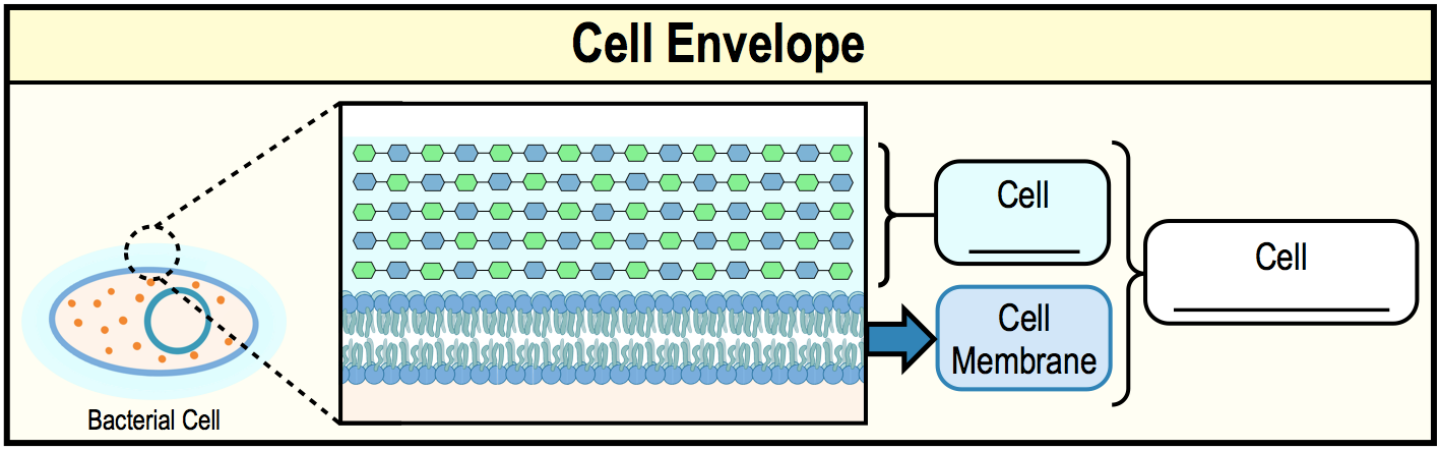
CONCEPT: CELL ENVELOPE & BIOLOGICAL MEMBRANES

●**Cell Envelope:** all of the _____ layers surrounding the cell (membranes, cell walls, etc.).

□ Structures that compose the cell envelope may _____ in different types of cells.

□ Cell membranes are _____ included in the cell envelope (all cells have cell membranes).



PRACTICE: Components of the cell envelope include:

a) Cell membrane. b) Cell wall. c) Cytoplasm. d) a, b, & c. e) a & b.

Intro to Biological Membranes

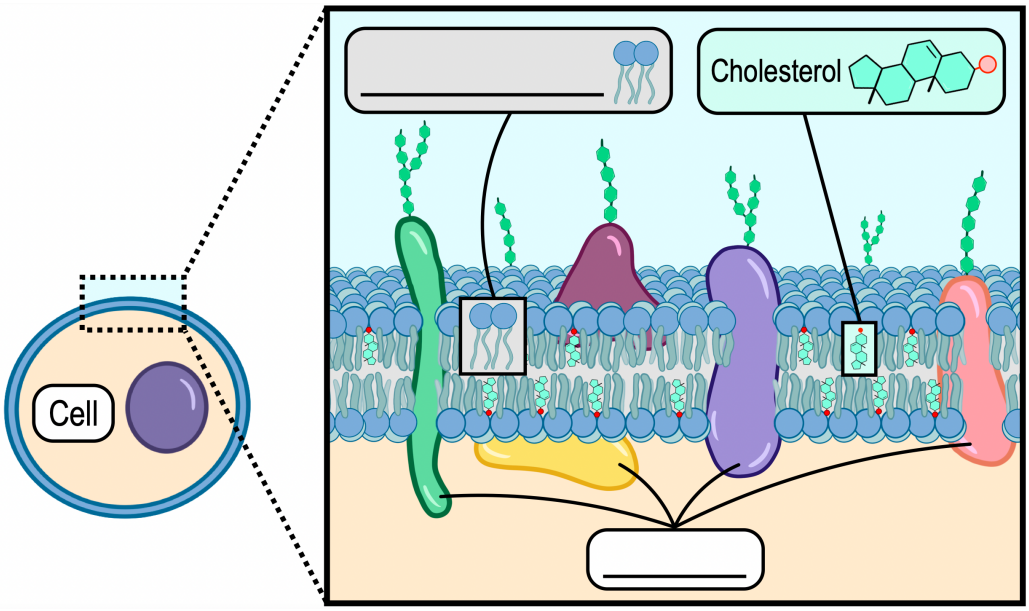
●Recall: _____ are *amphipathic* molecules & are the major component of *biological membranes*.

□ **Biological Membrane**: phospholipid _____ with other embedded molecules (ex. proteins & cholesterol).

□ Also called _____ *membrane* or _____ *membrane*.

●**Fluid Mosaic Model**: *biological membranes* are _____ & a _____ of membrane-embedded *proteins*.

□ Comprised of 20-80% _____ by mass that move *laterally* within the cell membrane.



CONCEPT: CELL ENVELOPE & BIOLOGICAL MEMBRANES

EXAMPLE: Membranes are a fluid mosaic of what major components?

a) Proteins, cholesterol, and sugar.
b) Phospholipids, proteins, and cholesterol.
c) Phospholipids, nucleic acids, and cholesterol.
d) Glucose, proteins, and phospholipids.

PRACTICE: The fluid mosaic model of the membrane proposed that membranes:

a) Consist of a single layer of phospholipids and proteins.
b) Consist of a phospholipid bilayer composed of a variety of fatty acids.
c) Consist of protein molecules embedded in a dynamic bilayer of phospholipids.
d) Consist of a phospholipid bilayer between two layers of hydrophilic proteins.