

Name _____

Element or Compound? Deciphering the Building Blocks of Matter

Open-Ended Response Questions

1. Imagine you are a scientist studying a new substance. Describe the experiments you would conduct to determine whether it is an element or a compound, and why these experiments are essential.

2. Investigate the role of chemical reactions in the formation of compounds. How do atoms of different elements combine to create compounds, and what are the resulting properties of these compounds?

3. Reflect on the impact of elements and compounds in our daily lives. Provide examples of elements and compounds that play significant roles in our environment, industries, or health.

4. Discuss the concept of chemical stability in elements and compounds. How do the properties of elements influence their reactivity, and how do compounds achieve stability through bonding?

