

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

QUIZ
PART-03

1. Which materials made the bulb glow in the electricity conduction activity?
- Coal, wood, stone
 - Sulfur, rubber, nylon
 - Aluminium, iron, copper
 - Wood, plastic, rubber (C)

Explanation : Aluminium, iron, and copper allowed electricity to pass and made the bulb glow, showing they are good conductors.

2. Materials that do NOT make the bulb glow are called _____.
- Conductors
 - Metals
 - Insulators or poor conductors
 - Alloys (C)

Explanation : Sulfur, coal, wood, stone, rubber, and nylon did not make the bulb glow, so they are poor conductors.

3. What is rust?
- A shiny coating on iron
 - A brown deposit on iron
 - A type of metal
 - A chemical added to iron (B)

Explanation : Rust is the brown deposit formed on objects made of iron.

4. What is rusting?
- Cleaning of iron
 - Painting of iron
 - Formation of brown deposits on iron
 - Melting of iron (C)

Explanation : Rusting is the process of formation of rust on iron objects.

5. Which conditions are necessary for rusting to occur?
- Only air
 - Only water
 - Air and water together
 - Sunlight only (C)

Explanation : Rusting occurs only when both air (oxygen) and water are present.

6. In which bottle did rust form during the iron nail experiment?
- Bottle with dry air only
 - Bottle with water only
 - Bottle with both air and water
 - Bottle with oil only (C)

Explanation : Rust formed only when both air and water were present, proving both are essential.

7. What happens when an iron nail is kept only in dry air or only in water?
- It rusts quickly
 - It melts
 - It does not rust
 - It breaks (C)

Explanation : Rust does not form if either air or water is absent.

8. The gradual deterioration of metal surfaces due to air and water is called _____.
- Rusting
 - Conduction
 - Corrosion
 - Melting (C)

Explanation : Corrosion is the gradual damage of metals caused by air, water, or other substances.

9. Which metal structure in India is famous for resisting rust for over 1600 years?
- Qutub Minar
 - Iron Pillar of Delhi
 - Gateway of India
 - Charminar (B)

Explanation : The Iron Pillar of Delhi has very little rust despite exposure to weather for centuries.

10. Which diagram correctly represents the process of rusting?
- Iron + heat \rightarrow rust
 - Iron + water \rightarrow rust
 - Iron + air \rightarrow rust
 - Iron + air + water \rightarrow rust (D)

Explanation : Rusting occurs when iron reacts with oxygen in the presence of water.