**Chapter 4**

**Essential Question: How do changes in our ecosystems affect our world?**

**Vocabulary:**

*competition*: two or more species in an ecosystem must use the same limited resources

*endangered*: numbers of a species have become reduced so much they are in danger of becoming extinct.

*extinct*: an entire species is gone forever

*hazardous waste*: substances that are harmful to humans and other organisms

*host*: organisms that are harmed by a parasite

*parasite*: organisms that are helped by living on or in another organism; they cause harm to the organism they are living in

*successsion*: the gradual change from one community of organisms to another in an ecosystem

**Key concepts to know:**

* Ecosystems are constantly changing. This change helps keep ecosystems in balance.
* All things in an ecosystem are interrelated, so a change in one population affects the whole community.
* In a healthy ecosystem resources in the environment are enough to meet the needs of the populations of organisms in the environment.
* Organisms that compete successfully for food will survive and reproduce.
* Living in groups helps animals compete successfully for food and stay protected. For example, wolves often hunt in packs in order to successfully compete for food, or deer travel together for protection from predators.
* Climate is the average temperature and winds over a long period of time.
* Fossils tell us that life on Earth has not always been the way it is now. Changes in the environment have caused changes in communities and ecosystems. Some changes are gradual, however some changes happen rapidly such as floods, fires or volcanic eruptions.
* Humans are different from other organisms because they change parts of the environment to meet their needs. For example, humans change clear land for buildings, planting crops, and building roads.
* The National Park System was established to preserve nature’s beauty, historic sights, and unique habitats.
* Pollution in water affects organisms that live in or depend on clean water. water becomes polluted when wastes or chemicals are introduced to rivers, lakes, or oceans.
* The Clean Water Act made it illegal to dump pollutants into the water.
* Strip mining is a way to get coal from the land.