

LESSON 5: Treasures of the Earth—A Play

LESSON'S CONCEPT

People use natural resources to make many items and are responsible for conserving and protecting these resources.

PURPOSE

Students will share with others the importance of caring for natural resources by presenting a play.

OVERVIEW

In this lesson students will:

- Perform a play about the importance of natural resources to people.
- Write a pledge to do one thing to conserve natural resources.
- Share the actions they have done based on their pledge.

CORRELATIONS TO CALIFORNIA'S CONTENT STANDARDS AND FRAMEWORKS

- Students develop a list of what they can do to show that they care about natural resources.
 - "(People) need to exercise judgment, care, and planning in their use of natural resources, including plants, animals, soil, and water, and in their practices of disposing of wastewater and materials." (*Science Framework*, page 125)
 - "The Earth is composed of land, air, and water. As a basis for understanding this concept, students know . . . how to identify resources from the Earth that are used in everyday life and that many resources can be conserved." (*Science Content Standards, Grades K–12; Kindergarten; Earth Sciences, Standard 3c*)
- Students perform a play that shows the importance of natural resources to people and the need to care for those resources.
 - "(People) farm the soil, mine resources from the earth, and get energy by burn-

ing fuels, including wood, which is also used to make paper and to build." (*Science Framework*, page 125)

- "Because we depend on other species for food, clothing, shelter, and other needs and will continue to do so, it is important for humans to respect nature and conserve natural habitats, resources, and species." (*Science Framework*, page 141)
- "To participate effectively in society, students need to: Develop personal skills (and) . . . group interaction skills." (*History–Social Science Framework*, page 24)
- "Students listen and respond to oral communications. They speak in clear and coherent sentences." (*English–Language Arts Content Standards for California Public Schools, Kindergarten Through Grade Twelve*, page 5)
- "Students convey the emotional qualities of given characters through simple dramatizations." (*Visual and Performing Arts Framework; Theater: Creative Expression Component, Example for Goal 3 for Kindergarten Through Grade Four*, page 83)

SCIENTIFIC THINKING PROCESSES

observing, communicating, relating, applying

TIME

15–30 minutes to prepare for the lesson; 60 minutes or more (depending on whether the play will be performed in front of other classes) to implement the lesson

VOCABULARY

Select a word or two from the play or from students' pledges.

PREPARATION

- 1. In this lesson students will perform a play about the importance of natural resources to people. Consider videotaping the play so students can see how the play can be improved before their performance in front of another class. Please note, there is no “Background Information for the Teacher” in this lesson.
- 2. Make a copy of “Treasures of the Earth and How People Use Them” (pages 46–48).
- 3. If students will be performing the play, see the “Preparation” section in “Treasures of the Earth and How People Use Them.”

MATERIALS

Materials for the Play

- Three pictures of minerals and/or objects made from different minerals; for example, jewelry, car, aluminum can, pots and pans, appliances (These can be found in magazines and newspapers.)
- Two large black garbage bags with the word “fossil fuels” on a piece of paper taped to each bag
- Two items made out of plastic
- A sign for each character (See the play at the end of this lesson for the list of characters.)

PRE-ACTIVITY QUESTIONS

Ask students: If we wanted to tell others about natural resources, what would we want to tell them? List students’ responses on the chalkboard.

PROCEDURE

Help students perform the play, “Treasures of the Earth and How People Use Them,” in class. For younger students, you will need to be the narrator. For older students, have one student be the narrator for the entire play, or select a different student to be the narrator for each scene.

Note to teacher: Because the focus of the play, “Treasures of the Earth and How People Use Them,” is on solid waste, the very important link that all other living things depend on natural resources was not included. For example, animals depend on plants for food and shelter, as well as for oxygen. Also, sunlight is an energy

source that is essential to almost all living things. Consider selecting other curricula to teach these very important concepts. Students can add to this play to show what they have learned about the importance of natural resources to all living things.

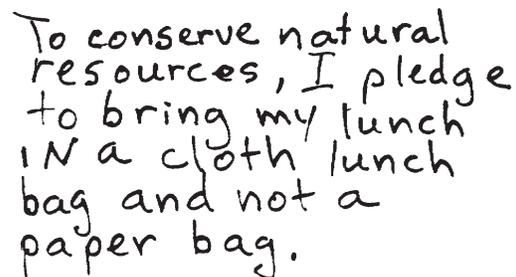
DISCUSSION/QUESTIONS

What can we do to conserve natural resources or to show that we care about natural resources? Add to the list brainstormed in Lesson 2 and Lesson 3 concerning what people could do to conserve natural resources.

APPLICATION

Project Idea: Have students present the play to other classes.

- A. Ask students to write a pledge to do one thing to conserve natural resources or to show that they care about natural resources. They can get ideas from the list they just completed concerning what people could do to conserve natural resources. Students can begin with:
 - “To conserve natural resources, I pledge . . .”; or
 - “One thing I will do to conserve natural resources is . . .”; or
 - “I can show that I care about natural resources by doing the following . . .”



To conserve natural resources, I pledge to bring my lunch in a cloth lunch bag and not a paper bag.

Submitted by Beth O’Neal, kindergarten and first-grade teacher, Marguerite Hahn Elementary School, Cotati-Rohnert Park Unified School District.

Homework Assignment: Ask students to share their pledges with family members.

- B. Check back with students in one month to see whether the students are honoring their pledges. Congratulate those students who have put effort into implementing their pledges. Allow students to rewrite (change) their pledges if they are having difficulty in implementing them.

- C. Once a month, allow students to share and celebrate their efforts for implementing their pledges.

RESOURCES

Video

Get Busy: How Kids Can Save the Planet. 3-2-1 Contact Extras video. Pleasantville, N.Y.: Sunburst Communications, 1992 (30 minutes).

Gives practical suggestions for improving the environment. Shows students taking part in reducing pollution and cleaning up the environment.

Books

50 Simple Things Kids Can Do to Recycle. Prepared by The EarthWorks Group. Berkeley: EarthWorks Press, 1994.

Contains many ideas on projects that students could do concerning recycling.

Kid Heroes of the Environment: Simple Things Real Kids Are Doing to Save the Earth. Prepared by The EarthWorks Group. Berkeley: EarthWorks Press, 1991.

Describes environmentally responsible actions that students have implemented.

Ross, Anna. *Grover's 10 Terrific Ways to Help Our Wonderful World.* New York: Random House, 1992.

Grover from Sesame Street describes what students can do to conserve natural resources (e.g., fix broken things, choose things that can be used again). Written for students in primary grades.

Williams, Rozanne Lanczak. *Let's Take Care of the Earth.* Cypress, Calif.: Creative Teaching Press, Inc., 1994.

Recommends to students in primary grades to take care of the areas (e.g., desert, forest, ocean) where animals live.

TREASURES OF THE EARTH AND HOW PEOPLE USE THEM

A PLAY

Written by Olga Clymire, Anne Harris, Sharon Janulaw, and Ted Schut

Preparation

- Obtain three pictures of minerals and/or objects made from different minerals; for example, jewelry, car, aluminum can, pots and pans, appliances.
- Obtain two black garbage bags and tape a piece of paper with the word “fossil fuels” on each bag.
- Obtain two items made out of plastic.
- Make a sign for each character.

(If you plan to present this play to other classes, make costumes or badges for the cast of characters. Students can design these.)

Cast of Characters:

Note: This play is based on a class of 20 students. If you have fewer students, reduce the number of plants and/or assign some students more than one role. If you have more students, increase the number of plants, minerals, and fossil fuels.

Humans (3)

Plants (trees) (4)

Animals (2) (sheep and wild bird)

Minerals (3)

Soil (2)

Car (1)

Fossil Fuels (2)

Air and Water (2)

Narrator (1)

Narrator: What are natural resources and how do people use them?

Scene 1

Characters: four plants, one human

Plants: We are the treasures of the Earth. We are natural resources.

We are plants.

Action: Four plants (trees) are growing. One human goes up to one plant and pretends to pick a fruit and eats it. Then the human goes up to another plant and moves its arms from a tree position (e.g., arms extended on sides) to a house (e.g., a V over its head). Then the human plants four seeds. Then the human sits down and pretends to read a book.

(Narrator narrates as students act out the scene.)

Narrator: Plants are very important natural resources. Humans eat plants. Humans use plants like trees to make houses, furniture, clothing, paper, and medicine. They also plant plants to beautify an area, to make shade, and to protect soil from being washed away by rain or blown away by the wind.

Scene 2

Characters: two animals (one sheep and one wild bird), three humans

Sheep and Bird: We are the treasures of the Earth. We are natural resources. We are animals.

Action: One human pretends to shear a sheep and then knits a sweater. Another human pretends to shovel the droppings and places them on crops. The third human pretends to look at a wild bird through imaginary binoculars.

(Narrator narrates as students act out the scene.)

Narrator: Animals are important natural resources. Domesticated animals are used by humans for food and clothing. For example, people get wool from sheep. The droppings of some animals are used as fertilizer for crops. Some people enjoy observing wild animals, such as birds.

Scene 3

Characters: three minerals, one human

Minerals: We are the treasures of the Earth. We are natural resources. We are minerals.

Action: Each of the three minerals hold up a picture that is either a mineral or an object that is made from a mineral. The human admires imaginary jewelry. The human acts out holding a fork and eating with it.

Narrator: Minerals are important resources. Minerals are found in rocks. Humans use minerals like iron to make steel. They use a mineral called bauxite to make aluminum. They make jewelry, tools, and machinery out of iron, silver, gold, copper, and other minerals.

Scene 4

Characters: two soils, one plant, one human

Soils: We are the treasures of the Earth. We are natural resources. We are soil.

Action: Soil is on the ground. A plant grows out of it and the human eats the plant. Then the human plants another plant. Then the human pretends to read a book at home in a chair.

Narrator: Soil is a very important natural resource. Humans use soil in which to grow crops for food and clothing. We build roads and houses on soil.

Scene 5

Characters: two fossil fuels, one car, two humans

Fossil Fuels: We are the treasures of the Earth. We are natural resources.
We are fossil fuels.

Action: Each fossil fuel wears around its waist a black garbage bag with the words “fossil fuels.” A car drives by and then stops. One human pretends to “pour” one of the fossil fuels into a car. Another person shows two plastic items.

Narrator: Fossil fuels are very important natural resources. People use fossil fuels to make cars, trucks, and planes go. People also use fossil fuels to make petroleum products from which clothing, like nylon and polyester, can be made. Plastics are made from petroleum. (Turn to the audience.) What items are made out of plastic? (Allow audience to mention several items.)

Scene 6

Characters: one air, one water, three humans

Air and Water: We are the treasures of the Earth. We are natural resources.
We are air and water.

Action: Air and water stand about five feet from each other. A person comes up to the air and takes in a deep breath. Another person comes up to water and takes a drink. A third person starts swimming next to the water.

Narrator: Air and water are natural resources. We need them to stay alive. There’s no new air and there’s no new water. It is all recycled by nature. We need clean water to drink and clean air to breathe. Let’s take care of our air and water and keep them clean.

Scene 7

Everyone: We are the treasures of the Earth. We are natural resources. We also enjoy natural resources in their natural state. We love trees. We love animals. We love rocks. We love soil. We love petroleum and other energy sources. We love air and water. Use wisely, conserve, and protect natural resources.

Then everybody sings to the tune of “Mary Had a Little Lamb”:

Reduce, reuse, recycle, recycle, recycle

Reduce, reuse, recycle

Don’t throw Earth’s treasures away.