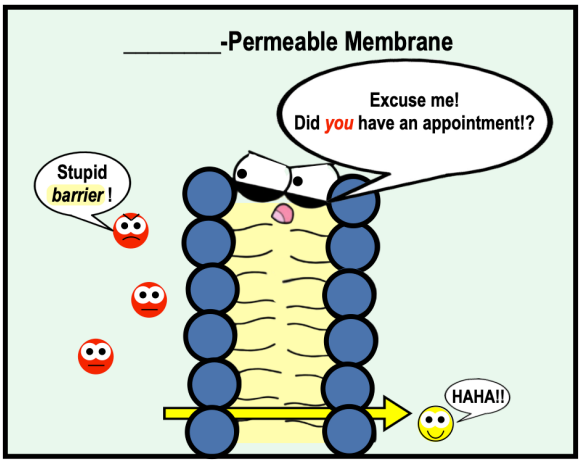
CONCEPT: INTRODUCTION TO MEMBRANE TRANSPORT

●*Biological membranes* are _____- *permeable* & can act as _____ to prevent *diffusion* of molecules.

□ **Selectively Permeable** (or *semi-permeable*): "_____" about what crosses the membrane.

EXAMPLE: Selectively Permeable Biological Membranes.

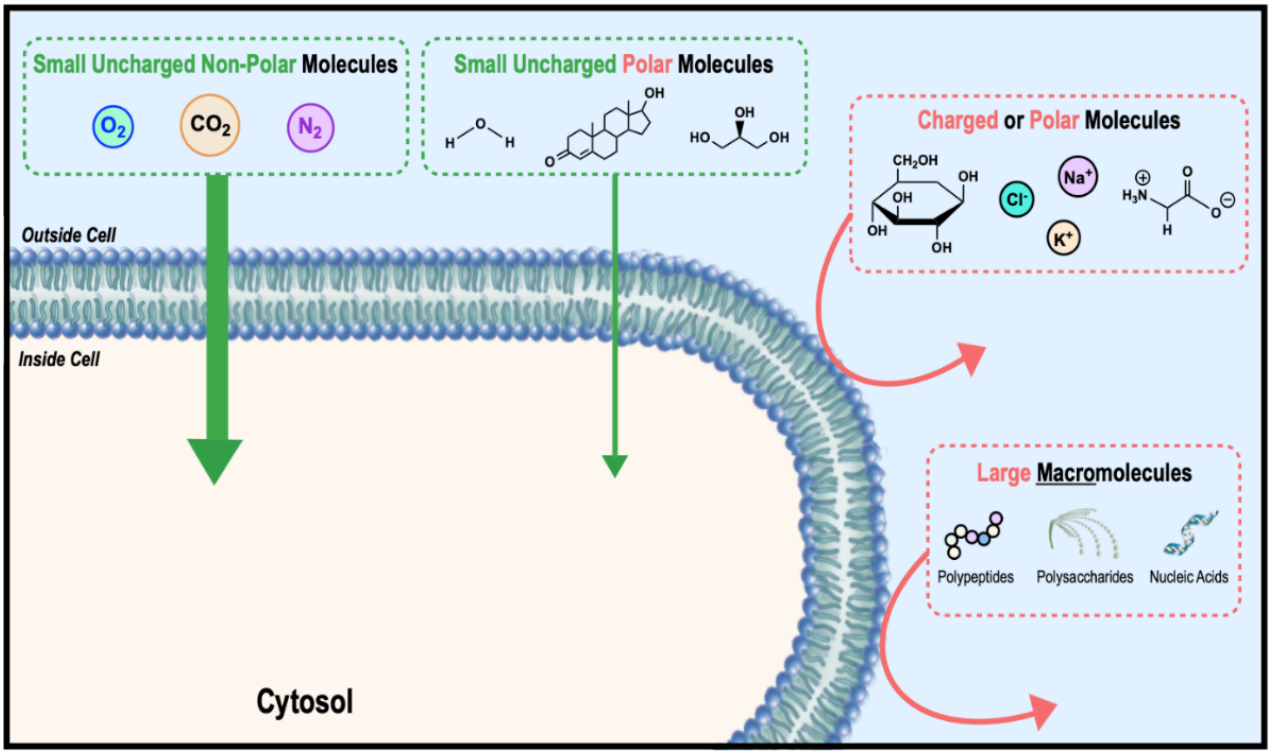


Which Molecules Freely Cross Membranes?

●Some molecules can *freely* diffuse across a membrane _____ facilitation from a protein:

CAN Freely Diffuse	_____	Uncharged	Nonpolar/Hydro_____
_____ Freely Diffuse	LARGE	_____ (+/-)	Polar/Hydrophilic

EXAMPLE: Diffusion Across a Membrane.



CONCEPT: INTRODUCTION TO MEMBRANE TRANSPORT

PRACTICE: Which molecule most easily diffuses across a biological membrane's lipid bilayer, without help of a protein?

a) H_2O.

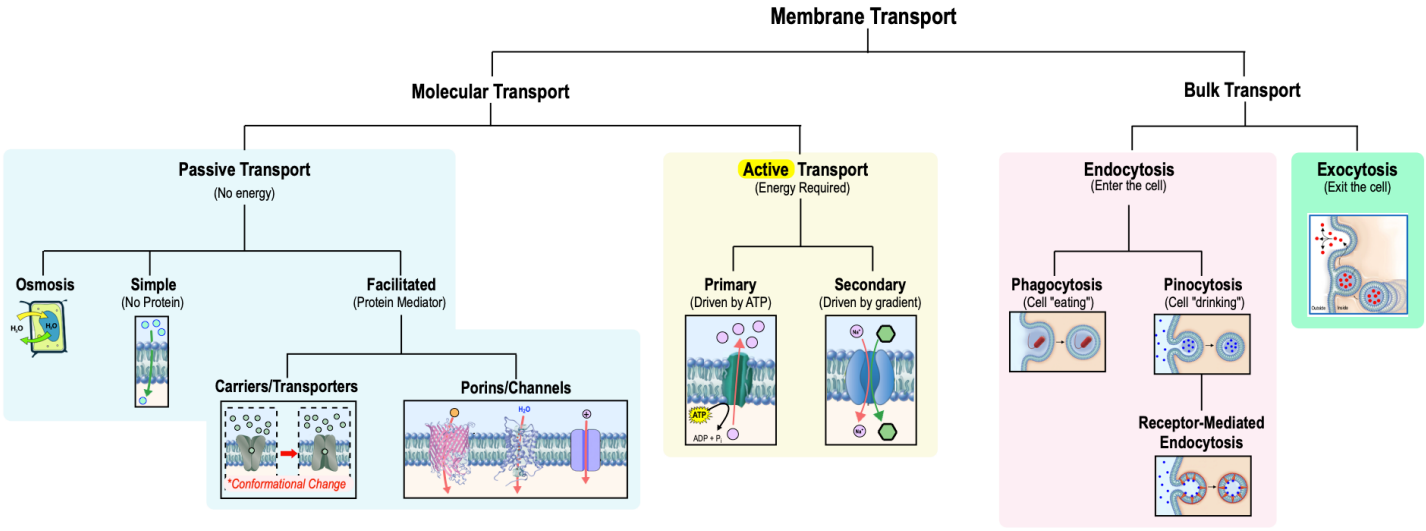
b) O_2.

c) $H_2PO_4^-$.

d) Glucose.

e) Na^+.

Map of the Lesson on Membrane Transport



PRACTICE: According to the map above, what kind of large molecule transport is also called the process of cell "eating"?

a) Phagocytosis.

b) Receptor-mediated Endocytosis.

c) Exocytosis.

d) Pinocytosis.

e) Facilitated Diffusion.