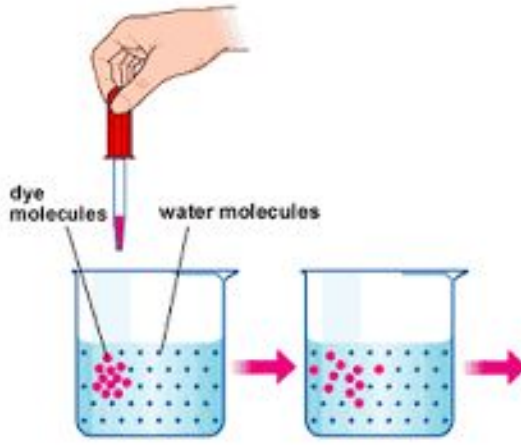
LET'S REVIEW

1. Material that is dissolved into a solution is called the _____.

SOLUTE

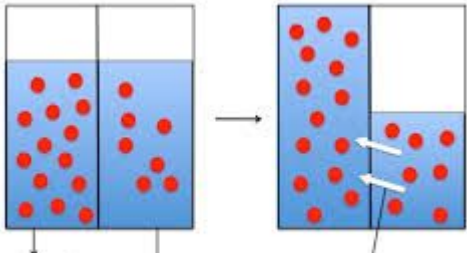
2. The substance that the solute is dissolved in is called the _____.

SOLVENT



3. Solutes move through cell membranes by the process of _____.

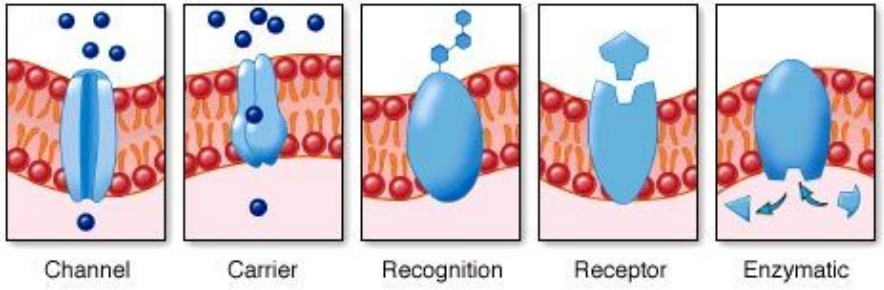
DIFFUSION



4. Water moves from areas of high concentration to areas of low concentration in a process called _____.

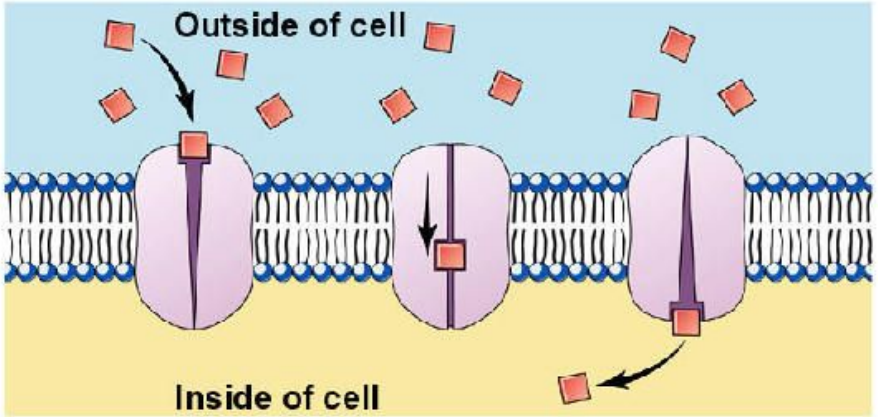
OSMOSIS

Facilitated Diffusion



Proteins within the membrane act as carriers, making it easy for certain molecules to cross cell membranes.

These protein channels are said to facilitate or help the diffusion of certain solutes through the cell membrane.



This process is known as **facilitated diffusion**.

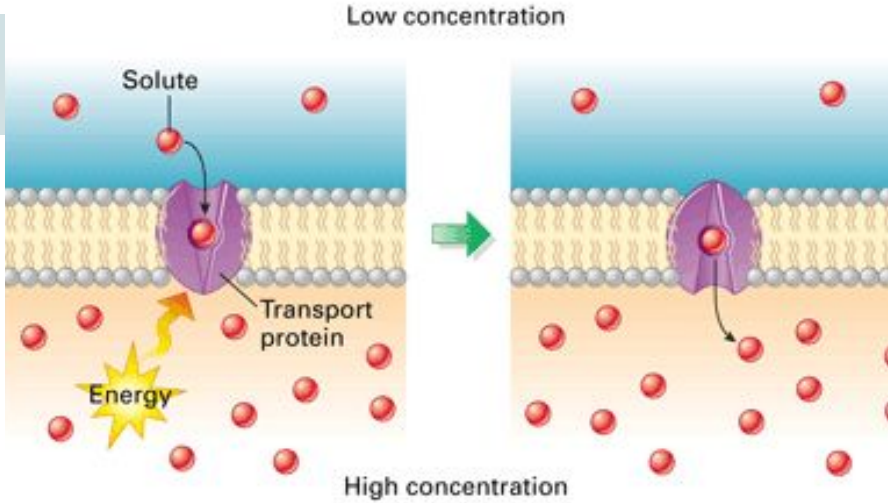
No energy required from cell.

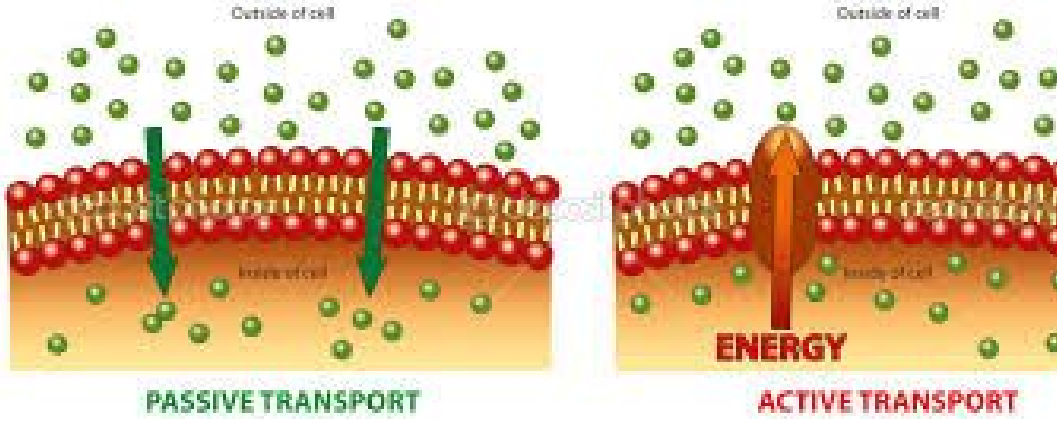
Active Transport

Active transport: the movement of molecules that requires energy

Moving molecules from areas of low concentration to areas of high concentration

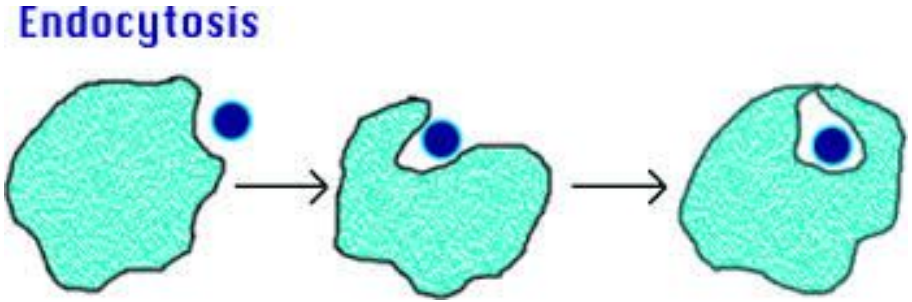
This action is carried out by transport proteins or “pumps” in the cell membrane.





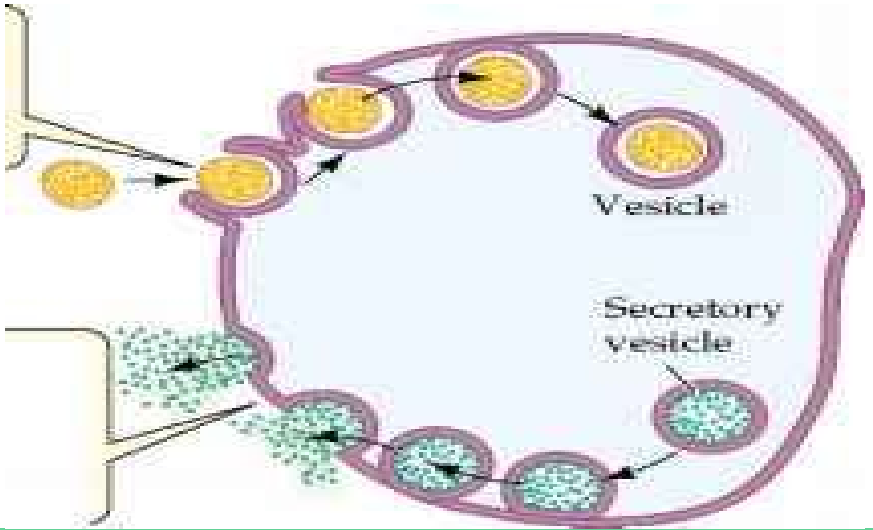
There are several ways in which molecules can be actively transported:

Endocytosis: the process of taking material into the cell by means of infoldings, or pockets, within the cell membrane.



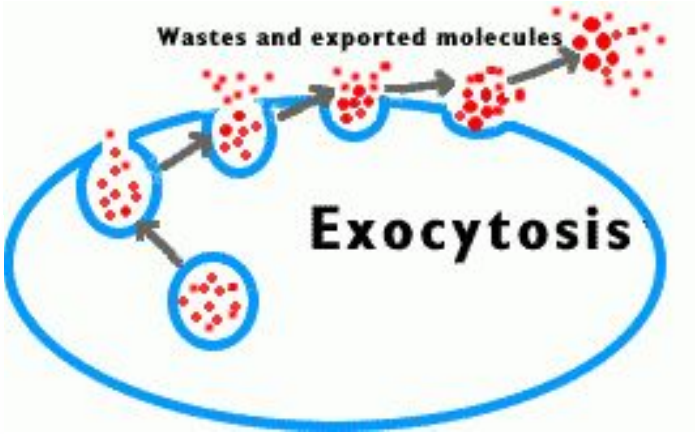
phagocytosis: “cell eating”, material is engulfed in cytoplasm and packaged into vacuoles.

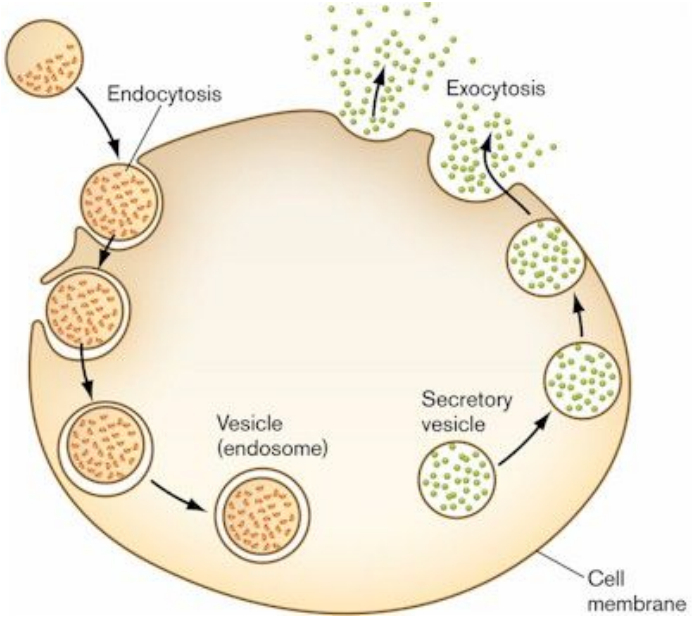
pinocytosis: liquids are taken in through pockets along the cell membrane and pinched off to form vacuoles.



Exocytosis: the process of removing material from the cell.

Vacuoles containing waste are fused with the cell membrane and the contents are forced out of the cell.





https://www.youtube.com/watch?v=dPKvHrD1eS4