

**Chapter Four,  
Lesson Three:**

**A Special  
Look at Plastic**

**Concepts and Skills  
Addressed:**

Problem solving  
Listening

**Materials Needed:**

None

**Materials Supplied:**

Teacher/Student background on plastic  
Questions and answers

**Students will** examine how plastic fits into our daily lives and will identify plastic items they routinely use. After discussing the problem in groups, students will explain to the class their ideas on how to reduce plastic waste and reuse some of the plastic we now throw away.

**A. Procedure**

1. Read and paraphrase for your students "A Special Look at Plastic." (You may ask them to read the material or you may want to give a short talk on the subject.)
2. Divide the class into groups of three or four and give each group a question or two from those listed here.
3. Ask the students to discuss their ideas as a group and to identify a leader who will act as the group's spokesperson.
4. Note the responses on the chalkboard, then review them.



## B. Plastic: A Special Case

Plastic. It's convenient. It doesn't cost much or weigh much. It rarely breaks. We like many of the unique qualities of plastic.

But, we haven't found enough ways to reuse and recycle plastic, so it is often used once and thrown away.

A lot of people don't know that plastic can be recycled. So little is recycled right now that not many recycling services are asking for plastic recyclables - there isn't much demand. We've heard so much about paper, glass and metal and, for many of us, these are the things picked up in front of our houses and at nearby recycling centers. Since plastic isn't picked up in many neighborhoods, we assume it can't be recycled. Well, we know now that that's wrong.



What can we do? We could cut down our use of plastic, but plastic is an extremely useful material. Right now we bury a lot of it in landfills. We could keep doing that - plastic amounts to 9.1% of waste by weight. But, plastic takes up a lot of room, 20% by volume, and we may run out of space. Is there a better way? Yes. We need to spread the word that certain plastics are recyclable.

Plastic is a general term. Different chemical components make up different kinds of plastic. Each kind of plastic must be recycled separately. And some types of plastic are not recyclable at all. Separating plastic is a problem when there are so many kinds, and when different types are combined to make one container. A shampoo bottle, for instance, may be made of one kind of plastic while the cap is made of another.

We are finding new uses for plastic every day. Meanwhile, scientists and businesses are working very hard to invent new ways to recycle plastic. Some plastics are commonly recycled even now, like milk containers and beverage bottles. A company called Wellman, Inc., in New Jersey, is the largest plastics and fiber waste recycler in the United States. Wellman supplies jobs to people in North and South Carolina, California and across the Atlantic Ocean in Ireland. They gather empty, plastic beverage bottles from the U.S. and Europe and make all kinds of materials and products from them, like pot scrubbers and even carpeting. Recycling plastic is possible.

Let's go back to our original question. What can we do?

## **C. MOBIUS Considers His Options**

**Teachers:** Many answers to these questions are based on common sense and the materials mentioned in this chapter. Use these questions as a starting point to your class discussion.

Imagine that MOBIUS has come to your classroom today. MOBIUS is asking you to help find answers to questions like how we can make the world a better place to live. What suggestions do we have for MOBIUS? How can we develop the recycling habit? How can we help others do the same? How would you respond to these questions?



**Should we stop using plastic?**

**What can we do to cut down on the amount of plastic we throw away?**

**What if we decided to stop using plastic? Is that a good idea?**

**What would life without plastic be like?**

**What can we do to make recycling plastic easier?**

**Is there anything we can do as a class that will help reduce the amount of plastic we throw away?**

**How can we help people who don't recycle develop the recycling habit?**

## Language/Art Activity

# The Recycle Times... Herald... News...Post...

## Objective

Students will write and produce a newspaper for their class, school or community on recycling and the environment. They will have a chance for independent or team study in specific subjects that interest them, to spread the word about recycling and to gain firsthand knowledge of the many aspects of newspaper production.



## Time Needed for Activity

One to four weeks, depending on length of the newspaper.

## Materials Supplied

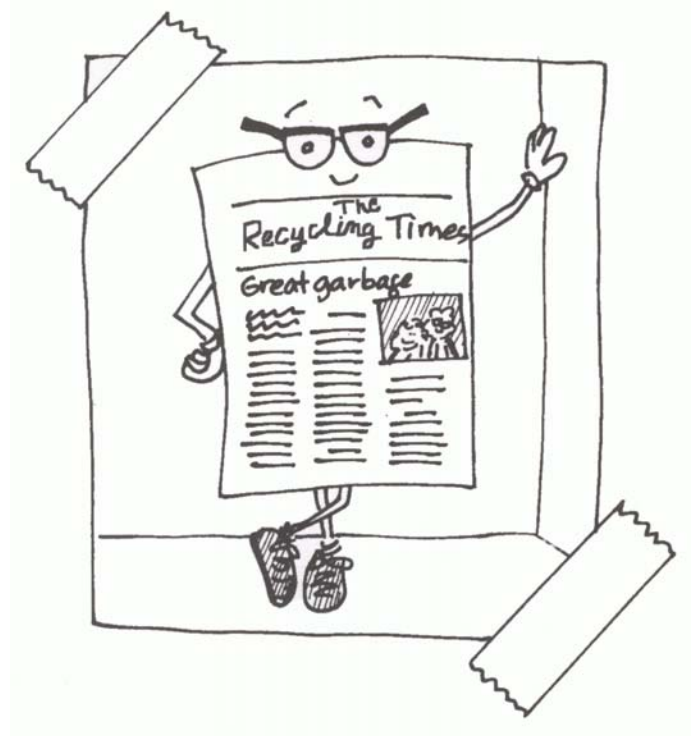
Planning worksheet

## Materials Needed

Paper, pencils, scissors, glue stick or spray, roller (rolling pin will work), cardboard or posterboard and copying facilities.

## Procedure:

1. Discuss with the class all aspects of producing and distributing a newspaper, as explained here. You may want to arrange for the editor of your local newspaper to speak to your class.
2. Work with students to develop a statement of purpose for the newspaper that answers, "What is the reason for this newspaper?" and "Who will read it?"
3. Brainstorm and then vote on a name for the newspaper.
4. Divide the class into teams: an editorial team (writers, researchers), an art team (illustrators, photographers, and/or picture collectors), a production team to design the banner and manage the layout and printing of the newspaper, and an advertising team that will help sell and create ads. The ads may be placed free of charge or for a nominal fee to cover printing costs. "Customers" for advertising can be role-played by class members.
5. Using the worksheet provided, devise a story list and assign tasks and deadlines. Suggested components:



- Feature story, such as what the school, the cafeteria, or the community, is doing to promote recycling
- Cartoons or a comic strip
- A crossword puzzle
- Photographs
- An interview or advice column (an interview could be conducted with a recycling expert, possibly from Allied Waste)
- Letters from students

6. Once all the elements are complete, the production team should work with the pieces to lay out the newspaper in the way it will look when printing is complete. If a computer capable of composing pages is available, you may decide to use it to complete this step. If hand produced, students will need to position the elements by cutting and pasting the articles and art (preferably black and white) on a page. Begin drawing the exact dimensions of the newspaper on a piece of paper or tag board that is slightly larger than the dimensions of your newspaper. You will need one of these layout boards for each page of the publication. Place immobile elements (e.g. banner, page numbers, borders) on the appropriate pages. Decide where everything should go and how best it will all fit. Glue articles and artwork into place. Press down the edges with a roller to be sure the surface is smooth.
7. Investigate printing your own newspaper on recycled paper and devise a method to collect the papers for recycling after they've been read.
8. Determine how many papers you'll print and how they'll be distributed: in the lunch line, classrooms, library, etc.

# Newspaper Planning Worksheet

**Story**

**Writer(s)/Art Coordinator(s)**

**Deadline**

## Language Activity

# Radio Waves Teach Recycling Ways

## Objective

Students will learn the messages and methods of recycling by writing and recording radio and/or video commercials for the class or school.



## Materials Supplied

None

## Materials Needed

Paper, pencils, tape recorders, a camcorder, and video and audio cassette tapes.

## Procedure:

1. Divide the class into groups of four or five students each.
2. Explain that each group will write and record a radio or television commercial to teach and promote recycling to their peers.
3. Before creating the commercial, have teams state the message they wish to convey - what will the ad tell people?
4. Explain that students can get their message across in many creative ways: using sound effects and music, multiple voices, impersonations, person-on-the-street interviews, etc.
5. Give students time to discuss what they will do and prepare to record their commercial. They may need some time to gather items that they'll use in recording.
6. Rehearse and record the commercials and present them to the class, to their families, or perhaps to the school.