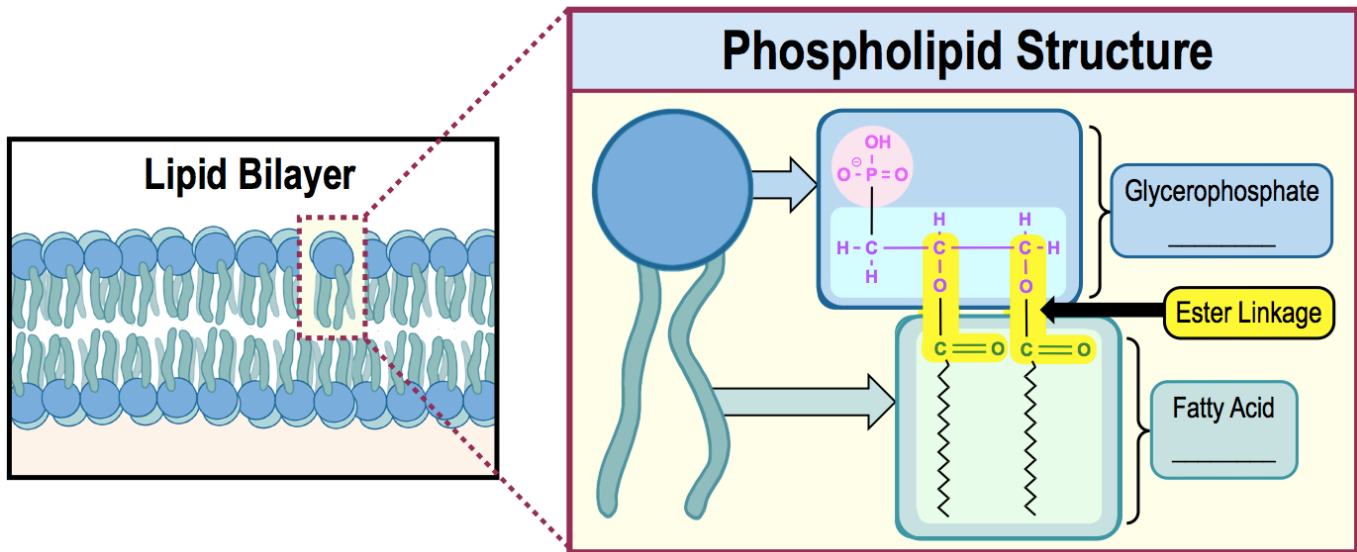


CONCEPT: BACTERIAL & EUKARYOTIC CELL MEMBRANES

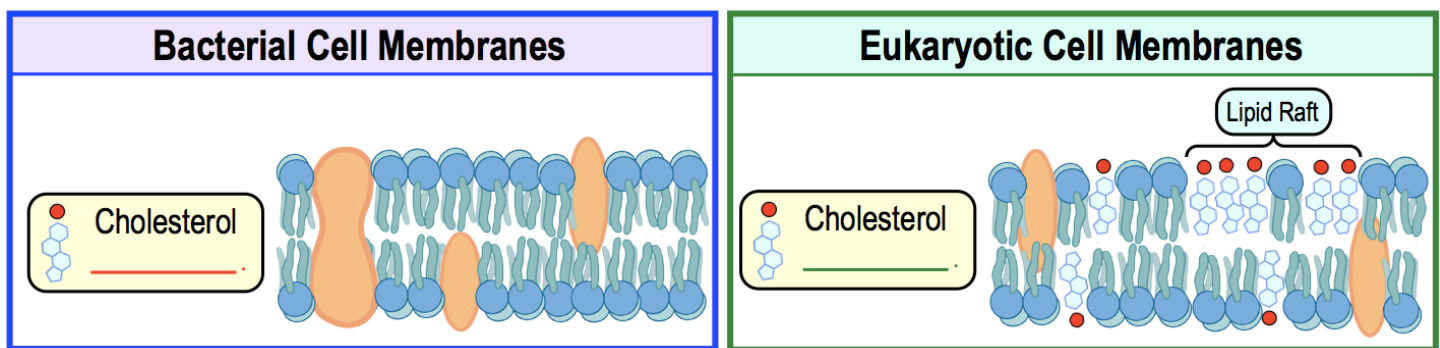
- BOTH *bacterial* & *eukaryotic* phospholipids have a glycerophosphate head & hydrophobic tails.
 - Recall: Phospholipids are *amphipathic* molecules with a *hydrophilic* head & *hydrophobic* tails.
 - Bacterial & eukaryotic phospholipids use an ester linkage to connect head group to fatty acid tails.



Cholesterol in Animal Membranes

- Only *eukaryotic* membranes have *cholesterol* making them more rigid than bacterial membranes.
 - **Lipid Raft**: dense regions of *cholesterol* moving laterally together through the fluid membrane.

EXAMPLE: Bacterial vs. Eukaryotic cell membrane.



- *Archaeal* cell membranes have a unique type of lipid composition.

PRACTICE: _____ is a chemical found in eukaryotic cell membranes that regulates fluidity in extreme temperatures.

- a) Phospholipid. b) Glycerophosphate. c) Glucose. d) Cholesterol.