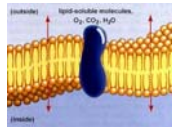


- Movement through the membrane
- Ch. 7 Section 3, Pages 184-189

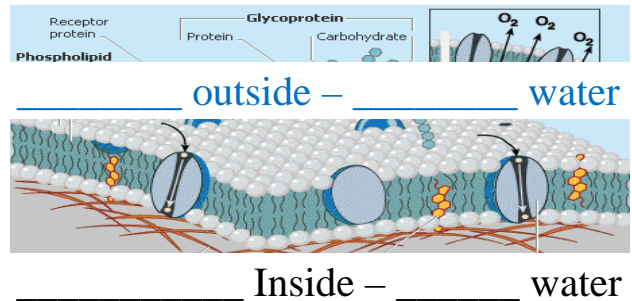


Objective: Students will

- A) Identify the 3 parts and functions of the cell membrane
- B) Define cellular transport and concentration
- C) Compare osmosis and diffusion
- D) Compare passive and active transport
- E) Predict cell response from changing salt concentrations

A) Identify the 3 parts and functions of the cell membrane

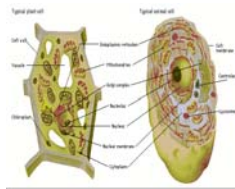
Cell Membrane



A) Identify the 3 parts and functions of the cell membrane

Cell Membrane

- _____ cells
- Gives _____ to _____ cells
- Inside cell wall of _____ cells



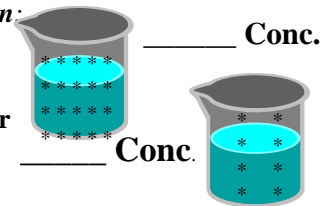
Made of:

- _____
- _____
- _____
- _____

B) Define cellular transport and concentration

Solution Concentration:

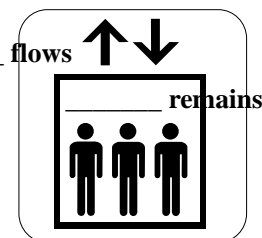
- Like density = # _____ per _____ of container



A) Identify the 3 parts and functions of the cell membrane

Semi-permeable or Selectively permeable

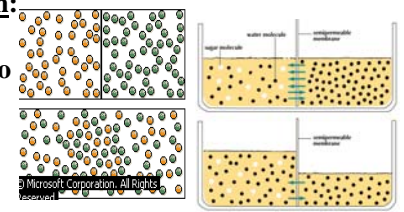
Link Word	
Reminds me of	
Because	



C) Compare osmosis and diffusion

Diffusion Osmosis

- Movement of _____ : _____ of _____ or _____
- **Law of Diffusion:** From _____ Concentration to _____ Concentration
- Balance the _____
- _____ of _____
- Special case of _____
- Think _____ smosis



C) Compare osmosis and diffusion

Equilibrium • "Equi" = _____

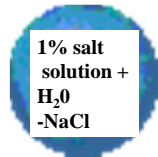
H₂O H₂O H₂O concentrations on _____ sides of _____

H₂O H₂O H₂O • Osmosis _____

H₂O H₂O H₂O • Isotonic Solution _____ means _____

Therefore focus on the water concentration. Predict the water movement given the following:

- 10% salt solution
- -H₂O
- +NaCl



E) Predict cell response from changing salt concentrations.

Outside the cell

Hypotonic or Hypertonic Solutions?

Tap Water



- Hypotonic = "_____" or _____ salt _____, relative to _____
- Hypertonic = "_____" or _____ salt relative to _____

Plasmolysis

- Cell membranes _____ or _____
- Dependent on _____

D) Compare passive and active transport

Passive Transport

Active Transport

- _____ or _____
- Going _____ the _____
- No _____ required

- _____ the _____
- Requires _____
- _____ to _____ Concentrations

_____ Conc. To _____ Conc.

* * * * *
* * * * *



E) Predict cell response from changing salt concentrations.

Sea water organism in fresh water

Tap Water



- _____ Solution = _____
- _____ salt concentration _____ the cell
- _____ Water concentration _____

Fresh water organism in salt water

- Water moves? _____ Cell _____

_____ Solution

Salt Water
• High salt
• Low water



- Water moves? _____
- Cell _____

Understanding Check Active or Passive Transport?

- Which requires ATP energy?
- Which goes with the concentration gradient?
- Which goes against the gradient?

Understanding Check

1. Draw a basic cell membrane and label the three main parts.
2. Why is the cell membrane called semipermeable?
3. Predict what will happen to a plant cell that is placed in salt water. Why does this happen?