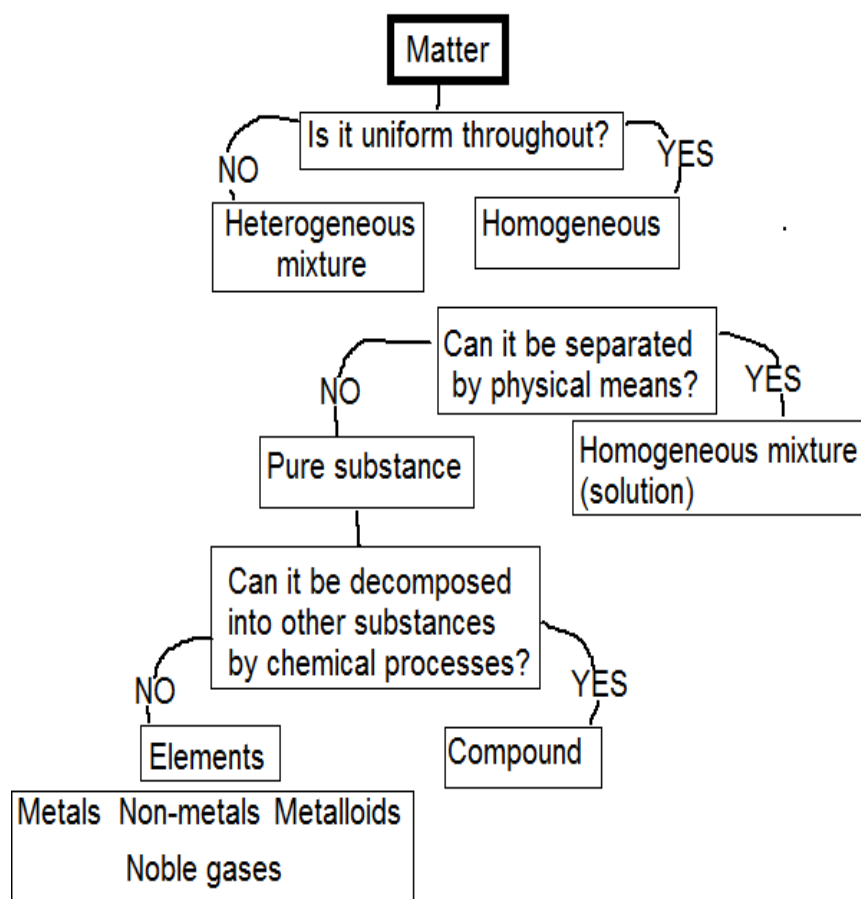


ICSE CLASS 8 CHEMISTRY  
ELEMENTS AND COMPOUNDS



**Atoms are the smallest unit of matter**

Elements are made of the same type of atoms. They are represented by a symbol

**Compounds have different kinds of atoms combined in fixed ratios. They are represented by a formula**

Molecules are the smallest unit of elements or compounds which can exist independently

The number of atoms in a molecule is called atomicity  
Monoatomic (noble gases)

Diatomic: oxygen, hydrogen

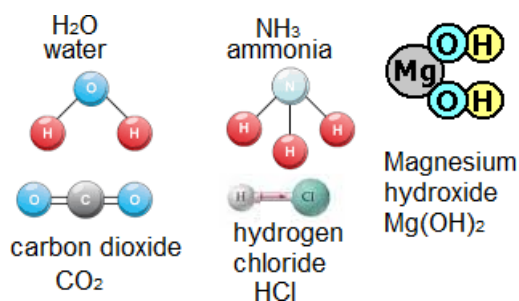
Triatomic: ozone, carbon dioxide

Polyatomic: sulphur, Phosphorus

**SYMBOLS OF SOME COMMON ELEMENTS**

Metals		Non-metals	
Sodium	Na	Hydrogen	H
Potassium	K	Oxygen	O
Magnesium	Mg	Nitrogen	N
Aluminium	Al	Chlorine	Cl
Calcium	Ca	Bromine	Br
Iron	Fe	Iodine	I
Copper	Cu	Sulphur	S
Zinc	Zn	Phosphorus	P
Silver	Ag	<b>Noble gases</b>	
Lead	Pb	Helium	He
Barium	Ba	Argon	Ar
Mercury	Hg	Neon	Ne

**Some molecules formed by these elements**



**Remember!**

2 H - 2 atoms of Hydrogen

$\text{H}_2$  - one molecule of hydrogen

2  $\text{H}_2$  - 2 molecules of hydrogen

$\text{H}_2\text{O}_2$  - one molecule of hydrogen peroxide with 2 atoms of hydrogen and 2 atoms of oxygen

$\text{Al}_2(\text{SO}_4)_3$  means one molecule of aluminium sulphate with 2 atoms of aluminium, 3 atoms of sulphur, and 12 atoms of oxygen