Ch 7.3

**Diffusion** = Movement of particles to reach equilibrium

* REQUIRES NO ENERGY

**Passive Transport** is using Diffusion to spread particles evenly in a cell

**Osmosis** = Moving water through a selectively permeable membrane

* Only Solvent is moving not solute

Both sides try to reach equilibrium

**Tonicity** = surrounding solution that causes a cell to gain or lose water

* + Compare concentration of solute that CANNOT cross the membrane

Water follows “salt”

Describe solution relative to cell

* Isotonic
* Hypertonic
* Hypotonic

Cell wall helps maintain shape when there are differences in tonicity

Hypotonic solution

* Turgor pressure
  + Pressure cell wall exerts back on the cell
  + Opposes too much water uptake

Hypertonic solution

* Similar to animal cell, loses water and shrivels= plasmolysis

Still diffusion

* Down concentration gradient
* Spreading out

Needs help

* Maybe charged or polar or too big

Channel

* Hydrophilic passage for ions or water molecules to diffuse

Ion channels

* Gated= opens/close in response to stimulus