



Science

Grade 5

1st Nine Weeks



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

Unit 1: Introduction & Physical Properties of Matter

Student Learning Targets

- I can identify and define the physical properties of matter such as physical state (solid, liquid, or gas), mass, magnetism, relative density (as compared to water), solubility, and the ability to conduct or insulate electrical or thermal energy.
- I can identify and classify an object's state of matter by their physical properties.
- I can predict how an object's state of matter will change if the object is heated or cooled.

Questions to Check for Unit Understanding

- How can matter be classified?
- How do we define and identify the different states of matter (solid, liquid, or gas)?
- How can we test for matter's ability to conduct thermal or electrical energy?
- How can density be used to describe and classify matter?

Key Academic Vocabulary

- Relative Density: the ability of an object to sink or float in water
- Conduction: a substance that does readily allow heat or electricity to transfer
- Insulation: a substance that does NOT readily allow heat or electricity to transfer
- Soluble: able to be dissolved, especially in water

Unit 2: Force, Motion, & Energy

Student Learning Targets

- I can define and identify the different uses of mechanical, electrical, light, thermal, and sound energies.
- I can describe how magnetism, gravity, and friction are examples of forces.
- I can describe and explain the effects of magnetism, gravity, and friction on an object's motion and position.
- I can describe how light travels.
- I can describe how light changes direction when either reflected or refracted.
- I can describe how electrical energy travels within a circuit and can produce other types of energy such as light, heat or sound.

Questions to Check for Unit Understanding

- In what ways can we use mechanical, electrical, light, thermal, and sound energies in our everyday lives?
- What are some examples of energy being transferred from one form to another in our everyday lives?
- What is needed in order for energy to flow in a circuit?
- How can the path of light be changed?
- What is the difference between reflection and refraction?
- How can force such as gravity, magnetism, or friction, change an object's motion and position?

Key Academic Vocabulary

- Force: a push or pull that may change an object's motion or position
- Reflection: to cast back (reflect) light from a surface
- Refraction: how light 'bends' (changes direction) when passing from one type of matter through another
- Gravity: a force of attraction that exists between any two masses
- Friction: the resistance to motion of an object
- Circuit: a closed path through which electrical energy flows through