

## K-3 MODULE

# Unit 4: Proper Disposal of Waste *Overview*

### UNIT 4'S CONCEPT

We can make choices to reduce litter and reuse or recycle litter.

The five lessons in this unit are:

#### LESSON 1: LITTER ON THE SCHOOL GROUNDS

**Lesson's concept:** Litter is packaging, paper, and other materials that have been disposed of improperly.

In Lesson 1 students will:

- Sing a song about litter.
- Go on a litter walk to see whether they can find litter on the school grounds (or in a nearby area).
- Pick up litter (or conduct a visual survey) around the school grounds (or in a nearby area) and tally the number of pieces of litter by categories.
- Classify litter into items that can be reused, those that can be recycled, and those that should be placed in a trash can.
- Identify the areas which have the most amount of litter and which type of litter was most common.
- Listen to the reading of *The Wartville Wizard* by Don Madden.
- Offer some solutions to the litter problem.
- Make litter bags for cars.

#### LESSON 2: LITTER, WILDLIFE, AND DECOMPOSITION

**Lesson's concepts:**

- Litter can be dangerous to wildlife.
- Some litter decomposes rapidly, while other litter can take hundreds and even thousands of years to break down.

In Lesson 2 students will:

- Observe how a plastic bag can create problems for wildlife.
- Use a toy animal to show how wildlife can

get injured by litter.

- Guess how long it might take for specific litter to decompose or break down; then Conduct an experiment to determine the decomposition rates of different types of litter.
- Compare the students' guesses and observations concerning the time it takes for various objects to decompose or break down to those made by scientists.
- Write a story about litter and wildlife.

#### LESSON 3: LITTER RELAY

**Lesson's concepts:**

- Litter can be sorted and some of it can be recycled.
- We can make choices to reduce litter and to reuse or recycle the litter we collect. This conserves natural resources.

In Lesson 3 students will:

- Listen to and/or read *The Great Trash Bash* by Loreen Leedy.
- Work in teams as they participate in a relay race to classify litter into categories of litter that can be reused, recycled, or sent to a landfill.

#### LESSON 4: PACKAGING CAN BECOME LITTER

**Lesson's concepts:**

- Most litter is material used in packaging.
- People can choose to reduce the amount of packaging they buy and use.

In Lesson 4 students will:

- Discuss the purpose of packaging.
- Compare the amount of packaging used for different cookies.
- Identify the waste created by packaging.
- Determine that some packaging is easier to recycle than others.

- Reduce the amount of disposable packaging used in preparing lunches.

## LESSON 5: ANTILITTER PROMOTIONAL CAMPAIGN

**Lesson's concept:** Education and publicity can help discourage people from littering.

In Lesson 5 students will:

- Promote an antilitter campaign at their school by selecting one of the following activities:
  - Design posters to place around the school to encourage others and to remind themselves not to litter.
  - Make signs for highly littered areas on the school grounds (or other areas).
  - Make a display to show how to package a zero-waste lunch.
  - Write an antilitter jingle based on a well-known song.
- Survey the school grounds (or other areas) to determine whether their antilitter campaign is working.
- Read or listen to *Where Is the Treasure?* by Kelli C. Foster and Gina Clegg Erickson.

### Required Books to Implement Unit 4

- **For Lesson 1:**  
Madden, Don. *The Wartville Wizard*. New York: Simon and Schuster, 1986.
- **For Lesson 3:**  
Leedy, Loreen. *The Great Trash Bash*. New York: Holiday House, 1991.
- **For Lesson 5:**  
Foster, Kelli C., and Gina Clegg Erickson. *Where Is the Treasure?* Illustrated by Kerri Gifford. Get Ready . . . Get Set . . . Read! series. Hauppauge, N.Y.: Barron's Educational Series, Inc., 1995.

## PROJECTS

Projects provide hands-on experiences for students. Some lessons in Unit 4 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 seven projects and examples of schools that have accomplished projects that address this unit on the proper disposal of waste. 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:** Students participate in statewide cleanup events, such as the Coastal Cleanup Day. For information on the Coastal Cleanup Day, contact the California Coastal Commission at 1-800-COAST-4U.
- **Project 2:** The class collects plastic six-pack holders and staples them together to make trellises. The trellises could be used in the garden or sold with seeds to parents or community members. (Lesson 2)
- **Project 3:** Students organize the sale of reusable lunch bags or boxes. They can have adults help them sew cloth lunch bags. (Lesson 4)
- **Project 4:** Students design and post "no littering" signs. (Lesson 5)

### *Mattie Washburn Elementary School, Windsor Unified School District<sup>1</sup>*

*Students at Kathy Angell's first-grade class regularly pick up litter in the Skyler Turney Nature Area, which is adjacent to their school. They identify which litter can be recycled and place the recyclable items in a recycling bin at school. They plan to make some signs to ask people using the nature area not to litter.*

### *Sunset School of the Arts, Livermore, Livermore Valley Joint Unified School District<sup>2</sup>*

*Thirty students at Sunset School of the Arts reached over 450 fellow students and countless community members with their commendable waste reduction efforts! Sunset students began by going on morning laps around the playground and picking up trash on the way. They*

<sup>1</sup>Submitted by Kathy Angell, first-grade teacher, Mattie Washburn Elementary School, Windsor Unified School District.

<sup>2</sup>"Jiminy Cricket's Environmentality Heroes." The Walt Disney Company, Inc., and the State of California's Environmental Education Interagency Network.

posted “NO LITTERING” signs at school and expanded their litter walks to include various areas of the local community. They separated and recycled the trash that they collected. Ultimately, they designed and orchestrated an entire museum on trash involving research, action, and education of the students, their families, their school, and their community

- **Project 5:** Students develop a presentation to teach other classes why it is important not to litter. Each group could choose a particular area to emphasize (e.g., packaging, litter and wildlife, litter on the school ground). In their presentations they could encourage other students to join their campaign and share ideas to decrease litter. (Lesson 5)
- **Project 6:** Students collaborate with local businesses to do a community project by drawing “reminder” signs on poster paper or on reused grocery bags to encourage people not to litter. (Lesson 5)
- **Project 7:** Students promote a litter-free campus through bookmark and T-shirt design contests.<sup>3</sup> (Lesson 5)
- **Other Projects**

**John B. Reibli Elementary School, Mark West Union School District<sup>4</sup>**

<sup>3</sup>*Taking Action: An Educator’s Guide to Involving Students In Environmental Action Projects.* Bethesda, Md.: Western Regional Environmental Education Council, 1995, p. 55.

Every Friday, students from Mark Angell’s first-grade class at John B. Reibli Elementary School pick up litter on their campus. They estimate the amount of litter collected and chart this amount on a graph. They found out that most of the litter is generated during after-school events. They are in the process of developing a plan to get additional garbage cans for special events. They also plan to ask students and adults using the campus for after-school activities to stop littering and to use the garbage cans.

**Tyrrell Elementary School, Hayward Unified School District<sup>5</sup>**

Ms. Essence Phillips’s class at Tyrrell Elementary School looked around the school and noticed that the school garden was run-down and the campus was strewn with litter. The students conducted research at the Museum of Environmental Science and at local libraries. During their studies the class learned about composting and developed a worm compost location to recycle the debris from their garden. Local nurseries donated trees and seeds. The students, along with their parents, came in on weekends to clean the campus and prepare the garden area for planting. Ms. Phillips’s class members shared their knowledge and project activities with their schoolmates during a school assembly. The revived garden provides the entire school with a place of natural beauty to enjoy as well as an outdoor laboratory to explore.

<sup>4</sup>Submitted by Mark Angell, first-grade teacher, John B. Reibli Elementary School, Mark West Union School District.

<sup>5</sup>“Jiminy Cricket’s 1997-98 Environmentality Winners.” The Walt Disney Company, Inc., and the State of California’s Environmental Education Interagency Network.

# NOTES