

Name \_\_\_\_\_

## The Evolution of Element Naming and Categorization

### Open-Ended Response Questions

1. Discuss the transition from ancient beliefs in the four elements to the modern understanding of chemical elements. What key developments led to this transformation?
2. Analyze the challenges and achievements of Dmitri Mendeleev in creating the periodic table. How did his system improve the categorization of elements?
3. Explore the historical context of alchemy and its impact on the naming and categorization of elements. How did alchemical practices influence early chemistry?
4. Evaluate the role of the International Union of Pure and Applied Chemistry (IUPAC) in standardizing the naming and categorization of elements. Why is this organization important for the scientific community?

