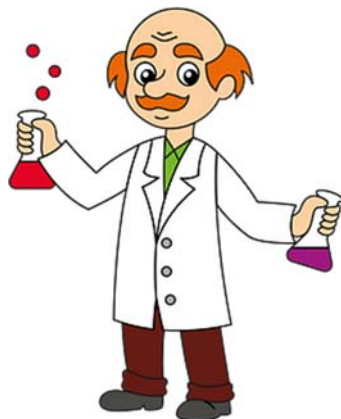


Name _____

Pioneers of the Periodic Table: Early Scientists and the Elements



Welcome to the intriguing world of chemistry, where curious minds have explored the mysteries of matter for centuries. In this passage, we'll journey through history and meet some of the early scientists who paved the way for the discovery and classification of elements, helping us understand the building blocks of the universe.

Antoine Lavoisier (1743-1794): The Father of Modern Chemistry

Antoine Lavoisier, a French chemist, is often regarded as the "Father of Modern Chemistry" for his groundbreaking work in the late 18th century. Lavoisier is famous for developing the law of conservation of mass, which states that matter is neither created nor destroyed in chemical reactions. He also helped establish a logical system for naming and categorizing elements.

John Dalton (1766-1844): The Atomic Theory Pioneer

John Dalton, an English chemist, introduced the atomic theory in the early 19th century. His theory proposed that elements are made up of indivisible particles called atoms, each with a specific mass and chemical properties. Dalton's work laid the foundation for understanding the composition of compounds and elements.

Dmitri Mendeleev (1834-1907): The Periodic Table Architect

Dmitri Mendeleev, a Russian chemist, is best known for creating the periodic table in 1869. He organized elements based on their atomic mass and properties, noticing a periodic pattern. Mendeleev left gaps in his table for undiscovered elements, accurately predicting the properties of elements that would later be found.

Henry Moseley (1887-1915): Revealing the Atomic Number

Henry Moseley, a British physicist, made significant contributions in the early 20th century. He introduced the concept of atomic number, which is now used to organize elements on the periodic table. Moseley's work redefined the arrangement of elements, making it more accurate and intuitive.

Marie Curie (1867-1934): Pioneer in Radioactivity

Marie Curie, a Polish-born physicist and chemist, made groundbreaking discoveries in the field of radioactivity. She isolated the radioactive elements radium and polonium, further expanding our understanding of elements' behavior. Curie's work in radioactivity has had a lasting impact on both chemistry and medicine.

