The plasma membrane / cell membrane / phospholipid bi-layer

Function: separates the inside of the cell from the outside

 AND controls what goes in and out of the cell

Membrane vocab:

Phospholipid – molecule made of phosphate and lipids (drawing)

Hydrophilic – water friendly

Hydrophobic – afraid of water

Transport proteins – helps let molecules in or out of cell

Channel proteins – allow molecules to pass through them into or out of the cell

Surface proteins – proteins on the surface of the membrane

 Marker proteins – ID the cell

 Receptor proteins – receive information

Transport across the membrane

Vocab

Passive Transport – does not need energy

Diffusion – passive transport of molecules from an area of high concentration to an area of low concentration

Osmosis – the diffusion of water

Facilitated diffusion – diffusion from high to low with the help of a protein (passive)

Active transport – movement of molecules across the membrane with the use of energy – movement goes low to high

Sodium-potassium pump – example of active transport

Proton pump – active transport

 Study the diagrams of the cell membrane below





The above diagrams are of the cell membrane. The cell membrane consists of…..

1. Phospholipid: phosphate and a lipid
2. Proteins