1. Why is land important?
   1. It is hard to imagine human life without land.
   2. Land and its resources affect every aspect of human life.
2. What are the different types of land use?
   1. Humans use land in many ways, including recreation, transportation, agriculture, residence, commerce, and industry.
   2. *Natural areas* are places that humans have left alone or restored to a natural state.
   3. Natural areas include forests, grasslands, and desert areas.
   4. A large network of roads and train tracks connect urban and rural areas across the country.
   5. Roads in the U.S. highway system cover 4 million miles of land.
   6. Much of the open land in rural areas is used for agriculture. Agricultural land is used to grow crops and raise cattle and other livestock.
   7. Residential areas can be rural or urban.
   8. Rural areas have a lot of open land and low densities of people.
   9. Urban areas have dense human populations and small areas of open land.
   10. **Urbanization** is the growth of urban areas caused by people moving into the cities.
   11. As cities and towns expand, commercial businesses are built, too, replacing rural or natural areas.
   12. Industrial businesses also use land resources.
3. Why is soil important?
   1. Soil is a mixture of mineral fragments, organic material, water, and air.
   2. Soil provides habitat for organisms such as plants, earthworms, fungi, and bacteria.
   3. Plants get water and nutrients from the soil. Because plants form the base of the food web, healthy soil is important for land ecosystems.
   4. Soil is a habitat for various organisms. Many burrowing animals live in soil and find food underground.
   5. *Decomposers* are organisms that break down dead animal and plant material. Decomposers such as fungi and bacteria live in soil.
   6. Soil holds plant roots in place.
   7. Soil stores water and nutrients.
   8. Different types of soil can store different amounts of water.
   9. Soils are also part of the nutrient cycle.
   10. Plants take up nutrients and water from the soil. Plants and animals that eat them die and are broken down by decomposers.
   11. The decomposers release nutrients back into the soil, and the cycle starts again.
4. How can humans activities affect the land and soil?
   1. Human activities have positive and negative effects on land and soil.
   2. Some activities can restore land to its natural state, and other activities can degrade land.
   3. **Land degradation** is the process by which human activity and natural processes damage land to the point that it can no longer support the local ecosystem.
   4. When urbanization occurs at the edge of a city or town, it is called *urban sprawl.*
   5. Urban sprawl replaces forests, fields, and grasslands with houses, roads, schools, and shopping areas.
   6. Urban sprawl decreases the amount of farmland available for growing crops, and it decreases the amount of natural areas that surround cities.
   7. *Erosion* is the process by which wind, water, or gravity transports soil and sediment from one place to another.
   8. Erosion can speed up when land is degraded or cleared for farming, exposing the soil to blowing wind and running water.
   9. Soil nutrients can get used up if the same crops are planted year after year. Farmers can plant a different crop each year to reduce nutrient loss.
   10. Pollution from industrial activities can damage land.
   11. Mining wastes, gas and petroleum leaks, and chemical wastes can kill organisms in the soil.
   12. **Desertification** is the process by which land becomes more desertlike and unable to support life.
   13. Without plants, soil becomes dusty and prone to erosion.
   14. Overgrazing, deforestation, and urbanization can lead to desertification.
   15. The removal of trees and other vegetation from an area is called **deforestation**.
   16. Logging for wood, surface mining, and urbanization can cause deforestation.
   17. Deforestation leads to increased soil erosion.