

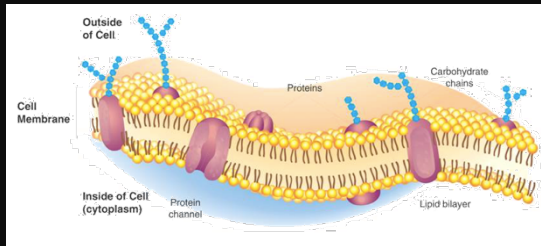
## Chapter 3 Cell Structure and Function

### 3.3 Cell Boundaries

#### I. **Cell Membrane** (Plasma Membrane):

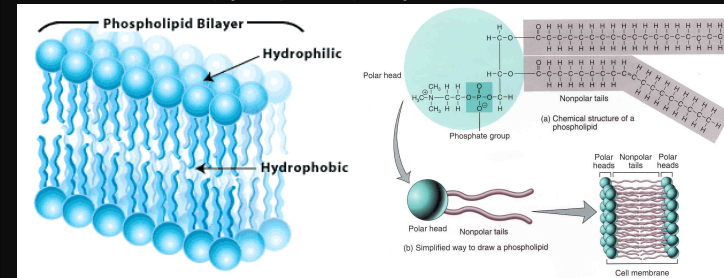
- A. Is a thin, flexible boundary that separates all cells from their surroundings.

Why does the cell need to be independent from its surroundings?



- B. Consists of a double layer of **phospholipids** that has three basic parts:

1. Charged (hydrophilic) phosphate group
2. Glycerol
3. Two (hydrophobic) fatty acid chains



- C. Is a constantly moving fluid mosaic that is made up of:

1. a lipid bilayer
2. many proteins that create channels and pumps
3. carbohydrates that can identify the cell

- D. **Regulates what enters and leaves the cell and also provides support and protection for the cell.**

Under what conditions would cells need to regulate the substances that go in and out of the membrane?

