

Agenda for Friday, October 9th 2015

Agenda	Homework
1. Plant Cell Observations	- No homework

Why are we doing this?

So far in lesson 5 we have studied animal cells. We learned that the shape and parts of the cell are connected to the function, or job, the cell performs. Today we will observe two plant cells: the leaf cells of the plant elodea and the bulb cells of an onion. Just like we did with the cheek and nerve cells, you will make sketches of each one, estimate the size of the cell using a ruler, compare and contrast the two cells, and discuss how each cell is specialized for its function.

Today's Procedure

You may have already completed part 1. The procedure is here for anyone who still needs to reference it. If you are done with part 1, begin with part 2!

Part 1: Elodea

1. Make a wet mount slide of the elodea. Add one elodea leaf to a slide. Add a drop of water (**do not use dye**) and add the cover slip.
2. Observe the elodea at 40X, 100X, and 400X. Make your drawing at 400X. Draw at least 4 cells (or fewer if you cannot see 4 cells).
3. Label the cell membrane/wall, nucleus, chloroplast, and cytoplasm.
4. Title your drawing "Elodea Leaf Plant Cell"
5. Measure the size of the cell using the small ruler.
6. Be sure your drawing follows the 10 rules of microscope drawings. Follow the rules on Handout 9 from your binder.
7. Clean up your slide with these instructions:
 - Throw away the cover slip and elodea leaf.
 - Dry the slide and return it to the blue tray.

Part 2: Onion

1. Read the instructions on figure 5.3 on page 71 of the IBI book for instructions on how to make a wet mount slide of the onion. A few helpful tips:
 - Lugol solution is found in the brown bottle on your table.
 - Avoid excess folding of the cells by laying part of the membrane on the slide while it hangs from part of the broken half. Do your best!

2. Observe the onion cell at 40X, 100X, and 400X. Make your drawing at 400X. Draw at least 4 cells.
3. Label the cell membrane/wall, nucleus, and cytoplasm.
4. Title your drawing "Onion Bulb Plant Cell"
5. Measure the size of the cell using the small ruler.
6. Be sure your drawing follows the 10 rules of microscope drawings. Follow the rules on Handout 9 from your binder.
7. Clean up your slide with these instructions:
 - Throw away the cover slip and onion skin
 - Dry the slide and return it to the blue tray.
8. Complete the rest of the handout.

I finished early, now what? (Do this in order)

1. On the back of your Elodea Leaf Cell drawing, write an explanation of how you know where the vacuole is, even though it is clear.
2. On the back of your Onion Leaf Cell drawing, write an explanation for why chloroplasts are not found in the cells, even though it is a plant cell.
3. On the back of either drawing, write a short instructional for how to identify a plant cell: what features did you see in these cells that you didn't in animal cells?
4. Relax and color! Grab a paper copy of the animal and plant cell color sheetings. Fill in the blank information and color the correct parts.