

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

QUIZ
PART-04

1. Which observation is seen when a magnesium ribbon is burnt in air?
- It melts into a liquid
 - It burns with a dazzling white flame
 - It produces a yellow powder
 - It does not react

(B)

Explanation : Magnesium ribbon burns with a dazzling white flame and forms a white powder.

2. What is the white powder formed after burning magnesium?
- Magnesium hydroxide
 - Magnesium carbonate
 - Magnesium oxide
 - Magnesium sulfate

(C)

Explanation : Burning magnesium forms magnesium oxide, which appears as a white powder.

3. What is the nature of magnesium oxide solution when dissolved in water?
- Acidic
 - Neutral
 - Basic
 - Salty

(C)

Explanation : Magnesium oxide solution turns red litmus blue, showing it is basic.

4. Generally, oxides of metals are _____ in nature.
- Acidic
 - Neutral
 - Basic
 - Salty

(C)

Explanation : The lesson explains that metallic oxides are generally basic in nature.

5. Why is sodium stored in kerosene?
- To keep it shiny
 - To cool it
 - To prevent reaction with air and water
 - To increase its strength

(C)

Explanation : Sodium reacts vigorously with air and water, so it is stored in kerosene to prevent contact.

6. What gas is formed when sulfur burns in air?
- Sulfur trioxide
 - Sulfur monoxide
 - Sulfur dioxide
 - Hydrogen sulfide

(C)

Explanation : Burning sulfur in air produces sulfur dioxide gas.

7. What is formed when sulfur dioxide dissolves in water?
- Sulfuric acid
 - Sulfurous acid
 - Hydrochloric acid
 - Nitric acid

(B)

Explanation : Sulfur dioxide dissolves in water to form sulfurous acid, which is acidic in nature.

8. Generally, oxides of non-metals are _____ in nature.
- Basic
 - Neutral
 - Acidic
 - Metallic

(C)

Explanation : The lesson states that non-metallic oxides are generally acidic.

9. Which of the following is a correct difference between metals and non-metals?
- Metals are dull, non-metals are lustrous
 - Metals are poor conductors of electricity
 - Metals are malleable, non-metals are brittle
 - Metals are soft, non-metals are hard

(C)

Explanation : Metals are malleable while non-metals are non-malleable or brittle.

10. Which non-metal is essential for breathing?
- Nitrogen
 - Carbon
 - Oxygen
 - Chlorine

(C)

Explanation : Oxygen, a non-metal, is essential for breathing in everyday life.