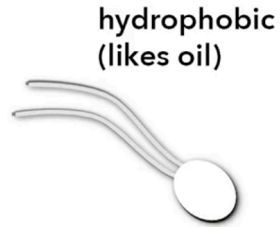
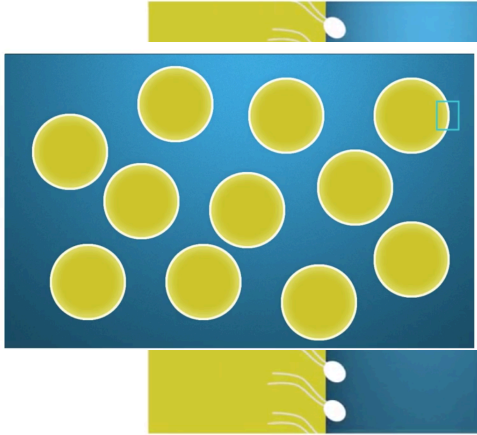




How are emulsions stabilized?

Surfactants keep droplets apart



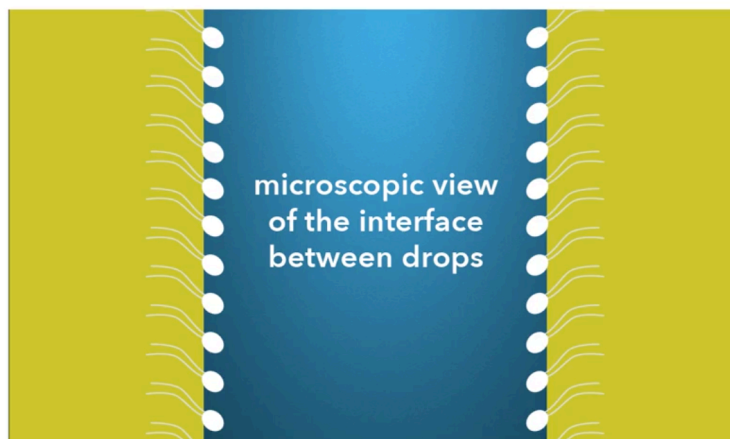
hydrophilic
(likes water)

amphiphilic:
like both water and oil



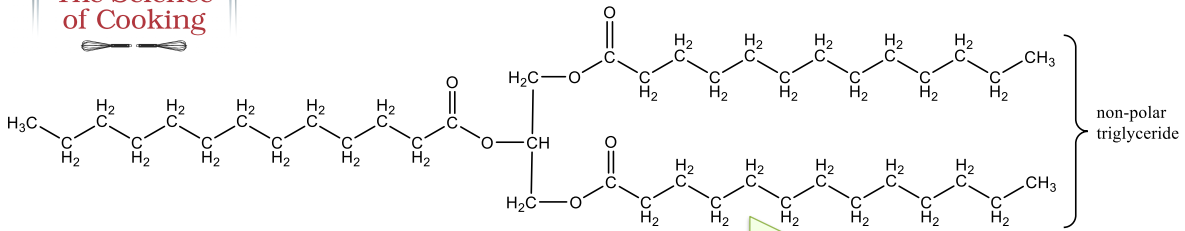
How are emulsions stabilized?

Amphiphilic molecules attach to the interfaces

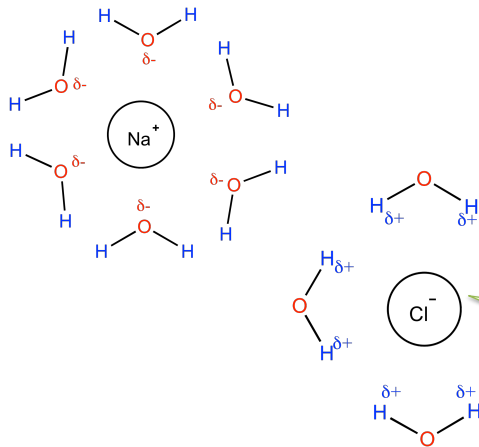




Hydrophilic / Hydrophobic



Molecules that hate water (love oil/fat) are called *hydrophobic* – these molecules will not dissolve in water.

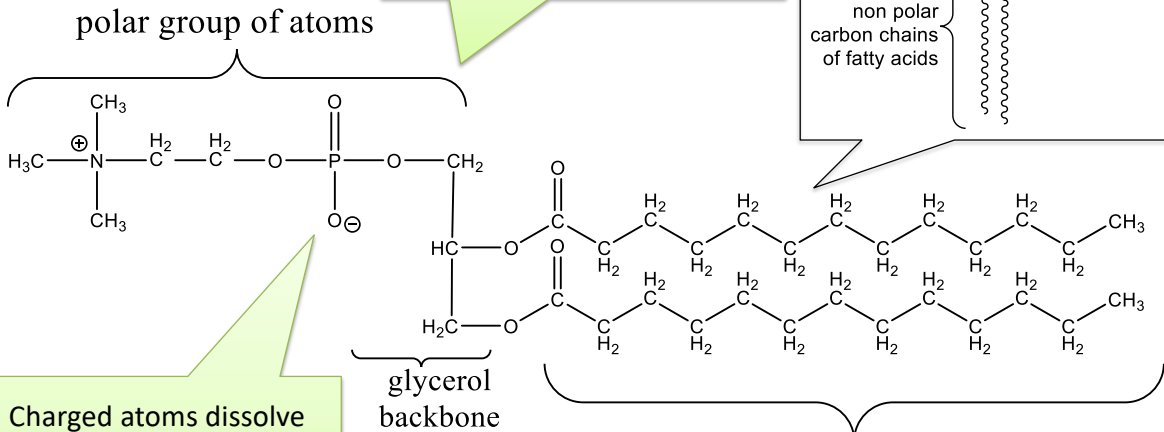
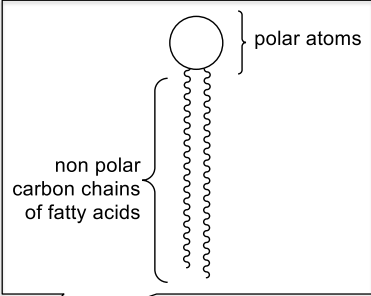


Molecules that love water are called *hydrophilic* – these molecules dissolve well in water



Amphiphilic molecules

This entire molecule is called a **phospholipid**...and it is **amphiphilic**



Charged atoms dissolve well in water. The charge is able to interact with the polar H-O-H bonds in water

non-polar carbon chains of fatty acids
Fat soluble (hydrophobic)