Membranes, transport and Macromolecules Vocabulary:

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| Diffusion | The random movement of atoms or molecules from an area of higher concentration to an area of lower concentration until equally distributed |
| Equilibrium | A condition in which all influences acting cancel each other, so that a static or balanced situation results |
| Concentration | A measure of the amount of dissolved substance contained per unit of volume |
| Concentration gradient | the gradual difference in concentration of a dissolved substance in a solution between a region of high density and one of lower density |
| Plasma [cell] Membrane | A semipermeable layer consisting of a fluid phospholipid bilayer with embedded proteins |
| Homeostasis | the tendency of a physiological system to maintain internal stability |
| Osmosis | the tendency of a fluid, usually water, to pass through a semipermeable membrane into a solution where the solute concentration is higher |
| Semi permeable | permeable to some usually small molecules but not to other usually larger particles |
| Hypotonic | a solution of lower solute concentration than another solution with which it is compared |
| Isotonic | a solution of the same solute concentration compared to another solution |
| Hypertonic | a solution of higher solute concentration than another solution with which it is compared |
| Passive transport | Transport across a membrane that does not require energy |
| Active transport | Transport across a membrane that requires ATP and a carrier protein |
| Facilitated diffusion | Transport across a membrane that does not require ATP but does require a carrier protein |
| Phospholipids | Any of various phosphorous-containing lipids that are composed mainly of fatty acids and a phosphate group, |
| Monomer | A molecule of low molecular weight capable of reacting with identical molecules of low molecular weight to form a polymer |
| Polymer | a compound of high molecular weight derived by the addition of many smaller monomer molecules |
| Fat | naturally occurring soft greasy solids that are composed of glycerol and fatty acids |
| Protein | consist of polymers of amino acids |
| Carbohydrate (mono, di, and poly-saccharides) | a large group molecules, including sugars, such as sucrose, and polysaccharides, such as cellulose, glycogen, and starch, that contain carbon, hydrogen, and oxygen |
| Fatty acid | consisting of a long hydrocarbon that bonds to glycerol to form a fat |
| Amino Acid | The monomer of a protein. There are 20 different ones found in nature. |
| Simple sugar | Another term for a monosaccharide |
| Dehydration reaction | a chemical reaction that involves the loss of water from the reacting molecules |
| Polar (Non-polar) | a molecule in which there is an uneven distribution of electrical charge |
| Hydrolysis reaction | a chemical reaction during which molecules of water are used to split other molecules apart. |