Lesson Plan: Earth’s Land as an Apple

This lesson plan was adapted with permission from www.naturebridge.org

Goal: Use an apple to demonstrate for students how precious habitable land and natural resources are on our earth. This activity is a great way to start a discussion with your students about resource use.

Assessment: Students will understand the value of land and the importance of conserving it as a limited resource.

Age Group: Grades 4-6

Time: 30-45 minutes

Materials:
- A globe
- One apple for each pair of students and one for the teacher
- Plastic knives, one for each pair of students
- Paper plates or recycled cardboard, one per pair of students, to catch apple juice

Activity
- Explain that the apple represents the earth.
- Cut the apple in half, then in half again to form quarters.
- Set three quarters aside. The last quarter represents the part of the earth that is not underwater.
- Cut that quarter-apple in half.
- Set one piece aside, as it represents the 1/8 of the earth that is too mountainous, too dry, too wet, or too cold for people to live there.
- Cut the last 1/8 into four equal parts.
- Set aside three parts, so only 1/32 of the apple remains. This is what provides us with food and clothing.

Discussion Questions
- What resources do you use in a day, week, or year?
- How do they compare with what you need vs. what you want?
- Where do your resources come from?
- Which resources are renewable and which are non-renewable?
- How does human population size affect resource use?
- Are resources used equally by everyone in the world? Is that fair?
- What issues exist regarding land use globally and in your community?
- What are possible solutions to these problems?

**Extensions**

- Investigate the geology, weather and history of your community. Was it once agricultural? What percent of the land was used in the past compared to today?
- Have your students plan an ideal community. Let them set the criteria for land use.
- Do you have space for a garden at your school? If you do, how would you distribute the harvest? Some public school cafeterias use produce from their school gardens for lunches. Is there a local food bank or organization that distributes food to people who need it in your community?

**Minnesota Teaching Standards**

**4th Grade**
Science: 4.1.2.1.1
Social Studies: 4.3.1.2.1, 4.3.3.6.1, 4.3.4.9.1

**5th Grade**
Science: 5.3.4.1.1, 5.3.4.1.3
Social Studies: 5.1.1.1.2, 5.4.1.2.1

**6th Grade**
Science: 6.1.2.1.1
Social Studies: 6.3.3.6.1, 6.3.4.10.1