ATOMS AND MOLECULES

ATOMS, SYMBOLS OF ELEMENT

❖ SYMBOLS OF ELEMENTS: -

Symbol may be defined as the abbreviation used for the name of an element. The symbol of an element are generally either the first letter or the first two letters or the first and the third letters of the name of the element.

for example, the symbol of the following elements are the first letter of the name of that element.

S.NO.	ELEMENT	SYMBOL
1	Hydrogen	H
2	Carbon	C
3	Nitrogen	N
4	Oxygen	O
5	Fluorine	F

- Some symbols derived from the first two letters of the names of the element.

S.NO.	ELEMENT	SYMBOL
1	A luminism	A l
2	Barium	Ba
3	Lithium	Li
4	Neon	Ne
5	Calcium	Ca

- Some symbol derived from the first and the third letter of the names of the elements.

S.NO.	ELEMENT	SYMBOL
1	Arsenic	A s
2	Magnesium	M g
3	Chlorine	Cl
4	Zinc	Zn
5	Chromium	Cr

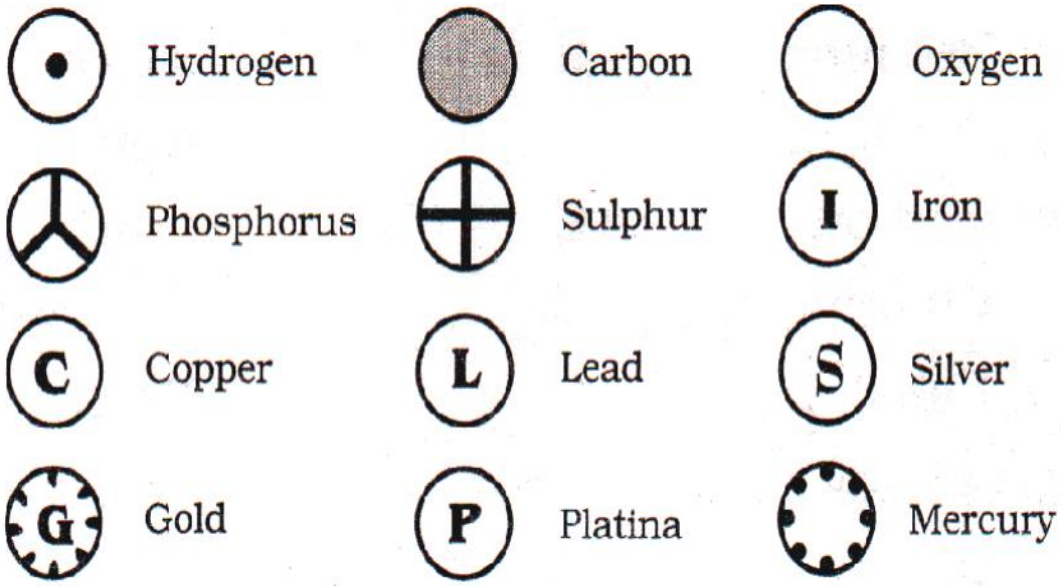
- There are certain symbols which seen to here no relationship to their names. The symbol of these elements are derived from their latin names.

ELEMENT	LATIN NAME	SYMBOL
Iron	Ferrum	Fe
Gold	Aurum	Au
Copper	Cuprum	Cu
Potassium	Kalium	K
Sodium	Natrium	Na
Silver	Argentum	Ag
Mercury	Hydragyrum	Hg
Lead	Plumbum	Pb

❖ ATOMS: -

All the matter is made up of atoms. An atom is the smallest particles of an element that can take part in achemical reaction. Atoms of most of the elements are very reactive and do not exist in the free state (as single atom). They exist in combination with the atoms of the same elements or another element. Atoms are very small in size.

The size of an atom is indicated by its radius which is called atomic radius (radius of an atom). Atomic radius is measured in nanometre (nm) (1 meter = 109 nanometers or 1nm =10–9m). Hydrogen atoms is the smallest atom of all, having an atomic radius of 0.037nm. Atoms are so small that we cannot see them under the most powerful optical microscope.



- Symbols for some elements as proposed by Dalton