

ATOMS, MOLECULES AND RADICALS

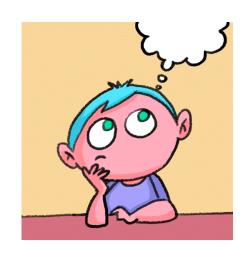
SUBJECT-CHEMISTRY
CHAPTER NO- 4
Molecular formula of a compound and writing a chemical formula
PERIOD-5

Website: www.odmegroup.org Email: info@odmps.org Toll Free: **1800 120 2316**Sishu Vihar, Infocity Road, Patia, Bhubaneswar- 751024

LEARNING OBJECTIVE

Students will be able to

- Know about the molecular formula of a compound
- Get aware of the steps of writing a chemical formula.
- Can write the chemical formula using CRISS-CROSS METHOD







WARM UP QUESTIONS

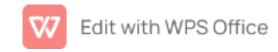
- Activate prior knowledge by asking students what do they mean by molecular formula of an element.
- After listening to their responses, test their knowledge on the radicals.
- Guide them to write the chemical formula of some compounds.





MOLECULAR FORMULA

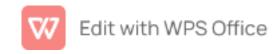
- A Molecular formula of a compound is the symbolic representation of its (one) molecule.
- It shows the number of atoms of each element present in it. The atoms combine in whole numbers to form the molecules.
- For Example: A molecule of Sulphur Dioxide gas is represented by SO_2 . It indicates that one molecule of SO_2
- contains one atom od sulphur and two atoms of oxygen





WRITING A CHEMICAL FORMULA OF A COMPOUND

- To write the chemical formula, the following steps must be followed.
- 1. Write the Symbols
- 2. Interchange the valence number
- 3. Write the valency of the symbols.
- 4. Write the interchanged numbers at the base.
- 5. Write the formula of the compound





For example, the step wise method for writing the formula of CALCIUM OXIDE is given below

CALCIUM OXIDE

Step 1: Write the symbols and valencies.

Sym	bols
Calcium	Oxide
Ca	0

Valencies	
Calcium	Oxide
2+	2-

- Step 2: Ca²⁺ O²⁻
- Step 3: Ca^{2+*} *O²-
- Step 4: Ca₂O₂
- Step 5: Reduce the valency numbers to the lowest ratio, if possible.





OTHER EXAMPLES OF CHEMICAL FORMULA (HOME ASSIGNMENT)

- Similarly, Formulas like Magnesium oxide
- Calcium nitride
- zinc hydroxide
- Aluminium Carbonate written by CRISS-CROSS method.
- Exercise Q3 & Q4





THANKING YOU

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