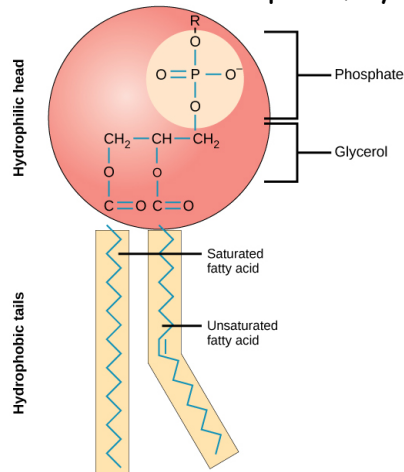


Phospholipids

- One glycerol molecule, two fatty acid chains, one phosphate (+ one alcohol)
- **Amphipathic**
 - Polar, hydrophilic head
 - Non-polar, hydrophobic tail



Phospholipids: Surfactants (One layer)

- Will form a layer on the surface of water with phosphate heads in the water and the fatty acid tails sticking out of the water.
- *Diagram in textbook page 56*
- Components of lung surfactants

Phospholipids: Bilayer

- Phosphate-choline 'head' (hydrophilic, polar) orientates itself towards any aqueous medium.
 - Forms hydrogen bonds with the aqueous medium
- Fatty acid 'tails' (hydrophobic, non-polar) orientate themselves away from any aqueous layer or medium.
 - Cannot form hydrogen bonds with the aqueous medium - Non polar.
 - Covalent bonds on the fatty acid chain- no shared charge.
- Components of cell and organelle membranes.

