

Osmosis lab report essay sample

[Environment](#), [Water](#)



This experiment is being done to find out what happens to a carrot or a potato if you place them in two different solutions. Osmosis has a lot to do with this experiment and is the movement of water molecules from a higher concentration to a lower concentration. Osmosis only deals with water and is a type of diffusion. The difference between all three solutions is that in a hypertonic solution the cells fluid rushes out of the cell and causes it to shrivel. In a hypotonic solution water rushes into the cell and causes the cell to expand and eventually pop. In a isotonic solution water rushes in and out of the cell and causes the cell to stay the same.

HYPOTHESIS: On the carrot lab the carrot that will be placed in the salt water will be hypertonic and will shrink because the cells will shrivel. The carrot that is placed in just water will be hypotonic and will expand or get bigger.

MATERIALS & METHODS: For the materials each group had to have a Petri dish that contained salt in it and then we added the salt in one of the two beakers filled with water and stirred it with a straw. Underneath each beaker we had a paper towel that we had to label hypotonic and hypertonic. One member from each group had to bring either a potato or a carrot, cut it in a cube with a scalpel, and then measured the length, width, and height of the cube with a ruler. Once all of that was done the cubes were placed in the solutions. Carrot #1 Hypertonic solution Carrot #2 Hypotonic Solution

Length: 2 3/4 in. (7 cm) Length: 2 3/4 in. (7 cm)

Width: 1 in. Width: 1 in.

Height: 5 in. Height: 5 in.

RESULTS: Right when the carrots were placed into each solution there were differences. In the hypertonic solution the carrot floated and stayed at the

<https://assignbuster.com/osmosis-lab-report-essay-sample/>

top and in the hypotonic solution the carrot sunk to the bottom of the beaker. Every 10 minutes I took down data, but nothing happened. Once we took the carrots out we noticed some differences like the carrot placed in the hypertonic solution shrunk in size and the carrot placed in the hypotonic solution got soft in texture.