# ATOMS, MOLECULES AND RADICALS

SUBJECT-CHEMISTRY

CHAPTER NO- 4

Relationship between valency of elements and the Periodic table.

PERIOD-4

# LEARNING OBJECTIVE

Students will be able to

- Know about the Periodic Table.

- Get aware of the valency of some elements.

-  Know about the Relationship of the valency of elements with the Periodic table.

# WARM UP QUESTIONS

- Activate prior knowledge by asking students what do they mean by valency.

- After listening to their responses, test their knowledge on the valency of some elements.

- Guide them and show the relationship of the valency of elements with the Periodic Table.

# PERIODIC TABLE

- Periodic Table is a tabular arrangement of elements in vertical columns and horizontal rows indicating the regular trends in the properties of elements.
- The table consists of 118 elements known to us.
- These elements are arranged in 18 vertical columns called groups and 7 horizontal rows called periods according to the IUPAC system.
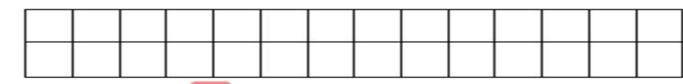
# VALENCY OF SOME ELEMENTS

| NAME OF THE ELEMENT | SYMBOL | VALENCY |
|---|---|---|
| Hydrogen | H | 1 |
| Helium | He | 0 |
| Lithium | Li | 1 |
| Beryllium | Be | 2 |
| Boron | B | 3 |
| Carbon | C | 4 |
| Nitrogen | N | 3 |
| Oxygen | O | 2 |
| Fluorine | F | 1 |
| Neon | Ne | 0 |
| Sodium | Na | 1 |
| Magnesium | Mg | 2 |
| Aluminium | Al | 3 |
| Silicon | Si | 4 |
| Phosphorous | P | 3 |
| Sulphur | S | 2 |
| Chlorine | Cl | 1 |
| Argon | Ar | 0 |
| Potassium | K | 1 |
| Calcium | Ca | 2 |

# RELATIONSHIP BETWEEN VALENCY AND VALENCE ELECTRON



Valence Electrons in Each Group

# WATCH A VIDEO ON PERIODIC TABLE

- https://youtu.be/rz4Dd1I_fX0

# HOME ASSIGNMENT

- Exercise Q1 (d), (e), Q6, Q12, Q13
- Expand IUPAC
- Define group in a periodic table.
- Define a Period in the periodic table.

# THANKING YOU

## ODM EDUCATIONAL GROUP

Edit with WPS Office