



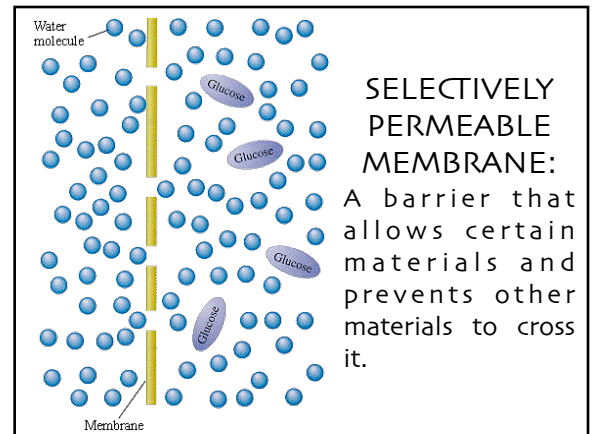
Name: \_\_\_\_\_

# Os-Fest

DIFFUSION is:

**OSMOSIS** is a form of DIFFUSION in which molecules of  $H_2O$  move across a **SELECTIVELY PERMEABLE MEMBRANE** from an area of HIGH concentration to an area of LOW concentration. Whichever side of the membrane that has the lower concentration of  $H_2O$  molecules will get more  $H_2O$  molecules from the other side. A CELL MEMBRANE is a **SELECTIVELY PERMEABLE MEMBRANE**.

**EQUILIBRIUM** is reached once sufficient water has moved to equalize the concentration of  $H_2O$  molecules on both sides of the membrane.



When the concentration of  $H_2O$  outside of the cell is greater,  $H_2O$  flows into the cell. PLANT CELLS are prevented from bursting by the rigid structure of their CELL WALL, but the CELL MEMBRANE of ANIMAL CELLS will burst if too much  $H_2O$  moves into the cell by OSMOSIS.

Procedure:

1. Fill Beakers/Plastic Cups with water.
2. Pour 15ml of salt into one beaker/cup and stir constantly until dissolved.
3. Carefully cut 2 slices of potato about 5mm thick.
4. Place one potato slice into each of the beakers/cups and allow to soak for 15 minutes.

In today's exercise we will look at **OSMOSIS** at work.

## PART 1: Spudfest

Materials:

- Potato
- Water
- Salt
- 15ml Measuring Spoon
- Slicing Instrument
- Stir Stick
- 2 Beakers/Plastic Cups



5. In the space below write down 2 or more observations of what has happened to the potato slices.

6. How can OSMOSIS help us to understand the reaction of the potato slices in the salted and non-salted water? (HINT: IT CAN)

7. Find definitions and examples of each of the following:  
Active Transport:

Turgor Pressure: