

Change around us

Synopsis

Types of changes

- Changes can also be classified based on the rate at which they take place.
- Fast change: The change that takes place within a very short time.
- Slow change: The change that occurs over a long period of time.
- Another factor for change is uniformity with respect to time.
- Periodic changes: Changes that repeatedly occur at fixed intervals of time e.g., change of seasons, formation of day and night.
- 4 Non-periodic changes: Changes that do not repeatedly occur at fixed intervals of time are non-periodic e.g., occurrence of storms and rain.
- Reversible change: A change in which the original substances can be retrieved.
e.g., mixing of iron particles and sulphur.
- Irreversible change: A change in which a new substance is formed and the original substances cannot be retrieved,
e.g., heating a mixture of iron pieces and sulphur.
- Exothermic reaction: A change in which heat is released e.g., burning of coal.
- Endothermic reaction: A change in which heat is absorbed e.g., evaporation of water.

- When substances react with each other, they require the right conditions like temperature, pressure, light, catalyst, etc. The rate and the extent of change depends on these conditions.
- Unstable substances undergo change easily.
- Differences between physical and chemical changes:

Physical Changes	Chemical Changes
1. Change is temporary.	1. Change is permanent.
2. It can be reversed.	2. It cannot be reversed by simple, chemical or physical means.
3. No new substance is formed. Only physical properties of the substances change.	3. New substances with different chemical properties are formed
4. No energy changes takes place.	4. Energy changes take place..