How to Use a Microscope



- 1. Put the slide on the microscope stage, keeping it in place with the spring-loaded slide-holder. Put the side with the writing on it facing up.
- 2. Turn on the microscope light source.
- 3. Turn the objectives until the smallest objective (4x) is in the light path (most downward position).
- 4. Using the x-y positioning knobs under the stage, move the slide so that the brown spot is directly under the center of the objective lens and in the column of light.
- 5. For a two-eyed (binocular) microscope, push the two eyepieces together or pull them apart until they match your eyes comfortably. For a one-eyed (monocular) microscope, look with one eye while leaving the other eye open or lightly shut. Switch eyes every so often to keep from getting eye strain.
- 6. Using the large focusing knob at the back of the microscope near the base, adjust the focus until the brown spot comes clearly into focus. A smaller knob behind or in the center of the large one may be used for fine focusing.
- 7. Another lens, called the condenser, sits under the microscope stage and focuses the light from the microscope lamp onto the slide. A small knob under the stage towards the back moves the condenser lens up and down. On the front of the condenser should be a lever to decrease the amount of light. Put this lever in the position that gives the least amount of light. Then turn the condenser-focusing knob until the condenser is very close to the bottom of the slide.
- 8. You may see a light polygon on a dark background through the eyepieces. If you do, focus the condenser until the edges of this polygon are as sharp as possible. Then move the lever back until the entire microscope field is evenly bright. Leave the condenser positioned this way for all objectives and all slides.
- 9. Once you have viewed a slide at 4X, rotate the objectives until the 10X objective is in place. You may have to readjust the slide focus. Examine the slide at 10X. Then rotate in the 20X objective and examine the slide again. If you have a 40X objective, rotate it is place and examine the slide once more.

