

Name _____

Base's Bold Encounter with Acids: The Reaction and Its Products

Open-Ended Response Questions

1. Investigate and discuss the practical applications of neutralization reactions involving bases and acids in various industries or everyday life. How is this knowledge utilized to solve real-world problems?
2. Imagine you are conducting an experiment to demonstrate the neutralization reaction between sodium hydroxide (NaOH) and sulfuric acid (H₂SO₄) to a group of students. Describe the materials and equipment you would need, the steps involved in the experiment, and the expected observations and outcomes.
3. Research and explain the concept of pH and its relationship to neutralization reactions. How does the pH scale measure the acidity or alkalinity of a solution, and what is the significance of achieving a neutral pH of 7?
4. Explore the environmental impact of neutralization reactions involving bases and acids. Discuss potential challenges and solutions for safely managing and disposing of the byproducts generated in these reactions, especially in industrial settings.

