

## Chemistry Worksheet

### Class 7

#### 1. Name the following:

- Uncharged particles present in an atom.
- A basic radical containing atoms of different elements and carrying positive charge.
- Combining capacity of an element.
- The compound whose formula is  $\text{H}_2\text{SO}_4$ .
- Process in which suspended impurities are allowed to settle down in water.
- The subatomic particle that revolves around the nucleus of an atom.

#### 2. Give the formulae for the following compounds:

- Calcium sulphate
- Sodium bicarbonate
- Ammonium phosphate
- Aluminum hydroxide
- Magnesium chloride
- Aluminum nitride
- Sodium oxide
- Ammonium hydroxide
- Calcium bicarbonate
- Sodium nitrate
- Calcium bicarbonate
- Aluminium phosphate
- Magnesium hydroxide
- Ammonium chloride

#### 3. Name the following radicals:

- |                                    |                          |                             |                     |                      |                                 |                    |
|------------------------------------|--------------------------|-----------------------------|---------------------|----------------------|---------------------------------|--------------------|
| i) $\text{S}^{2-}$                 | ii) $\text{HSO}_4^-$     | iii) $\text{Br}^-$          | iv) $\text{NO}_3^-$ | (v) $\text{N}^{3-}$  | vi) $\text{Ca}(\text{OH})_2$    | vii) $\text{AgCl}$ |
| viii) $(\text{NH}_4)_2\text{CO}_3$ | ix) $\text{H}_2\text{S}$ | x) $\text{CH}_3\text{COOH}$ | xi) $\text{Cl}^-$   | xii) $\text{NH}_4^+$ | xiii) $\text{CH}_3\text{COO}^-$ |                    |
| xiv) $\text{Al}^{3+}$              | xv) $\text{S}^{2-}$      |                             |                     |                      |                                 |                    |

#### 4. Name the following compounds-

- |                              |                     |                                    |                          |                             |  |
|------------------------------|---------------------|------------------------------------|--------------------------|-----------------------------|--|
| i) $\text{NH}_4\text{OH}$    | ii) $\text{MgNO}_3$ | iii) $\text{AlCl}_3$               | iv) $\text{H}_2\text{S}$ | v) $\text{CuCO}_3$          |  |
| vi) $\text{Ca}(\text{OH})_2$ | vii) $\text{AgCl}$  | viii) $(\text{NH}_4)_2\text{CO}_3$ | ix) $\text{H}_2\text{S}$ | x) $\text{CH}_3\text{COOH}$ |  |

#### 5. Write the balanced equations for the following word equations:

- Nitrogen + Hydrogen  $\rightarrow$  Ammonia
- Sodium + Chlorine  $\rightarrow$  Sodium chloride
- Silver(I) nitrate + Sodium chloride  $\rightarrow$  Silver(I) chloride + Sodium nitrate
- Iron sulphide + Hydrochloric acid  $\rightarrow$  Iron(II) chloride + Hydrogen sulphide
- Sodium oxide + Water  $\rightarrow$  Sodium hydroxide

**6. Balance the following chemical equations.**

- i)  $\text{Fe} + \text{H}_2\text{O} \rightarrow \text{Fe}_3\text{O}_4 + \text{H}_2$
- ii)  $\text{Na} + \text{O}_2 \rightarrow \text{Na}_2\text{O}$
- iii)  $\text{Pb}(\text{NO}_3)_2 \rightarrow \text{PbO} + \text{NO}_2 + \text{O}_2$
- iv)  $\text{Cu} + \text{AgNO}_3 \rightarrow \text{Cu}(\text{NO}_3)_2 + \text{Ag}$
- v)  $\text{CaO} + \text{H}_2\text{O} \rightarrow \text{Ca}(\text{OH})_2$

**7. What does each of the following represent:**

- (i)  $3\text{N}_2$                       (ii)  $2\text{H}$                       (iii)  $2\text{H}_2\text{O}$                       (iv)  $5\text{HNO}_3$                       (v)  $\text{HCl}$

**8. Name the element present in:**

- i) Group III and period 1
- ii) Group II and period 3
- iii) Group I and Period 1
- iv) Group II and Period II

**9. The valency of Calcium is 2. Write the formula of its**

- (i) oxide                      (ii) chloride                      (iii) sulphide                      (iv) carbonate

**To be done after the completion of final syllabus**

**1. Fill in the blanks.**

- i) \_\_\_\_\_ show the properties of both metals and non-metals.
- ii) \_\_\_\_\_ is a metal which is liquid at room temperature.
- iii) Chemical formula of rust is \_\_\_\_\_.
- iv) \_\_\_\_\_ is the measure of purity of precious substances.
- v) \_\_\_\_\_ and \_\_\_\_\_ are known as noble metals.
- vi) \_\_\_\_\_ is the hardest compound known to us.

**2. Distinguish between metals and non-metals based on the following properties:**

S.No.	Properties	Metals	Non-metals
1.	Lustre		
2.	Density		
3.	Ductility		
4.	Sonority		
5.	Tensile Strength		
6.	Solubility		