The Microscope - The Letter “e” lab Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 Period: \_\_\_\_\_\_Date \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Problem**: How is the microscope used

**I CAN** correctly use a compound microscope to draw accurately detailed observations of specimens.

**Purpose**: a) To develop skill in using the microscope

 b) To prepare wet mount slides

 c) To observe a specimen and draw it

**Materials**: Microscope, lens paper, glass slide, coverslip,

water, scissors, newsprint, pipette

**Procedure**:

1) Using 2 hands take a microscope to your table

2) 6 QUICK STEPS

* Start on Low Power
* Turn coarse adjustment to lower objective lens all the way down
* Center fine adjustment knob
* Check diaphragm—open to let in the most light
* Check mirror and make sure it is turned correctly
* **ONLY USE COARSE ADJUSTMENT ON LOW POWER**

3) Cut a piece of newsprint that contains the letter “e”. Place the letter “e” in the center of the slide.

 Using a dropper, place a drop of water on the letter “e”.

4) Place a coverslip at about a 45 degree angle over the drop of water. Gently lower the coverslip

 onto the slide. Tap the coverslip gently to remove air bubbles.

5) Place the wet mount slide of the letter “e” on the stage of the microscope with the “e” facing you as

 you would read it. Adjust the “e” so that it is over the opening in the stage.

6) Now look into the eyepiece and use the coarse adjustment to bring the “e” into focus.

7) Draw the letter “e” in circle (a).

8) Turn the revolving nose piece so that the medium power objective is in place.

 Use the **fine adjustment only to focus**. (coarse adjustment is only used on low power.)

 Draw the letter “e” in circle (b).

9) While watching your slide on the stage, turn the revolving nose piece again so that the high power

 objective is in place.

 **Use the fine adjustment only to focus**. (coarse adjustment is only used on low power.)

 Draw the letter “e” in circle (c).

C

B

A

**Observations**: 1) While looking through the microscope, in what direction does the “e” appear to

 move when you move the slide

1. to the right \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. to the left \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
3. away from you \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
4. toward you \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_