



Class 10 Science | Chemical Reactions And Equations

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

1. The balanced equation for aluminium burning in oxygen is:

- A. $\text{Al} + \text{O}_2 \rightarrow \text{AlO}_2$ B. $2\text{Al} + 3\text{O}_2 \rightarrow \text{Al}_2\text{O}_3$
C. $4\text{Al} + 3\text{O}_2 \rightarrow 2\text{Al}_2\text{O}_3$ D. $2\text{Al} + \text{O}_2 \rightarrow \text{Al}_2\text{O}_3$

2. Heating calcium carbonate gives CaO and CO₂. This is a:

- A. Neutralisation reaction
B. Decomposition reaction
C. Displacement reaction
D. Combination reaction

3. Iron nails placed in copper sulfate solution acquire a coating of:

- A. Zinc B. Copper C. Iron oxide only D. Sulfur

4. The blue colour of CuSO₄ fades when iron is added because:

- A. Water decomposes completely
B. Copper becomes a gas
C. Iron is less reactive than copper
D. FeSO₄ forms as copper is displaced

5. Mixing barium chloride and sodium sulfate solutions forms a white precipitate of:

- A. Na₂O B. NaCl C. BaSO₄ D. Ba

6. Which reaction releases heat?

- A. Thermal decomposition of CaCO₃
B. Electrolysis of water
C. Decomposition of AgCl by light
D. $\text{CaO} + \text{H}_2\text{O} \rightarrow \text{Ca(OH)}_2$

7. Silver bromide darkens in sunlight due to formation of:

- A. Silver nitrate B. Silver oxide
C. Liquid bromine only D. Silver metal

8. In $\text{CuO} + \text{H}_2 \rightarrow \text{Cu} + \text{H}_2\text{O}$, the substance oxidised is:

- A. H₂O B. CuO C. Cu D. H₂

9. In the same reaction, the oxidising agent is:

- A. H₂O B. H₂ C. Cu D. CuO

10. Rancidity of stored oily food is slowed by:

- A. Packing under nitrogen
B. Adding oxygen
C. Increasing sunlight exposure
D. Keeping it warm and open

11. Rusting of iron requires the presence of:

- A. Dry oxygen alone B. Oxygen and water
C. Pure hydrogen alone D. Nitrogen alone

12. When lead nitrate is heated, the brown gas evolved is:

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

13. Which observation most directly indicates a precipitation reaction?

- A. The beaker is moved
B. Water is added
C. An insoluble solid appears
D. The liquid is stirred

14. In $2\text{H}_2 + \text{O}_2 \rightarrow 2\text{H}_2\text{O}$, the ratio of H₂ to O₂ molecules consumed is:

- A. 1:2 B. 4:1 C. 2:1 D. 1:1

15. Respiration is classified as exothermic because it:

- A. Needs no chemical reaction
B. Absorbs only light energy
C. Creates new atoms
D. Releases energy from food oxidation

ANSWER KEY — check after completing all 15 questions

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

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