

Name _____

The Significance of Atomic Number and Atomic Mass

Open-Ended Response Questions

1. Imagine you are explaining the concept of atomic number to a younger student. How would you describe it in simple terms, and why is it important in understanding the periodic table?
2. Investigate the element hydrogen, which has an atomic number of 1 and an atomic mass of approximately 1.008 amu. Explain the significance of these values and how they contribute to hydrogen's unique characteristics and importance in the universe.
3. Explore the concept of isotopes and how they impact the atomic mass of elements. Provide examples of elements with multiple isotopes and explain how their atomic masses are calculated.
4. Analyze the differences in atomic number and atomic mass between two elements of your choice. Explain how these differences reflect their distinct identities and properties.

