



Science

Grade 8

3rd Nine Weeks



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

Unit 6: Relationships Among Living Systems

Student Learning Targets

- I can explain the difference between abiotic and biotic factors in ecosystems.
- I can understand the importance of the different roles or organisms in an ecosystem such as: predator, prey, consumer, parasite, host
- I can list and describe several examples of short term and long term environmental changes.
- I can explain how short term and long term changes can alter a populations' behavioral and physical adaptations and its ability to survive.

Questions to Check for Unit Understanding

- What are some abiotic and biotic factors found in most ecosystems?
- What is the difference between a species and a population in a ecosystem?
- Why is competition amongst organisms for resources essential to maintain homeostasis of an ecosystem?
- What is the difference between a short term and long term change that affects organism or populations?
- How can short or long term environmental changes cause a species to face extinction?
- How does an increase in biodiversity increase the sustainability of the ecosystem?

Key Academic Vocabulary

- Organism: an individual form of life.
- Population: a group of individuals of the same species occupying a particular geographic area.
- Ecosystem: a system containing all the biotic and abiotic factors in an area and the interaction among them.
- Biotic Factor: a living thing, such as a plant, that influences or affects a system.
- Abiotic Factor: a non-living condition or thing such as oxygen, that influences or affects an ecosystem.
- Short term environmental change: an environmental change that occurs quickly and affects organisms immediately such as a flood or a fire.
- Long-term environmental change: an environmental change that occurs over time affecting the organism or the entire population gradually. the effect can be positive or negative such as an ice age or global warming.
- Sustainability: the ability to maintain at a certain level.
- Biodiversity: the variety of life in an ecosystem