Class-IX(Chemistry)

Freezing

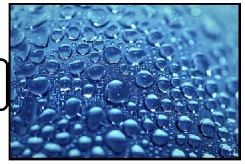
Melting point

Freezing point

Condensation point

Boiling point

Condensation



Melting

Solid to liquid & vice versa

Latent heat

(Heat energy required to change 1 kg of solid into liquid at atmospheric pressure and its M.P.)

Liquid to gas & vice versa

Boiling

Latent heat

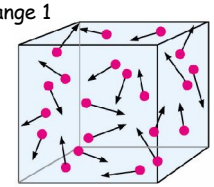
(Heat energy required to change 1 kg of liquid into gas at atmospheric pressure and its B.P.)

By altering temperature

Solid to gas & vice versa

Sublimation

Camphor



(Zig-zag motion)

Brownian motion

$\text{Evap}^n \propto \frac{1}{\text{Humidity}}$

$\text{Evap}^n \propto$ S.A.

$\text{Evap}^n \propto$ W.S.

$\text{Evap}^n \propto$ T

Humidity

Surface area

Wind speed

Temperature

Nature of substance

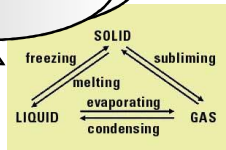
Factors affecting

Interconversions

By altering pressure

Liquefaction

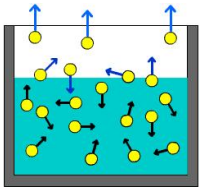
(At high P & low T)



Dissolving solid in liquid

Movement of pollen grains

Evidence



Evaporation

MATTER

(Anything that has mass, occupies space.)

Physical nature

Matter consists of particles

Cooling effect

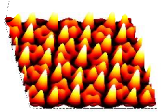
Difference between boiling and evaporation

Uses of cotton clothes

Evaporation	Boiling
It is a surface phenomenon.	It is a bulk phenomenon.
It occurs at all temperatures below B.P.	It occurs at B.P. only.
The rate of evaporation depends upon the surface area of the liquid, humidity temperature & wind speed	The rate of boiling does not depend upon the surface area, wind speed, and humidity.

Solid

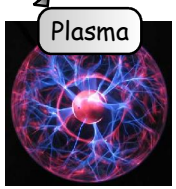
Classification



BEC

Liquid

Gas



Plasma

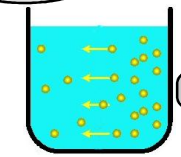
Characteristics

Small particle size

Interparticle spaces

Particles moving constantly

Diffusion



Interparticle attraction

Cohesive force

(between similar atoms)

(between dissimilar atoms)

Adhesive force