

(1)

1. the smallest particle of an element
2. variable
3. ~~water~~ atmosphere
4. valency
5. Silicon
6. 3

(10)

### (1) Atoms

An atom is the smallest particle of an element that exhibits all the properties of that element.

(2) Molecule

A molecule is the smallest particle of a pure substance which has independent existence.

3. Valency

Valency is the combining capacity of an element or of a radical.

4. Radicals

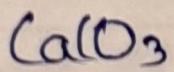
A radical is an atom of an element or a group of atoms of different elements that behaves as a single unit with a positive or negative charge on it.

## Level-2.

1.  $\text{CaO}$

Valency Ca - 2

Valency O - 2



Valency Ca - 2

Valency  $\text{CO}_3$  - 2

2. Acidic Radical

- They have negative charge and are also called anions
- Most of the non-metallic ions are acid radicals

Basic Radical

- They have positive charge and are also called cations.
- All metallic ions and ammonium ion are basic radicals.

3. A molecular formula of a compound is a symbolic representation of its molecules.

Ex p - Sulphur dioxide -  $\text{SO}_2$

## 5. Atoms

- An atom is the smallest particle of an element that exhibits all the properties of that element.

## Molecules

- A molecule is the smallest particle of a pure substance.

- It may or may not have independent existence.

- It has independent existence.

6. The elements that exhibit more than one valency, example Ferrum have variable valency.

## 7. Molecules

- A molecule is the smallest particle of a elements or compound.

- A molecule represents all the properties of that element or compound.

## Radicals

- A radical is a single atom of an element.

- Oppositely charged radicals combine to form molecules of compounds