

Name \_\_\_\_\_ Class Period \_\_\_\_\_  
Lab Partner's Name \_\_\_\_\_ Date \_\_\_\_\_

## Microscope Lab #1

### **Part A: Parts of the Microscope**

Label the parts of the microscope.

## Part B: Determining Total Magnification

To determine the total power or magnification, simply multiply the magnification of the eyepiece by the magnification of the objective. This number is usually stamped on the edge of the lens.

\_\_\_\_\_ 1. What is the total magnification of your microscope when the scanning lens is used?

\_\_\_\_\_ 2. What is the total magnification of your microscope when the low power is used?

\_\_\_\_\_ 3. What is the total magnification of your microscope when the high power is used?

## Part C: Observing Pictures from Magazines and Newspapers

Cut out a black and white picture from a newspaper. Make a dry mount with it and observe it with your microscope.

4. Describe what you see. \_\_\_\_\_

5. How do the darker parts of the photograph differ from the lighter parts of the photograph? \_\_\_\_\_

Cut out a color picture from a magazine. Make a dry mount and observe it with your microscope.

6. Describe what you see. \_\_\_\_\_

7. How do the darker parts of the photograph differ from the lighter parts of the photograph? \_\_\_\_\_

Find an area of a color photo that consists of only one color. Examine this area with your microscope.

8. Describe what you see. \_\_\_\_\_

## Part D: Human Hair

Make a dry mount of your hair. Observe this under low and high power.

9. Describe what you see. \_\_\_\_\_

10. Make a drawing (using HP) of the surface detail of your hair.

- Make a drawing (follow all drawing rules) of the hair as it appears in the high power field.
  - Title the page. Example: In this case the title would be Human Hair
  - Trace a Petri dish on the paper. (The circle now represents the field of view.)
  - Draw in the circle exactly what you see through the microscope. Objects should be the same size and location as they are in the field of view.
  - Under the circle, write the power the object was seen under.

11. Get a hair sample of a different color. Observe and describe any changes that you see. \_\_\_\_\_

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