

BIOLOGY LAB

Lab: Osmosis In Potatoes

Problem: How will salt water affect a potato?

Prediction: _____

Materials:

Potato measuring spoon
2 250 mL beakers salt
graduated cylinder label
stirring rod
balance plastic wrap or foil
scalpel ruler

Procedure:

1. Label one beaker "water" and the other beaker "salt." Place 100 mL of water into each beaker.
2. Place 3 tablespoons of salt into the salt beaker and stir until the salt is dissolved.
3. With a knife, cut two cubes of potato (without skin) that measure 2 cm on each side. Use caution when cutting the potato. Cut away from the body.
4. Using a balance, measure and record the mass of each potato piece. Then place one piece in the water beaker and the other in the salt beaker.
5. Record the texture of the potato cubes before soaking (hard or soft).
6. Cover the beakers with plastic wrap or aluminum foil and allow them to sit undisturbed overnight.
7. On the second day, carefully remove the potato cubes one at a time and blot them dry on the outside. Weigh the pieces and record their masses.
8. Observe any changes in the texture of each cube.

Data:

Type of Water Potato Is In	Texture Before Insertion in Water	Texture After Insertion in Water	Mass Before Insertion in Water	Mass After Insertion in Water
Water				
Salt Water				

Conclusions:

1. Describe what happened to the mass of each cube after

soaking. _____

2. Describe what happened to the texture of each cube after soaking.

3. Explain the changes you observed in terms of

osmosis. _____
