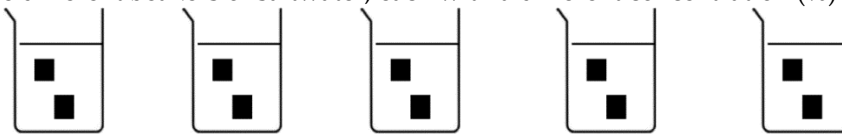


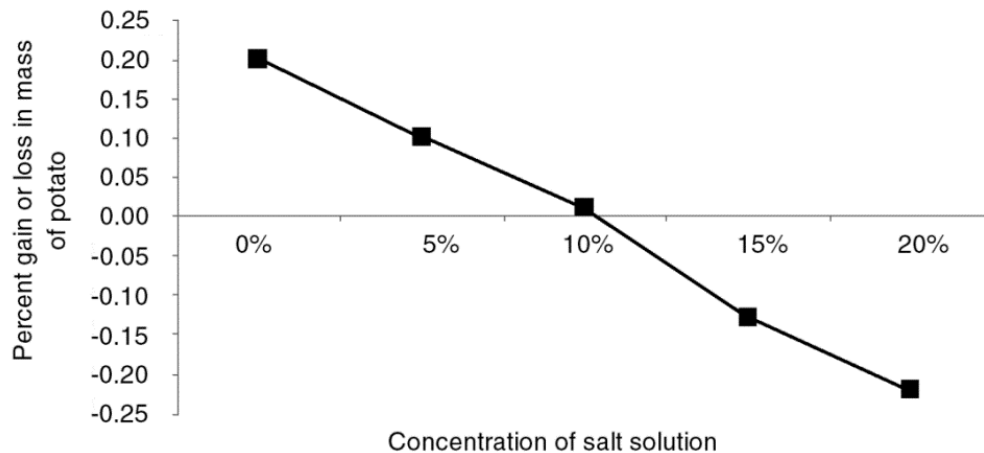
Lab 3. Osmosis: How Does the Concentration of Salt in Water Affect the Rate of Osmosis?

1. Describe the process of osmosis.

2. A potato was cut into 10 equal-size cubes, each weighing about 10 grams. The cubes were placed into five different beakers of saltwater, each with a different concentration (%) of salt solution.



The potatoes were allowed to sit in the salt solution for 24 hours and then removed from the beakers, dried, and weighed. The figure below shows the average percent change in mass for the potatoes.



Using what you know about osmosis and the data above, what was the original concentration of salt solution in the potato? Explain your reasoning.

3. The data that were generated in the scenario for question 2 above came from an experiment.
 - a. I agree with this statement.
 - b. I disagree with this statement.

Explain your answer, using an example from your investigation about osmosis.

4. In this investigation we observed osmosis happening.

- a. I agree with this statement.
- b. I disagree with this statement.

Explain your answer, using an example from your investigation about osmosis.

5. It is important for scientists to develop and use models. Explain why models are important in science by using an example from your investigation about osmosis.

6. It is important for scientists to understand the flow of matter in a system. Explain why this is important, using an example from your investigation about osmosis.