

Unit 1 Handout _____

Lesson 5: Diffusion and Osmosis

Purpose: To learn about diffusion and osmosis and how they affect cells

Term	Definition
Diffusion	The movement of molecules (particles) from an area of _____ concentration to an area of _____ concentration.
Osmosis	The diffusion of _____.

How do diffusion and osmosis work?

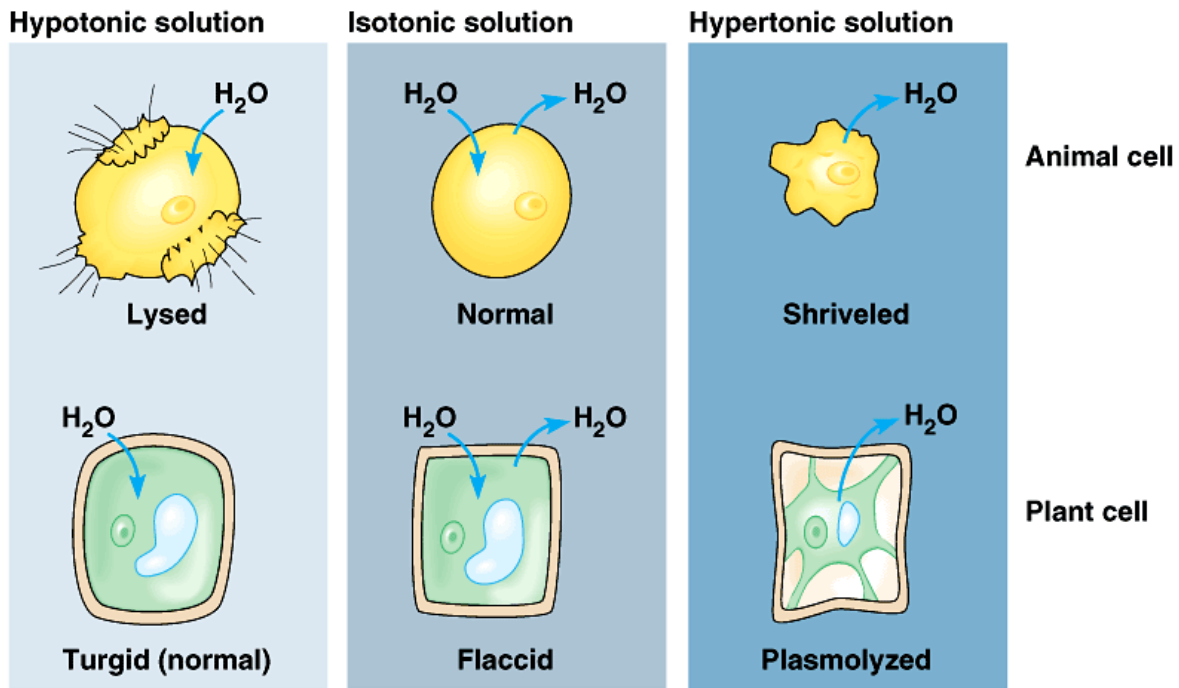
Molecules (we'll call them particles) are in constant _____. Because of this they constantly collide and move in different directions. If there are a high amount of particles in a certain space, we say it has a _____. These particles will collide with each other more and begin to spread to areas where there is a _____ of these particles.

An Example

Imagine you just finished drying off after swimming. You want your towel to dry. You place it outside on a railing. A few hours later the towel is dry. Why? The towel had a _____ of water than the air. Therefore, the water moved from the _____ and to the _____. (Water also evaporates.)

Now imagine the same situation again. You want your towel to dry **but** it is a very humid day. A few hours later, your towel is still wet. Why? The towel had a _____ of water than the air. Therefore, the water stayed in the towel.

One more. Why does a dry sponge soak up water? The sponge has a _____ of water than the water. Therefore, the water particles moved from the _____ to the _____.



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Lysed = pop or burst | *Plasmolyzed = shrinks*

Diagram Information

	Hypotonic	Isotonic	Hypertonic
Lower Concentration is Found	_____ the cell	Nowhere. Concentrations are equal.	_____ the cell
Higher Concentration is Found	_____ the cell	Nowhere. Concentrations are equal.	_____ the cell
Where does the water move?	From _____ the cell to _____ the cell	It moves both in and out equally.	From _____ the cell to _____ the cell
What happens to the cell?	Cell becomes bigger because more particles are moving into it.	Nothing. The cell stays the same.	Cell becomes shriveled and shrinks because particles are leaving it