

6 Physical and chemical changes

:- When one or more properties of a substance become different, we say that a change has taken place.

Many changes are taking place all around us. Some examples of them are followings:

- i) Formation of curd from milk
- ii) drying of clothes
- iii) Burning of fuels
- iv) rusting of iron.....etc.

TYPES OF CHANGES:

Changes can be of two types:-

- 1) Physical changes
- 2) Chemical changes

1)Physical changes:-

Those changes in which no new substances are formed, are called physical changes.

It is a temporary change which can be reversed to form the original substance.

eg:- Melting of ice ,freezing of water, boiling of water and condensation of steam,making of a solution, breaking of a glass tumbler,heating of hacksaw blade.....etc.

2) Chemical Changes:-

Those changes in which new substances are formed, are called chemical changes.

It is a permanent change which can usually not be reversed to form the original substance.

eg:- Ripening of fruits, digestion of food , photosynthesis.....etc.

Differences between physical and chemical changes

- i) A chemical change is a permanent change while a physical change is a temporary change.
- ii) Chemical change is an irreversible change while a physical change is a reversible change.
- iii) Permanent change in colour may take place in a chemical change while temporary change in colour takes place in physical change.
- iv) A lot of energy is either absorbed or given out in a chemical change while very little energy is either absorbed or evolved in a physical change.