**Microscope Practice with the Letter “e”**

**Purpose**:

* To learn/review the parts of the microscope.
* To learn how to make a wet mount slide preparation.
* To practice finding specimen using low, medium and high power.

In this laboratory, you will examine the letter “e” in order to learn effective microscope technique. You will perform activities that demonstrate the key concepts of magnification, resolution, slide manipulation, field of view and depth of field. Follow the procedure below and answer all questions in complete sentences.

**Procedure:**

1. With your scissors **cut out the letter "e" from the newspaper or magazine.**
2. Place it on the **glass slide** so as to look like:



1. Follow the “wet mount slide prep” instructions from your notes
2. Turn on the microscope and place the slide on the stage; making sure the "e" is facing the normal reading position (see the figure above). Using the coarse focus and **low power** (4x), move the slide down until the "e" can be seen clearly.
3. **Draw what you see** in the box to the right. Include on your drawing the total magnification of your image.

Looking through the eyepiece, move the slide to the upper right area of the stage. **In what direction does the image move?**

Now, move it to the lower left side of the stage. **In what direction does the image move?**

1. Re-center the specimen on the slide and view the specimen in **medium power** (10x). Use both the fine and coarse adjustments to bring it into focus.
2. **Draw the image** you see of the letter e (or part of it) on medium in the box to the right. Include on your drawing the total magnification of your image.
3. Re-center the slide and change the scope to **high power** (40x). You will notice the "e" is out of focus. **Do Not** touch the coarse focus knob, instead use ONLY the fine focus to resolve the picture.
4. **Draw the image** you see of the letter e (or part of it) on high in the box to the right. Include on your drawing the total magnification of your image.
5. **Locate the diaphragm under the stage.** Move it and record the changes in light intensity as you do so.