

Chapter 6

COMBUSTION AND FLAME

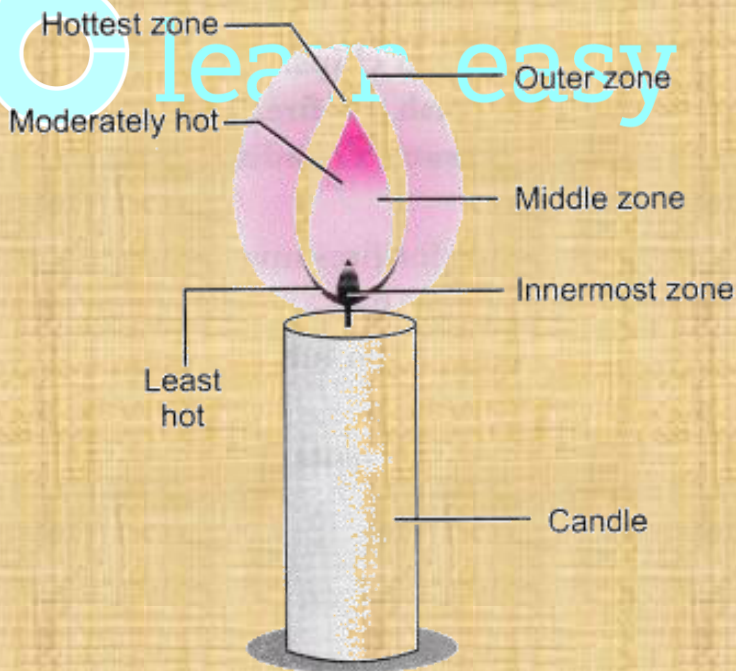
Flame:

- In fuels some of the substances burns with flame and some burns without flame.
- The substances which vapourizes on burning results in flame

Ex. Kerosene, wax

Structure of flame:

- When we observe the candle flame, we can notice different layers.



Outermost zone (or) Non-luminous zone:

The outermost zone of candle flame is the zone where complete combustion takes place. It is hottest zone of the flame and blue in colour.

Middle zone (or) Luminous zone:

The middle zone of candle flame is the zone where incomplete combustion takes place. It is moderately hot and yellow in colour.

Innermost zone (or) Dark zone:

The innermost zone of candle flame is the dark zone formed around the wick of the candle. It contains unburnt vapours of wax. It is least hot zone of the flame.

