**Osmosis in Plant Cells**

**Introduction:** Plant cells experience osmosis. Remember that osmosis is the movement of water particles from a high concentration to a low concentration through a membrane. As the water leaves or enters the cell the cell membrane will shrink or stretch outward. The cell wall tries to stay in place. When a plant wilts you can see the affect of osmosis. Today you will be adding some salt water to plant cells and watching what happens.

**Hypothesis:** Write a hypothesis of what will happen when you add salt water to onion or cabbage cells. IF \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ THEN \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Materials:** List the materials that you will be using today.

**Procedure:**

1. Make a wet mount slide of a thin layer of red onion or red cabbage leaf.
2. Carefully focus on Low then Medium then High power lens.
3. Sketch and label 4 organelles on high power.
4. Have a lab buddy add salt water (blue) with a micro-pipett as you watch through your eyepiece on high power. Observe for 2 minutes.
5. Sketch on High power after the two minutes.
6. Have a lab buddy add fresh water with the mirco-pipett and again observe for 2 minutes.
7. Sketch again on High power.

**Observations:**

**Conclusion:** Write a conclusion. Make sure that you have all 3 parts. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Analysis:

1. What kind of particle movement is this an example of?
2. Which direction did the water move when you put the salt water on?
3. Why did the water move in that direction?
4. What did the cell membrane expand back out when the fresh water was added after the salt water?
5. Why do grocery stores spray water on their vegetables?
6. Do these veggies lose or gain weight?
7. So do you pay more or less for the veggie?
8. How do you feel about that?