Physical Changes

Introduction to Physical Changes

A physical change is a change in which the substance itself remains the same, but its form, shape, or state may change. No new substance is formed, and the process is generally reversible.

Example of Physical Change

Riya and Kabir are playing with clay.

- Kabir molds the clay into a ball and then flattens it again.
- Riya observes that although the shape changes, the clay remains the same.
- This demonstrates that in a physical change, only the form of the substance is altered, but the composition remains unchanged.

Physical Properties of Substances

Physical properties are characteristics that define a substance without altering its composition. These include:

- Shape
- Size
- Color
- State (Solid, Liquid, Gas)
- Temperature

Definition of Physical Change

A physical change is a change in which a substance undergoes a transformation in its physical properties without altering its chemical composition.

Examples of Physical Changes:

- Melting of ice or freezing of water
- Dissolution of salt or sugar in water
- Melting of wax
- Evaporation or condensation of liquids

- Expansion of an iron rim upon heating and contraction upon cooling
- Cutting a paper sheet into smaller pieces

Characteristics of a Physical Change

- Generally reversible (can be undone)
- No new substance is formed
- Only physical properties change