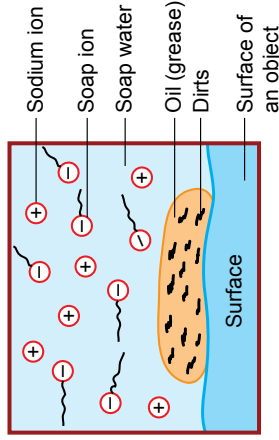


Cleansing Action of Soap

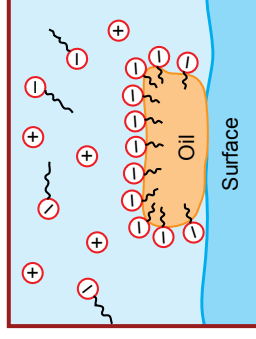
1



- Oily dirts stuck on the surface of an object. Soap dissolves in water and ionise to produce sodium ions and soap ions. Soap ions move randomly in the water.

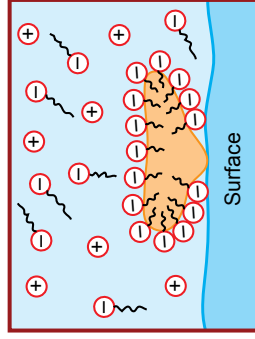


2



- Soap ions bind the water and oil together.
- The hydrocarbon part of soap ions in hydrophobic and dissolves in oil/grease while the ionic part of soap ions is hydrophilic and dissolves in water.

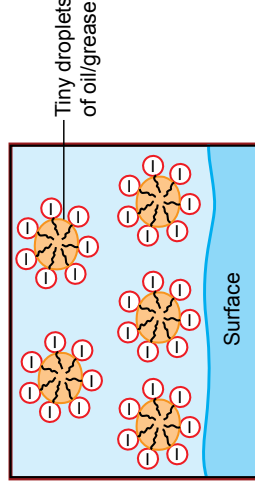
3



- Soap ions reduce the surface tension of water. Thus, they allow water to wet the surface.
- This action allows oil / grease to be detached from the surface.



4



- The oil / grease is removed from the surface as tiny droplets.
- Tiny droplets of oil / grease with negative charges on their surfaces repel against each other and are prevented from redepositing onto the surface. The oil droplets disperse in water to produce an emulsion.
- The lathers formed by the soap also help to float the oil droplets and dirts. Disposal of the emulsified water and lathers plus rinsing leaves the surface clean.