

Class:8

Chemistry
Elements, Compounds and Mixtures

Synopsis:

- Matter can be classified into pure substances and impure substances (mixtures).
- Pure substances include elements and compounds.
- An element is a pure substance made up of only one kind of atoms and cannot be broken down into simpler substances.
- Elements can be classified into metals, nonmetals, metalloids and noble gases.
- A compound is a pure substance made up of two or more different elements combined chemically in a fixed proportion.
- A mixture is an impure substance made up of two or more elements or compounds mechanically mixed in any proportion.
- Mixtures may be homogeneous as well as heterogeneous.
- Homogeneous mixtures have uniform chemical composition whereas heterogeneous mixtures do not have.
- The components of mixtures can be separated by various methods like handpicking, magnetic separation, gravity separation, sublimation, solvent extraction, filtration, distillation, evaporation, fractional distillation etc.

Worksheet

- I. Give one word for the following:
1. Substances combined chemically.
 2. A metal which is a poor conductor of electricity.
 3. A soft metal which can be cut with a knife.
 4. Non metal which is liquid at room temperature.
 5. A metal which is neither malleable nor ductile.
- II. Fill in the blanks:
1. _____ are sonorous.
 2. _____ and _____ are liquid metals.
 3. The solid left behind on the filter paper is known as _____.
 4. _____ is a non metal that is a good conductor of electricity.
 5. _____ and _____ are sublimable substances.

III. Name the method of separating the following mixtures:

1. Chalk and water -
2. Ammonium chloride and sodium chloride -
3. Iron filings and copper turnings -
4. Sand and sawdust -
5. Benzene and water -

IV. Name the solvent of the following substances:

Sulphur, rubber , chlorophyll , glue , rust.

V. Complete the exercises at the end of the chapter:

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