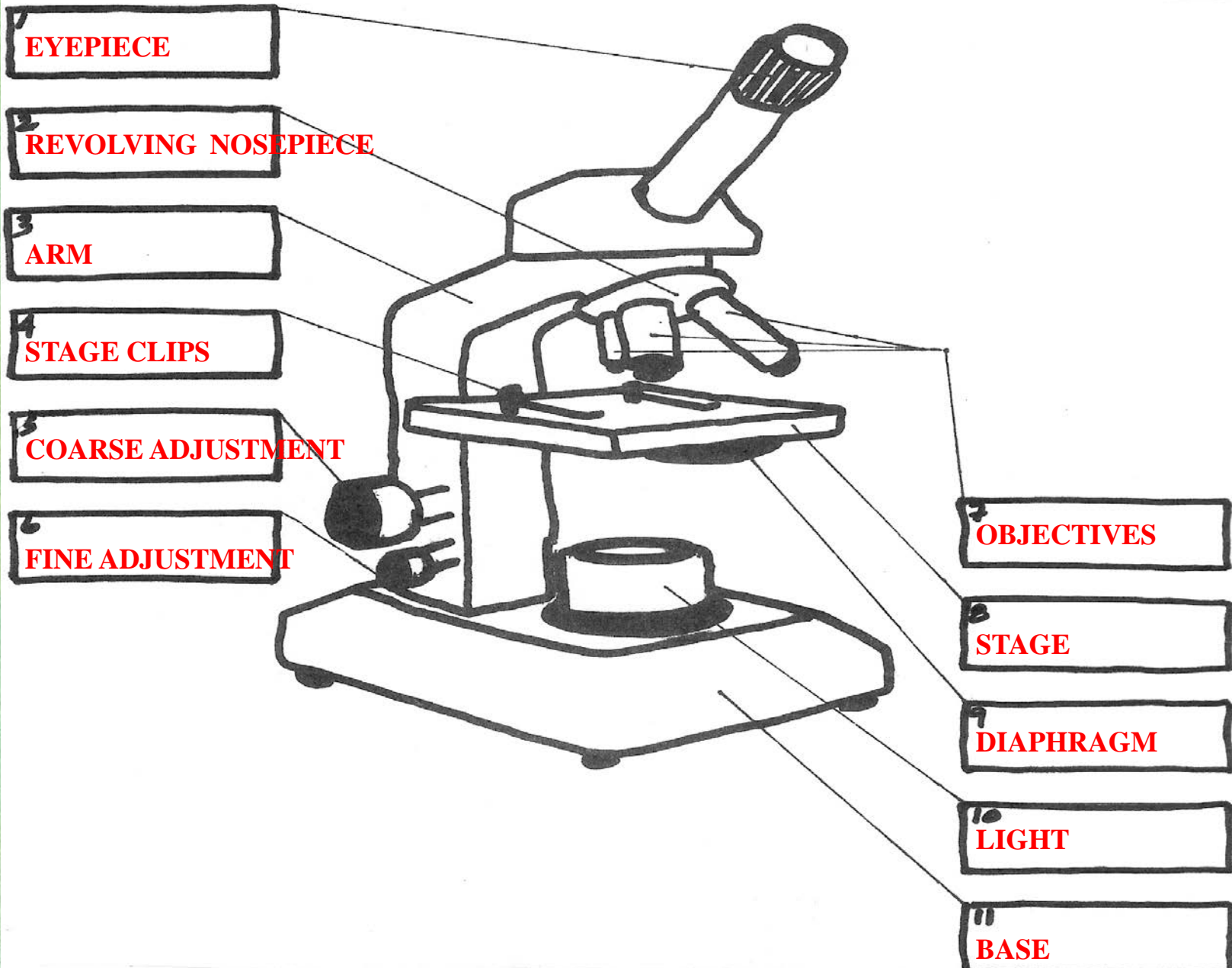


MICROSCOPES



MICROSCOPE LECTURE

PROPER HANDLING OF A MICROSCOPE

1. Always carry a microscope by the ARM and the BASE.
2. Hold the microscope CLOSE TO your body.

FOCUSING TECHNIQUE

1. Position the microscope AWAY FROM the edge of the counter.
2. Be sure that the ARM and the EYEPIECE are facing you.
3. Put LOW power into position.
4. Turn the coarse and fine adjustment knobs all the way UP, or TOWARDS you.

5. Put the slide/specimen on the STAGE.
6. Hold the slide in place using the STAGE CLIPS.
7. Look through the EYEPIECE.
8. To focus in LOW power, turn the **coarse adjustment knob** DOWN or away from you SLOWLY.
9. Put MEDIUM power into position.
10. To focus in MEDIUM power, turn the **coarse adjustment knob** DOWN or away from you SLOWLY.
11. Look from the side, and SLOWLY move HIGH POWER into position. If high power won't fit, go back to MEDIUM POWER and use it instead. IF IT WON'T FIT, IT WON'T FOCUS !
12. To focus in HIGH power, turn the **fine adjustment knob** DOWN or away from you SLOWLY.
13. DRAW your specimen, and LABEL the total magnification.

CLEAN UP AND STORAGE

1. Put LOW power in position.
2. Remove the SLIDE, WASH and DRY the SLIDE and COVER SLIP.
3. CLEAN the stage if anything is on it.
4. Gently WRAP the cord around your hand, and DRAPE it over the EYEPIECE. Do not wrap it around the LIGHT!
5. Put the DUST COVER back over the microscope.
6. Put the microscope away in the MICROSCOPE CABINET, in its proper place, matching up the NUMBERS.
7. Make sure your LAB TRAY is in placed under your lab station number, and CONTAINS all of slides, cover slips, and materials that were used for the lab.
8. Be sure that your lab station area is CLEAN and ready for the next class.

TO CALCULATE MAGNIFICATION

1. Multiply the EYEPIECE magnification by the OBJECTIVE magnification.
2. In low power, the EYEPIECE magnifies 10 X, and the OBJECTIVE magnifies 4 X, for a total of 40 X.
3. In medium power, the EYEPIECE magnifies 10 X, and the OBJECTIVE magnifies 10 X, for a total of 100 X.
4. In high power, the EYEPIECE magnifies 10 X, and the OBJECTIVE magnifies 40 X, for a total of 400 X.