

# Lesson Outline for Teaching

## Lesson 3: Earth's Surface

### A. Oceans and Continents

1. Earth has a variety of landforms, including mountains and valleys.
2. Long chains of high mountains and deep canyons appear on dry land and on the ocean floor.

### B. Landforms

1. Landforms are topographic features formed by processes that shape Earth's surface.
2. The characteristics of landforms change over time.
3. One characteristic of landforms is elevation, which is the height of the landform above sea level.
  - a. The difference in elevation in a given area is called relief.
  - b. If the difference between the highest and lowest elevation of an area is small, that area has low relief. If the difference between the highest and lowest elevation of an area is large, that area has high relief.
4. The shape of a given area is called the area's topography.
5. Landforms with low relief and low elevation are called plains. They are the most common feature on Earth.
6. Landforms with low relief and high elevation are called plateaus. They can form when forces within Earth uplift layers of rock.
7. Mountains are landforms with high relief and high elevation. They are Earth's tallest landforms.
  - a. Some mountains form when lava, material from volcanoes, builds up.
  - b. Some mountains form when forces inside Earth fold, push, or uplift large blocks of rock.
8. The United States has several major landform regions.
  - a. The East Coast and the Gulf Coast have coastal plains.
  - b. The Appalachian Mountains formed about 480 million years ago. After millions of years of weathering and erosion, these mountains are shorter than they once were.
  - c. The central part of the United States is a flat, grassy area called the Great Plains.
  - d. The young, rugged Rocky Mountains are in the western United States and Canada.

## Lesson Outline continued

- e. An area of high, rugged land in the Southwestern United States is the Colorado Plateau. A river has cut a huge valley through this landform, forming the Grand Canyon.
- f. The western part of the United States has many different mountain ranges. There are no coastal plains in the West.

### Discussion Question

Name and define three kinds of landforms. Give examples of them in the United States.

Plains are landforms with low relief and low elevation; the United States has coastal plains along the eastern and southern coasts; it has central plains called the Great Plains. Plateaus are areas with low relief and high elevations; the United States has a plateau called the Colorado Plateau in the southwestern part of the country. Mountains are landforms with high relief and high elevation; the United States has two main mountain ranges—the Appalachian Mountains and the Rocky Mountains.