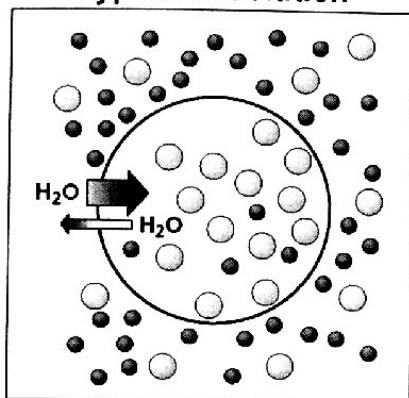
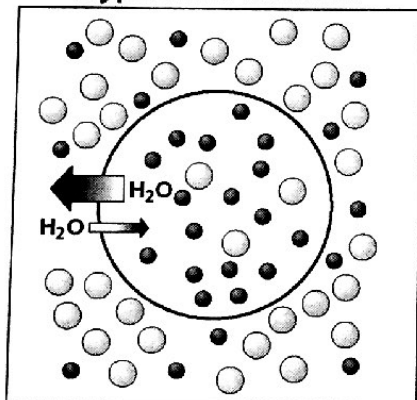


Master
12

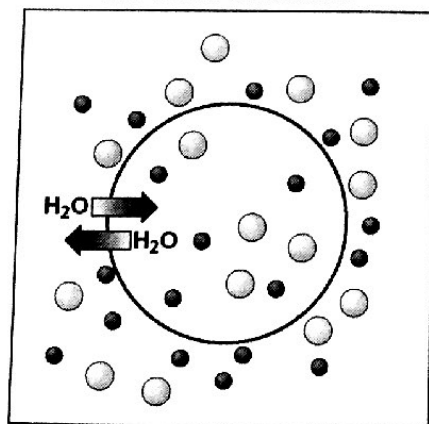
Osmosis and Hypotonic, Hypertonic, and Isotonic Solutions

Reteaching Skills
Use with Chapter 8, Section 8.1
Hypotonic Solution

Approximate ratio of water molecules to dissolved particles
Inside cell:
1 water molecules: 3 dissolved particles

Outside cell:
4 water molecules: 1 dissolved particles

Hypertonic Solution

Approximate ratio of water molecules to dissolved particles
Inside cell:
5.5 water molecules: 1 dissolved particles

Outside cell:
1 water molecules: 2.5 dissolved particles

Isotonic Solution

Approximate ratio of water molecules to dissolved particles
Inside cell:
1 water molecules: 1 dissolved particles

Outside cell:
1 water molecules: 1 dissolved particles

● Water molecules

○ Dissolved particles

Count the water molecules and dissolved particles inside and outside each cell.

Worksheet
12**Osmosis and Hypotonic,
Hypertonic, and
Isotonic Solutions****Reteaching Skills***Use with Chapter 8, Section 8.1*

1. Define the following terms:
 - a. osmosis

 - b. hypotonic solution

 - c. hypertonic solution

 - d. isotonic solution

2. When a cell is in a hypotonic solution, how will water molecules move?

3. When a cell is in a hypertonic solution, how will water molecules move?

4. When a cell is in an isotonic solution, how will water molecules move?

5. Explain how hypotonic and hypertonic solutions can make a plant rigid and firm or make it wilt.

6. Osmosis is a form of passive transport. Explain how facilitated diffusion, which is another form of passive transport, is different from osmosis.

