



Science

Grade 7

3rd Nine Weeks



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

Unit 5: The Flow of Energy

Student Learning Targets

- I can accurately describe the process of photosynthesis.
- I can illustrate the process of photosynthesis.
- I can diagram the flow of energy through living systems including food chains, food webs, and energy pyramids.
- I can explain the flow of energy through a food chain, food web, and energy pyramid.

Questions to Check for Unit Understanding

- How do you explain the interdependence of a producer, consumer, and decomposer in an ecosystem?
- How is energy transferred and consumed in an energy pyramid?
- What are the steps taken and the reactants needed in the process of photosynthesis?
- In what ways is energy transformed through living organisms?
- How does the Law of Conservation apply to the transformation of energy within an organism?

Key Academic Vocabulary

- Photosynthesis: a chemical reaction during which plants convert radiant energy from the Sun to chemical energy; the reaction converts carbon dioxide and water into sugar (glucose) and oxygen
- Energy Pyramid: a diagram that shows the total amount of energy contained within each trophic level

Unit 6: Plant and Animal Adaptations

Student Learning Targets

- I can describe how an organism's traits may help it survive in its environment.
- I can explain how variation within a species can enhance that species survival.
- I can match an organism's trait with its suitable environment.
- I can identify special internal and external structures an organism possesses that help it survive.
- I can explain how internal and external structures of organisms have adaptations that help it survive.

Questions to Check for Unit Understanding

- How have changes in inherited traits over generations enhanced the survival of a species?
- How can structural changes over time in living organisms enhance the survival of a species?
- How have the internal structures of organisms adapted over time to meet specific functional needs of animals?
- What is an example of an external structure that has enhanced the survival of a species?
- What are some physical and behavioral adaptations that have enhanced a species survival?

Key Academic Vocabulary

- Genetic Traits: characteristics passed from parent to offspring
- Species: a group of organisms having many characteristics in common
- Adaptation: a process by which a population or species becomes better suited to its environment by increasing the frequency of the "better" traits that provide benefits to survival and reproduction
- Internal structures: inner pieces and parts that keep an organism alive, helps them grow, and help them reproduce
- External structures: parts of an organism that you see on the outside
- Function: what something does
- Enhance: intensify, increase, or further improve the quality, value, or extent of.