

Name _____

Metal Marvels: How Acids React and What They Produce

Multiple Choice Questions

1. What is the main product produced when acids react with metals?
 - a) Oxygen gas (O₂)
 - b) Hydrogen gas (H₂)
 - c) Carbon dioxide (CO₂)
 - d) Nitrogen gas (N₂)

2. Which of the following acids is commonly used in experiments to demonstrate the reaction with metals?
 - a) Citric acid
 - b) Hydrochloric acid (HCl)
 - c) Acetic acid
 - d) Sulfuric acid (H₂SO₄)

3. What are the positively charged ions found in acids that play a key role in the reactions with metals?
 - a) Hydrogen ions (H⁺)
 - b) Oxygen ions (O²⁻)
 - c) Sodium ions (Na⁺)
 - d) Carbon ions (C⁻)

4. Which metal is commonly used to demonstrate the reaction with hydrochloric acid in educational experiments?
 - a) Iron (Fe)
 - b) Gold (Au)
 - c) Platinum (Pt)
 - d) Aluminum (Al)

5. What is the main observation that indicates a chemical reaction is occurring when a metal reacts with an acid?
 - a) A change in color
 - b) Formation of bubbles
 - c) An increase in temperature
 - d) Release of a foul odor

