



Indoor and Outdoor



**Time**

Part 1: 60 minutes  
Part 2: 30 minutes  
Part 3: 60–90 minutes

**Related Subject**

Language Arts

**Process Skills**

Communicating  
Applying



**Materials**

*For the Class:*

- 1 or more large tins or plastic containers with lids
- stake or sign
- waterproof markers
- shovel (optional)
- hammer (optional)
- packet of flower seeds

*For Each Student:*

- sheet of large paper for Big Book
- crayons and pencils
- rubberband
- completed Lab Book pages
- Lab Book, p. 116

# Message to the Future

In this postassessment activity, students create a Big Book to share what they have learned about how living things use resources. Then they develop and share a plan for conserving resources.



**Outcome**

Students review the year's work and describe ways to conserve natural resources.

**For the Teacher**

End the year with a celebration that gives students a chance to share their knowledge and skills with their families and next year's second grade class. It is also an opportunity to celebrate your second graders' growth in understanding and maturity. Over the past year, your students have not only tracked the ways living things use resources to grow and change, but also developed a sense of responsibility for conserving, renewing, and using those resources wisely.

At the year-end celebration, students share their knowledge and their visions about resources and the best ways to conserve them. To help them formulate those ideas, review the year's topics by creating a class Big Book as a gift to next year's class. After all, the class's knowledge is itself a valuable resource! Help them recognize how much they have learned by referring to the charts they have written, the projects they have completed, and their efforts in the garden. Then, as the highlight of the celebration, bury the students' conservation plans in a time capsule, which students can unearth next fall as third graders and keep in the Life Lab Center for years to come. Even if your school's population is transient, the plans will be a useful motivator for next year's third graders.

### Teacher to Teacher

*I was pleasantly surprised when I returned to school this fall and found that students were still stimulated by the activities we did before school ended. They had even maintained their enthusiasm at home during the summer. I discovered that one boy took recycling so seriously that he refused to throw away the soft drink can he got on an airplane flight to Ohio. He arrived at his grandparents' home with an aluminum can ready to be recycled.*

—Phyllis Weber, El Portal Elementary School, El Portal, CA

### Preparation

1. Schedule a date and time for a year-end Garden Celebration. Arrange for volunteers to help with the celebration.
2. If you plan to bury the time capsule, select a site in the garden. Find a large container that can be sealed and buried for a few months.
3. Ask volunteers to decorate the time capsule to make it a suitable receptacle for holding plans that will save the planet. Invite others to design a stake or sign identifying the site of the time capsule.
4. Suggest that students harvest garden produce to use in making a salad for the celebration (optional).

### Part 1



### Getting Started

Discuss what students have learned during the year about using and conserving resources.

You may wish to refer to specific charts made in earlier units or examples of students' work. **What do you remember best from all you learned this year about resources? How do living things use resources? Do resources stay the same? What ideas do you have for protecting the Earth? For protecting all the living things on our planet?** Give students a

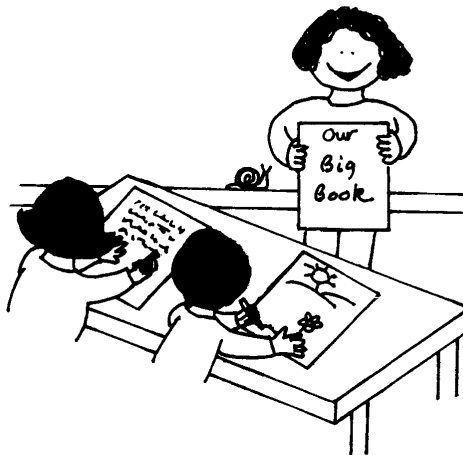
chance to brainstorm with a partner what they have learned. **How can you pass on what you have learned?**



### Action

1. Suggest that students share their knowledge of resources with next year's second graders by creating a Big Book. Discuss what should go into the book. Draw up a Table of Contents, using the topics the class has investigated as a guide. Students may wish to end each chapter with tips on how to conserve resources.

J K L M N O P Q



2. Divide the class into teams, with each responsible for one chapter of the book. Let the teams meet to decide what they want in their chapter. Suggest that students review their Lab Books for ideas. Encourage them to share their knowledge, offer tips on how to set up experiments, and suggest ways to overcome problems in the garden. Circulate among students as they work, and listen to their discussions. Check understanding of key ideas by posing questions or probing meaning.

3. Distribute large sheets of paper for students to write and draw on.

4. Bind or staple the book, and display it in the Life Lab Center.



### Assessment

Read the book together as a class.

**What are the most important ideas you have learned? What connections do you see between chapters? How are you like scientists? Why do scientists do experiments? Why did you do experiments? What did we learn from them?** Help students recognize how much they have learned during the year and how the Big Book reflects their knowledge.

### Part 2



### Getting Started

Discuss what the class has done to conserve resources during the year.

**What have we done to protect the environment during the year? How does conserving resources help our planet? If you could tell**

**people next year or even 100 years from now what you are doing now to protect the environment, what would you say? What do you think people in the future should do to protect resources? What will you do in the future?** Give students time to share their plans and ideas with each other.



### Action

1. Display the time capsule. Explain that students will have an opportunity to address people in years to come and advise them on caring for planet Earth.

2. Ask students each to fill out the Message to the Future in their Lab Books.

3. Invite each student to share his or her plan with classmates.

4. Make a ceremony of rolling up the plans and placing them in the time capsule. Show students how to fold, roll, and secure their plan with a rubber band before placing it in the container.

5. Make plans for burying or storing the time capsule at the Garden Celebration. Discuss whether students want to read their plans to their families at that time.





### Assessment

Have students compare the ideas they expressed on the WE CARE! lab sheet from the first lesson of the unit, with the ideas expressed in their Message to the Future.

**How have your ideas changed? What sorts of things do you think people in the future should do? Did your plans involve recycling? Conservation? Wise use of resources? Why are these things important? How can we remind your third grade teacher to open your time capsule?**

### Part 3



### Action

1. Plan activities for the celebration by dividing the class into groups. Ask each group to be responsible for one part of the celebration. One group can plan and then give garden tours. Another might show off the Big Book. A third group might read the time capsule plans, and a fourth might prepare a salad or relish tray using produce from the garden.
2. Bury the time capsule in a special ceremony. Pound in the stake to mark the capsule's position.
3. Ask guests to help plant seeds above the time capsule, so that the third graders can harvest food or pick flowers when they dig up the capsule in the fall.



### Assessment

Encourage students to reflect on the unit and the year.

**What are the most important ideas you learned this year? What did you learn about the garden and how it works? About conserving resources? What projects would you like to try this summer? Why?**

### Digging Deeper

- Encourage students to make a plan for conserving resources at home during the summer. For example, discuss ways they can cool off on hot days. What resources will they be using? Urge students to turn their ideas into a Summer Conservation Poster with tips for the whole school.
- Make plans to maintain the garden over the summer. If possible, you might invite a different family to care for the garden each week. During the week they water and weed, each family might also take home any produce that is ready to harvest.

### Teacher Reflections

- Did students draw on their garden experiences and previous units in selecting their plans?
- Were they able to come up with ways to explain or show what they knew to other people?
- How can you encourage students to take action in their personal lives to conserve resources?
- How can you enhance the Life Lab Science Program next year?

# Message to the Future

## To all future citizens of Planet Earth:

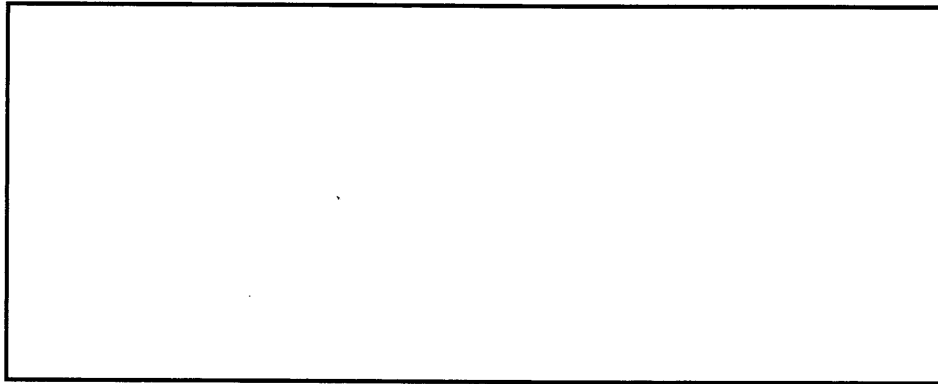
Let it be known on this day, \_\_\_\_\_,  
that I, \_\_\_\_\_, care about our planet.  
This is what I am doing now to protect our  
environment:

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Below is a picture of what I am doing to protect  
our resources.



I know that you care about our planet, too.  
Here is a plan that will help you continue to  
protect Earth's resources:

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Your friend, \_\_\_\_\_