

- CHEMISTRY WORKSHEET
CLASS-IX
CHAPTER- ATOMS AND MOLECULES

1. FILL IN THE BLANKS:-

- (a) The full form of IUPAC is -----
 (b) In water, the proportion of oxygen and hydrogen is ----- by mass.
 (c) The building blocks of matter are -----
 (d) The atomicity of oxygen is -----

2. NAME THE SCIENTIST WHO GAVE:-

- (a) Law of conservation of mass (c) Atomic theory of matter
 (b) Law of constant proportion (d) Concept of symbols

3. GIVE TWO SYMBOLS WHICH HAVE BEEN DERIVED FROM:-

- (a) The English names of the elements
 (b) The Latin names of the elements

4. MULTIPLE CHOICE QUESTIONS:-

1. The symbols of elements cobalt, aluminium, helium, sodium respectively written by a student are as follows. Which symbol is correct one?
 (a) CO (b) AL (c) He (d) So
2. The formula of a compound is X_3Y . the valencies of elements X and Y will be
 (a) 1 and 3 (b) 3 and 1 (c) 2 and 3 (d) 3 and 2

5. Work out the formulae of the following compounds:-

- (a) Sodium oxide (b) Calcium carbonate
 (c) Magnesium hydrogen carbonate (d) Aluminium oxide

6. Name the following compounds. Also write the symbols/ formulae of ions present in them.

- (i) $CuSO_4$ (ii) $(NH_4)_2 SO_4$ (iii) Na_2CO_3 (iv) $CaCl_2$

7. What do the following abbreviations stand for:-

- (i) O (b) 2O (iii) O_2 (iv) $3O_2$

8. Define the following:-

- (a) Cation (b) polyatomic ions

9. Potassium chlorate decomposes on heating to give potassium chloride and oxygen.

When 24.5 g of potassium chlorate is decomposed completely, then 14.9 g of potassium chloride is formed. Calculate the mass of oxygen formed. Which law of chemical combination have been used to solve this problem?

10. Fill in missing data:-

Species →	Oxygen	nitrogen	Calcium	Aluminium
Property				
Valency	2	-----	-----	3
Atomic no.	-----	7	20	-----