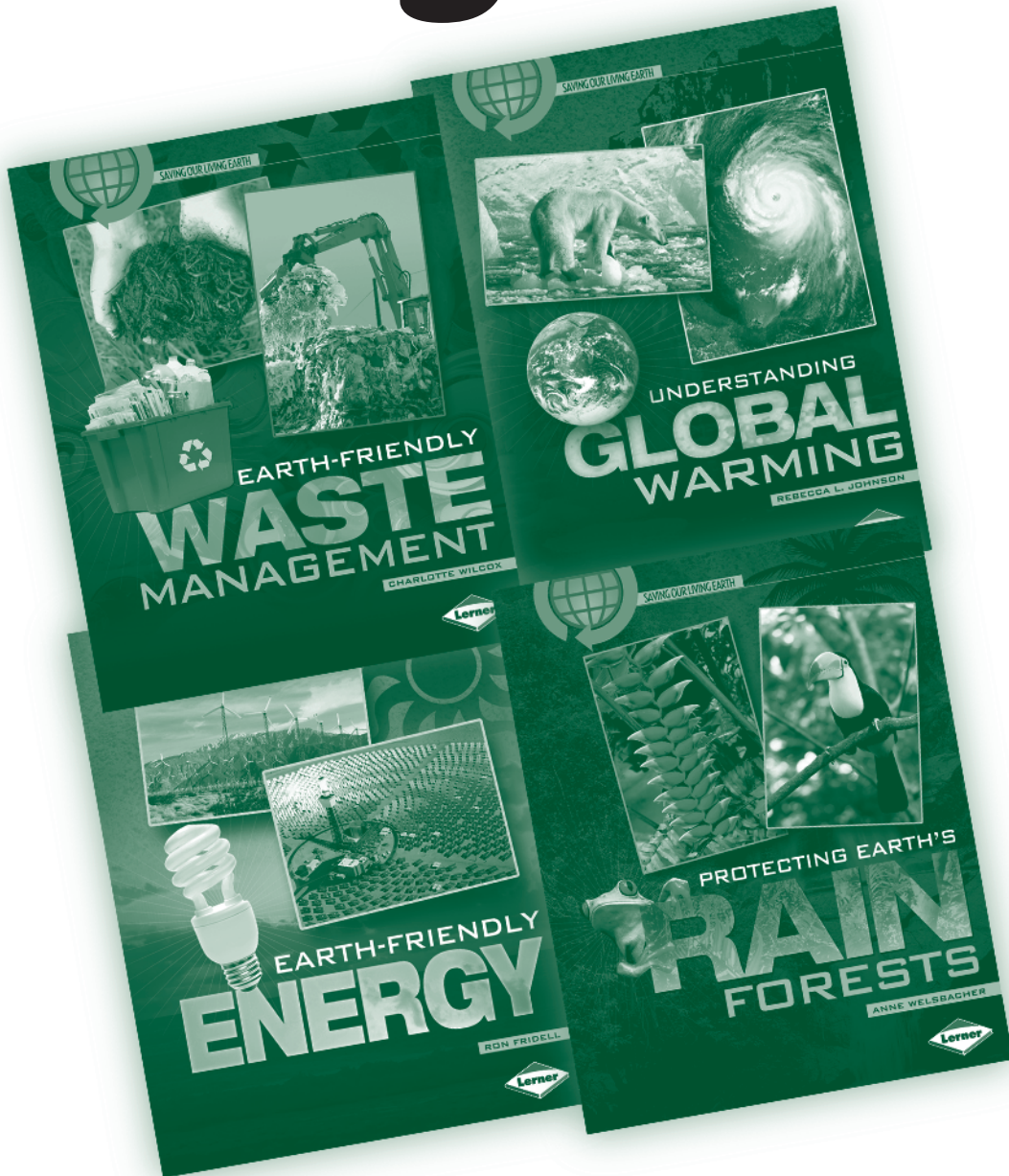


TEACHING

Saving Our Living Earth



5th Grade Reading Level

Standards

- Geography**
- Understands the physical and human characteristics of place.
 - Understands the characteristics of ecosystems on Earth's surface.
 - Understands how human actions modify the physical environment.
 - Understands how physical systems affect human systems.
 - Understands the changes that occur in the meaning, use, distribution, and importance of resources.
 - Understands global development and environmental issues.
- History**
- Understands long-term changes and recurring patterns in world history.
- Language Arts**
- Uses grammatical and mechanical conventions in written text.
 - Uses the general skills and strategies of the writing process.
 - Uses reading skills and strategies to understand and interpret a variety of informational texts.
 - Uses listening and speaking strategies for different purposes.

Multiple Intelligences Utilized

- linguistic, spatial, intrapersonal, interpersonal, and naturalistic

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Books in the *Saving Our Living Earth* series include:

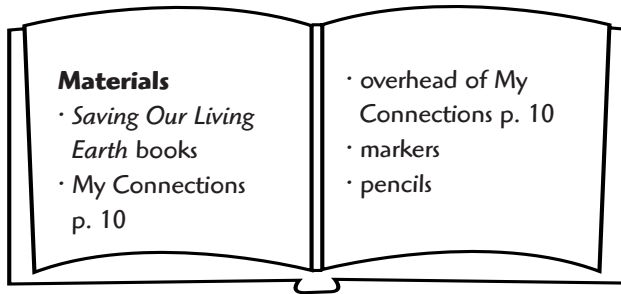
Earth-Friendly Design
Earth-Friendly Energy
Earth-Friendly Waste Management
Protecting Earth's Air Quality
Protecting Earth's Land
Protecting Earth's Rain Forests
Protecting Earth's Water Supply
Understanding Global Warming



Lesson 1

Connection to the Living Earth

Purpose: Students will examine their daily activities to learn how they are connected to Earth.



Materials

- *Saving Our Living Earth* books
- My Connections p. 10

- overhead of My Connections p. 10
- markers
- pencils

Objectives

- Identify ways that humans are connected to Earth.
- Discuss natural resources used by people.
- Investigate how each student uses resources.
- Analyze ways humans rely on the planet.
- Create a daily schedule.
- Evaluate daily schedules for environmental connections.

Activity Procedures

Prepare

(teacher)

- Copy My Connections p. 10 for each student.

Pretest

(teacher, students)

- What are natural resources?
- Can you think of ways you rely on our planet's natural resources?

Read

(students)

- Read *Saving Our Living Earth* books.

Model

(teacher)

- Explain that students will be brainstorming ways they are connected to the environment.
- Put My Connections p. 10 on the overhead.
- Model writing a schedule of daily activities on the left side of My Connections p. 10.
- Ask students how each activity is connected to the environment. (For example, breakfast is made from food grown in the earth).
- List connections to the environment on the right side of My Connections p. 10.
- Tell students they will be recording their own daily schedules and looking for connections to the environment.

Practice

(students)

- Students complete My Connections p. 10.

Discuss

(teacher, students)

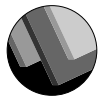
- Ask students to share their daily activities and explain how those activities connect them to Earth.
- Discuss how students use natural resources in their daily lives.
- Discuss how resources are used differently in different households and in different countries.
- Ask students why it is important to recognize connections to the planet.

Evaluate

(teacher)

- Assess My Connections p. 10 for completion and understanding.

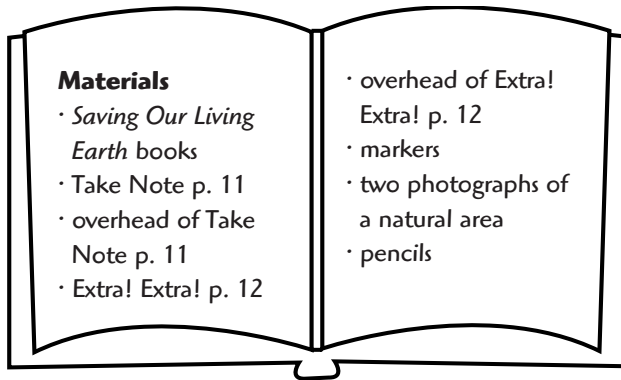




Lesson 2

Human Impact

Purpose: Students will learn how humans have affected the environment.



Objectives

- Identify changes in the environment over time.
- Compare a photograph of an area from two time periods.
- Investigate ways in which humans have affected the environment.
- Analyze how resources have been found and used.
- Write a newspaper article about an environmental topic.

Activity Procedures

Prepare

(teacher)

- Divide students into groups of three or four.
- Copy Take Note p. 11 and Extra! Extra! p. 12 for each group.
- Find two photographs of a natural area, one from the past and one from the present. The photographs should show how humans have affected Earth through development or the use of resources.

Pretest

(teacher, students)

- Show students a photograph of a natural area in the past. Ask them to comment on what they notice.
- Show students a recent photograph of the same area.
- Discuss how humans have affected the area.

- Ask students how the planet has changed in the past 100 years. How has it changed in the past 1,000 years?

Read

(small groups)

- Each small group will read a different book from the *Saving Our Living Earth* series.

Model

(teacher)

- Tell students they will be using the *Saving Our Living Earth* book they just read to take notes on how humans have affected Earth.
- Put up overhead of Take Note p. 11.
- Explain that their notes should answer the questions *who, what, when, where, why* and *how* about the impact humans have had on Earth.
- Model writing notes and determining which question is being answered by the information.
- Put up overhead of Extra! Extra! p. 12.
- Explain that a newspaper article should answer the questions *who, what, when, where, why* and *how*.
- Model how to use notes to write a newspaper article about how humans have affected the planet in a particular area (e.g. air quality, water use, waste management).

Practice

(small groups)

- Students take notes from their *Saving Our Living Earth* book on Take Note p. 11.
- Students use their notes to write a newspaper article on how humans have affected the planet, using Extra! Extra! p. 12.

Discuss

(teacher, students)

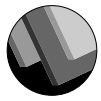
- Have each group share their newspaper article.
- Discuss the impact humans have had on the environment.

Evaluate

(teacher)

- Assess Take Note p. 11 and Extra! Extra! p. 12 for completion and understanding.

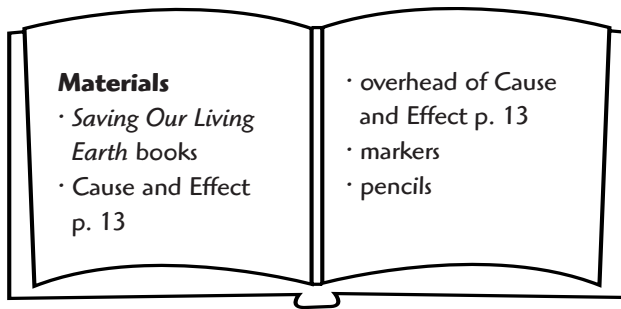




Lesson 3

Environmental Problems

Purpose: Students will explore cause and effect to learn about the environmental problems that exist on our planet.



Materials

- *Saving Our Living Earth* books
- Cause and Effect p. 13
- overhead of Cause and Effect p. 13
- markers
- pencils

Objectives

- Identify environmental problems.
- Differentiate between types of environmental problems.
- Investigate the causes of environmental problems.
- Analyze reasons for the scope of the problems.
- Create a cause-and-effect table.
- Suggest solutions for environmental problems.

Activity Procedures

Prepare

(teacher)

- Divide students into groups of three or four.
- Copy Cause and Effect p. 13 for each group.

Pretest

(teacher, students)

- What are some environmental problems we are facing?
- Why do these problems exist?

Read

(small groups)

- Each group will read a book from the *Saving Our Living Earth* series.

Model

(teacher)

- Put up the Cause and Effect p. 13 overhead.
- Using one of the *Saving Our Living Earth* books, give students an example of an environmental problem (e.g. global warming).
- Explain the terms *cause* and *effect*.
- Model writing the cause of the problem on the left side of the paper and the effect on the right side of the paper.
- Tell students that many problems have multiple causes.

Practice

(small groups)

- Using the *Saving Our Living Earth* book they read, students will complete Cause and Effect p. 13

Discuss

(teacher, students)

- What are some of the environmental problems you read about?
- What are the causes of these problems?
- Can these problems be solved? How?

Evaluate

(teacher)

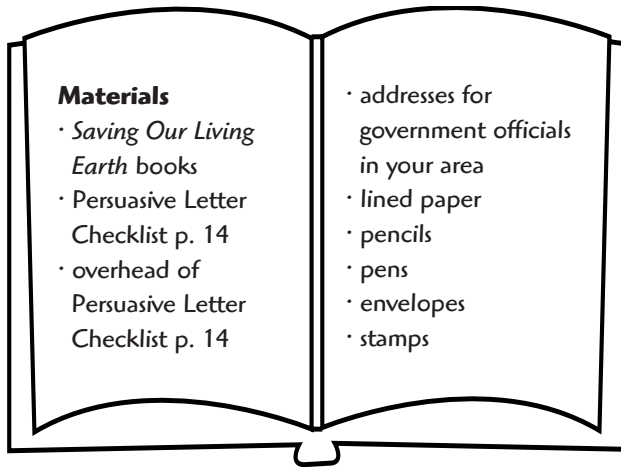
- Assess Cause and Effect p. 13 for completion and understanding.





Lesson 4 Take Action!

Purpose: Students will learn how take action to solve environmental problems by writing persuasive letters to government officials.



Materials

- *Saving Our Living Earth* books
- Persuasive Letter Checklist p. 14
- overhead of Persuasive Letter Checklist p. 14
- addresses for government officials in your area
- lined paper
- pencils
- pens
- envelopes
- stamps

Objectives

- Recall environmental problems discussed in Lesson 3.
- Identify solutions for problems.
- Analyze how to take action to solve problems.
- Determine how to reach government officials.
- Write persuasive letters to government officials.

Activity Procedures

Prepare

(teacher)

- Copy Persuasive Letter Checklist p. 14 for each student.
- Find addresses for government officials in your area by going to www.usa.gov and clicking the Contact Government link.

Pretest

(teacher, students)

- Ask students which environmental problems concern them most.
- Ask students what they think could be done to solve these problems.

Read

(students)

- Read *Saving Our Living Earth* books.

Model

(teacher)

- Explain that government officials such as senators and governors often make decisions about the environment. They have the power to make a difference and take action on environmental issues.
- Put up the overhead of Persuasive Letter Checklist p. 14.
- Explain that students will be writing a persuasive letter to a government official.
- Read through each step of writing a persuasive letter, answering any questions students may have.

Practice

(students)

- Students write a letter to a government official using Persuasive Letter Checklist p. 14 as a guide.

Discuss

(teacher, students)

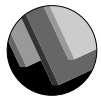
- Ask a few students to share their persuasive letters.
- Discuss how students have persuaded government officials to take action.
- Congratulate students on taking action to save the planet.

Evaluate

(teacher)

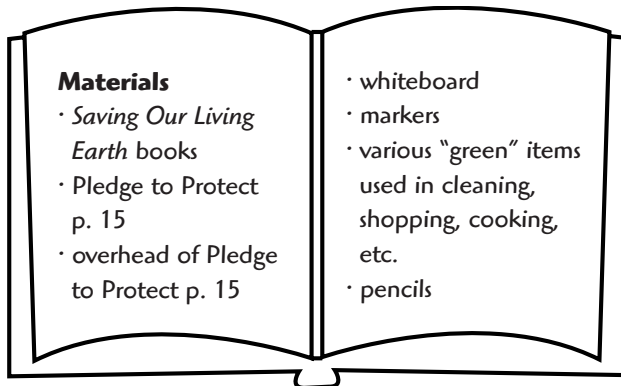
- Collect letters and envelopes from students.
- Assess letters for understanding and completion.
- Mail letters.





Lesson 5 Live Green

Purpose: Students will learn how to make small changes in their everyday lives to help save the planet.



Objectives

- Review ways human actions have affected the environment.
- Understand that humans need to change their actions in order to save the planet.
- Identify small things that students can do to reduce waste and make a difference.
- Discuss how students can talk to family members about changes.
- Create pledges for living a “greener” life.
- Predict how students’ actions will influence family members, neighbors, and the community.

Activity Procedures

Prepare

(teacher)

- Copy Pledge to Protect p. 15 for each student.
- Collect “green” items used in everyday situations such as cooking, cleaning, or shopping (e.g. a canvas grocery shopping bag).
- Find examples of small changes people can make in *Saving Our Living Earth* books.

Pretest

(teacher, students)

- How have humans affected the environment?
- Can humans change their actions in order to save our planet? How?

Read

(students)

- Read *Saving Our Living Earth* books.

Model

(teacher)

- Show students the “green” items collected and explain how using these items can help the environment.
- Tell students they can make a difference by reducing waste and changing their habits in small ways.
- Give students examples of things they can do to help the environment that are suggested in the *Saving Our Living Earth* books.
- Ask students if they have any other ideas of small ways they can make a difference.
- Write their responses on a whiteboard.
- Put up the overhead of Pledge to Protect p. 15.
- Model writing a pledge, listing ways you will change your habits in order to reduce waste and live “green.”
- Tell students that they can share their pledges with family members to help everyone in their household protect the environment.

Practice

(students)

- Students complete Pledge to Protect p. 15.

Discuss

(teacher, students)

- What small changes did you pledge to make to protect the environment?
- Why did you choose to make those changes?
- How can you help your family members make changes? Your neighbors? Your community?

Evaluate

(teacher)

- Assess Pledge to Protect p. 15 for completion and understanding.
- Check in with students periodically to see if they are making the changes listed on Pledge to Protect p. 15.

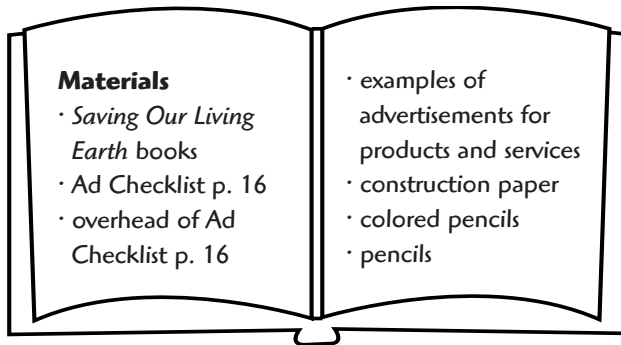




Lesson 6

Save Our Living Earth

Purpose: Students will create an advertisement to inform others about environmental issues and motivate them to make changes to help save the planet.



Objectives

- Define *advertisement*.
- Discuss how advertisements can inform and motivate.
- Determine how to inform and motivate students and staff at school.
- Outline information needed in advertisement.
- Create an advertisement.
- Evaluate the success of the advertisement.

Activity Procedures

Prepare

(teacher)

- Gather multiple advertisements for products and services to use as examples.
- Divide students into groups of three or four.
- Copy Ad Checklist p. 16 for each group.

Pretest

(teacher, students)

- Do you think people would agree to make changes if they knew about environmental problems?
- How can we inform and motivate people to make changes in their lives?

Read

(small groups)

- Read *Saving Our Living Earth* books.

Model

(teacher)

- Tell students that one way to inform and motivate a large group of people is to create advertisements. Define *advertisement*.
- Show students the advertisements for products and services you have collected.
- Discuss how the advertisements inform or motivate the reader.
- Put up overhead of Ad Checklist p. 16.
- Read through the directions, taking time to answer questions students may have.
- Tell students they will be creating an advertisement about an environmental issue with their group.

Practice

(small groups)

- Students follow directions on Ad Checklist p. 16 to create an advertisement about an environmental issue.

Discuss

(teacher, students)

- Each small group will share their advertisement with the class.
- Students in other groups will explain what they learned from the advertisement.
- Predict whether the advertisements will inform and motivate students in other classes.
- Put advertisements up in hallways around the school.

Evaluate

(small groups, teacher)

- The small groups will visit other classes to ask students what they learned from the advertisements. Were students motivated to make changes to save the planet?
- Students will use responses to determine if their advertisements were successful.
- The teacher will assess advertisements and Ad Checklist p. 16 for understanding and completion.



Additional Resources

BOOKS

- Amsel, Sheri. *The Everything Kids Environment Book*. Cincinnati, OH: Adams Media, 2007.
Are you ready to go green? This book is full of ideas for budding scientists and environmentalists.
- Earthworks Group. *50 Simple Things Kids Can Do to Save the Earth*. Riverside, NJ: Andrew McMeel Publishing, 1990.
Kids can feel overwhelmed by the scope of environmental problems. Give them power to make a difference by reading about small ways to save the planet.
- Gibbons, Gail. *Recycle! A Handbook for Kids*. New York: Little, Brown, 1996.
Do you know how items are recycled? Find out with this informative and empowering book.
- Green, Jen. *Saving Energy*. London: Hodder Wayland, 2005.
Packed with straightforward information about energy, this book is part of a series called *Improving the Environment*.
- Hall, Julie. *A Hot Planet Needs Cool Kids*. Bainbridge Island, WA: Green Goat Books, 2007.
Cool kids will love reading about how they can help reduce climate change.
- Needham, Bobbe. *Ecology Crafts for Kids*. New York: Sterling Publishing, 1999.
Give students a chance to be creative while learning about ecology. Kids can get crafty with 50 projects involving recycled materials.
- Olien, Rebecca. *Kids Care! 75 Ways to Make a Difference for People, Animals, and the Environment*. Charlotte, VT: Williamson Books, 2007.
Who cares about the environment? Kids do! This book will give them ideas for making a difference.
- Showers, Paul. *Where Does the Garbage Go?* New York: Harper Trophy, 1994.
Learn what happens to waste in landfills and recycling plants.

WEBSITES

- Earth Matters*
<http://www.earthmatters4kids.org.html>
This kid-friendly website for fourth and fifth graders provides information on sustainable foods and Earth systems.
- EekoWorld*
<http://www.pbskids.org/eekoworld/>
Learn about recycling, air and water pollution, garbage, and more on this vibrant and interactive website.
- Green Squad*
<http://www.nrdc.org/greensquad/>
Students can learn how to investigate their school environment and take action to make schools healthier by becoming a member of the Green Squad.
- Kids Do Ecology*
<http://www.nceas.ucsb.edu/>
Visit this website for suggestions on ecological classroom projects.
- Kids for Saving Earth*
<http://www.kidsforsavingearth.org/>
Clinton Hill, a boy who died of cancer at age 11, cared deeply about the environment. This website offers information, checklists, and action programs to help others accomplish Clinton's dream of saving the planet.
- Project Wild*
<http://www.projectwild.org/>
This website contains extensive resources for lessons about conservation of wildlife and other ecological issues.
- United States Environmental Protection Agency*
<http://www.epa.gov/kids/>
Looking for games, activities, coloring books, and information on protecting the environment? This site is packed with useful resources for students and teachers.
- Wisconsin Department of Natural Resources*
<http://www.dnr.state.wi.us/org/caer/ce/eek/>
This website has sections for teachers and students. Both parts are well organized and full of useful resources.

My Connections

Name _____

Daily Schedule	Connections to the Environment
7:00 A.M. _____	_____
8:00 A.M. _____	_____
9:00 A.M. _____	_____
10:00 A.M. _____	_____
11:00 A.M. _____	_____
12:00 _____	_____
1:00 P.M. _____	_____
2:00 P.M. _____	_____
3:00 P.M. _____	_____
4:00 P.M. _____	_____
5:00 P.M. _____	_____
6:00 P.M. _____	_____
7:00 P.M. _____	_____
8:00 P.M. _____	_____
9:00 P.M. _____	_____
10:00 P.M. _____	_____



Take Note

Name _____

Title of Book _____

Human Impact on Earth	Does this information answer the question <i>who, what, when, where, why, or how?</i>

EXTRA! EXTRA!

Humans Have Impacted the Environment in Major Ways






by _____

Cause and Effect

Name _____

Directions: Write the cause of an environmental problem under *Cause* and the type of environmental problem that is created under *Effect*.

Cause  Effect

Persuasive Letter Checklist

Name _____

1. Choose an environmental problem you want to help solve.
2. Determine which government official could help solve the problem.
3. Find the address of the government official.
4. Decide what actions you would like the government official to take to solve the problem.
5. Make an outline of your letter. Include a description of the problem, the reasons the government official should care about it, and what the official should do about it.
6. Write a persuasive letter, using your outline as a guide.
7. Edit your letter for spelling and grammar mistakes. Make sure that the letter is convincing!
8. Have a partner read your letter. Does the letter make sense? Would your partner be persuaded to take action? Ask your partner to suggest ways to improve your letter.

Have your partner sign here after editing _____

9. Write a final copy of the letter in ink in your best handwriting.
10. Write the address of the government official in ink on an envelope. Hand in your letter and envelope to your teacher. Well done!

Pledge to Protect

I, _____, pledge to make the following changes to protect the environment:

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

7. _____

Date _____

Student signature _____

Parent signature _____



Ad Checklist

Group members:

We want to inform the public about this environmental problem:

We want to motivate the public to:

How to create an advertisement:

- ___ Choose an environmental problem discussed in the *Saving Our Living Earth* books. Take notes on the most important things people should know about the topic.
- ___ Decide how you want to inform the public about your topic. You can catch their attention with surprising facts or statistics. You can ask questions and then provide answers. It is up to you!
- ___ Determine what actions the public could take to solve the problem. Decide how you will convince others to take these actions.
- ___ Make a list of the information you will include in the advertisement.
- ___ Create a slogan with your group. It should be a catchy phrase that people will remember.
- ___ Make a sketch of the advertisement. Decide what kinds of illustrations you can use to inform people about your topic.
- ___ Create the final advertisement with your group. Make sure you can read it from a few feet away.
- ___ Share your advertisement with the class. Listen to their comments and make changes if needed.