

Physical and Chemical Changes

Class 8 and O-levels 9th Grade

Physical changes are those changes which are **reversible**. Chemical changes are those changes which are **irreversible**.

Reversible changes are those which **can** be brought back to their original form.

Irreversible changes are those which **cannot** be brought back to their original form.

Physical Changes:

Through these changes the appearance or form of the substance changes but the substance remains the same. Such as change in the state of water. When an ice cube is heated, it melts, and water is obtained. If the water obtained is further heated, it will change into water vapours. Throughout these changes the substance is **water** but the appearance of water has changed in every stage, e.g. water vapour obtained after boiling the water, is still water but in a different form.

Chemical Changes:

Through these changes both the appearance and the substance itself changes. Such as burning. When a paper burns, grey coloured ashes are formed. **The substance changes (paper to ashes)**. In these changes the substances change and new substances are formed. Other examples:

- Combustion
- Rusting