



Science

Grade 6

3rd Nine Weeks



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

Unit 6: Energy Resources & Transformations

Student Learning Targets

- I can compare and contrast potential and kinetic energy.
- I can provide evidence to show how energy changes from one form to another.

Questions to Check for Unit Understanding

- How can energy be transformed between potential and kinetic energy?
- How is chemical energy transformed to electrical energy in a battery?
- What is energy? What are the different types of energy?

Key Academic Vocabulary

- energy transformation - the process of changing energy from one form to another
- potential energy- the energy held by an object because of its position relative to other objects(stored energy)
- kinetic energy - the energy an object possesses due to its motion
- Law of Conservation of Energy - Energy can never be created nor destroyed. It can only change its form from one type to another.
- Chemical energy - energy that is stored within atoms' bonds.
- Electrical energy - energy type caused by the movement of electrons, which form currents and voltage.
- Light energy - energy form originated by electromagnetic waves or fields.

Unit 7: Thermal Energy

Student Learning Targets

- I can differentiate between conduction, convection and radiation
- I can perform an investigation to prove that thermal energy moves from a warmer to a cooler temperature

Questions to Check for Unit Understanding

- What is the Law of Conservation of Energy?
- How does conduction transfer thermal energy?
- How does convection transfer thermal energy?
- How does radiation transfer thermal energy?
- What pattern of thermal energy transfer is predictable within a system?

Key Academic Vocabulary

- conduction - a type of heat transfer that occurs between objects of different temperatures
- convection - a type of heat transfer that occurs when a fluid, either gas or liquid, flows into another fluid.
- radiation - heat transfer which occurs from the random movements of atoms and molecules in substances
- thermal energy - energy in the form of heat