Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Lab Partner:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Materials needed:

Moss sample

Glass slide

Cover slip

Forceps

Pipette

Small beaker of tap water

Dissecting scope

Microscope

Paper towels for spills and cleanup

Instructions:

Once you have your group and your materials at a lab bench, each person in the group needs to view the moss sample under the dissecting scope. Look over the entire sample, searching for sporophytes. If anybody finds sporophytes, call the teacher over to see them, too.

Each person needs to title the moss lab in your lab notebook. Step one is to draw a good field of view of the gametophytes (and sporophytes, if present), using the highest power on the dissecting scope. Remember to label the drawing AND write its total magnification below the drawing. Label the gametophytes (and sporophytes). Your drawing should be about the size of the circle below.

1. Once the view of the dissecting scope is drawn, it is time to make a wetmount slide. Using the forceps, one person in the group will pluck a small sample from the gametophyte and place it on a clean glass slide. Try a slide with the small well in it first. Then, drop a drop of water on top of the sample. Cover with a cover slip, while tilting the slide and cover slip slightly, in order to prevent trapping air bubbles, as much as possible. Use a small corner of a paper towel in order to soak up excess water from the slide. The paper towel also helps to draw water toward that side of the slide.
2. Now, each person needs to view the sample under each power of the microscope.
3. Draw the sample on each magnification, and label each with the name and total magnification. Each drawing should be about the same size as the one above.
4. Next, make a slide of the sporophytes, using the same procedure you used to make the slide of the gametophyte. If you are unable to find any sporophytes, obtain a prepared slide of the moss life cycle from the teacher. Each person needs to view the sporophyte(s) under each objective on the microscope. Draw and label the sporophyte(s) on low and high power.
5. Finally, rinse and dry all slides and cover slips. Return all materials to the cart.