

NAME \_\_\_\_\_

DATE \_\_\_\_\_ PERIOD \_\_\_\_\_

## Cell Membrane Worksheet

### Composition of the Cell Membrane & Functions

The cell membrane is also called the \_\_\_\_\_ membrane and is made of a phospholipid \_\_\_\_\_. The phospholipids have a hydrophilic (water attracting) \_\_\_\_\_ and two hydrophobic (water repelling) \_\_\_\_\_. The head of a phospholipid is made of an alcohol and \_\_\_\_\_ group, while the tails are chains of \_\_\_\_\_. Phospholipids can move \_\_\_\_\_ and allow water and other \_\_\_\_\_ molecules to pass through into or out of the cell. This is known as simple \_\_\_\_\_ because it does not require \_\_\_\_\_ and the water or molecules are moving \_\_\_\_\_ the concentration gradient.

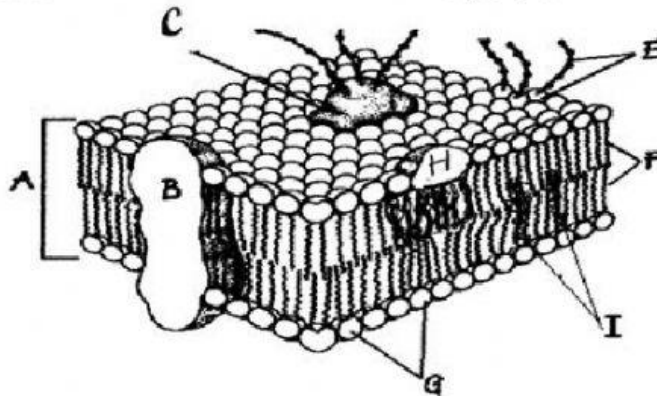
Label the head and tail region of the phospholipid below:



Another type of lipid in the cell membrane is \_\_\_\_\_ that makes the membrane more fluid. Embedded in the phospholipid bilayer are \_\_\_\_\_ that also aid in diffusion and in cell recognition. Proteins called \_\_\_\_\_ proteins go all the way through the bilayer, while \_\_\_\_\_ proteins are only on one side. Integral proteins are also called \_\_\_\_\_ proteins. Large molecules like \_\_\_\_\_ or carbohydrates use proteins to help move across cell membranes. Some of the membrane proteins have carbohydrate \_\_\_\_\_ attached to help cells in recognize each other and certain molecules.

**Identify** the name for each part of the cell membrane.

_____	Name/Color	Letter	_____	Name/Color
_____	Phospholipid bilayer		_____	Peripheral protein
_____	Integral protein		_____	Cholesterol
_____	Fatty acid tails		_____	Glycoprotein
_____	Phosphate heads		_____	Glycolipids



**Match** the cell membrane structure or its function with the correct letter from the cell membrane diagram.

Letter	Structure/Function	Letter	Structure/Function
_____	Attracts water	_____	Repels water
_____	Helps maintain flexibility of membrane	_____	Make up the bilayer
_____	Involved in cell-to-cell recognition	_____	Help transport certain materials across the cell membrane