

Chapter 9 Elements, Compounds and Mixtures

Define the following

a) Compound: A compound is a substance formed when two or more elements are chemically bonded together.

b) Mixture: A mixture is a material made up of two or more different substances which are physically combined. Examples: Air, sand.

c) Molecules: Molecules are made up of atoms that are held together by chemical bonds.

Question & Answer

Q1) What is an element? Why is carbon called an element?

Ans) An element is a chemical substance that cannot be broken down into anything simpler. It is because it is made up of only one type of atom.

Carbon is an element because it is made because it is made up of only one type of atoms.

Q2) What is an atom? Describe three parts of an atom?

Ans) An atom is the smallest part of an element that can exist and take part in a chemical reaction. All atoms, apart from hydrogen, are made from three even smaller particles which are as follows:

Proton: have positive charge

Electron: have negative charge.

Neutron: have no charge, they are neutral.

Q3) What is an electron cloud?

Ans) The electron whizz or move around the nucleus in tiny orbits. They move so quickly that they turn into blurry cloud. This is called an electron cloud.

Q4) Differentiate between metals and non-metals?

Metals	Non-Metals
1) They are hard solids except Mercury.	They are usually gases or solids.
2) They have high melting point.	They have low melting point.
3) They are malleable (can be easily bent)	They are brittle or powdery.
4) They are good conductors of heat and electricity.	They are poor conductor of electricity.