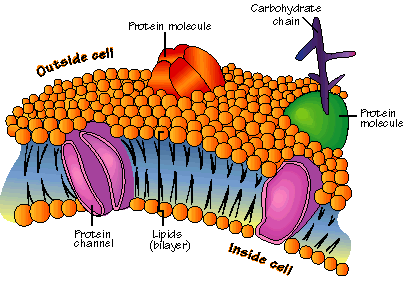
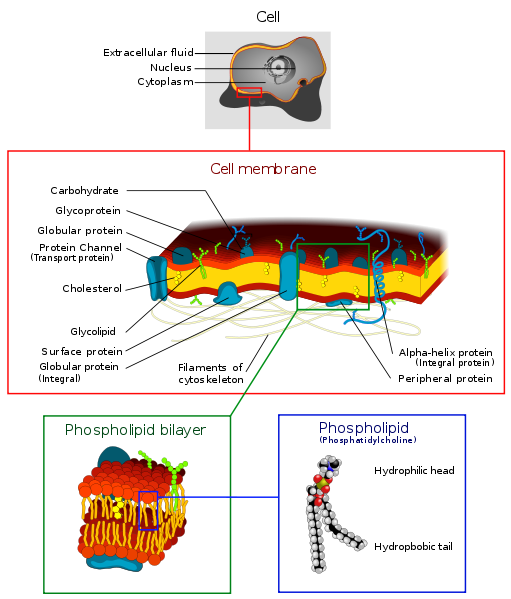
**CELL MEMBRANE**

Where? What?

* .
* .
* .
* .
* .

What are the main players?

The Fluid Mosaic Model

* .
  + .
  + .
* .

Fluidity of the Membrane

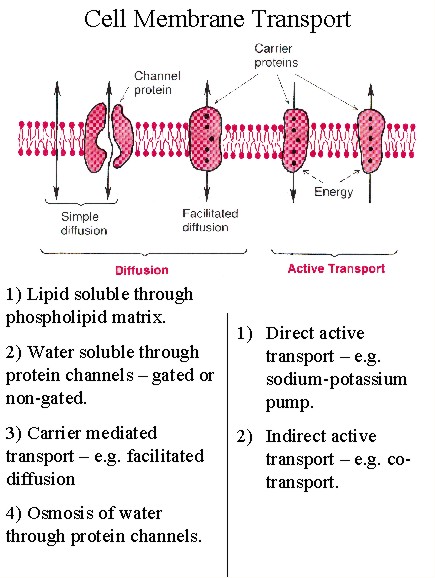
* .
* .
* .

Membrane as a Mosaic

* .
* Peripheral Proteins –
* Integral Proteins –

Selective Permeability of the Membrane

* .
* .

**PERMEABILITY OF THE MEMBRANE**

**AND TRANSPORT ACROSS IT**

2 types: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Nonpolar molecules**

* .
* .
* .

**Polar molecules**

* .
  + .
  + .

**Transport Proteins**

* Carrier Proteins –
* Channel Proteins –
  + .
* **Both allow for greater and faster passage of substances across the membrane**

**Plasmolysis**

* .

**Membrane Potential**

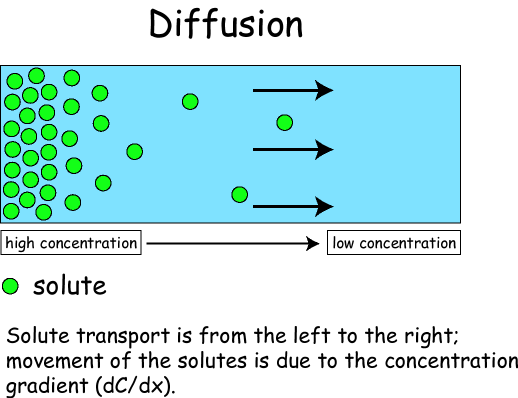
* .
* .

**Electrochemical Gradient**

* .
* This is called the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

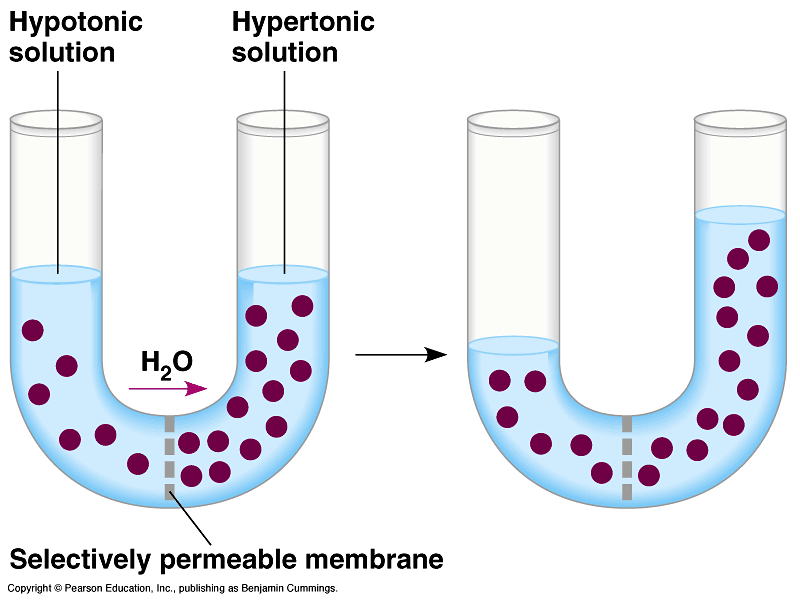
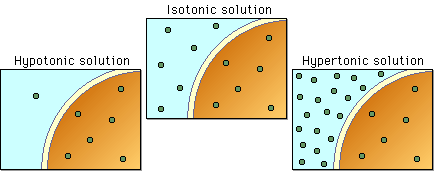
**Passive Transport –**

3 Types of Passive Transport: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

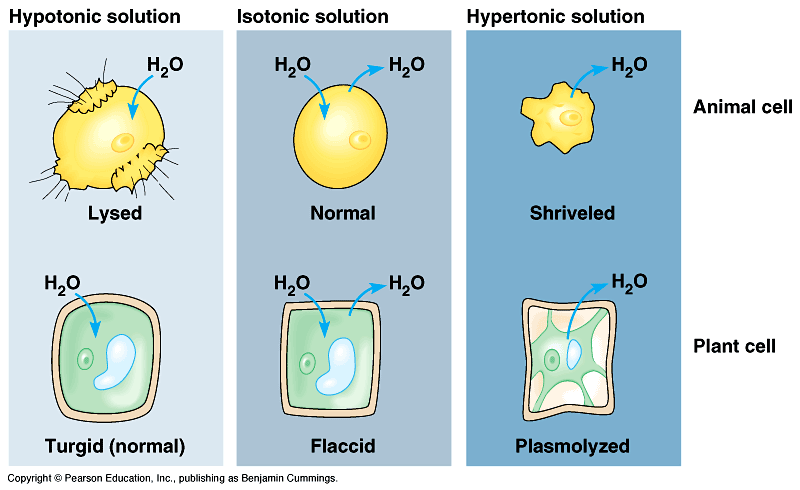
Diffusion –

* .
* .
* .

What substance may diffuse across a membrane?

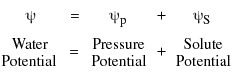
\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

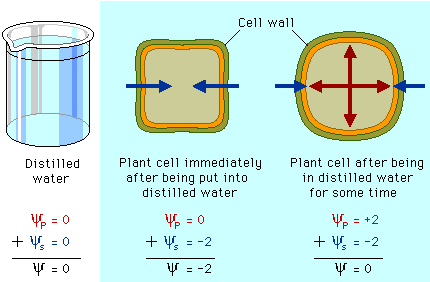
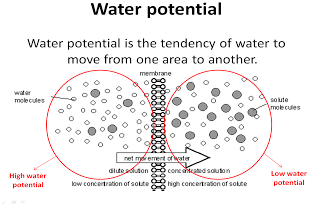
Osmosis

* .
  + .
* .

In Plant and Animal Cells

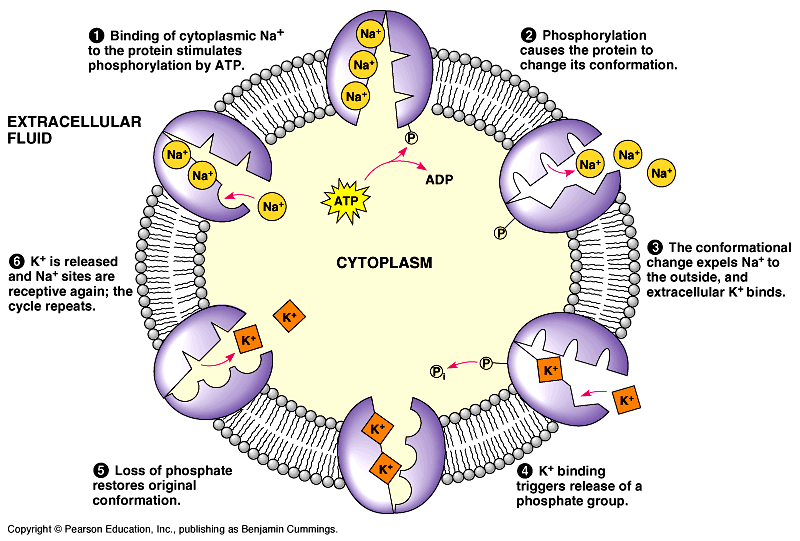
Facilitated Diffusion

* Does **NOT** require an input of energy - Solute is still moving down its concentration gradient
* .
* .
* .
* .

Water Potential – abbreviated by ψ (psi)

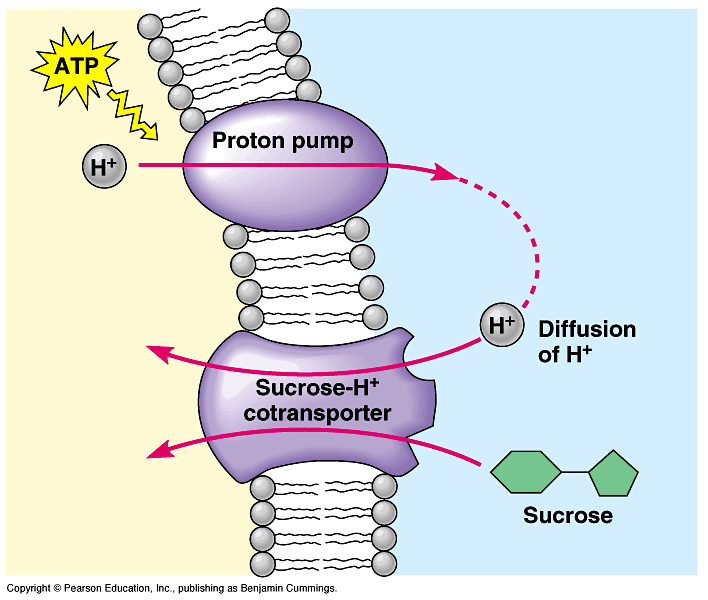
* .
* .

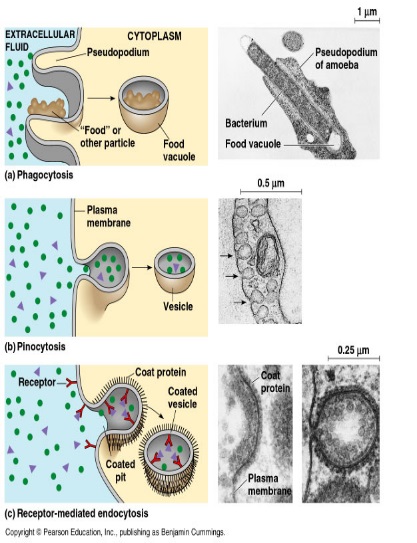
**Active Transport**



Electrogenic Pumps –

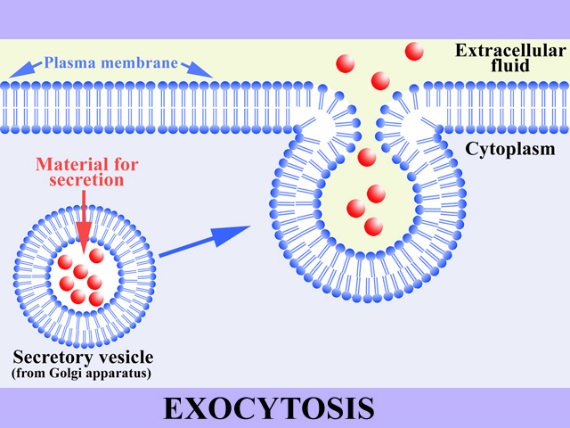
**Sodium-Potassium Pump**





Cotransport

Endocytosis and Exocytosis

Endocytosis

Phagocytosis

Pinocytosis

Receptor-mediated endocytosis

Exocytosis