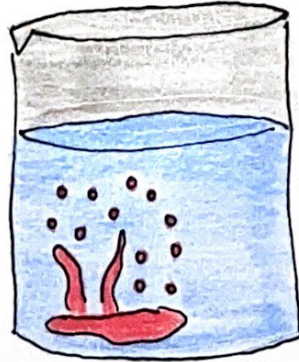


DIFFUSION

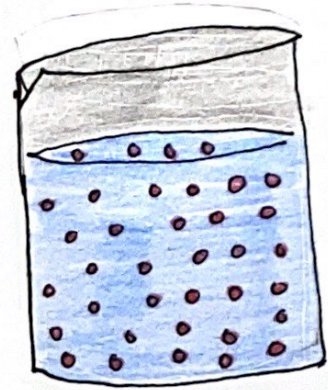
Process resulting from random motion of molecules by which there is a net flow matter from a region of high concentration to a region of low concentration.



(A) When a drop of dye is dropped into a beaker of water, its molecules dissolve.



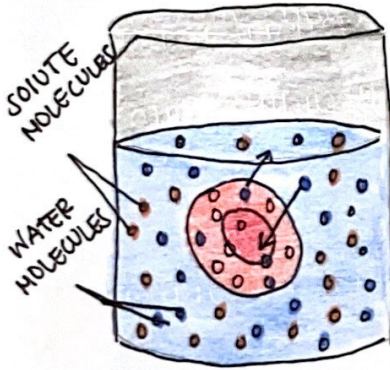
(B) the molecules begin to diffuse through the water



(C) the dye molecules are evenly distributed throughout the water.

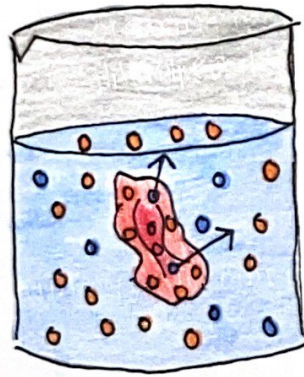
OSMOSIS

The movement of water molecules through a selectively permeable membrane from a region of high water concentration to low water concentration.



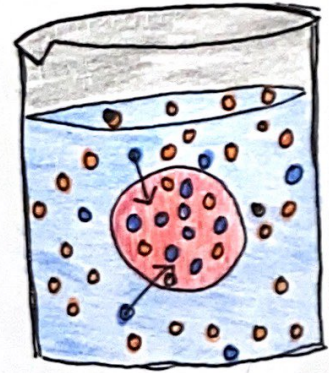
ISOTONIC SOLUTION

One that has the same concentration of solutes both inside and outside the cell. The net movement of water molecules is zero.



HYPERTONIC SOLUTION

One that has a higher solute concentration outside the cell than inside. This results in a net movement of water molecules out of the cell causing them to dehydrate, shrink, and die.



HYPOTONIC SOLUTION

One that has a higher solute concentration inside the cell than outside. The net diffusion of water molecules into the cell causes them to swell and even to burst.