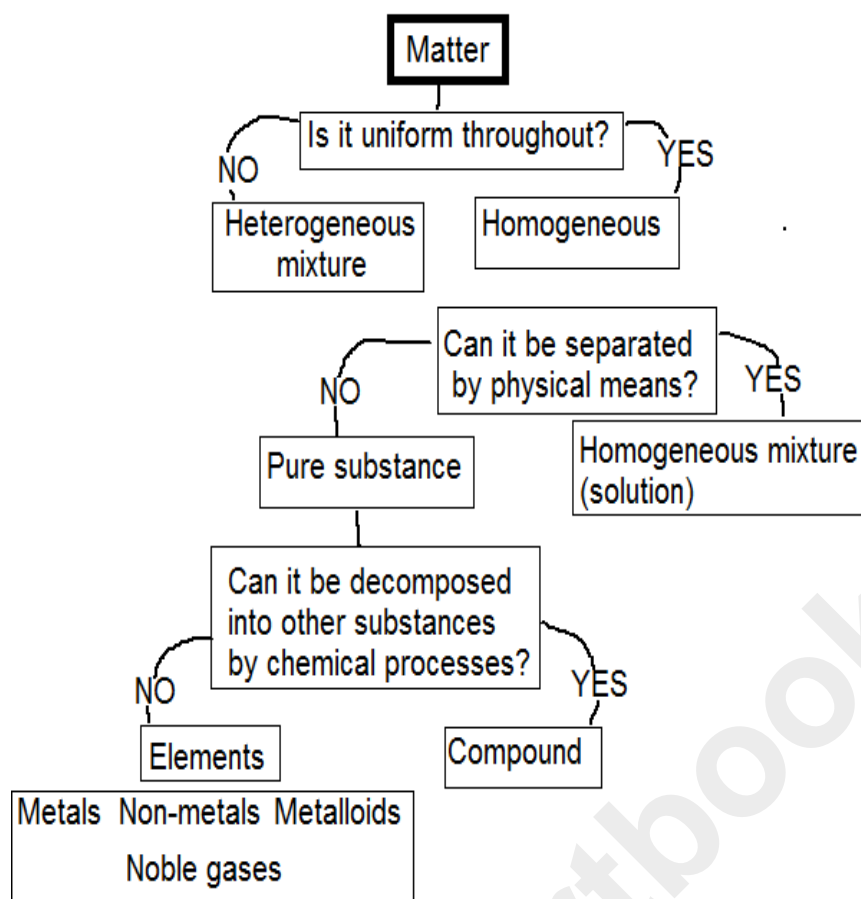


ICSE CLASS 8 CHEMISTRY
ELEMENTS AND COMPOUNDS



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

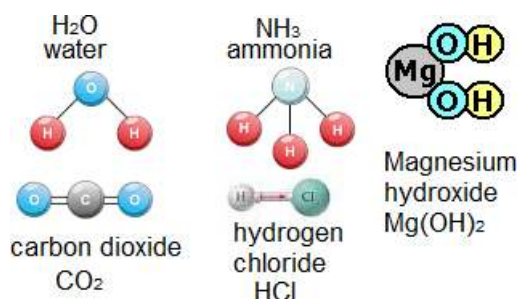
Molecules are the smallest unit of elements or compounds which can exist independently

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	Noble gases	
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
 H_2 - one molecule of hydrogen
 2 H_2 - 2 molecules of hydrogen
 H_2O_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