



Class 10 Science | Acids, Bases And Salts

MCQ WORKSHEET • 15 questions • Choose one correct option • Suggested time: 25 minutes

1. Dry HCl gas does not change dry blue litmus because it lacks:

- A. Water needed for ion formation
- B. Chlorine atoms
- C. A strong smell
- D. Hydrogen atoms

2. A solution with pH 2 has how many times the H^+ concentration of pH 4?

- A. 1000 B. 2 C. 10 D. 100

3. Diluting an acidic solution with water generally makes its pH:

- A. Rise toward 7
- B. Fall toward 0
- C. Remain always unchanged
- D. Become exactly 14

4. Which ion is characteristic of aqueous alkaline solutions?

- A. H_3O^+ only
- B. Na^+ in every case
- C. Cl^- in every case
- D. OH^-

5. Zinc reacts with dilute hydrochloric acid to produce:

- A. Carbon dioxide
- B. Hydrogen
- C. Nitrogen
- D. Chlorine

6. An acid reacts with sodium carbonate. The evolved gas turns limewater milky and is:

- A. H_2 B. O_2 C. NH_3 D. CO_2

7. The main products of acid-base neutralisation are:

- A. Hydrogen and carbon
- B. Salt and water
- C. Metal and oxygen
- D. Only carbon dioxide

8. Which solution turns red litmus blue?

- A. Aqueous NaOH
- B. Lemon juice
- C. Vinegar
- D. Dilute HCl

9. The chemical formula of baking soda is:

- A. $CaCO_3$
- B. $CaSO_4 \cdot 2H_2O$
- C. $Na_2CO_3 \cdot 10H_2O$
- D. $NaHCO_3$

10. Washing soda is:

- A. $Na_2CO_3 \cdot 10H_2O$ B. $NaHCO_3$ C. $NaCl$ D. $CaOCl_2$

11. Plaster of Paris has formula:

- A. $CaSO_4 \cdot 2H_2O$
- B. $CaSO_4 \cdot \frac{1}{2}H_2O$
- C. $CaCO_3$
- D. $Ca(OH)_2$

12. Plaster of Paris hardens after water is added because it forms:

- A. Bleaching powder
- B. Baking soda
- C. Quicklime
- D. Gypsum

13. Electrolysis of concentrated brine produces chlorine at the:

- A. Salt bridge
- B. Cathode
- C. Bottom of the vessel only
- D. Anode

14. On heating blue copper sulfate crystals strongly, they become white due to loss of:

- A. Oxygen gas only
- B. Sulfate ions
- C. Water of crystallisation
- D. Copper atoms

15. Which is the safe procedure for diluting concentrated acid?

- A. Add acid slowly to water with stirring
- B. Pour water rapidly into acid
- C. Mix while holding the container by hand
- D. Heat acid before adding water

ANSWER KEY — check after completing all 15 questions

1.A 2.D 3.A 4.D 5.B 6.D 7.B 8.A 9.D 10.A 11.B 12.D 13.D 14.C 15.A

Original exam-style practice • Reference notes: www.physics.guru/cbse-practice-papers/ • Not an official paper