

Name _____

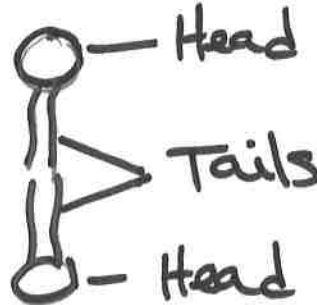
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Cell Membrane Coloring Worksheet

Composition of the Cell Membrane & Functions

The cell membrane is also called the Plasma membrane and is made of a phospholipid bilayer. The phospholipids have a hydrophilic (water attracting) head and two hydrophobic (water repelling) tails. Phospholipids can move freely and allow water and other small molecules to pass through into or out of the cell. **SKETCH AND LABEL** a phospholipid coloring the heads red and the tails blue.

PHOSPHOLIPID



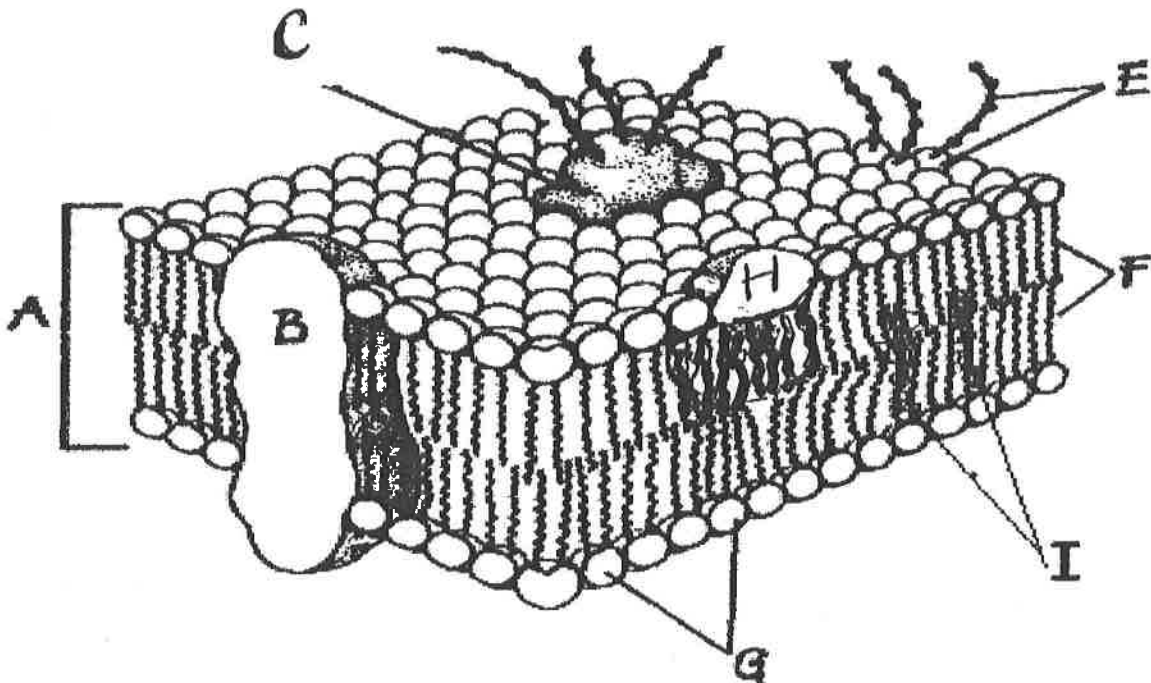
Embedded in the phospholipid bilayer are proteins that also aid in transportation within the cell. Proteins called integral proteins go all the way through the bilayer, while peripheral proteins are only on one side. Integral proteins are also called channel proteins. Some of the membrane proteins have carbohydrate receptors attached to help cells in recognize each other and certain molecules.

List functions of the cell or plasma membrane:

- Help maintain homeostasis
- Exchange materials like food, water, wastes
- water, Oxygen, CO₂ can move freely
- It is semipermeable or selectively permeable allowing certain molecules to pass through

Correctly *color code* and *identify* the name for each part of the cell membrane.

Letter	Name/Color	Letter	Name/Color
<u>A</u>	Phospholipid bilayer (no color)	<u>C</u>	Peripheral protein (red)
<u>B</u>	Integral protein (pink)	<u>I</u>	Cholesterol (blue)
<u>F</u>	Fatty acid tails (orange)	<u>H</u>	Glycoprotein (green)
<u>G</u>	Phosphate heads (yellow)	<u>E</u>	Glycolipids (purple)



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

Letter	Structure/Function	Letter	Structure/Function
<u>G</u>	Attracts water	<u>F</u>	Repels water
<u>I</u>	Helps maintain flexibility of membrane	<u>A</u>	Make up the bilayer
<u>C</u>	Involved in cell-to-cell recognition	<u>B</u>	Help transport certain materials across the cell membrane