

## K-3 MODULE

# Unit 1: Conserving Natural Resources

## Overview

### UNIT 1'S CONCEPT

People use natural resources to live and to make many items, and they are responsible for conserving and protecting those resources.

**Note:** The following lessons were developed by Olga Clymire, Anne Harris, Sharon Janulaw, and Ted Schut, with ideas submitted by Nona Reimer.

The five lessons in this unit are:

#### LESSON 1: WHAT ARE NATURAL RESOURCES?

**Lesson's concept:** Natural resources are things that come from nature, such as plants, animals, soil, minerals, energy sources (e.g., sunlight, fossil fuels), air, and water. These natural resources are used to meet the needs of all living things, including people.

In Lesson 1 students will:

- Make journals.
- Observe models of categories of natural resources.
- Identify natural resources on the school grounds, record them on a chart, and describe them in their journals.
- Determine the natural resources used to make various items on the school grounds and in the classroom.
- Compare items made from different natural resources.

#### LESSON 2: PEOPLE USE NATURAL RESOURCES

**Lesson's concept:** People use natural resources to live and to make things.

In Lesson 2 students will:

- Make "Earth Pockets" using paper plates in which the students place a string of illustrations and words that show the transformation of a natural resource into a product.
- Work in groups to make mobiles that represent the kinds of natural resources humans need in order to live.

- Classify an item based on the natural resource from which it was made.
- Make a collage of items made from a specific natural resource.

#### LESSON 3: LANDFILL IN A JUG

**Lesson's concepts:**

- Placing waste material in landfills is the most common method of disposing of solid waste in the United States.
- Landfills take up space and are located in areas that are, or once were, habitats for people and wildlife.

In Lesson 3 students will:

- Listen to stories, such as *Farewell to Shady Glade* by Bill Peet and/or *Where Once There Was a Wood* by Denise Fleming, and discuss how a landfill can affect habitats of wildlife and people.
- Construct model landfills in a gallon jug, add garbage to these models on a daily basis, and record what has been added.
- Discuss what they can do with the new garbage when most of their model landfills are full.
- Identify the garbage they placed in the model landfill that could have been reused or recycled.

#### LESSON 4: THERE IS NO "AWAY"

**Lesson's concepts:**

- Items that become solid waste are made from a variety of natural resources.
- Most of the solid waste is buried in a landfill.
- Some garbage can be reduced, reused, or recycled (including composting).

In Lesson 4 students will:

- Look at the pictures of a landfill in *Where Does the Garbage Go?* by Paul Showers and describe a landfill.
- Classify classroom garbage according to the kinds of natural resources used to make the garbage.
- Listen to the story *Katherine and the Garbage Dump* by Martha Morris and relate the actions of the character to actions they can take with the garbage in the classroom.
- Classify items that can be reduced, reused, or recycled.

## 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.

In Lesson 5 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.

### Required Books to Implement Unit 1

- **For Lesson 3:**
  - Fleming, Denise. *Where Once There Was a Wood*. New York: Henry Holt and Company, 1996.
  - Peet, Bill. *Farewell to Shady Glade*. Boston: Houghton Mifflin Company, 1966.
  - Showers, Paul. *Where Does the Garbage Go?* Illustrated by Rand Chewning. Let's-Read-and-Find-Out Science series. New York: HarperCollins Children's Books, 1994.
- **For Lesson 4:**
  - Morris, Martha. *Katherine and the Garbage Dump*. Illustrated by Yvonne Cathcart. Toronto, Canada: Second Story Press, 1992.
  - Showers, Paul. *Where Does the Garbage Go?* Let's-Read-and-Find-Out Science series. New York: HarperCollins Children's Books, 1994.

### Recommended Books to Implement Unit 1

- **For Lesson 2:**  
Brooks, Felicity. *How Things Are Made*. Designed by Chris Scollen. Finding Out About series. Tulsa, Okla.: EDC Publishing, 1989.
- **For Lesson 3:**  
Wilcox, Charlotte. *Trash!* Minneapolis: Carolrhoda Books, Inc., 1988.
- **For Lesson 5:**  
Ross, Anna. *Grover's 10 Terrific Ways to Help Our Wonderful World*. Illustrated by Tom Leigh. New York: Random House, 1992.

## PROJECTS

Projects provide hands-on experiences for students. Some lessons in Unit 1 are project-based and encourage students to apply what they have learned in the classroom. Some project-based lessons are service-learning oriented in which students participate in improving the environment in their school and community.

The following describe four projects and an example of a class that has completed a similar project that addresses this unit on conserving natural resources. Teachers are encouraged to select one of these projects with their students or to have their students develop one of their own. If students implement an applicable project, they and their teachers are encouraged to send a description of the project to the California Integrated Waste Management Board's Office of Integrated Education, MS-14A, P.O. Box 4025, Sacramento, CA 95812-4025.

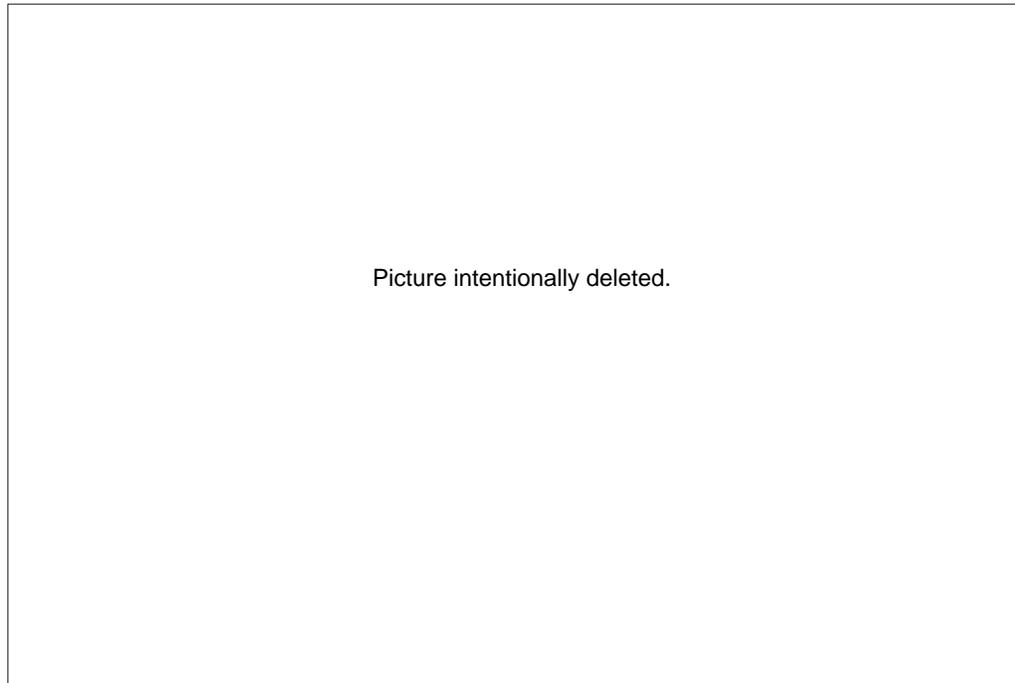
- **Project 1:** Through displays, posters, and other art forms, students show the ways natural resources can be used wisely. (Lesson 2)
- **Project 2:** Students look in the classroom at the types of materials that are thrown away. They reuse everything possible in the classroom. Students also recycle everything possible in the classroom and take it to a recycling center. (Lesson 3)
- **Project 3:** Students develop a plan on how to reduce waste in the classroom. For example, they can monitor the use of paper and paper towels and ensure that lids are on markers

and glue sticks so they won't dry out and then have to be thrown in the trash. (Lesson 4)

- **Project 4:** Students perform the play, "Treasures of the Earth and How People Use Them," for other classes to teach their fellow

students about the importance of natural resources to people. (Lesson 5)

### Example of a School Participating in a Project



Students in Anne Harris's second-grade class present the play, "Treasures of the Earth and How People Use Them," to another class at Jefferson Elementary School in the Cloverdale Unified School District. The play teaches the importance of natural resources to people.

# NOTES