

Instructions for Plant Cell Observations

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. Be sure your drawing follows the 10 rules of microscope drawings. Follow the rules on Handout 12 from your binder.
5. Title your drawing "Elodea Leaf Plant Cell"
6. Measure the size of the cell using the small ruler.
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. Be sure your drawing follows the 10 rules of microscope drawings. Follow the rules on Handout 12 from your binder.
5. Title your drawing "Onion Bulb Plant Cell"
6. Measure the size of the cell using the small ruler.
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.