

CHAPTER-4 | The World of Metals and Non-metals

QUIZ
PART-05

1. Which metal is commonly used to make food packaging materials because it is cheap and can be folded easily into thin sheets?
- A. Aluminium
B. Copper
C. Iron
D. Gold (A)

Explanation : Aluminium is cheap and highly malleable, so it can be easily made into thin sheets for food packaging.

2. Which metal catches fire when it comes in contact with water?
- A. Copper
B. Aluminium
C. Zinc
D. Sodium (D)

Explanation : Sodium reacts vigorously with water and can catch fire.

3. Which statement is TRUE about oxygen?
- A. Oxygen is a metal used in utensils
B. Oxygen is a non-metal essential for respiration
C. Oxygen is brittle
D. Oxygen is used only in fertilizers (B)

Explanation : Oxygen is a non-metal and is essential for respiration in living organisms.

4. Why are only a few metals suitable for making jewellery?
- A. They are cheap
B. They are brittle
C. They have lustre, malleability, ductility, and resistance to corrosion
D. They conduct electricity (C)

Explanation : Metals like gold and silver are shiny, easily shaped, drawn into wires, and resist corrosion, making them suitable for jewellery.

5. Which metal is the most malleable and ductile?
- A. Iron
B. Aluminium
C. Gold
D. Zinc (C)

Explanation : Gold is described as the most malleable and ductile metal.

6. Which substance is used in water purification?
- A. Oxygen
B. Nitrogen
C. Chlorine
D. Carbon (C)

Explanation : Chlorine, a non-metal, is commonly used for water purification.

7. What happens when magnesium reacts with oxygen?
- A. Magnesium hydroxide is formed
B. Magnesium oxide is formed
C. Sulfur dioxide is formed
D. Carbon dioxide is formed (B)

Explanation : Magnesium reacts with oxygen to form magnesium oxide.

8. Which statement correctly describes the nature of oxides formed by metals and non-metals?
- A. Both form neutral oxides
B. Metal oxides are acidic
C. Non-metal oxides are basic
D. Metal oxides are basic and non-metal oxides are acidic (D)

Explanation : Generally, metal oxides are basic while non-metal oxides are acidic.

9. Which iron nail will NOT rust when dipped in different liquids?
- A. Nail dipped in water
B. Nail dipped in vinegar
C. Nail dipped in oil
D. Nail dipped in salt solution (C)

Explanation : Oil prevents contact of iron with air and water, so rusting does not occur.

10. Why is sulfur not used to protect iron from rusting like zinc?
- A. Sulfur reacts with water
B. Sulfur is very expensive
C. Sulfur is brittle and does not form a durable coating
D. Sulfur conducts electricity (C)

Explanation : Sulfur is brittle and cannot form a strong protective layer on iron, unlike zinc.