Types of Changes(Physical Changes)

Following are the main types of physical change:

1. Dissolution: Dissolution of a solid in a liquid is a physical change.

Sugar is sweet. It dissolves in water easily. A solution of sugar also tastes sweet, i.e., sugar on dissolution does not lose its basic properties.

Solution of sugar when concentrated by heating and cooled, gives back the crystals of sugar. These crystals also taste sweet. Thus, sugar is recovered back from the solution by a simple method.

During dissolution, sugar has not lost its sweetness. It is recovered from its solution by crystallisation. Therefore**, the dissolution of sugar in water is a physical change.**

2. Evaporation: Evaporation or vaporization of water (or any liquid) is a physical change.

When water is heated to boiling, it gets converted into vapour. The vapour so formed when condensed gives back liquid water. The condensed water has all the properties of the original water. So, the evaporation/vaporisation of water is a physical change.

The slow conversion of liquid into its vapour is called **evaporation.**

Evaporation takes place at all temperatures. At room temperature, it is slow. Evaporation is faster at higher temperature.

When a liquid is converted into its vapour at its boiling point the process is called **vaporisation.**

Thus,**evaporation and vaporization are similar processes.**

Types of Changes(Physical Changes)

3. Melting and Freezing: Melting of a solid and freezing of a liquid are physical changes.

When a solid substance is heated, it gets converted to its liquid form. When a liquid is cooled, it gets changed to its solid form.

Solid $\rightleftharpoons$ **Liquid**

During any change of state:

- The composition of the substance remains unchanged.
- There is no change in the chemical properties of the substance.
- The change can be easily reversed by changing temperature.

Thus, **eating office solid and freezing of a liquid are physical changes.**

4. Sublimation: Sublimation is a physical change

During sublimation, is solid substance when heated changes into vapour form, and the vapor on cooling gives back the substance in solid form.
During the change of state, there is no change in the composition and chemical proper properties of the substance. The change can be easily reversed by changing temperature. **Therefore sublimation is a physical change.**