

Microscope Use and Care

SAVE THIS SHEET AND USE IT WHEN DOING MICROSCOPE LABS!

Follow these rules for using the microscope carefully. I may change rules where necessary depending on which microscope type you are using in lab.

1. Remove a microscope carefully from the cabinet using both hands. You must always carry the microscope with two hands; one supporting the base underneath, the other holding the neck of the microscope. Slide it onto a tabletop. Be careful not to trip over the electrical cord when removing it from the cabinet and when it is plugged in.
2. Clean the microscope lenses. Clean them with only lens paper to avoid scratching the lenses. A special cleaning fluid may be used. The stage and condenser may need to be cleaned also. Start with ocular lenses, and then go on to objective lenses. Work from low to high power, cleaning oil lens last.
3. Prepare your slide properly. Put slide on stage using either the stage clips or the mechanical stage clamp. Center the specimen over light source in middle of stage.
4. Always begin your viewing with the lowest power objective lens (or 10x), moving it as far from the stage as possible with the course adjustment knob. Rotate nosepiece so that the low power objective lens is facing down toward the slide on the stage. Make sure the lens "clicks" into position.
5. On low power, always focus in specimen using the course adjustment knob FIRST! You will use the course adjustment knob on the low power objective ONLY! Use the fine adjustment knob to fine-tune your focus.
6. When your specimen is focused well on low power, do NOT move anything. Simply rotate the revolving nosepiece so that the next higher power objective is in place. Always visually check for clearance space before clicking lens into position.
7. When using high power, use only the FINE ADJUSTMENT KNOB to further focus details, $\frac{1}{2}$ turn at most at a time. If you "lose" your specimen on high power, return to low power and repeat the steps again. If you use the oil lens, do not use any adjustment knobs. If it will not focus, turn fine AK about a $\frac{1}{10}$ turn at a time. PLEASE avoid smashing the objectives into the slide!!!
8. When finished viewing, return nosepiece to low power, directly to 10x, extend nosepiece away from stage, and remove slide off of the microscope. Turn light off! Put cover back on microscope and return it to cabinet. (Remember to unplug it first!) Clean slide and replace it in the proper tray.
9. If frustrated, NEVER bang, hit, or fiddle with parts of the microscope. It is not a toy or a hammer. Never loosen or over tighten any parts or pieces of the microscope. If your microscope is malfunctioning, get the teacher's attention.