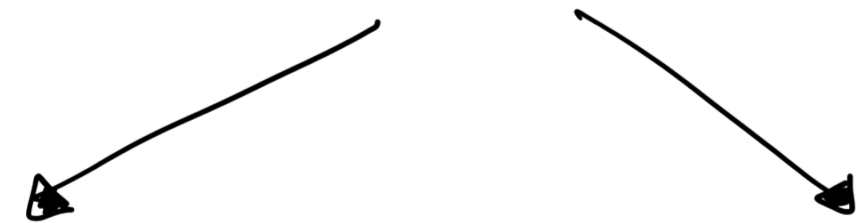


CLASSIFYING SUBSTANCES :-

ISOLATED ATOMS : Elements in group 18 are noble gases.

They are: He, Ne, Ar, Xe, Kr, Rn.

MOLECULES: group of atoms joined together by one or more covalent bonds.



ELEMENTS

formed by a single type of atoms: O_2 , N_2 , H_2 , Cl_2 ...

COMPOUNDS

made up of atoms of more than one chemical element combined.

CRYSTAL : group of atoms or ions with perfectly ordered 3D internal structure.

a) metal + non metal $\rightarrow$ IONIC CRYSTAL (NaCl)

b) non metal + non metal $\rightarrow$ COVALENT CRYSTAL (C $\begin{cases} \text{diamond} \\ \text{graphite} \end{cases}$)

c) metal + metal $\rightarrow$ METALLIC CRYSTAL (Fe, Al, Ag, etc)