9th Grade

CHEMISTRY CHAPTER -03

ATOMS AND MOLECULES

LECTURE-03

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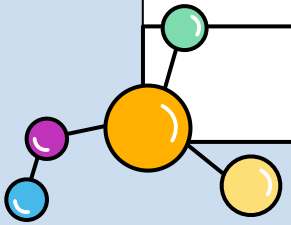
01

MOLECULES



WHAT IS MOLECULES ?

The atoms of the same or different elements are bonded together tightly by some strong forces of attraction also called chemical bonds. The new species which are formed as a result of this chemical combination are called **molecules.**

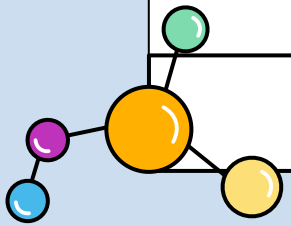
Definition : Molecules represents a group of two or more atoms (same or different) chemically bonded to each other and held tightly by strong attractive forces.
Molecules are represented in terms of symbols of constituting atoms, and it is known as chemical formula.

Molecules are of two types

- Homoatomic (Molecules of elements)
- Heteroatomic (Molecules of compounds)

02

IONS



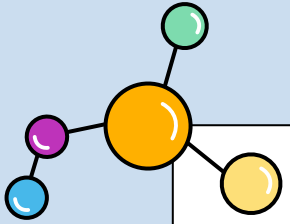
WHAT IS IONS ?

Charged species are known as **ions.**

Definition : an atoms or group of atoms having positive or negative charge

Ions are of two types

- The ion which has one or more positive charge is called CATION
- The ion which has one or more negative charge is called ANION



CHEMICAL FORMULAE

03

CHEMICAL FORMULAE OF COMPOUNDS

Definition : the shorthand representation of the name of a molecule in terms of the symbols of the constituting atoms.

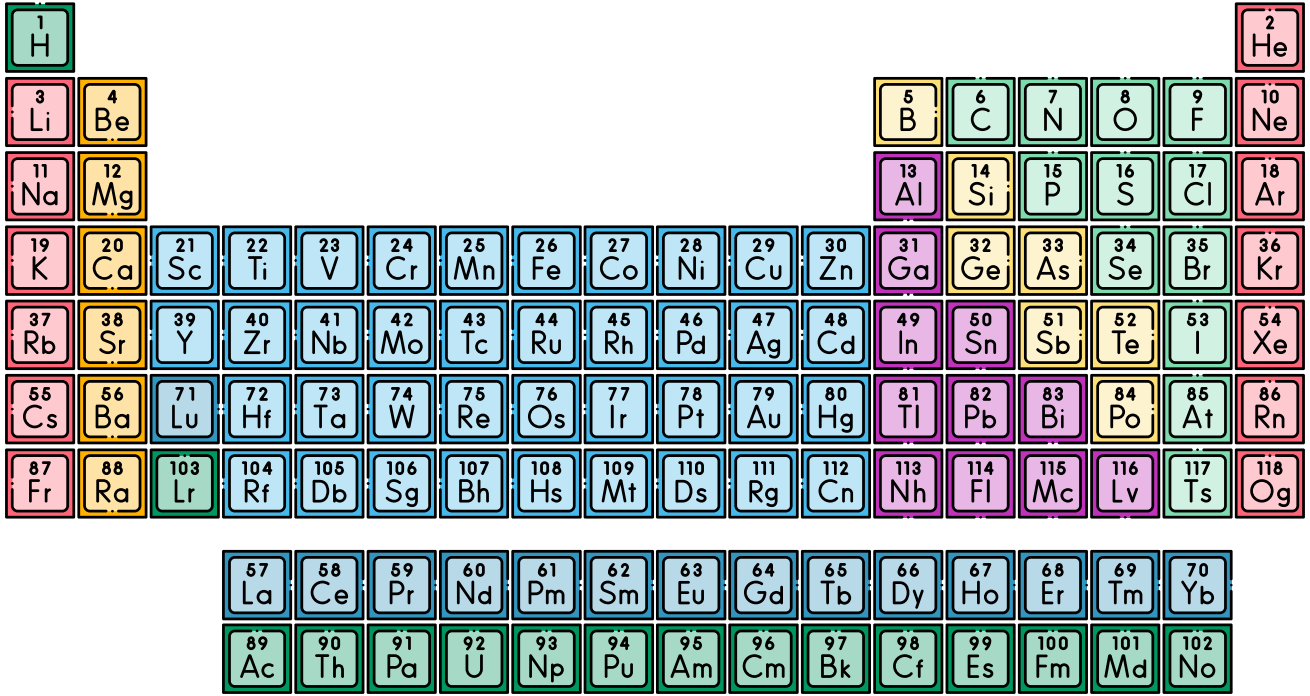
For example,
Formula of Water :
Formula of Ammonia :
Formula of Sodium Chloride :
Formula of Sulphuric acid :

In molecules, the atoms are combined with each other. Different elements have different combining capacity of their atoms. This is known as **Valency**

Definition : the combining capacity of an element is known as Valency.

WRITING CHEMICAL FORMULAE

MODERN PERIODIC TABLE




THANKS
Revise Last Chapter, Learn 20 Elements