

MIND MAP

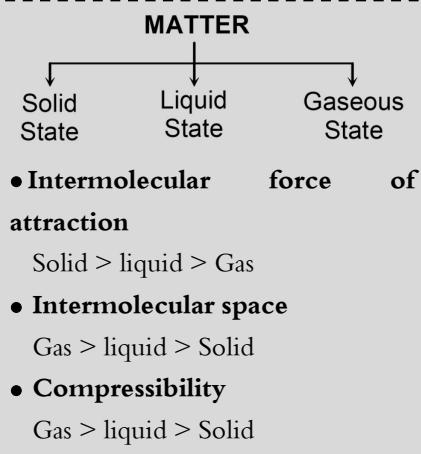
Matter: Anything that occupies space and possesses mass. Matter is made up of particles which are

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

States of matter are interconvertable

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    Solid State  $\xrightarrow{\text{Heat}}$  Liquid State  $\xrightarrow{\text{Heat}}$  Gaseous State
    Solid State  $\xleftarrow{\text{Cool}}$  Liquid State  $\xleftarrow{\text{Cool}}$  Gaseous State
    Solid  $\xleftarrow{\text{Sublimation}}$  Gas  $\xrightarrow{\text{Sublimation}}$  Solid
  
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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

- **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.