



BEST

Learning Centre

Joining us to write your Own Success Story

ELEMENTS AND COMPOUNDS

GENERAL SCIENCE

Copy Right @ Best Learning Centre

First Edition January 2020

All Rights Reserved

ELEMENTS AND COMPOUNDS

Elements

- * Matter in its simplest form is called an element.
- * The common salt is consisting of elements of **Sodium and Chlorine**.
- * Water consists of **Hydrogen and Oxygen**.

Classification of Elements

- Metals
- Non-Metals
- Metalloids

Atoms

- * The graphite refill used in pencil is made up of element called **Carbon**.
- * We can break the graphite into smaller and smaller pieces.

Molecules

- * When an atom combines with another atom (or atoms) and forms a compound it is called as **molecule**.

Compounds

- * A **compound** is a pure substance that is formed when the atoms of **two or more elements combine chemically in definite proportions**.
- * Compounds exhibit properties entirely **different from the properties of their constituent elements**

Properties of Compounds

- * A compound is formed only when the constituent elements combine in a fixed proportion.
- * The properties of a compound are different from those of its constituent elements .

Elements represented by single letter symbols

Element	Symbol
Hydrogen	H
Fluorine	F

Chemical Formulae

- * Often we hear that **water is H₂O**.
- * This is the chemical formula for water molecule.
- * This means that each molecule of water has two hydrogen atoms combined with one oxygen atom.

Atomicity

- * In chemistry we usually **understand atomicity to imply the total number of atoms present in one molecule of an element, compound or a substance.**
- * Let us see how to calculate the atomicity of elements.

Elements in air

- ♦ **Air is a mixture of gases.** The molecules of two different elements, nitrogen and oxygen, make up about **99% of the air.**