impact an employee and the employer.

Try these questions in learnON for instant, corrective feedback. Go to www.jacplus.com.au.

## 25.4 Employer responsibilities

### 25.4.1 The best places to work

Each year, Great Place to Work – Australia compiles a report detailing the 50 businesses with the best work environments in Australia. The eleventh annual study, released in 2018, consisted mainly of companies that are not well known to the general public – you probably have not heard of most of them! Among these are Atlassian, Canva and Salesforce. What these companies have in common is that they take their responsibilities to their employees very seriously. These employers view employee satisfaction as crucial to the success of the company itself. From free personal training and education programs to generous salaries, smart employers will provide the best possible work environments for their employees.

**FIGURE 1** Google offices like this one in Chicago, USA, are known for their quirky design.

## 25.4.2 Workplace health and safety

Whether employees spend their day working on a computer at a desk, or in a harness lopping trees, employers are equally obliged to provide safe working conditions. There are numerous official workplace responsibilities designed and enforced by government, and every employer in Australia must abide by them. Employers have a **duty of care** to provide proper training programs, equipment and facilities for their employees. The nature of this support, known as workplace health and safety (WHS), is determined by the duties undertaken by the employee. For an office worker, this may require the provision of an ergonomic work station and regular breaks. For a tree lopper, this could necessitate more complex training programs and proper safety equipment.

WHS law is described in the *Work Health and Safety Act 2011*. This Commonwealth legislation has corresponding state government acts, with each state responsible for running its own WorkCover/WorkSafe authority. These government organisations hold employers to their WHS responsibilities.

**FIGURE 2** WorkSafe officials conduct spot checks to ensure that employers are providing a safe working environment.

They conduct random spot checks on employers, imposing fines and other penalties should any breaches be found. WorkCover also serves to protect employees who suffer injuries resulting from an employer's negligent behaviour. If any such injuries occur, it is also the employer's responsibility to provide suitable alternative work for the injured worker. Mental health issues as well as workplace harassment and bullying are also covered by the federal act.

## 25.4.3 National Employment Standards (NES)

All Australian employers must abide by the ten national employment standards (NES). Developed under the *Fair Work Act 2009*, these standards were established to protect the fundamental rights of Australian workers. It is therefore the responsibility of all Australian employers to follow the NES. Failure to comply with the standards can result in fines for individuals or companies. The details of the NES are listed in **FIGURE 3**.

**FIGURE 3** Entitlements under the ten national employment standards

### THE TEN NES ENTITLEMENTS

- **Maximum weekly hours of work** — 38 hours per week, plus reasonable additional hours
- **Requests for flexible working arrangements** — an entitlement allowing employees in certain circumstances as set out in the *Fair Work Act 2009* to request a change in their working arrangements because of those circumstances
- **Parental leave and related entitlements** — up to 12 months' unpaid leave per employee, plus a right to request an additional 12 months' unpaid leave, plus other forms of maternity, paternity and adoption related leave
- **Annual leave** — four weeks' paid leave per year, plus an additional week for certain shift workers
- **Personal/carer's leave and compassionate leave** — 10 days' paid personal/carer's leave, two days' unpaid carer's leave as required, and two days' compassionate leave (unpaid for casuals) as required
- **Community service leave** — unpaid leave for voluntary emergency activities and leave for jury service, with an entitlement to be paid for up to ten days for jury service
- **Long service leave** — After working at an organisation for an extended period of time, employees qualify for a prolonged period of paid leave.
- **Public holidays** — a paid day off on a public holiday, except where reasonably requested to work
- **Notice of termination and redundancy pay** — up to five weeks' notice of termination and up to 16 weeks' severance pay on redundancy, both based on length of service
- **Provision of a Fair Work Information Statement** — must be provided by employers to all new employees, and contains information about the NES

***Source:*** Adapted from Fair Work Ombudsman fact sheet, *Introduction to the national employment standards*

### DISCUSS

The maximum weekly hours of work in Australia are set at 38, plus reasonable additional hours. However, many workers find themselves under pressure to consistently work longer hours. Do you think the 38-hour guideline is fair? What do you think reasonable additional hours are? **[Personal and Social Capability]**

## 25.4.4 Taxation and superannuation

Whether a small family business or a large corporation, every Australian employer has taxation and **superannuation** obligations. Employers must provide staff with necessary taxation documentation and ensure they are taxed at the correct amount. Adequate records of tax withheld must be kept and passed on to employees at the end of each financial year. Employers are also required to lodge the company's own taxation documents.

Australian employers must also make regular contributions to their employees' superannuation accounts. Each pay period, a small proportion of money is diverted into a retirement fund mandated by the federal government. (The current minimum amount of 9.5 per cent of each employee's income was set in July 2014.) This fund is known as superannuation and is paid to all employees over 18 years of age. While employees are allowed to make additional payments to their own superannuation accounts, it is an employer's responsibility to make at least a minimum payment for each employee. Many superannuation funds invest this money for the employees. In this way, an employee's superannuation fund can grow significantly over time.

**FIGURE 4** Superannuation is intended to provide a 'nest egg' that grows over a person's working life and accumulates enough money for them to live on when they retire.

### 25.4 EXERCISES

**Economics and Business skills key: ES1** Remembering and understanding **ES2** Describing and explaining **ES3** Examining, analysing, interpreting **ES4** Questioning and evaluating **ES5** Reasoning, creating, proposing **ES6** Communicating, reflecting

#### 25.4 Exercise 1: Check your understanding

1. **ES1** What duty of care do employers have towards their employees?
2. **ES1** What are the national employment standards (NES)?
3. **ES2** What is superannuation and why is it important for an employee?
4. **ES1** What is the minimum amount employers must pay into an employee's superannuation account?
5. **ES2** Explain how WorkCover/WorkSafe can help injured workers.

#### 25.4 Exercise 2: Apply your understanding

1. **ES3** Consider your own part-time job (or that of a friend if you do not have one yourself). What occupational dangers and risks are there at the workplace? What training and instruction has been provided to minimise these risks?
2. **ES5** Provide one argument for and one against the idea of compulsory superannuation.
3. **ES3** Analyse why the national employment standards (NES) are necessary.
4. **ES6** 'The more money you put into superannuation now, the better off you will be in retirement.' Comment on this statement.
5. **ES6** Are there any entitlements described under the NES that you believe are unnecessary? Justify your response.

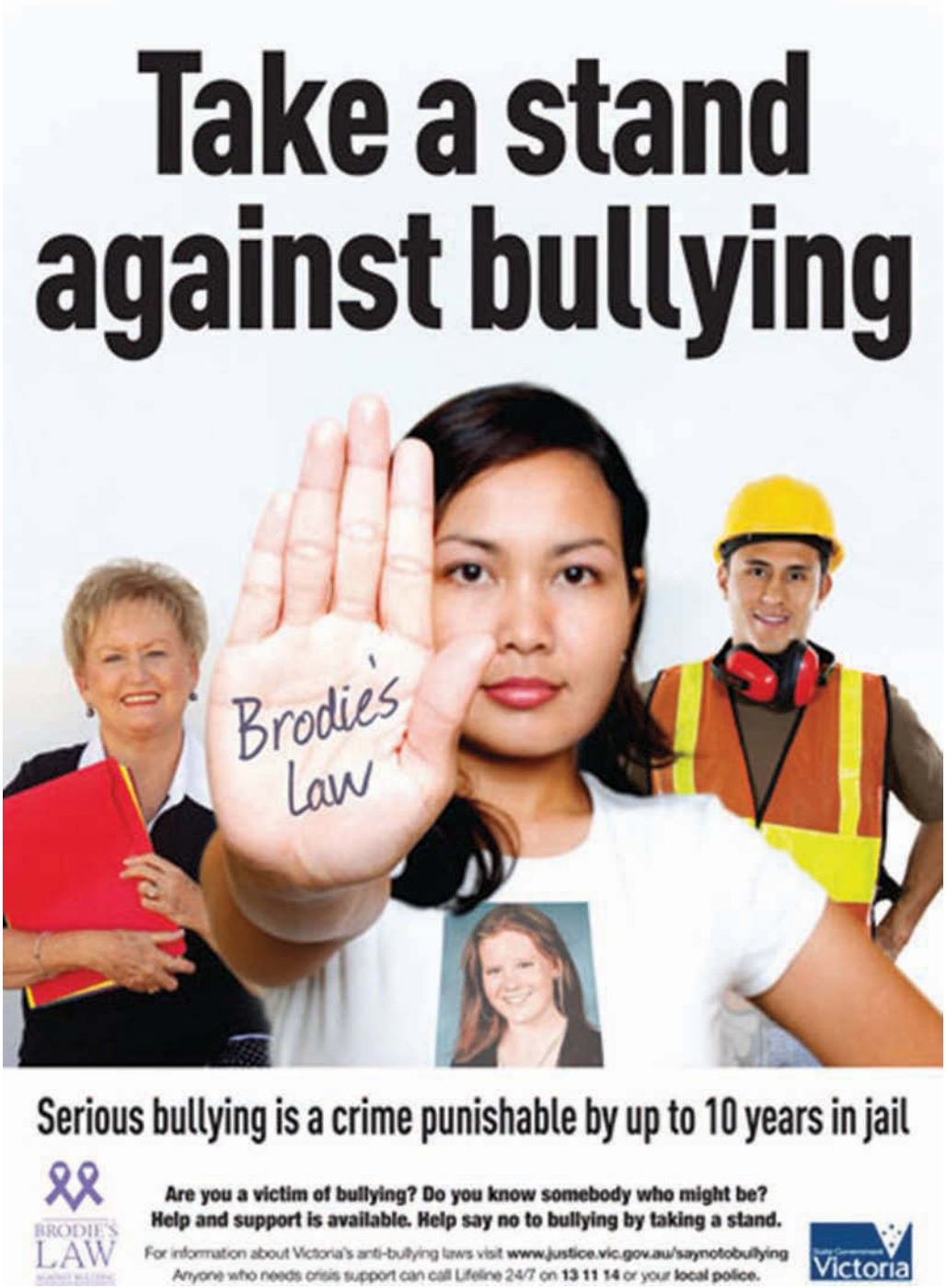
Try these questions in learnON for instant, corrective feedback. Go to www.jacplus.com.au.

# 25.5 Government responsibilities

## 25.5.1 Passing workplace legislation

Federal, state and (to a lesser extent) local governments are involved in developing and implementing the laws that facilitate effective workplaces. The *Fair Work Act 2009*, the *Work Health and Safety Act 2011* and the various Acts relating to anti-discrimination are all examples of legislation that protects the rights and conditions of Australian workers. Discrimination on the basis of age, race, gender and sexual orientation is unlawful under stringent federal and state legislation. Governments have a responsibility to make laws such as these to ensure the health and safety of employees and the productivity of the Australian economy. One particular example of such law-making is 'Brodie's Law', which was passed in response to the suicide of 19-year-old Brodie Panlock, who endured ongoing humiliating and intimidating bullying in the course of her work at a Melbourne café.

**FIGURE 1** 'Brodie's Law' was established after incessant workplace bullying led to the suicide of teenager Brodie Panlock.




## 25.5.2 Generating growth

Economic growth, as measured by **gross domestic product (GDP)**, creates employment and generates income. High growth usually translates to low unemployment. By stimulating growth, the government helps to keep people employed and earning incomes, and the businesses that employ them operating and making profits. Some argue that generating economic growth is one of the most important roles played by government in the workplace.

The problem in Australia as elsewhere in the developed world is the ageing of the population. The *Australia to 2050: future challenges* report published by the federal government has found the following facts:

- In 1970 there were 7.5 people of working age supporting each Australian over 65.
- In 2010 there were 5 people of working age supporting each Australian over 65.
- In 2050 it is predicted at current trends there will be only 2.7 people of working age supporting each Australian over 65.

Where will we find the people to do all the jobs that keep the nation running? Without enough people in the workforce, an economy can cease to function and an entire country can be crippled.

It is the responsibility of government to develop and implement policies that avert this projected decline. It must redesign the vehicle that is the Australian economy to ensure it is heading in the right direction. Possible strategies include the funding of training and education programs, as well as programs targeting skilled migrants.

## 25.5.3 Negotiating workplace agreements

Governments are also heavily involved in negotiating workplace agreements with various professions. Workplace agreements can take several forms. Essentially, they document the terms and conditions of employment between an employee (or group of employees) and their employer. Professionals in the public service such as teachers, nurses and paramedics regularly negotiate agreements with their state governments. It is the responsibility of these governments to work with employees and trade unions to develop fair and equitable agreements. Such negotiations are often challenging and sometimes lead to industrial action. While industrial actions can be disruptive, they can also be necessary for meaningful change to occur.

**FIGURE 2** Governments create a system that allows for workplace agreements to be negotiated between employers and employees.

### 25.5 EXERCISES

**Economics and Business skills key: ES1** Remembering and understanding **ES2** Describing and explaining **ES3** Examining, analysing, interpreting **ES4** Questioning and evaluating **ES5** Reasoning, creating, proposing **ES6** Communicating, reflecting

#### 25.5 Exercise 1: Check your understanding

1. **ES1** What is gross domestic product and how is it calculated?
2. **ES2** What is a workplace agreement? Why are workplace agreements important?
3. **ES2** Explain how governments can generate economic growth.
4. **ES2** Explain how governments can impact the level of unemployment.
5. **ES1** The role of government in the workplace is established in acts of Parliament. Identify one such act.

#### 25.5 Exercise 2: Apply your understanding

1. **ES5** Imagine you are a government adviser. In order to boost employment rates in Australia, which areas of the Australian economy would you prioritise? For example, would you encourage the immigration of skilled workers, or invest in education and training programs?
2. **ES3** Analyse the role of the government in establishing workplace agreements.
3. **ES6** The government has created occupational health and safety legislation. Discuss why you think this legislation was necessary and why it needs to be monitored.
4. **ES3** Analyse how governments can influence gross domestic product through their role in the workplace.
5. **ES6** Australia's population is ageing, so the government is progressively raising the age at which people are able to access the aged pension. Discuss why this is necessary.

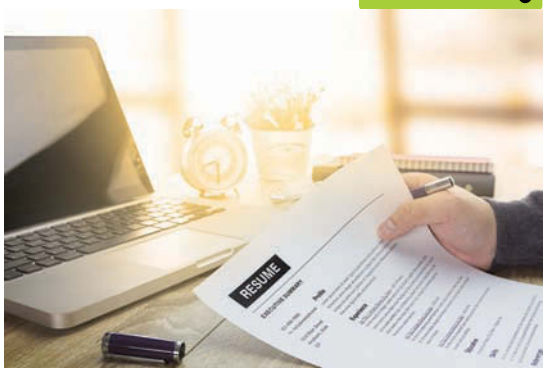
Try these questions in learnON for instant, corrective feedback. Go to www.jacplus.com.au.

# 25.6 SkillBuilder: Preparing a résumé

online only

## What is a résumé?

A résumé is a short summary of your skills, experience and qualifications (also known as a curriculum vitae, or CV) that is a crucial part of the job application process. Constructing an effective résumé is an important skill; a good résumé will help you stand out from other applicants and increase your chances of obtaining an interview for the position.




### Select your learnON format to access:

- an explanation of the skill (Tell me)
- a step-by-step process to develop the skill (Show me)
- an activity to allow you to practise the skill (Let me do it).

### on Resources

**Weblink** How to write a résumé

# 25.7 Thinking Big research project: Workplace evolution presentation

online only

## SCENARIO

Technological advances, online shopping, the introduction of parental leave and carer's leave for employees, the growth of part-time and casual work and 24-hour shopping have changed the way we work. You will choose an industry to investigate and present a report on how jobs have changed over time and how they might change in the future.

### Select your learnON format to access:

- the full project scenario
- details of the project task
- resources to guide your project work
- an assessment rubric.

### on Resources

**ProjectsPLUS** Thinking Big research project: Workplace evolution presentation (pro-0203)

# 25.8 Review

online only

## 25.8.1 Key knowledge summary

Use this dot point summary to review the content covered in this topic.

## 25.8.2 Reflection

Reflect on your learning using the activities and resources provided.

### on Resources

**eWorkbook** Reflection (doc-31744)
Crossword (doc-31988)

**Interactivity** Participants in the changing work environment crossword (int-7659)

## KEY TERMS

**chief executive officer (CEO)** the most senior position in an organisation
**competitive advantage** occurs when a business is able to produce and sell goods or services better than its competitors
**duty of care** the legal obligation of employers for the health and wellbeing of their employees
**gross domestic product** (GDP) the value of all the goods and services produced within a country in a given period of time (usually a year). It is often used as an indicator of a country's wealth.
**industrial action** official protest activities (such as strikes and go-slows) undertaken by members of trade unions, usually with the aim of improving or protecting the working conditions of their members
**intrapreneur** an employee of a business who demonstrates the qualities and skills of an entrepreneur
**multinational company** an organisation with interests and offices in several countries
**position description** a document that explains the duties and responsibilities of an employee
**retrench** to remove a person from their job, usually because of the employer's cost cutting or difficult economic circumstances
**superannuation** a retirement fund mandated by the government

# 25.6 SkillBuilder: Preparing a résumé

## 25.6.1 Tell me

The first step in gaining employment is applying for a job. To do this, you will need a résumé: a short summary of your skills, experience and qualifications. (It is also known as a curriculum vitae, or CV.) A résumé is a crucial part of the job application process, and yours needs to stand out from the résumé of everyone else who has applied for the same position. With so many applicants, a poorly presented or badly written résumé may be the difference between getting the job and not even getting an interview. Employers are not concerned with fancy résumés, nor do they want to spend 20 minutes reading your entire life story. They are often put off by résumés with photographs and will not consider your application if you don't have the necessary skills. An effective (and ultimately successful) résumé will be:

- brief and succinct
- relevant to the position for which you are applying
- a strong and confident description of your skills, experience and qualifications.

**FIGURE 1** Your résumé needs to stand out from the crowd to secure the interview that eventually leads to the job.

This SkillBuilder explains the various components of a résumé and presents examples and templates on which you can model your own résumé.

Let us now examine the elements of an effective résumé.

### Length

An effective résumé should be between one and two pages long. Remember that your résumé is merely a summary and an introduction to who you are as a prospective employee. If there is other important information that you wish to provide, you can do so through a cover letter or during the interview process. Do not be concerned if your résumé is only one page long. Some people are tempted to add irrelevant information simply to make a résumé longer and seem more impressive. This is a common mistake and can impede your chances of getting the job.

### Order

The order of your résumé is important and the information in it should flow logically. Use the following list as a guide:

- contact details
- opening statement/career overview
- key skills and personal attributes
- employment history
- education
- referees.

### Contact details

Begin with your name, possibly in a slightly larger font than the rest of your résumé. You want to make a bold and positive impression from the first time an employer sees your résumé! You only need to provide your phone number and email address on a résumé. Make sure that your email address is

professional and does not include any nicknames or inappropriate words and phrases. An address such as john.smith@jacarandamail.com would be more suitable than one such as smithy9999@jacarandamail.com.

### Opening statement/career overview

A brief opening statement is a component usually seen in the résumés of older professionals, and can add a touch of maturity to your résumé. If you choose to include this component, make sure it is relevant to the position. There is no point explaining your experience and passion for babysitting if you are applying for a job as a dog washer.

### Key skills and personal attributes

This section can be included as a simple bullet-point list of your relevant skills (including any technical skills) and personal attributes. You need to list the skills for which this particular employer is looking. In other words, the skills you list for one job application may differ from those you list for another, depending on the job requirements. Many applicants use the same résumé, changing only the employer name and job title (and sometimes forgetting to do even this!), and then wonder why they have no success in their job hunting. Do not make this mistake.

### Employment history

The convention for listing your previous jobs is to start from the most recent position and work backwards to the oldest. For each position you should provide the job title, the name of the employer and the dates (in months or years) during which you worked. You can also include a bullet-point summary of the main responsibilities of each job you have held.

### Education

There is no need to list your entire educational history in a résumé. Instead, you need only include the highest level of education you have obtained. It is also a good idea to describe any achievements or positions of responsibility that you may have had during your time at school.

### Referees

Ideally, at the end of your résumé you should include the names of two people who are willing to provide references. A reference is a written or verbal testimony about you by someone (the referee) who knows you well or for whom you have worked. At least one referee should be a past employer who can attest to your work ethic and professional performance. The second referee could be from a non-employer (such as your sporting coach or former teacher/principal) who can vouch for your character and personality. Make sure that you ask your referees for permission before listing them on your résumé.

## 25.6.2 Show me

**FIGURE 2** contains the résumé of a Year 11 student who is applying for a casual position at a veterinary clinic. Consider how this student uses the components we have just discussed.

**FIGURE 2** Résumé of Chris Fernandez

## Résumé of Chris Fernandez

### *Contact details*

Email: chris.fernandez@jacarandamail.com
Mobile: 0400 000 000

### *Career overview*

Current Year 11 student seeking career opportunities in veterinary sciences. Highly motivated and passionate individual with demonstrated experience working in high-pressure working environments. Dedicated to the health and wellbeing of animals and to the emotional welfare of their owners and families. Strong communication skills and the ability to learn quickly and effectively.

### *Key skills and personal attributes*

- Customer service
- Relevant scientific background
- Caring and enthusiastic personality
- Proficiency in Microsoft Office Suite
- Verbal and written communication skills
- Occupational health and safety procedures
- Point-of-sale experience
- Proficiency in Macintosh operating environments

### *Employment history*

McDonald's Restaurant (2018–present)

- Customer service: Provided customer service at register. Responded to all customer enquiries, providing support and guidance as required.
- Cash management: Ensured accurate management of all cash and electronic sales.
- Stock control: Conducted regular and thorough stocktake of inventory.

*Achievements*

- Employee of the Month, November 2018 and April 2019

### *Education*

Heartback Secondary College
Years 7 to 11 (current)

### *Current subjects*

Biology, Chemistry, Physics, English and Geography

*Achievements*

House Captain (2019); Debating Captain (2018–19); Student Environmental Group Coordinator (2017–18)

### *Volunteer placements*

Green Valley Animal Shelter (2018–present)

- Customer service: Responded to incoming calls and customer inquiries. Liaison between customers and veterinary clinics.
- Practical duties: Cleaning of pens; involvement with welfare of animals.

### *Referees*

Peter Parker
Franchise Manager
McDonald's Green Valley
Phone 01 9555 5555

April O'Neill
Manager
Green Valley Animal Shelter
Phone: 01 9555 5554

## Resources

**Weblink** How to write a résumé

## 25.6.3 Let me do it

Complete the following activity to practise your skills.

### 25.6 ACTIVITY

Using the example in **FIGURE 2** as a guide, create your own résumé. Make sure you follow the guidelines as to what to include and what to omit from your résumé. Use the following checklist to make sure you've included all essential elements:

- contact details
- opening statement/career overview
- key skills and personal attributes
- employment history
- education
- referees.

If you are happy with your final product, why not print off some copies and deliver them to businesses in your area at which you might like to work? Good luck!

# 25.7 Thinking Big research project: Workplace evolution presentation

## Scenario

Technological advances, online shopping, the introduction of parental leave and carer's leave for employees, the growth of part-time and casual work, and 24-hour shopping have all changed the way we work. How will the workplace continue to evolve, and what will the future bring?

## Task

You will choose an industry to investigate, and present a report on how jobs within that industry have changed over time and how they might change in the future.

The task is in two parts:

1. Use the case of supermarkets as an example of change over time. Conduct online research and/or interview adults you know, of different ages, about the way supermarkets operated in the 1960s and beyond. What has changed? What has stayed the same?
2. Select another job/field/industry that has undergone change in the past 50 years. Conduct online research and/or interview adults you know to learn about the industry. (Interviewing someone who has worked in your chosen industry would be particularly useful.) Outline the changes that have occurred and predict future changes that might be seen in this field.

## Process

- Open the ProjectsPLUS application in the Resources for this topic. Click on the **Start new project** button to enter the project due date and set up your project group if you wish. You may work individually or in pairs, depending on your teacher's preference. Save your settings and the project will be launched.
- Navigate to the **Research forum**, where you will find starter topics loaded to guide your research. You can add further topics to the Research forum if you wish. When you have completed your research, you can print out the **Research report** in the Research forum to easily view all the information you have gathered.
- In the **Media centre** you will find an assessment rubric to guide your work and some weblinks that will provide a starting point for your research.
- Conduct your online research and/or interviews to learn about supermarkets in the past. Find images or draw diagrams to add to your report.
- Select a second job/area/industry to research. Conduct your research and/or interviews. Some ideas include:
  - banking — ATMs, payWave, etc.
  - construction — pre-fabricated housing, 'kit' homes
  - accounting — ICT, cloud technology.
- Create your report or presentation. Remember to include images and/or diagrams to add interest.
- Check your report thoroughly to ensure you have used correct spelling and grammar, and that you have completed all elements listed in the **Task** section. Once you are happy with your work, submit your report to your teacher for assessment.

### on Resources

**ProjectsPLUS** Thinking Big research project: Workplace evolution presentation (pro-0203)

# 25.8 Review

## 25.8.1 Key knowledge summary

### 25.2 Australian workplace participants

- Participants in the Australian workplace include employers and their employees, governments and independent organisations such as trade unions.
- People can be employed on a casual, seasonal, part-time or full-time basis.
- Employers have a range of responsibilities in relation to their employees and the workplace environment.
- A number of government organisations, such as the Fair Work Commission, hold employers to their responsibilities.
- Trade unions represent workers in a common industry in their quest for better pay, safer working conditions and increased job security.
- Governments set and enforce employment standards, and create and sustain employment through various infrastructure projects and training programs.

### 25.3 Changing roles of employees

- Modern workplaces are dynamic and ever-changing environments.
- Technological developments facilitate and encourage the fluidity of modern workplaces.
- Technology allows employees to work from multiple locations and with more flexible working conditions, but it also means they may be expected to be more readily contactable and responsive at all hours of the day.
- An employee's primary objective is to help their employer's business succeed, but their specific duties are outlined in their position description and/or employment contract.
- The global economy has created increased competition, which can place businesses at risk and lead to staff retrenchments.
- Rising job insecurity can lead to employees feeling increasingly pressured to work harder and longer to provide their worth to employers.
- An employee who develops their own ideas for the financial benefit of their employer is known as an intrapreneur.
- The global workplace presents opportunities for employees to work in other locations around the globe, experiencing new places and cultures.

### 25.4 Employer responsibilities

- Employers are obliged to provide safe working conditions.
- Workplace Health and Safety law covers the various responsibilities of employers.
- The National Employment Standards (NES) outline ten fundamental entitlements of all Australian workers.
- Employers have taxation and superannuation responsibilities in respect of all employees.

### 25.5 Government responsibilities

- Various acts of Parliament (at both state and federal level) protect workers and facilitate effective workplaces.
- By stimulating economic growth, the government helps maintain employment levels.
- Government must also develop and implement policies to ensure ongoing workforce capacity to power the economy.
- Government also plays a major role in the negotiation of workplace agreements with various professions.

## 25.8.2 Reflection

Complete the following to reflect on your learning.

### 25.8 ACTIVITIES

Revisit the inquiry question posed in the Overview:

**Employers provide jobs and employees do the work. Is that all there is to the Australian workplace?**

1. Now that you have completed this topic, what is your view on the question? Discuss with a partner. Has your learning in this topic changed your view? If so, how?
2. Write a paragraph in response to the inquiry question, outlining your views.

### on Resources

**eWorkbook** Reflection (doc-31744)
Crossword (doc-31988)

**Interactivity** Participants in the changing work environment crossword (int-7659)

### KEY TERMS

**chief executive officer (CEO)** the most senior position in an organisation
**competitive advantage** occurs when a business is able to produce and sell goods or services better than its competitors
**duty of care** the legal obligation of employers for the health and wellbeing of their employees
**gross domestic product** (GDP) the value of all the goods and services produced within a country in a given period of time (usually a year). It is often used as an indicator of a country's wealth.
**industrial action** official protest activities (such as strikes and go-slows) undertaken by members of trade unions, usually with the aim of improving or protecting the working conditions of their members
**intrapreneur** an employee of a business who demonstrates the qualities and skills of an entrepreneur
**multinational company** an organisation with interests and offices in several countries
**position description** a document that explains the duties and responsibilities of an employee
**retrench** to remove a person from their job, usually because of the employer's cost cutting or difficult economic circumstances
**superannuation** a retirement fund mandated by the government

# GLOSSARY

**abdicate** to step down from the throne or from other high office
**abolition** the end of legal acceptance of slavery
**accused** the person charged with or on trial for a crime
**active travel** making journeys via physically active means such as cycling or walking
**adversary system** a system of trial in which the two sides argue their case and the judge or magistrate acts as an independent umpire
**affiliated unions** unions linked with other unions through a wider umbrella organisation
**age pension** regular payments made to elderly people to support them in retirement
**agent** a person acting for another in a business transaction
**agribusiness** business set up to support, process and distribute agricultural products
**agroforestry** the use of trees and shrubs on farms for profit or conservation; the management of trees for forest products
**animal husbandry** breeding and caring for livestock, usually in a farm environment
**annex** to take possession of a territory
**anthropogenic** resulting from human activity (man-made)
**appeal** the request to a higher court to review a decision made by a lower court
**appellant** the person appealing a court decision
**appellate jurisdiction** the power of a court to review a lower court's decision
**aquaculture** the farming of aquatic plants and aquatic animals such as fish, crustaceans and molluscs
**aquaponics** a sustainable food production system in which waste produced by fish or other aquatic animals supplies the nutrients for plants, which in turn purify the water
**aquifer** a body of permeable rock below the Earth's surface, which contains water, known as groundwater
**arable** describes land that can be used for growing crops
**arbitration** the process of resolving a dispute by an independent third party, such as a court or tribunal, where the decision is legally binding on the parties
**artefact** an object made or changed by humans
**artillery** large-calibre guns
**Australian Council of Trade Unions (ACTU)** the peak union organisation in Australia
**Australian Electoral Commission** an independent body that organises and runs elections in Australia
**bail** an agreement to release an accused person into the community while awaiting trial
**balance of trade** the difference between the value of a country's exports and the value of its imports over a specific period of time
**bankruptcy** a legal process that declares that a person cannot pay their debts and allows them to make a fresh start
**barter** to trade goods in return for other goods or services rather than money
**bell pit** a traditional form of coalmining in which a shaft is dug down to a seam of coal and then excavated outwards, with the coal raised to the surface using a winch and buckets
**biased** one-sided or prejudiced, seeing something from just one point of view
**biased account** narrative or description in which a writer presents only one side of an issue in an attempt to convince the reader
**Bill** a proposal to change the law by Act of Parliament
**biodiversity** the variety of plant and animal life within an area
**biofuel** fuel that comes from renewable sources
**biophysical environment** the natural environment, made up of the Earth's four spheres — the atmosphere, biosphere, lithosphere and hydrosphere
**Black Death** a deadly disease that ravaged Europe, killing between a quarter and a half of the population in the second half of the fourteenth century. It continued to occur periodically over the next 300 years.

**black market** any illegal trade in officially controlled or scarce goods
**blast furnace** a type of furnace into which air is forced to raise the temperature sufficiently to carry out thesmelting of iron ore
**blockade** sealing off an area so that nothing can get in or out
**bookkeeping** keeping records of financial accounts
**bourgeoisie** capitalist middle classes; the owners of the means of production, distribution and exchange —factories, shipping, banks and other businesses
**bribery** the act of giving money, a gift or any other item of value to a recipient in the expectation that it will alter the recipient's behaviour
**British Dominion** a self-governing territory belonging to the British Empire
**budget** an itemised estimate of income and expenses for a given period
**canal housing estate** a housing estate built upon a system of waterways, often as the result of draining wetland areas. All properties have water access.
**capital growth** an increase in the value of an asset
**carding** the process of untangling and and straightening raw wool or cotton fibres
**cash crop** a crop grown to be sold so that a profit can be made, as opposed to a subsistence crop, which is for the farmer's own consumption
**cause and effect** the concept that every historical event will have a cause, and every event or action is likely tobe the cause of subsequent effects or consequences
**censorship** restriction or control of what people can say, hear, see or read
**cesspits** pits into which householders with no toilets could empty their waste, which was later collected by workers known as nightmen
**charter** a written grant from a sovereign, providing certain rights or privileges to the holder
**chief executive officer (CEO)** the most senior position in an organisation
**cholera** a bacterial disease of the intestines, causing vomiting and diarrhoea. It is transmitted throughcontaminated water and can lead to death through dehydration.
**chronology** a record of past events in order of time, from ancient Greek *chronos* (time) and *logos* (to work out)
**clear-felling** the removal of all trees in an area
**coalition** an alliance between two or more political parties, formed to improve their chances of winning an election and forming government
**coercion** the practice of forcing someone to act in an involuntary manner by using intimidation or threats, or some other form of pressure
**coke** a type of fuel produced by using heat to remove impurities such as coal gas and tar from coal
**colony** an area of land settled by people from another country. This can involve military conquest if the originalinhabitants resist that settlement.
**common good** something that is in the interest or to the benefit of everyone
**common law** judge-made law, or law developed by judges through the decisions in actual cases brought before the courts
**commute** to change a penalty to one less severe
**competitive advantage** occurs when a business is able to produce and sell goods or services better than its competitors
**conciliation** a process of settling disputes in which a neutral third party (a conciliator) assists the parties to reach agreement. It differs from mediation in that the conciliator can suggest solutions to the parties.
**concubine** a woman who lives with a man she is not married to and has a lower social rank than his wife
**connectivity** the ability to access the internet
**conscription** compulsory enlistment of citizens to serve in the armed forces
**consent order** a written agreement reached by the parties to a dispute and approved by the court
**contestability** when particular interpretations of the past are open to debate
**continuity and change** the concept that while many changes occur over time, some things remain constant

**convict** a person imprisoned for a crime
**coral polyp** a tube-shaped marine animal that lives in a colony and produces a stony skeleton. Polyps are the living part of a coral reef.
**cottage industry** small-scale manufacturing in which raw materials are processed in workers' homes
**court delay** a setback in the legal system that prevents justice from occurring in a timely fashion
**Crimean War** war fought between Britain and its allies and Russia, 1853–56
**crop rotation** a procedure that involves the rotation of crops, so that no bed or plot sees the same crop in successive seasons
**Daoist** ancient Chinese philosophical/religious tradition emphasising simple living in harmony and balance with the universe
**deadlock** a stalemate in which neither side can gain an advantage
**debt** a financial obligation to repay money owed
**defendant** a person against whom a legal action has been brought
**deforestation** clearing forests to make way for housing or agricultural development
**degradation** deterioration in the quality of land and water resources caused by excessive exploitation
**deport** to forcibly remove someone from a country
**desertification** the transformation of arable land into desert, which can result from climate change or from human practices such as deforestation and overgrazing
**despot** a ruler with almost unlimited power who uses it unfairly or cruelly
**developed** describes countries with a highly developed industrial sector, a high standard of living, and a large proportion of people living in urban areas
**developing countries** nations with a low living standard, undeveloped industrial base and low human development index relative to other countries
**digger** an Australian or New Zealand soldier, particularly used with reference to those who served in World War I
**digital divide** a type of inequality between groups in their access to and knowledge of information and communication technology
**disability** a functional limitation in an individual, caused by physical, mental or sensory impairment
**discretionary item** an item that is bought out of choice, according to one's judgement
**discrimination** the treatment of an individual in an unfavourable manner based on an actual or perceived personal characteristic protected by the law
**dividends** company profits paid to shareholders, in cash or in additional shares, in proportion to the number of shares they already own
**Duma** the Russian parliament
**dummies** people, secretly acting for squatters, who selected land and later sold it to the squatters
**duty of care** a responsibility to ensure the safety of any persons who we can reasonably foresee might be affected by our actions; (workplace) the legal obligation of employers for the health and wellbeing of their employees
**e-waste** any old electrical equipment such as computers, toasters, mobile phones and iPods that no longer works or is no longer required
**economic entity** any person or organisation engaged in economic activity. It could be an individual, a household, a business, a government or a country.
**ecotourism** tourism that interprets the natural and cultural environment for visitors, and manages the environment in a way that is ecologically sustainable
**egalitarian** believing in equality
**egalitarianism** equality of all people
**eligible voters** Australian citizens who are over 18 years old and are on the electoral roll, which is an official register of voters
**empathy** the ability to understand and share another person's thoughts and feelings
**empire** a number of different countries or colonies controlled by the government of one country

**enclosure** consolidation of open fields and common land into single farms owned by one farmer, and fenced off from neighbouring farms
**endemic** describes species that occur naturally in only one region
**enlist** to join voluntarily, usually the military
**enterprising behaviours** behaviours which an enterprising individual will possess, including being creative, inquisitive, innovative, imaginative and good at problem solving
**entrepreneur** a person who organises a business venture, and assumes the financial risks associated with it, usually in the hope of making a profit
**entrepreneurship** the act of being an entrepreneur
**environmental refugees** people who are forced to flee their home region due to environmental changes (such as drought, desertification, sea-level rise or monsoons) that affect their wellbeing or livelihood
**erosion** the wearing down of rocks and soils on the Earth's surface by the action of water, ice, wind, waves, glaciers and other processes
**ethnicity** cultural factors such as nationality, culture, ancestry, language and beliefs
**evidence** information that indicates whether something has really happened
**exports** goods and services sold by local businesses to overseas consumers
**extensive farm** farm that extends over a large area and requires only small inputs of labour, capital, fertiliser and pesticides
**extremism** extreme political or religious views or extreme actions taken on the basis of those views
**factory farming** the raising of livestock in confinement, in large numbers, for profit
**fallow** land left unplanted
**famine** a severe shortage of food, leading to starvation, usually due to crop failures over a sustained periodof time
**federation** movement of colonies to form a nation
**feint** a dummy attack meant to deceive the enemy into moving troops from where the main attack will take place
**financial intermediary** any organisation that takes deposits from those with surplus funds and makes those funds available to borrowers
**financial risk** the chance that a financial decision may result in a loss or inadequate return
**formal vote** a ballot paper that has been filled out correctly
**fraud** a criminal offence where one person deliberately tricks another to gain personal advantage
**genetically modified** describes seeds, crops or foods whose DNA has been altered by genetic engineering techniques
**goldsmith** a craftsman who works with gold and other precious metals
**graffiti** the marking of another person's property without permission; it can include tags, stencils and murals
**grazing** pasture to feed cows and sheep
**Green Revolution** a significant increase in agricultural productivity resulting from the introduction of high-yield varieties of grains, the use of pesticides and improved management practices
**greenhouse gases** any of the gases that absorb solar radiation and are responsible for the greenhouse effect. These include water vapour, carbon dioxide, methane, nitrous oxide and various fluorinated gases.
**gross domestic product** (GDP) the value of all the goods and services produced within a country in a given period of time (usually a year). It is often used as an indicator of a country's wealth.
**gross wage** a person's wage or salary before it is taxed by the government
**groundwater** water that exists in pores and spaces in the Earth's rock layers, usually from rainfall slowly filtering through over a long period of time
**gunboat diplomacy** a coercive form of diplomacy in which a country threatens the use of military force toachieve its objectives
**halal** describes food that is prepared under Islamic dietary guidelines
**half-caste** of mixed race (a term widely used in the mid 1900s, but now considered offensive)

**hard sport tourism** tourism in which someone travels to either actively participate in or watch a competitive sport as the main reason for their travel
**Hindenburg line** a heavily fortified (German) position on the Western Front
**horticulture** the practice of growing fruit and vegetables
**hulk** the body of an old ship that serves as a prison rather than a sailing vessel
**human development** measures such as life expectancy, education and economic wellbeing that provide an overall indication of a place's level of development and the standard of living of its inhabitants
**human rights** the basic rights that are considered to be the entitlement of all humans
**humanitarian principles** the principles governing our response to those in need, with the main aim being to save lives and alleviate suffering
**humus** an organic substance in the soil that is formed by the decomposition of leaves and other plant and animal material
**hybrid** plant or animal bred from two or more different species, sub-species, breeds or varieties, usually to attain the best features of the different stocks
**hydroponic** describes a method of growing plants using mineral nutrients, in water, without soil
**hypothesis** (plural: hypotheses) a theory or possible explanation
**impartial observations** comments that recognise all sides and opinions relating to an issue or event, leaving it tothe reader to form his or her own judgment
**imperialism** the policy of an empire by which it gains land by conquest and rules other countries, or dominates them as colonies
**imports** goods and services purchased by local consumers from overseas businesses
**impound** to confiscate
**income diversity** income that comes from many sources
**incontrovertible** certain, undeniable
**indicator** something that provides a pointer, especially to a trend
**indoor relief** the provision of assistance to the inmates of a workhouse
**industrial action** official protest activities (such as strikes and go-slows) undertaken by members of trade unions, usually with the aim of improving or protecting the working conditions of their members
**industrial relations** refers to the laws and processes that govern the relationships between employers and employees
**industrialisation** the process by which a country transforms itself from mainly agricultural production to the manufacturing of goods in factories and similar premises
**infant mortality rate** a means of measuring the percentage of babies who fail to survive their first birthday
**inflation** a general rise in prices across all sectors of the economy
**informal vote** a ballot paper that has not been filled out correctly and therefore will not be counted
**infrastructure** the facilities, services and installations needed for a society to function, such as transportation and communications systems, water pipes and power lines
**innate** inborn, an inherent characteristic, rather than being developed through experience
**innovation** new and original improvement to something, such as a piece of technology or a variety of plant or seed
**insurance** an arrangement where an insurer promises to compensate the insured person for specific potential losses in the future in exchange for a periodic payment called a premium
**intensive farm** farm that requires a lot of inputs, such as labour, capital, fertiliser and pesticides
**intercontinental** involving or occurring between two or more continents
**interest** an amount that is paid regularly for the use of borrowed money, usually expressed as an annual percentage of the sum of money lent (the interest rate)
**intrapreneur** an employee of a business who demonstrates the qualities and skills of an entrepreneur
**investment** the use of money to purchase equipment or premises for the establishment of a new business or the expansion of an existing business
**irrigation** the supply of water by artificial means to agricultural areas

**Islamic** relating to the Muslim religion, Islam
***terra nullius*** ('land belonging to no-one') in Australia, the legal idea that since no-one was 'using' the land when the first Europeans arrived, it could be claimed by the British Crown
**jatropha** any plant of the genus *Jatropha*, but especially *Jatropha curcas*, which is used as a biofuel
**judge** a court official who presides over cases in courts higher than a magistrates court or Local Court
**judiciary** the collective name given to the judges who preside over law courts
**junk** Chinese sailing ship
**jurisdiction** the power or authority of a court to hear specific types of disputes and cases
**jury** in criminal cases, the 12 people who are randomly selected to decide the guilt or innocence of an accused based on the evidence presented in court
**kenaf** a plant in the hibiscus family that has long fibres; useful for making paper, rope and coarse cloth
**kinship** a multi-faceted social system that prescribes Indigenous peoples' responsibilities to others and the land; (general) relationships between members of an extended family
**kowtow** to kneel and touch the forehead to the ground in deep respect for an emperor
**labour** the human skills and effort required to produce goods and services
**land degradation** deterioration in the quality of land resources caused by excessive exploitation
**latitude** the angular distance north or south from the equator of a point on the Earth's surface
**leaching** the process by which water runs through soil, dissolving minerals and carrying them into the subsoil
**League of Nations** the world body set up at the Paris Peace Conference to solve disputes between nations peacefully
**leave to appeal** permission from the court to appeal a decision
**leeward** describes the area behind a mountain range, away from the moist prevailing winds
**legation** a foreign country's diplomatic office, similar to an embassy
**logging** large-scale cutting down, processing and removal of trees from an area
**Luddites** a group of protesters who expressed their opposition to industrialisation by smashing factory machines
**magistrate** a court official who hears cases in the lowest court in the legal system
**malefactor** a person who does bad or illegal things
**mallee** vegetation areas characterised by small, multi-trunked eucalypts found in the semi-arid areas of southern Australia
**malnourished** describes someone who is not getting the right amount of the vitamins, minerals and other nutrients to maintain healthy tissues and organ function
**mandate of heaven** the idea that heaven blessed the rule of a just emperor but could rescind that blessing if theemperor ruled unjustly
**manslaughter** the accidental or unintentional killing of one person by another person
**Marco Polo** merchant from Venice who travelled through Asia in the thirteenth century; generally credited with introducing Europeans to China and Central Asia
**marginal land** describes agricultural land that is on the margin of cultivated zones and is at the lower limits of being arable
**maritime power** having strong naval forces
**market** any organised exchange of goods, services or resources between buyers and sellers
**Masai** an ethnic group of semi-nomadic people living in Kenya and Tanzania
**mature-aged** describes individuals aged over 55
**median age** the age that is in the middle of a population's age range, dividing a population into two numerically equal groups
**mediation** a process of settling disputes in which a neutral third party (a mediator) assists the parties to reach agreement. Mediators do not offer solutions; they help the parties to reach agreement through their own suggestions.
**minority government** a government that has fewer than half the seats in a lower house of parliament

**mobility** the ability to move or be moved freely and easily
**monoculture** the cultivation of a single crop on a farm or in a region or country
**mortgage loan** money advanced to a person for the purchase of a house or other property, where the property itself is used as security for the loan. This means the bank or other lender can take possession of the property if the borrower fails to make the regular repayments.
**mortgages** money advanced by a bank, credit union or building society to a person for the purchase of a house or other property. The property itself is used as security for the loan, allowing the lender to seize the property if the borrower fails to make the regular repayments.
**multicultural** describes a society in which the cultures and traditions of many different groups coexist and are encouraged
**multinational company** an organisation with interests and offices in several countries
**Napoleonic Wars** a series of wars between the French Empire, led by Napoleon Bonaparte, and a number of other European nations between 1803 and 1815
**national park** a park or reserve set aside for conservation purposes
**national security** the protection of a nation's citizens, natural resources, economy, money, environment, military, government and energy
**nationalism** feeling of loyalty to a nation
**naturalist** a term once used to describe a scientist who studies plants and animals. Today such a person wouldbe called a biologist.
**negligence** failure to take reasonable care when a person or organisation is legally required to do so
**new moon** the phase of the moon when it is closest to the sun and is not normally visible
**New Spain** Spanish territories in the New World, including much of North America
**no man's land** unoccupied ground between the front lines of opposing armies
**non-government organisation** (NGO) a group or business that is organised to serve a particular social purpose at local, national or international level, and operates independently of government
**not-for-profit organisation** a group or business that puts any profit towards its social purpose rather than returning profits to owners
**offshore** to relocate part of a company's processes or services overseas in order to decrease costs
**old-growth forests** natural forests that have developed over a long period of time, generally at least 120 years, and have had minimal unnatural disturbance such as logging or clearing
**opportunity cost** what you have to give up if you choose to do A rather than B; the value of the next best alternative that is given up whenever a choice is made
**organic matter** decomposing remains of plant or animal matter
**original jurisdiction** the power of a court to hear and decide a case for the first time
**outdoor relief** the provision of assistance to the poor while allowing them to remain in their own homes
**pacifist** person who holds a religious or other conscientious belief that it is immoral to take part in war
**pandemic** disease epidemic affecting many different countries
**parish** an area of local government centred on the local church, which fulfilled some of the functions that localmunicipal councils perform in society today
**parliamentary representation** the representation of people's views and interests in parliament through elected delegates
**pastoral lease** land that is leased for the purpose of grazing sheep or cattle
**patent** a legally enforceable right to make or sell an invention, usually granted by government, to protect an inventor's idea from being copied
**pauper** a very poor person
**peacocking** buying up land around creeks and rivers to make the rest of the area useless to selectors
**penal colony** a settlement for convicts
**per capita** per person
**perception** the process by which people translate sensory input into a view of the world around them
**perspective** point of view or attitude

**picking oakum** unpicking short lengths of rope coated in tar. Oakum would be rammed between the planks onwooden ships to make them watertight.
**pig iron** the initial product resulting from the smelting of iron ore in a blast furnace
**plaintiff** a person who commences a legal action in a civil case
**plantation** an area in which trees or other large crops have been planted for commercial purposes
**pluralist** describes a society that accepts all people's right to maintain their individual cultural traditions, languages and faiths
**pneumatophores** exposed root system of mangroves, which enables them to take in air when the tide is in
**portfolio** an area of responsibility given to a minister, such as health, education or defence
**position description** a document that explains the duties and responsibilities of an employee
**potable** drinkable; safe to drink
**prairie** native grassland of North America
**precedent** a legal principle that is established by a court in resolving a dispute and is expected to be followed in later cases
**precipitation** the forms in which moisture is returned to the Earth from the sky, most commonly in the form of rain, hail, sleet and snow
**primary sources** objects and documents that were created or written in the period of time that they relate to
**private members' bills** bills that are proposed by members of the House of Representatives on their own behalf rather than on behalf of the government
**proletariat** the working class, especially industrial wage earners
**propaganda** distortion of the truth to persuade people to support an action or point of view
**prosecute** to take legal action against a person accused of a crime
**pulp** the fibrous material extracted from wood or other plant material to be used for making paper
**quota** in the Senate, refers to the share of votes required to be elected. It is calculated using the total number ofvotes cast and the number of vacancies to be filled.
**rain shadow** the dry area on the leeward side of a mountain range
**Ramsar site** a wetland of international importance, as defined by the Ramsar Convention — an intergovernmental treaty on the protection and sustainable use of wetlands
**recession** a period of decline in economic growth when GDP decreases
**recklessness** continuing on a particular course of action despite realising that doing so might result in harm to others
**referendum** ballot in which voters decide on a political question. Where there is no change to the Australian Constitution involved, this is called an advisory referendum or plebiscite.
**relative scarcity** the economic problem of having unlimited needs and wants with only limited means to satisfy them
**remanded in custody** to be held by the authorities until a case is heard in court
**remedial action** action taken to restore a site to its previous or natural condition, or to an equivalent condition
**remuneration** pay or reward such as wages
**repatriated** returned to home country
**repeal** withdrawal of a law or set of laws by Parliament
**repossessed** a legal process by which an item can be reclaimed to cover the cost of a debt
**republicanism** the belief that a country should be a republic (where the country has an elected or appointed head of state), not a monarchy (where the head of state is a king or queen)
**resources** the land, labour, capital and enterprise used to produce goods and services that satisfy needs and wants. Production usually requires a combination of these resources.
**retrench** to remove a person from their job, usually because of the employer's cost cutting or difficult economic circumstances
**rickets** a softening of the bones, leading to deformity of the limbs, caused by a deficiency of calcium and vitamin D

**Roaring Forties** strong winds of the southern ocean that blow in an easterly direction. Called the 'Roaring Forties' because they are found around the latitude of 40 degrees south of the equator.
**royal commission** a special public inquiry set up by government to investigate a particular issue and to make recommendations for changes in the law
**rural population** people living in the countryside, rather than in towns or cities
**salinity** the presence of salt on the surface of the land, in soil or rocks, or dissolved in rivers and groundwater
**scrutineer** a representative of a parliamentary candidate who attends the counting of votes to ensure the count is fair
**scurvy** a disease caused by poor diet, especially a deficiency of vitamin C
**secondary sources** reconstructions of the past written or created after the period that they relate to
**security of tenure** the constitutional guarantee that an office holder, such as a judge, cannot be removed from office except under exceptional circumstances
**separation of powers** the division of government into the executive, the legislature (parliament) and the judiciary with the aim of providing a system of checks and balances that prevents the excessive concentration of power in one group
**sharemarket** a market for trading shares in listed companies; also called a stockmarket
**shares** units of ownership in a company that entitle the possessor of the shares (the shareholder) to a proportion of any profits that the company makes
**shilling** a unit of Australian currency until decimal currency was introduced. There were 12 pence to a shilling and 20 shillings to a pound.
**significance** the importance assigned to particular aspects of the past; for example, events, developments, movements and historical sites
**Sinn Fein** organisation formed in Ireland in 1905 to campaign for Irish independence from Britain. The name wasalso used by the pro-independence party after the failed 1916 uprising.
**Slavic** belonging to the Slavs (a language group including Russians, Serbs and other Central and Eastern European peoples)
**smuggling** importing or exporting goods secretly or illegally
**social justice** a principle applied so that a society is based on equality, the appreciation of the value of human rights and the recognition of the dignity of every human being
**socialism** a political system in which the government controls the economy to ensure greater equality
**soft sport tourism** tourism in which someone participates in recreational and leisure activities, such as skiing, fishing and hiking as part of their travel
**Soviet** a council representing workers, peasants, soldiers and sailors
**spinning** the twisting of carded fibres into lengths of continuous thread or yarn
**spirit possession** an alleged supernatural event in which a spirit or god takes control of the human body, creating changes in behaviour
**stalemate** (from chess) a situation in which neither side can gain a winning advantage
**standard of living** how well off a country or community is, often measured by the level of wealth per headof population
**stereotype** widely held but oversimplified idea of a type of person or thing
**stockade** a fortified enclosure
**street art** artistic work done with permission from both the person who owns the property on which the work isbeing done and the local council
**strike** attempt by employees to put pressure on their employer by refusing to work
**subordinate** having a lower or less important position
**subsistence farming** farming that provides only enough to satisfy the basic needs of the farmer or community
**suffrage** or **franchise** the right to vote
**superannuation** a retirement fund mandated by the government

**superannuation fund** an account that holds and invests superannuation contributions made by employees, their employers or the government, for eventual distribution to help fund an individual's retirement
**surety** when bail is granted, a sum of money deposited with a court as a guarantee that an accused will abide by the conditions of bail and will appear in court when required to do so
**sustainable** describes the use by people of the Earth's environmental resources at a rate such that the capacity for renewal is ensured
**sweated labour** workers exploited by being made to work for long hours and with low pay
**tariff** a duty charged on imports
**telegraph** device for sending messages over long distances
**tenuous** weak, thin
**timeline** a diagrammatic tool representing a period of time, on which events are placed in chronological order
**totem** an animal, plant, landscape feature or weather pattern that identifies an individual's connection to the land
**trade barrier** government-imposed restriction (in the form of tariffs, quotas and subsidies) on the free international exchange of goods or services
**trading partner** a participant, organisation or government body in a continuing trade relationship
**trading post** a store or settlement established by a foreign trader or trading company to obtain local products in exchange for supplies, clothing, other goods or cash
**transfer pricing** when one subsidiary of a transnational corporation charges another subsidiary for providing goods or services, often resulting in profits being moved between different countries to avoid the payment of tax on those profits
**transnational corporations (TNCs)** large business organisations that have a home base in one country and operate partially or wholly owned businesses in other countries
**transportation** a sentence of banishment from England for certain crimes, to be served in an overseas colony
**treadwheel** a punishment device, also called the 'everlasting staircase', comprising a large, iron-framed, hollow cylinder with wooden steps. As the device rotated slaves were forced to keep stepping forward.
**treaty** a formal agreement between two or more independent states or nations, and usually involving a signed document
**treeline** the edge of the area in which trees are able to grow
**trench foot** a painful, swollen condition caused by feet remaining wet for too long; if gangrene set in, the feet would have to be amputated
**trial by media** creating widespread opinion regarding a person's guilt or innocence before a trial has occurred or before a verdict has been delivered
**trustee** an individual or group appointed to manage property on behalf of another person or organisation
**tucker** traditional Australian slang term for food
**tundra** the area lying beyond the treeline in polar or alpine regions
**turn-up-and-go** frequent and regular transport service such that reference to a timetable is not required; e.g. users know that a train will run every 10 minutes
**turnpike** a type of toll road
**turnpike trusts** organisations established by parliament with the power to collect tolls on particular roads, anduse the money to pay for maintenance of those roads
**typhus** a fatal disease spread through the bites of lice and fleas
**U-boats** German submarines
**ultimatum** a final set of demands or terms backed by a threat
**undernourished** describes someone who is not getting enough calories in their diet; that is, not enough to eat
**undulating** describes an area with gentle hills
**Universal Declaration of Human Rights** a declaration passed by the United Nations outlining the fundamental human rights of all people in the world

**urban agglomeration** the extended built-up area of a place, including suburbs and continuous urban area
**urban population** people living in cities or large towns
**urbanisation** the growth and spread of cities
**value adding** processing a material or product and thereby increasing its market value
**vices** immoral habits
**virtues** admirable moral qualities, goodness
**warp** the fixed vertical threads used in the weaving process
**water stress** situation that occurs when water demand exceeds the amount available or when poor quality restricts its use
**waterlogging** saturation of the soil with groundwater such that it hinders plant growth
**watertable** the surface of the groundwater, below which all pores in the soils and rock layers are saturated with water
**weft** the horizontal movable thread that is woven through the warp to create cloth
**Western-style diet** eating pattern common in developed countries, with high amounts of red meat, sugar, high-fat foods, refined grains, dairy products, high-sugar drinks and processed foods
**windward** describes the side of the mountain that faces the prevailing winds
**winter solstice** the shortest day of the year, when the sun reaches its lowest point in relation to the equator
**workhouse** an institution built to house the poor
**World Wide Web** the global resources and information exchange available to internet users through the use of the Hypertext Transfer Protocol (HTTP)
**xenophobia** extreme fear, distrust or hatred of foreigners
**yield gap** the gap between a certain crop's average yield and its maximum potential yield

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