

Name: \_\_\_\_\_ # \_\_\_\_\_  
Date: \_\_\_\_\_ Core: \_\_\_\_\_

## Proper Microscope Use

### SET UP--

- 1) Always carry the microscope with two hands...one on the arm and the other on the base.
- 2) Remove the cover and neatly fold. Place in a safe spot on your desk.
- 3) Clean the eyepiece with lens paper. Never use paper towel or tissue.
- 4) Turn on the light source.
- 5) Check to make sure the lowest power objective is in place. Make sure the revolving nosepiece "clicks" into place.
- 6) Lower the stage to its lowest position using the coarse adjustment.
- 7) Check to see that the diaphragm is set on the highest setting (5) or open all the way. It is best to start with all the light possible and reduce if needed.

### VIEWING YOUR SPECIMEN--

- 1) Prepare your slide and fasten it to the stage using the stage clips. Never pull up hard on the clips...they are spring loaded and will break easily.
- 2) Make sure the specimen (what you want to look at) is directly over the hole in the stage where the light comes through.
- 3) Look through the eyepiece and raise the stage using the coarse (big) adjustment until your specimen comes into focus. If it isn't perfectly clear, then raise or lower the stage ever so slightly until it is. (If you are wearing eyeglasses...you may want to remove them.)
- 4) Once the object is in focus, move the slide appropriately to view the exact part of the specimen you want. Make sure the arrow (pointer) is surrounded by what you want to see in the next highest power.
- 5) Without touching coarse or fine adjustment, switch the revolving nosepiece so the medium-power objective "clicks" into place.
- 6) Follow steps 3 and 4 again for focusing in medium power.

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7) Finally, without touching coarse or fine adjustment, turn the nosepiece so the high-power objective "clicks" into place. **NEVER touch the coarse adjustment anymore!!!!** Don't touch anything and look through your eyepiece. (These microscopes are "par-focal" which means if it is focused in medium power, then it should be focused in the highest power.)

8) If the specimen appears to be "fuzzy" or out of focus, then ever so slightly turn the fine adjustment away from you first...if that doesn't work...then turn it slightly towards your body. **NEVER make a full turn or spin the fine adjustment...this ruins the calibration and is completely unnecessary!**

\*\*It is important to keep in mind that the specimens you are looking at are three dimensional and the fine focus actually helps you to focus "through" the layers of what you are looking at. You will be frustrated at first but your skills will improve with time. Practice patience!

9) Draw what is required by the teacher or lab. Make sure you label all the necessary parts and include the name of what you are drawing and the total magnification power.

### **CLEAN-UP—**

1) Make sure the lowest power objective is clicked into place.

2) Lower the stage to the lowest setting using the coarse adjustment.

3) Remove the slide from the stage. (If you haven't done steps 1 and 2...you could damage the microscope or slide!)

4) Turn off the light source and put the cover back on.

5) Clean up the slides as the teacher directs...listen for specific directions regarding cleaning up the specimens...it is not the same for each lab.