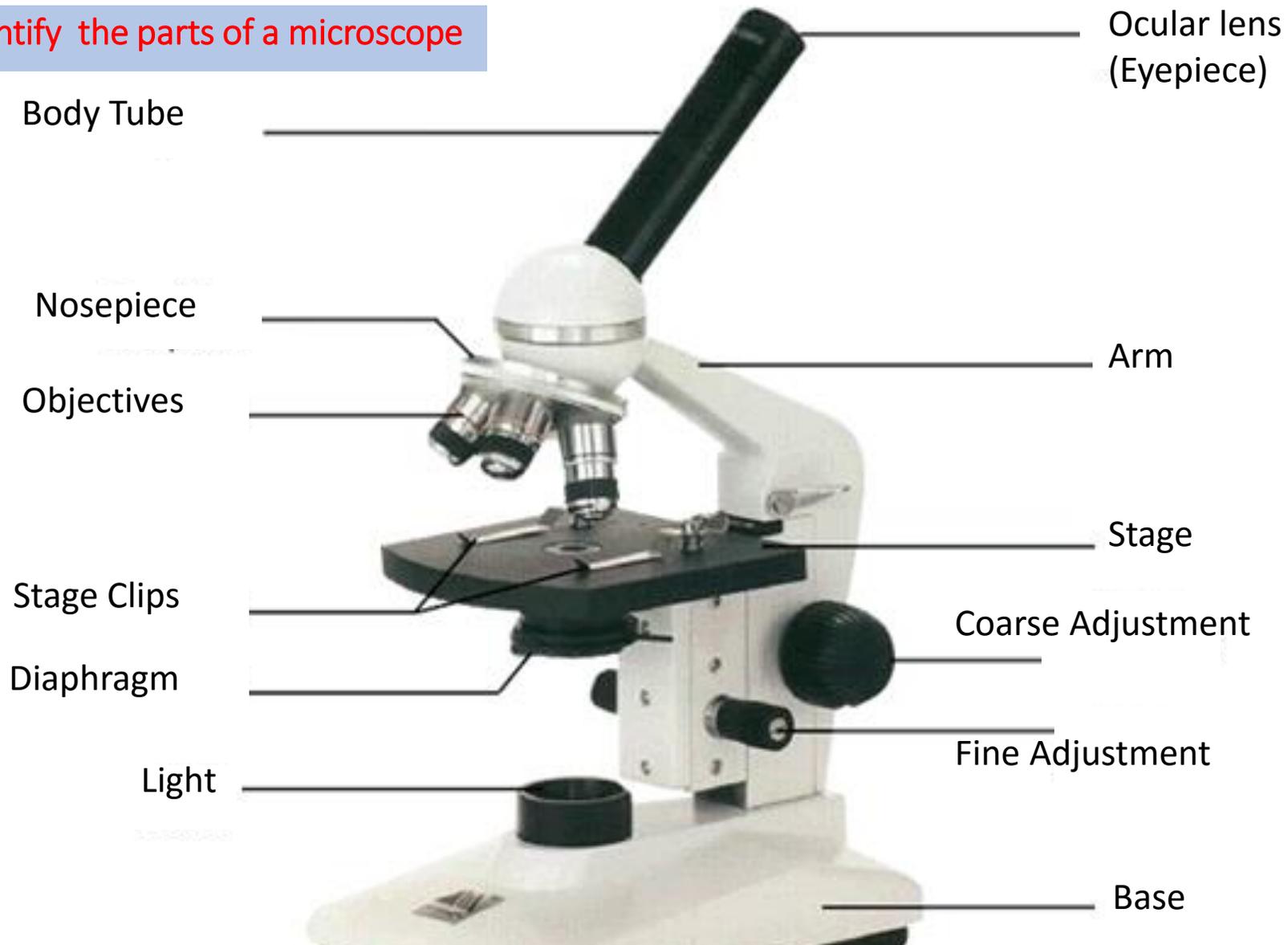


Microscopes:



Objective 1: I can identify the parts of a microscope



Always carry a microscope with one hand holding the **arm** and one hand under the **base**.

Carrying a Microscope



A



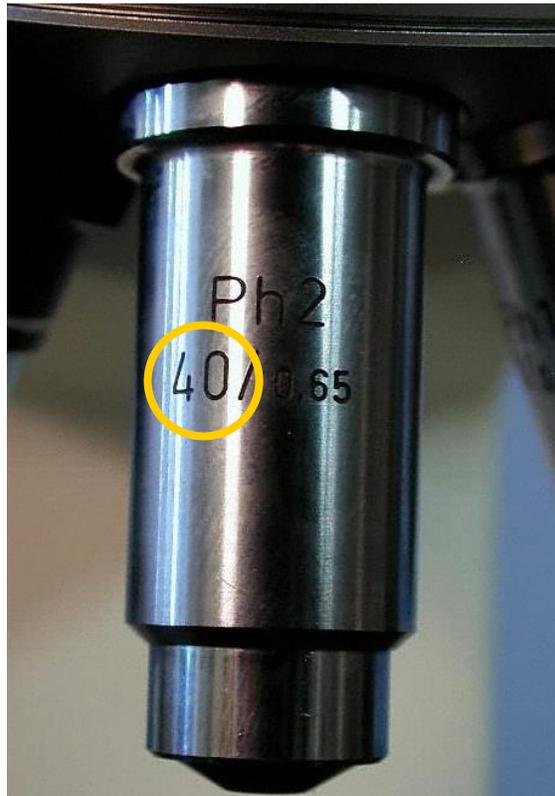
B

Objective 2: I can follow the steps to use a microscope correctly

1. Always observe using the **LOWEST POWER** objective first.
2. Focus using the **COARSE ADJUSTMENT KNOB** to bring the object into focus. Bring the object into sharp focus by using the fine adjustment knob. This is **ONLY USED ON LOW AND MED POWER**
3. Focus, and then move to a higher power objective, if needed.
4. Use only the **FINE ADJUSTMENT KNOB** when using the **HIGHEST (longest) POWER OBJECTIVE**.
5. Keep both eyes open to reduce eyestrain.
6. Determine total magnification of the object by multiplying the power of the ocular (10x) the power by the power of the objective.

Objective 3: I can calculate the total power of each objective lens on the microscope

To calculate the power of magnification, multiply the power of the ocular lens by the power of the objective.



What are the powers of magnification for each of the objectives we have on our microscopes?

Total Magnification of Each power

LOW

Eyepiece 10x x low power 4x =

MED

Eyepiece 10x x med power 10x =

HIGH

Eyepiece 10x x high power 40x =

Comparing Powers of Magnification



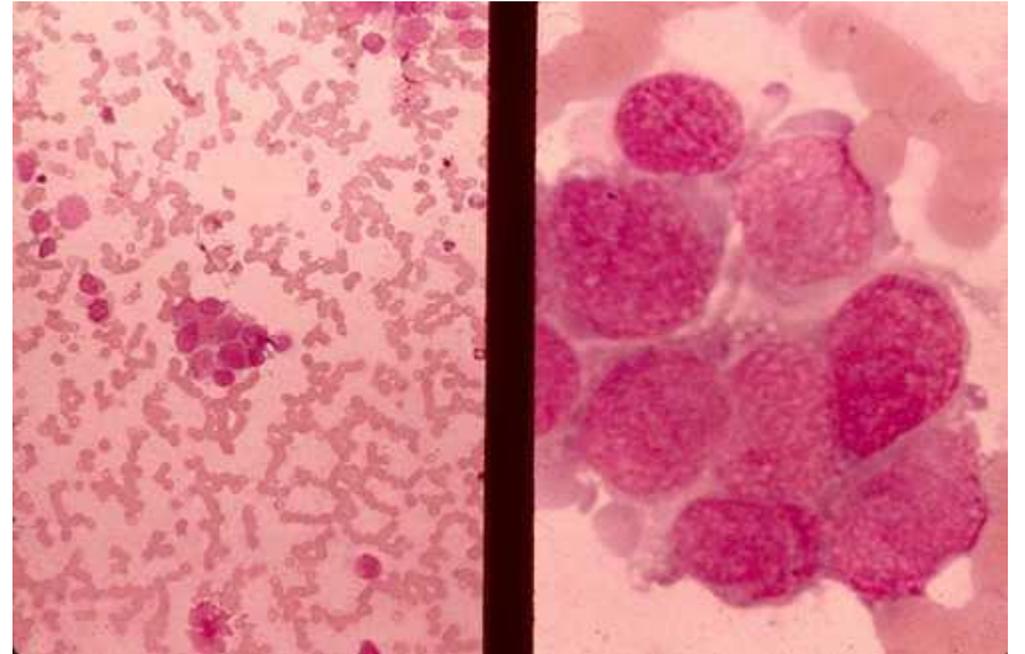
7x



10x

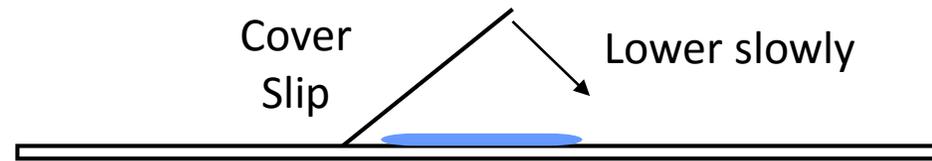
We can see better details with higher the powers of magnification, but we cannot see as much of the image.

Which of these images would be viewed at a higher power of magnification?



Objective 4: I can describe the steps to making a wet mount slide.

- 1 – Get a clean slide and coverslip from your teacher.
- 2 – Place **ONE** drop of water in the middle of the slide over your specimen. Don't use too much or the water will run off the edge and make a mess!
- 3 – Place the edge of the coverslip on one side of the water drop.



- 5 – Place the slide on the stage and view it first with the red-banded objective. Once you see the image, you can rotate the nosepiece to view the slide with the different objectives.

You do not need to use the stage clips when viewing wet-mount slides!

Storing The Microscope

-  Return the lowest power objective in place
-  Wrap the cord around the base
-  Return dustcover