## Microscope Lab

## 1. Remove any unnecessary items from your lab table.

2. When moving the microscope, always carry the microscope with both hands, placing one hand on the arm while holding the base with the other hand.
3. Always set the microscope down gently and away from the edge of the table. Keep the electrical cord away from any water.
4. Make sure the microscope is plugged in and turn on the lamp.
5. Rotate the nosepiece to bring the low-power (red) objective into place. The low power objective will be the shortest and will have the smallest magnifying power ( 4 x ). When changing from one objective to another you will hear a click as the objective snaps into position.
6. Start with the paper slips that have the letter 'e'. Place the paper on the stage and secure it with the stage clips. Position the letter ' $e$ ' in the middle of the light coming through the stage.
7. When focusing, begin using the $4 x$ objective. Be careful to make sure the objectives do not touch the paper.
8. Look through the ocular and slowly turn the coarse adjustment knob to raise the stage until the specimen comes into focus. Use the fine adjustment knob to finish focusing.
9. Slowly move the paper to the right. Observe which direction the 'e' moves in the field of view.
10. Slowly move the paper away from you. Again, observe which direction the ' $e$ ' moves in the field of view.
11. Sketch a drawing of the letter 'e' on low magnification. Indicate the magnification power below your sketch.
12. To increase the magnification, revolve the nosepiece to the yellow objective until it snaps into place. You should only have to use the fine-adjustment knob.
13. Sketch the letter 'e' as it appears under high power magnification in the space provided on your student answer page. Indicate the magnification power below your sketch.
14. Repeat steps $7-13$ for at least 10 of the different specimens. Sketch each specimen on the observation sheet.
15. When you have finished, turn off the microscope and return all samples.


Magnification: $\qquad$


Magnification: $\qquad$


Magnification: $\qquad$


Magnification: $\qquad$


Magnification: $\qquad$


Magnification: $\qquad$

