



# Science

## Grade 6

### 1st Nine Weeks



This academic overview can be used to monitor and support your child's at-home learning progress.

#### Unit 1: Introduction & Chemical Substances

##### Student Learning Targets

- I can explain the difference between elements and compounds.
- I can describe a compound as a pure substance represented by a chemical formula.
- I can recognize that the formation of a new substance is evidence of a chemical change.
- I can identify patterns that show the signs of a chemical change.

##### Questions to Check for Unit Understanding

- How are elements and compounds alike?
- How are elements and compounds different?
- How are models used to demonstrate the differences in an element and a compound?
- What are physical properties?
- What are chemical properties?
- What evidence can be used to identify the formation of a new substance from a chemical change?

##### Key Academic Vocabulary

- Element: a pure substance composed of the same type of atom throughout
- Compound: formed when two or more elements are chemically bonded, has unique chemical & physical properties
- Chemical Change: a change in a substance to form a completely different substance or substances (usually formed when a substance is broken down or combined with another substance)
- Physical Change: a change in a substance that occurs without forming a new substance

#### Unit 2: Properties of Matter

##### Student Learning Targets

- I can classify properties of matter
- I can describe the physical properties of matter
- I can use math solving skills to multiply and divide
- I can calculate density using a mathematical formula

##### Questions to Check for Unit Understanding

- What are metals?
- What are metalloids?
- What are nonmetals?
- How are physical properties used to compare metals, metalloids, nonmetals (such as luster, conductivity)?
- How do you find the density of an irregularly shaped object?

##### Key Academic Vocabulary

- Conductivity: the ability of a substance to transfer heat or electrical energy
- Malleability: the ability of a substance to be permanently reshaped without breaking or cracking
- Metalloids: elements that have properties of both metals and nonmetals
- Metals: elements that are typically solid, shiny, malleable, and good conductors of heat & electricity
- Nonmetals: elements that are typically gases or brittle solids, not shiny, not malleable, and are poor conductors of heat & electricity
- Density: the amount of matter in a given space or volume
- Displacement: a procedure that measures the volume of an irregularly shaped solid object
- Mass: a measure of how much matter is within a substance