

Chapter 6

COMBUSTION AND FLAME

How to control fire?

- When any fire accident is happened, the fire can be controlled by restricting the essential requirements of fire (Combustion).
- As we know, the essential requirements for combustion are fuel, supply of oxygen and heat to raise the temperature of the fuel to its ignition temperature.
- In fire accidents, fire man throw water to control fire. Because water cools down the temperature of the substance below ignition temperature. Water vapours enters into air and cuts the supply of oxygen to the substance burning.
- In case of fire accidents due to electric short circuit, we should not use water as it may causes electric shock. In such case, we can use CO_2 to control fire.
- In extinguishing the fire involving oil or petrol, we should not use water. Oil is lighter than water. So, it floats over water and continues to burn. Sand (or) CO_2 can be used to control such fires.
- CO_2 cuts off the supply of oxygen to the substance which is burning and brings down the temperature.
- Chemicals like sodium bicarbonate (NaHCO_3) or potassium bicarbonate (KHCO_3) to produce CO_2 gas.