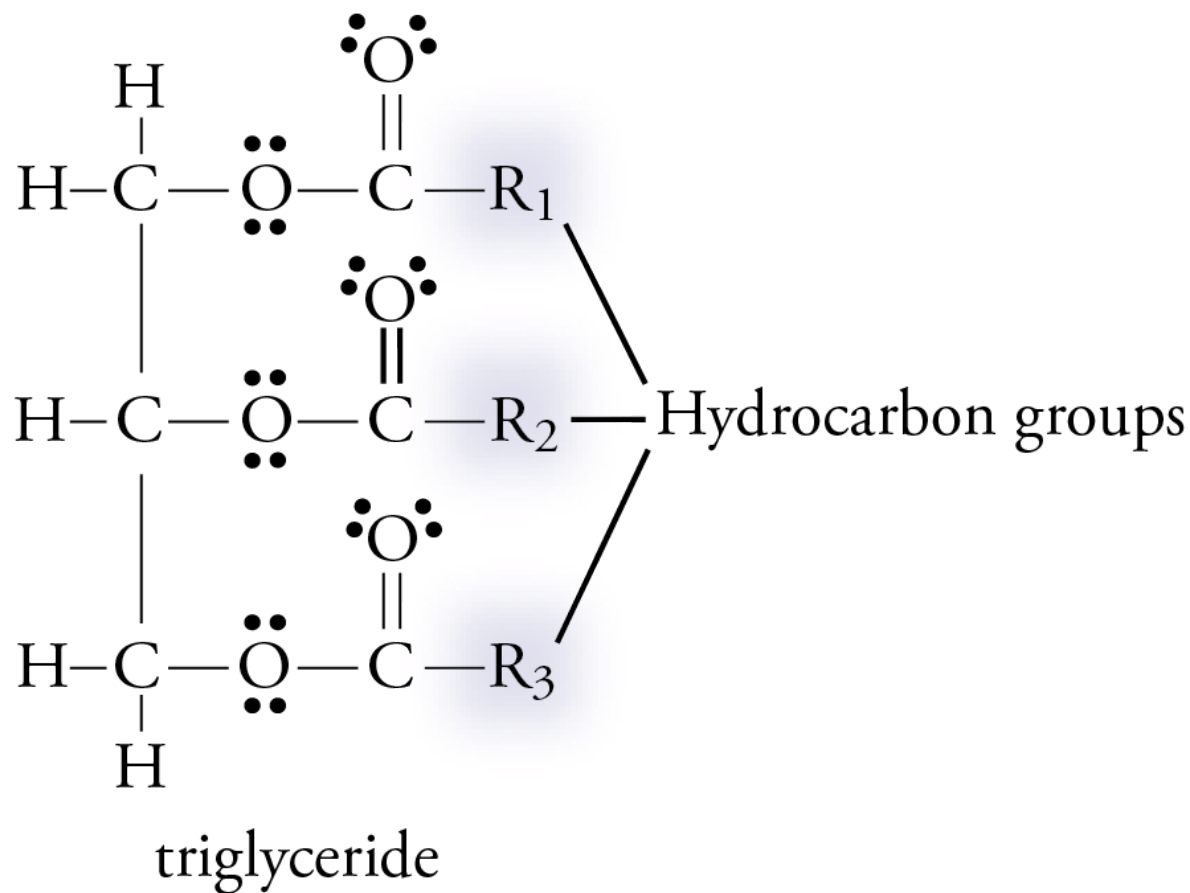


# Soaps and Detergents



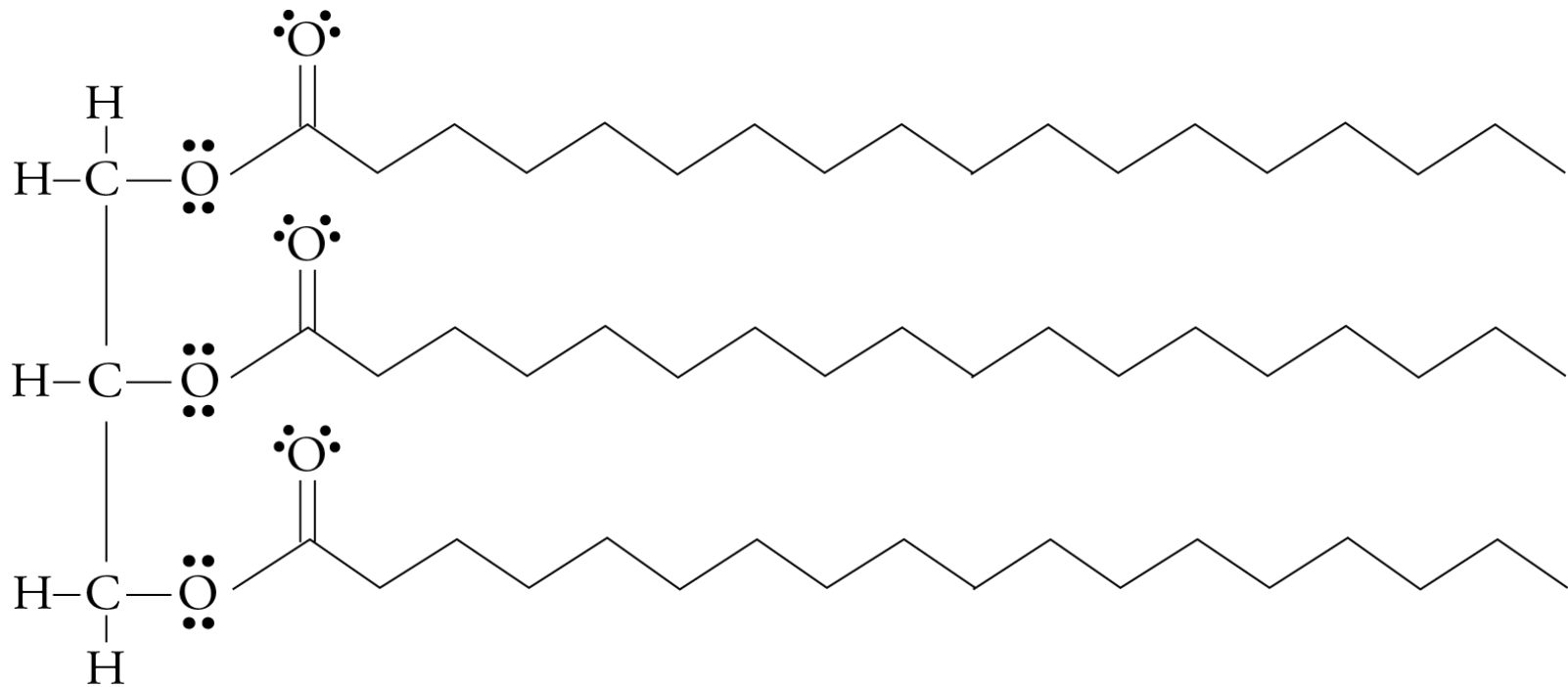
- Soap is made from natural triglycerides, which can be either animal fats or vegetable oils.
- Detergents are made from a variety of chemicals most of which are ultimately derived from petroleum. There is a much greater variety in the structures of detergents.

# Triglycerides (Fats and Oils)

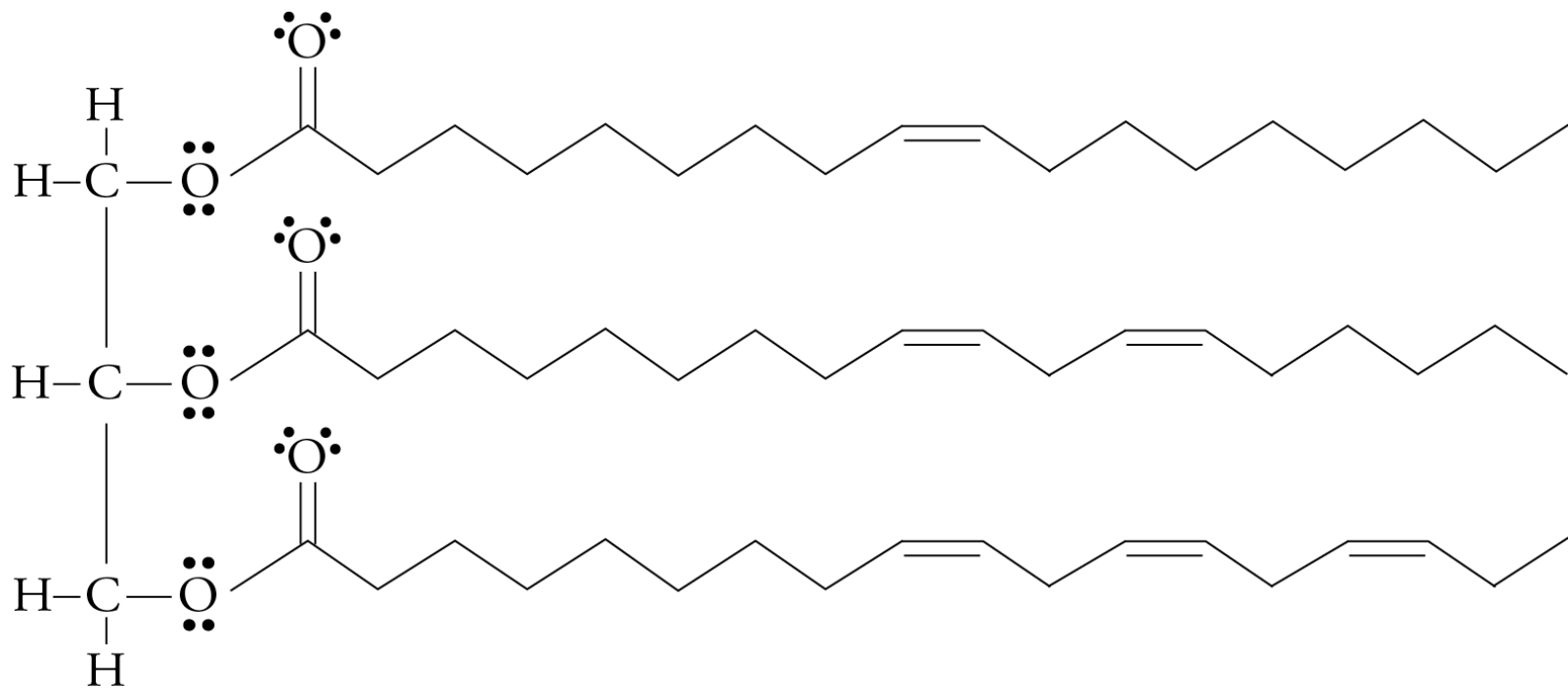


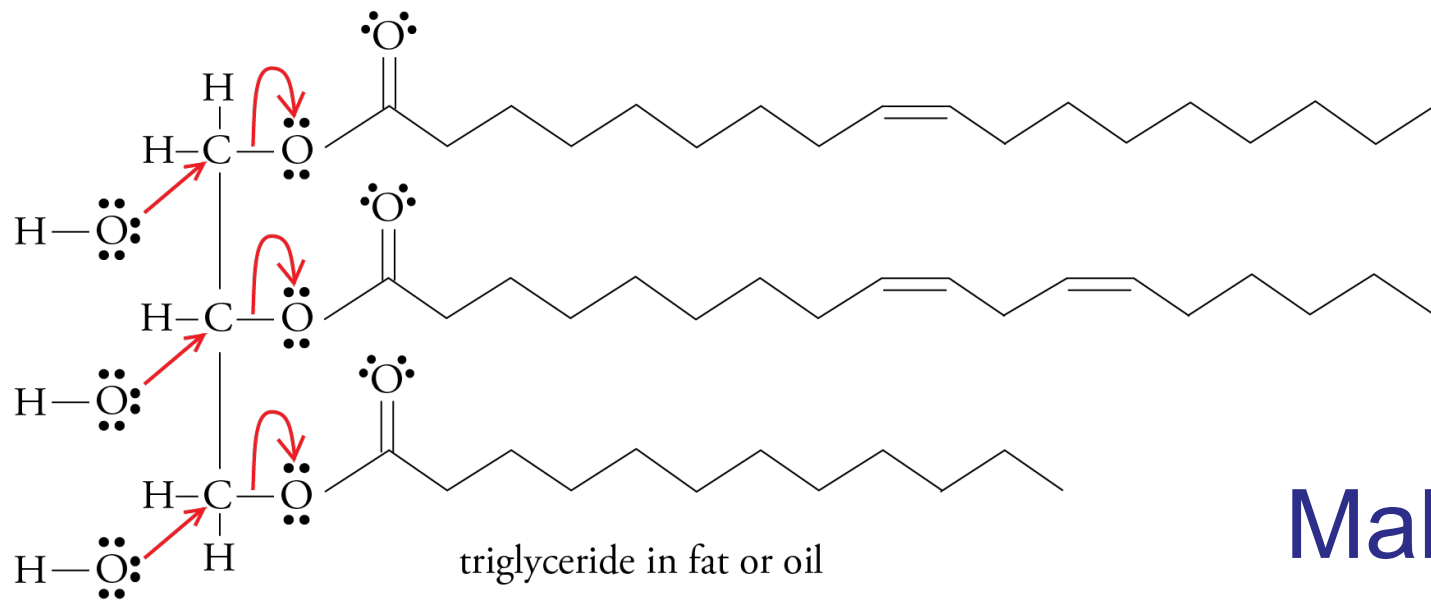


# Tristearin – Line Drawing

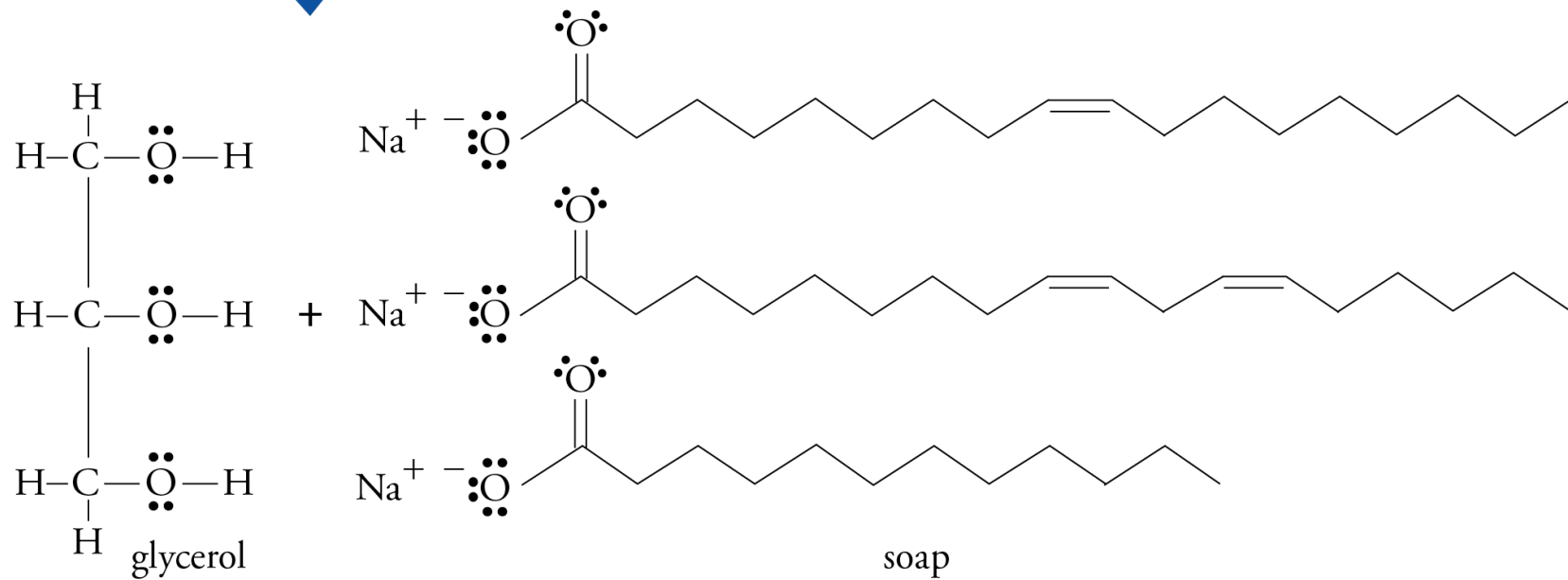


# Typical Liquid Triglyceride



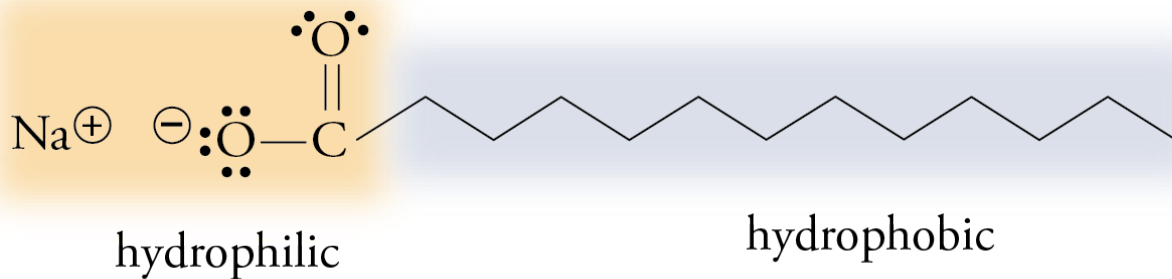


# Making Soap

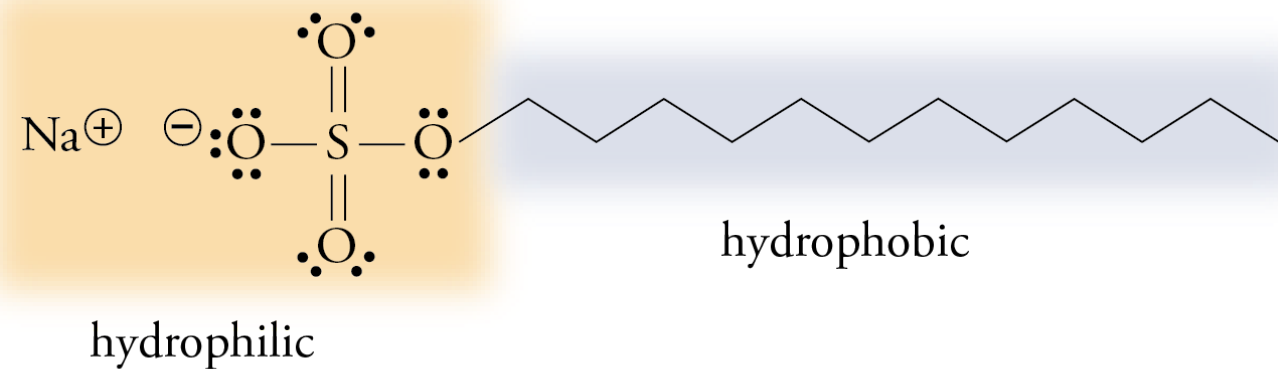


# Soap and Detergent

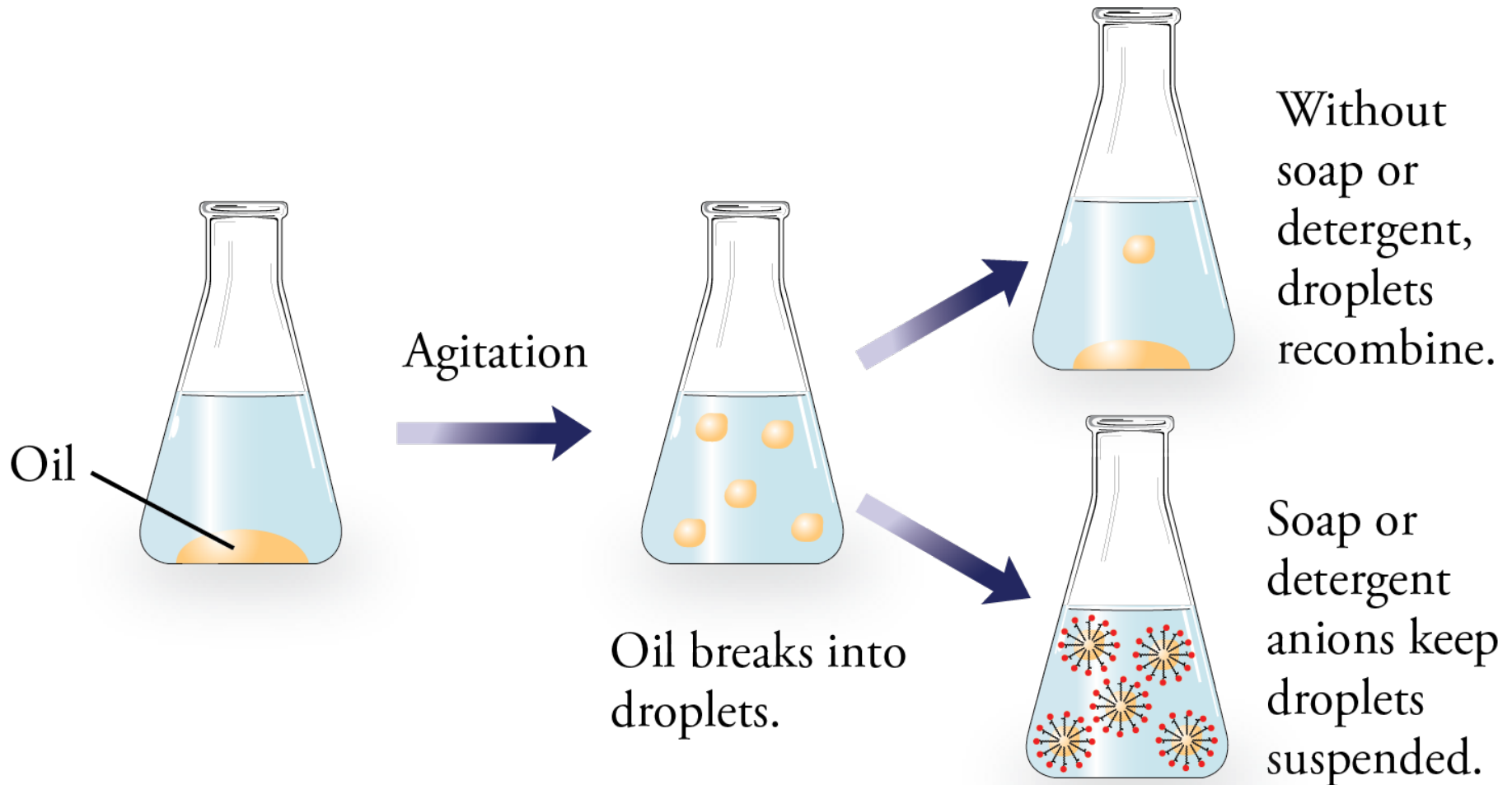
Typical soap



SDS, a typical ionic detergent



# Cleaning Greasy Dishes





# Oil Droplets and Soap or Detergent

Hydrophobic ends of soap or detergent enter droplet.

Hydrophilic ends of soap or detergent stick out into the water.

