

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

# Diffusion and Osmosis: Reinforcement Activity #1

To the student observer: Explain osmosis. \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_


Analyze: How does osmosis explain what happens to a bowl of strawberries when you cover it with sugar? \_\_\_\_\_  
 \_\_\_\_\_

*In your textbook, read about osmosis: diffusion of water.*


Complete the table by checking the correct column for each statement.

Statement	Isotonic Solution	Hypotonic Solution	Hypertonic Solution
1. Causes a cell to swell			
2. Doesn't change the shape of a cell			
3. Causes osmosis			
4. Causes a cell to shrink			

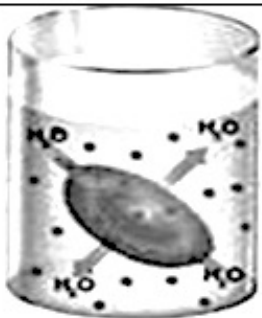
**Part II. Directions.** Identify the type of solution is shown in the diagram by writing **hypotonic**, **isotonic** or **hypertonic** inside the boxes below, then describe the shape of the cell as “expands”, “shrinks”, or “normal” on the blank spaces below each figure.



**cell** \_\_\_\_\_



**cell** \_\_\_\_\_



**cell** \_\_\_\_\_

# Cellular Transport

Match the definition in Column A with the term in Column B.

## Column A

\_\_\_\_\_ 1. moves small molecules across the plasma (cell) membrane using transport proteins

\_\_\_\_\_ 2. involves water moving across the plasma (cell) membrane to the side with the greater solute concentration

\_\_\_\_\_ 3. occurs when substances move against the concentration gradient; requires energy and the aid of carrier proteins

\_\_\_\_\_ 4. occurs when the plasma (cell) membrane surrounds a large substance inside the cell and moves it outside the cell

\_\_\_\_\_ 5. the condition that results when diffusion continues until the concentrations are the same in all areas

\_\_\_\_\_ 6. occurs when the plasma (cell) membrane surrounds a large substance outside the cell and moves it inside the cell

## Column B

A. osmosis

B. exocytosis

C. facilitated diffusion

D. dynamic equilibrium

E. active transport

F. endocytosis

Complete the table by checking the correct column(s) for each description.

Description	Isotonic Solution	Hypotonic Solution	Hypertonic Solution
7. A solution that has the same osmotic concentration as a cell's cytoplasm			
8. A solution that causes a cell to shrivel			
9. A solution that causes a cell to swell			
10. A solution that neither shrinks nor swells a cell			
11. A solution in which there is more water outside the cell than inside the cell			
12. A solution that causes water to move out of a cell			