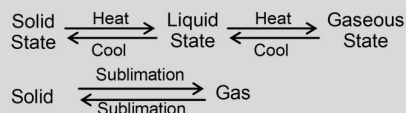


MIND MAP

Matter: Anything that occupies space and possesses mass. Matter is made up of particles which are

- very small in size.
- have spaces between them
- are continuously moving
- attract each other

States of matter are interconvertible


MATTER

Solid State Liquid State Gaseous State

• **Intermolecular force of attraction**

Solid > liquid > Gas

• **Intermolecular space**

Gas > liquid > Solid

• **Compressibility**

Gas > liquid > Solid

• **Melting point**

The temperature at which a solid melts to become a liquid at atmospheric pressure is called '**melting point**'.

• **Boiling point**

The temperature at which the vapour pressure becomes equals to the atmospheric pressure is known as the **boiling point**.

• **Latent heat**

The amount of heat required to change the state of matter from one state to another without rise in temperature is known as latent heat of that substance.

• **Latent heat of vaporization**

The amount of heat energy that is required to change 1kg of solid into liquid at atmospheric pressure at its boiling point is called, **latent heat of vaporization**.

• **Latent heat of fusion**

The amount of heat energy that is required to change 1kg of a solid into liquid at atmospheric pressure at its melting point is called **latent heat of fusion**.

• **Specific heat**

The amount of heat energy required to raise the temperature of a unit mass of a substance by 1°C. It is different for different substances.

• **Sublimation**

Sublimation is the process of conversion of a solid directly into a gas or vice-versa without changing into liquid state.

• **Evaporation**

The phenomenon of change of a liquid into vapours at any temperature below its boiling point is called '**evaporation**'

Factors affecting evaporation

Rate of evaporation increases with

- Increase in surface area.
- Increase in temperature
- Increase in wind velocity
- Decrease in humidity