**NOTES 1.3:Diffusion, Osmosis and the Cell Membrane**

**Where we’re going today…**

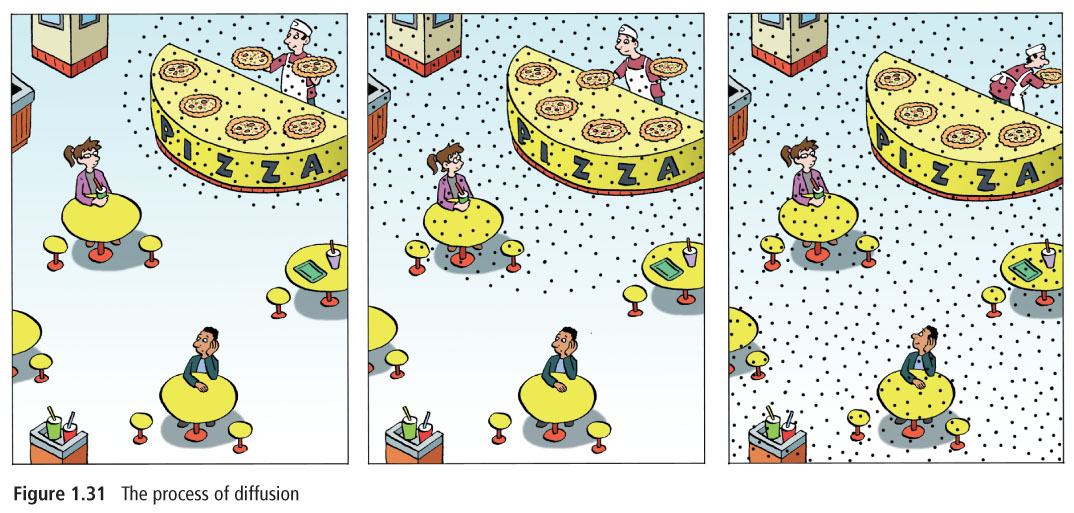
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**Diffusion**

**Concentration**

Diffusion says that the area of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ will move to an

area of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ concentration



**Diffusion and the Cell Membrane**

The \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ allows materials from \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ the cell to

move \_\_\_\_\_\_\_\_\_\_\_\_\_ the cell. This occurs through a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

in the cell membrane.

The cell membrane is called a **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

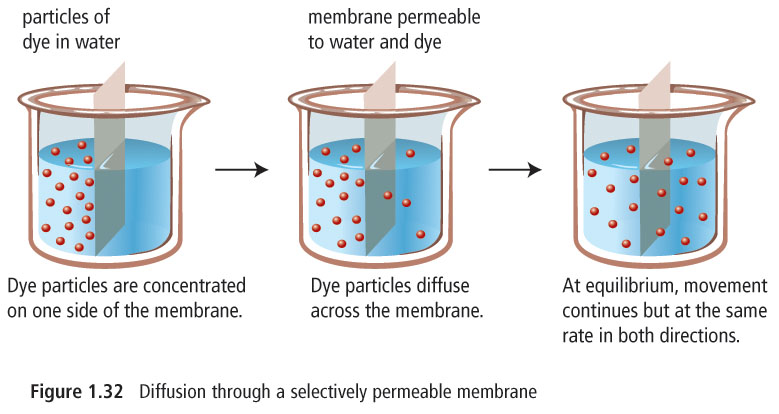
because it allows some materials to \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ it but keeps \_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ out (eg. coffee filter).

Diffusion is one way materials are \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ across the cell membrane.

Particles move across a selectively permeable membrane if there is a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

concentration of particles on \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.



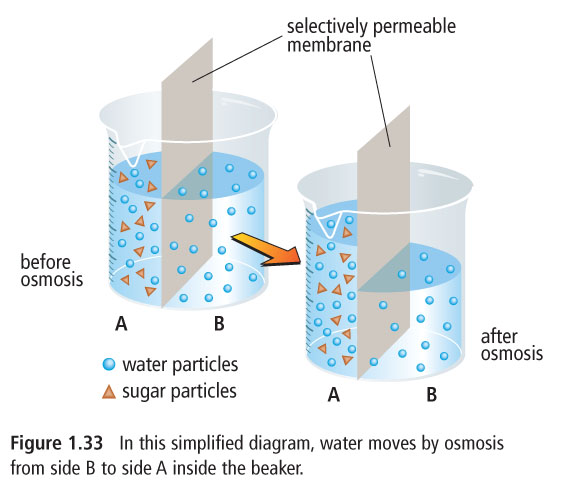
**Equilibrium** –

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ transferred to your \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ in your \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

is an example of diffusion in your body

**Osmosis**

This is the diffusion of \_\_\_\_\_\_\_\_\_\_ particles through a selectively permeable membrane.



**Water flow through the cell membrane**

To predict the direction of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ through a cell membrane, you have to

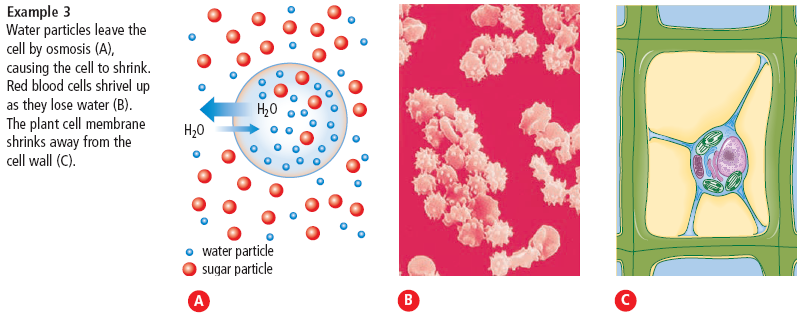
\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ on both sides of the membrane.

Remember that water will flow from an area of \_\_\_\_\_\_\_\_\_\_\_\_\_\_ concentration to an area

of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ concentration







**Application of Osmosis**

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (antibiotic) uses the process of osmosis to destroy harmful bacteria.

Prevents bacteria from \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Reverse Osmosis**

This occurs when \_\_\_\_\_\_\_\_\_\_\_ flows from an area of \_\_\_\_\_\_\_\_\_\_\_\_\_\_ concentration to

an area of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ concentration across a selectively permeable membrane.

This can happen only when \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ on the lower concentration side of the

membrane is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ causing water to \_\_\_\_\_\_\_\_\_\_\_\_\_ through the membrane.

This is used to \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ water and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ it for drinking.