**Chapters 3-6: Ecology**

* **Objectives**
	+ Describe the study of ecology
	+ Evaluate how biotic and abiotic factors shape an ecosystem
	+ Create an ecological pyramid
	+ Demonstrate how matter and energy cycle among the living and nonliving parts of an ecosystem
	+ Explain how the availability of nutrients affects the productivity of ecosystems
	+ Model how predator-prey relationships influence an ecosystem
	+ Compare biodiversity in different ecosystems
* **Essential Questions**
	+ How do living and nonliving parts of the Earth interact and affect the survival of organisms?
	+ What factors affect the growth and carrying capacity of populations?
	+ How does matter cycle through the biosphere?
	+ What causes ecosystems to change?
	+ How can we preserve biodiversity?
* **Vocabulary**
	+ Biosphere
	+ Ecology
	+ Ecosystem
	+ Biotic factor
	+ Abiotic factor
	+ Autotroph
	+ Heterotroph
	+ Photosynthesis
	+ Chemosynthesis
	+ Food web
	+ Biological Magnification
	+ Trophic level
	+ Ecological Pyramid
	+ Biogeochemical cycle
	+ Nutrient
	+ Resource
	+ Pollutant
	+ Carrying capacity
	+ Limiting factor
	+ Climate
	+ Biome
	+ Biodiversity
	+ Monoculture
	+ Disturbance
	+ Sustainable development
	+ Renewable resource