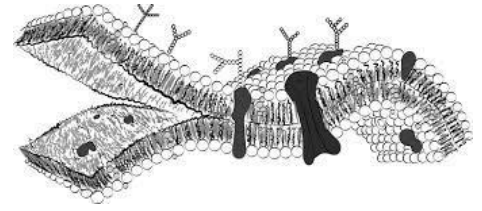


Cell Membrane – Gateway to the Cell



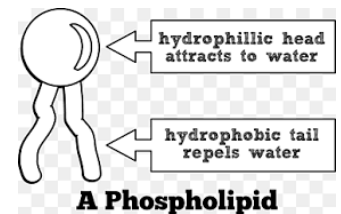
Key Points About the Cell Membrane:

- controls substances entering and leaving the cell
- The cell membrane **allows only some** substances to pass through it.
- Therefore, it is called a “**semi-permeable**” membrane.

Fluid Mosaic Model of the Cell Membrane

- The cell membrane parts move around so it is **fluid**
- There are many different types of molecules so it is a **mosaic**

Three Parts of the Cell Membrane:



1. Phospholipids

- The cell membrane is made up of a double layer of phospholipid molecules
- Each phospholipid has a phosphate “head” that likes water
- Each phospholipid has two long fatty “tails” that hate water
- Only small water molecules or fatty molecules can easily pass through the cell membrane

2. Proteins

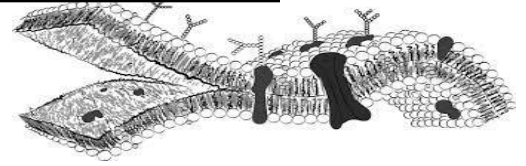
- Proteins are like “doorways” in the cell membrane. They let larger molecules pass through the cell membrane that cannot pass through the phospholipid bilayer like glucose sugar

Cell Membrane – Gateway to the Cell

3. Carbohydrates

- These are long chain molecules that are attached to the outside of the cell membrane
- Carbohydrates help cells recognize other cells and they help cells stick together

Cell Membrane – Gateway to the Cell



Key Points About the Cell Membrane:

- controls substances _____ the cell
- The cell membrane _____
- Therefore, it is called a _____ membrane.

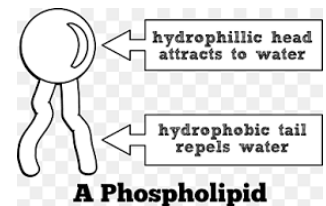
Fluid Mosaic Model of the Cell Membrane

- The cell membrane _____ so it is **fluid**
- There are many _____ so it is a **mosaic**

Three Parts of the Cell Membrane:

1. Phospholipids

- The cell membrane is made up of a _____ molecules
- Each phospholipid has _____
- Each phospholipid has _____
- Only _____ can easily pass through the cell membrane



2. Proteins

- Proteins are like “_____” in the cell membrane. They let _____ the cell membrane that cannot pass through the phospholipid bilayer _____

Cell Membrane – Gateway to the Cell

3. Carbohydrates

- These are long chain molecules that are _____ of the cell membrane
- Carbohydrates help cells _____ and they help cells _____