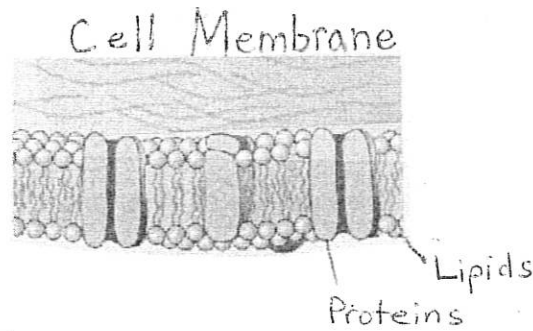


Cell Processes Notes
Moving Materials In and Out

Name _____

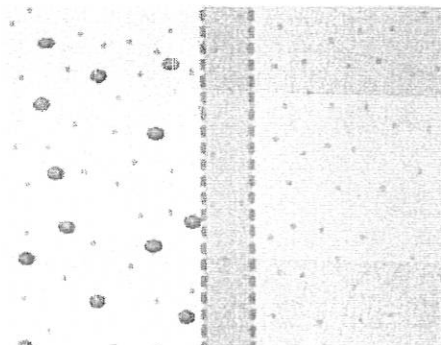
Cell Membrane:

1. Each cell is surrounded by a _____ which provides _____ and _____ the passage of materials between the cell and its _____.
2. A cell membrane consists of two layers composed of _____ and _____.
3. A cell membrane is known as a _____ membrane since it only allows _____ to move into and out of the cell.



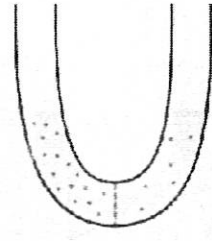
Diffusion:

1. Organisms use the process of _____ to allow useful molecules to enter the cells and remove _____.
2. Diffusion is the movement of gas or solute molecules from _____ to _____ until they are spread _____ throughout a space.
3. For example, a high concentration of _____ from the lungs moves to a lower concentration in the blood, while _____ moves from an area of high concentration in the blood to a lower concentration in the air sacs.



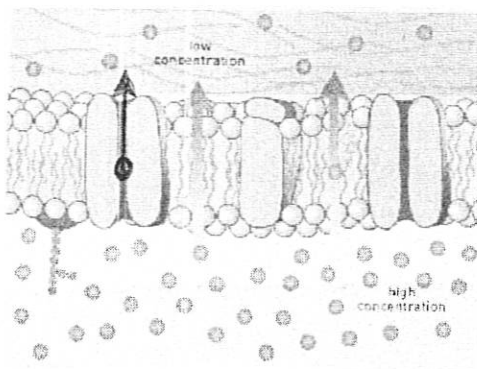
Osmosis: The _____

1. All cells need _____ to carry out _____.
2. Osmosis is the _____ of water through a cell membrane from a higher water concentration (_____) to a lower water concentration (more concentrated solution).

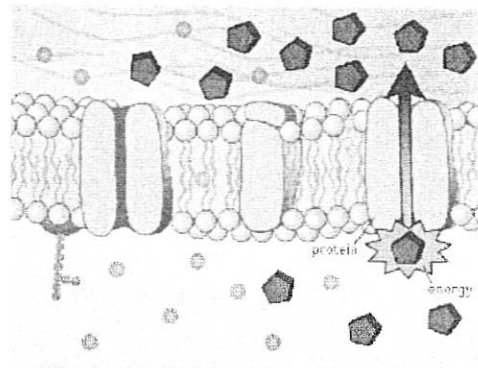


Passive and Active Transport:

1. The transport of materials across a cell membrane from areas of higher concentration to areas of lower concentration without the use of energy is called _____.
2. Sometimes _____ are used to carry large molecules across the cell membrane. This process is called _____.
3. Some substances move across the cell membrane from an area of low concentration to an area of high concentration. The transport of materials through proteins in the cell membrane *using energy* is called _____.
4. An example of active transport is when plant _____ take in _____ from the surrounding soil.



Passive Transport



Active Transport