Chapter 5

Atomic Structure and the Periodic Table

Vocab and Objectives

Objectives:

I will be able to explain the structure of atoms and what atoms can make up.

I will be able to articulate how atoms and elements are related

I will be able to describe how a substance’s atomic structure determines its physical and chemical properties

I will be able to connect the concepts that matter is made up of particles too small to see and how each element is composed

I will be able to draw a sketch of the periodic table and identify and explain the relationships between the names of elements and their location within the periodic table

I will be able to describe the organization of elements within the periodic table

I will be able to infer the relationships between elements based on their location within the periodic table

I will be able to identify and differentiate between metals, metalloids, and nonmetals

I will be able to perform experiments related to atoms, elements, and compounds, and be able to analyze those results and explain why they are relevant

Proton

Neutron

Nucleus

Electron

Atomic number

Atomic mass number

Isotope

Ion

Atomic mass

Periodic table

Group

Period

Reactive

Metal

Nonmetal

Metalloid

Radioactivity

Half-life