# Life on the Land

### Goals

Students will learn the other important uses for land besides food production, visualize the small portion of land capable of producing food, and reflect on the importance of soil productivity.

# **Objectives**

Students will engage in a discussion and visualize land uses through a visual model.

## **Materials**

- Apple
- Small knife
- Vegetable peeler
- Stapler
- Chart or poster paper
- Paper towels or toilet issue

#### Time: 30 minutes

### **Background Information**

Soil is not only what we grow food in, but also has other important uses. One third of Earth's surface is land and only a portion of that land is suitable for human habitation. The way land is used affects the health and happiness of all people because it is a precious natural resource. Land use is the way in which private and public space is used (like residential, commercial, agricultural, and recreational). A community's planning commission must make difficult decisions about how land can be used.

### Introduction (5 min)

Ask students to think about where their food comes from. Is their food grown nearby or far away from their home? (Answer: most food is probably grown in other parts of the country, transported, and then purchased at the local grocery store).

# Activity Steps (20 min)

- 1. Demonstrate the limited amount of land available for growing food by telling students to imagine Earth as an apple.
- 2. Cut the apple into fourths and tell students that only one part is land (1/4) and the rest is water. Set aside the three sections that represent water.
- 3. Cut the land section (1/4 of apple) in half. One part represents land that is mountains, deserts, or covered with ice. Set this part aside.
- 4. Cut the other livable area into fourths. Three of these are two rocky, wet, hot, infertile, or covered with roads and cities to grow food. Set these three aside.
- 5. There is now only 1/32 of a slice of apple remaining. Peel the skin from this tiny piece.
- 6. The skin represents the soil on which the food is grown that must feed all people on Earth.



- 7. Discuss what will happen to Earth if we lose such a precious resource as land. Ask students what soil is used for besides growing food crops?
- 8. Brainstorm other uses of soil or land and list ideas on the board or poster paper. Examples of land use include surfaces for homes and other buildings, surfaces for roads and highways, surfaces for mining coal, ore, gravel, and minerals.

### **Conclusion (5 min)**

Explain to students that sometimes there isn't enough land for all uses and people must decide what is most important. Describe town-planning commissions-people who decide how to use the land. Ask students how the apple model demonstrates human uses of land and the availability and productivity of that land.

#### Notes

The apple could easily be incorporated into a healthy snack. The activity could easily compliment other lessons in the classroom or is a perfect stand-alone summer garden activity.