

Name: _____ Period: _____ Date: _____

Onions in Salt Water Lab

Question: What happens to a red onion cell when it is placed in a salt-water solution? Will the cell shrink, grow, or stay the same size? Discuss with the class each possibility.

Hypothesis (If...then...because): _____

- Procedure:
1. Prepare a wet-mount slide of the red layer of the onion. Use tap water.
 2. Observe the red onion cell on high power. Draw a picture and label what you see (cell wall, cytoplasm, cell membrane, nucleus). The cytoplasm is red in this onion.
 3. Without moving your slide, place the edge of a paper towel next to one edge of the coverslip. Meanwhile, on the opposite edge of the coverslip, add several drops of salt water. The paper towel will help draw the salt water under the coverslip so that the onion is surrounded by salt water.
 4. For the next several minutes, watch the onion cell carefully through the microscope. Do not look away, or you might miss what you are supposed to see!
 5. Once you have observed a change, draw and describe what you saw.
 6. Repeat steps 3 and 4, except this time with tap water. Describe what happens.

Data: Draw and describe the onion at each stage

Onion cell in tap water	Onion cell in salt water	Onion cell returned to tap water

Conclusion: 1) Answer the question we were trying to answer this lab. _____

2) Was your hypothesis correct? _____

3) Something moved into or out of the onion cell to cause a change. If the onion became larger, then something moved in. If the onion became smaller, then something moved out. Did something move in or out? _____

4) What do you think moved into or out of the onion? _____

5) On the back of this paper, write a paragraph explaining what you think happened and why.