



INTRODUCTION TO THE LIGHT MICROSCOPE --Internet Lab--

Access the Virtual Microscope at

<http://www.udel.edu/biology/ketcham/microscope/>

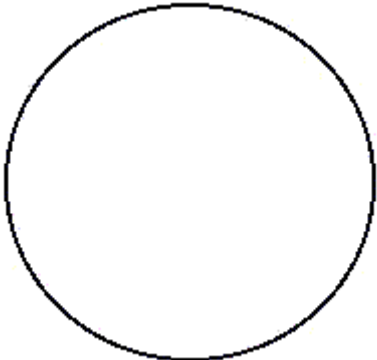
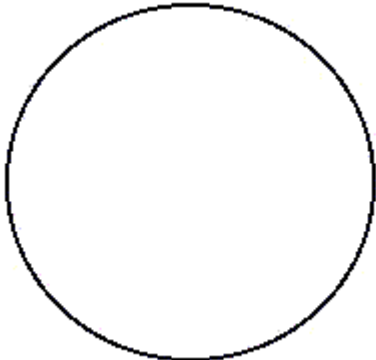
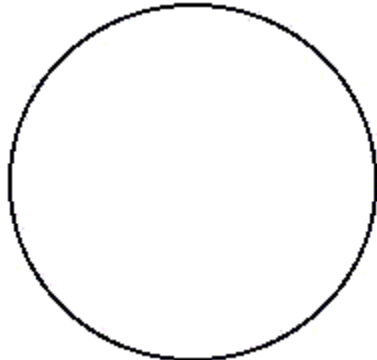
Click on the link that says "the virtual scope"

1. Familiarize yourself with the microscope, run the tutorial and examine the parts you will be working with.

a. How many objectives are on the virtual microscope?

What are the numbers listed on each of the objectives?

2. You will be looking at the slide (top right) labeled "letter e". Follow the tutorial and use the microscope adjustments to focus the "e" on each of the objectives.

Scanning (4)	Low (10)	High (100)
		

Draw the "e" exactly as it appears



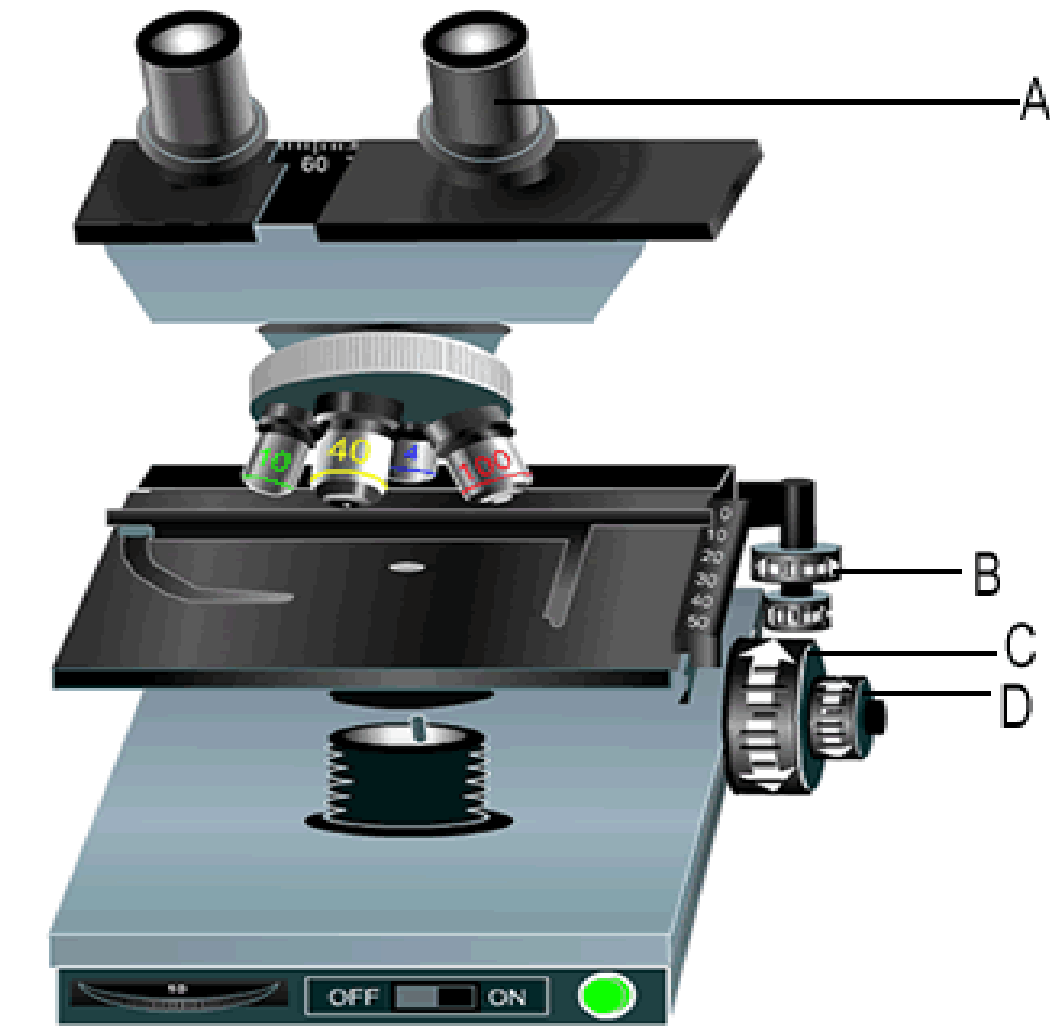
3. Which letter on the microscope points to the

OCULAR _____

COARSE ADJUSTMENT _____

FINE ADJUSTMENT _____

STAGE CENTERING _____

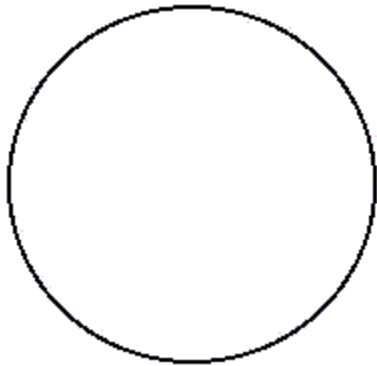




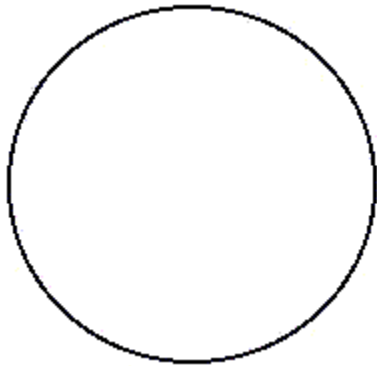
4. Choose 2 specimens from the box of "common things". Use the circles below to sketch your specimens under LOW and HIGH power. You may practice focusing with the high power, but you do not need to sketch it. Label your specimens from the name written on the slide.

Specimen 1 _____

Low Power

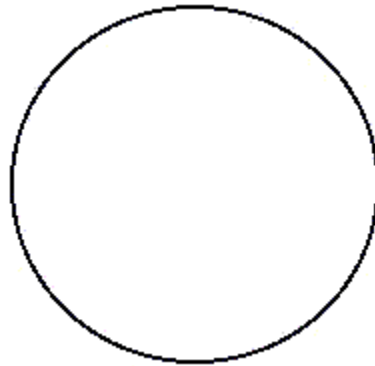


High Power

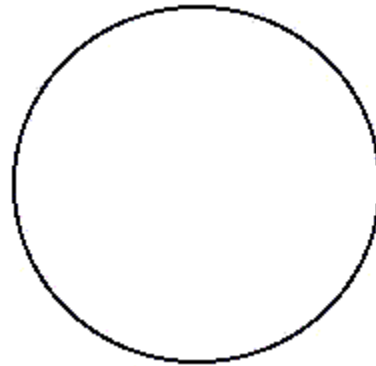


Specimen 2 _____

Low Power



High Power



5. Answer true or false to each of the statements

- _____ On high power, you should use the coarse adjustment knob.
- _____ The diaphragm determines how much light shines on the specimen.
- _____ The low power objective has a greater magnification than the scanning objective.
- _____ The fine focus knob moves the stage up and down.
- _____ Images viewed in the microscope will appear upside down.
- _____ If a slide is thick, only parts of the specimen may come into focus.
- _____ The type of microscope you are using is a scanning microscope.
- _____ For viewing, microscope slides should be placed on the objective.
- _____ In order to switch from low to high power, you must rotate the revolving nosepiece.
- _____ The total magnification of a microscope is determined by adding the ocular lens power to the objective lens power.