

MATTER IN OUR SURROUNDINGS

Q* Boiling point :-

The temperature at which liquid boils into gas is called boiling point.

* Latent heat of vaporization

The amount of heat require to change 1 kg liquid to its gaseous state.

* Sublimation

The process of solid directly into gas without passing through liquid state.

Questions

(i)

$$470 \text{ K}$$

$$\Rightarrow ^\circ\text{C} = \text{K} - 273$$

$$^\circ\text{C} = 470 - 273$$

$$^\circ\text{C} = 197^\circ$$

(ii)

$$173 \text{ K}$$

$$\Rightarrow ^\circ\text{C} = \text{K} - 273$$

$$^\circ\text{C} = 173 - 273$$

$$^\circ\text{C} = -100^\circ$$

(iii)

$$30^\circ\text{C}$$

$$\Rightarrow \text{K} = ^\circ\text{C} + 273$$

$$\Rightarrow \text{K} = 30 + 273$$

$$\Rightarrow \text{K} = 303 \text{ K}$$

(iv)

$$-71^\circ\text{C}$$

$$\Rightarrow \text{K} = ^\circ\text{C} + 273$$

$$\Rightarrow \text{K} = -71 + 273$$

$$\Rightarrow \text{K} = 202 \text{ K}$$