



Activity One

Get to Know Your Watershed

You learned how runoff can carry pollutants from the ground into streams. Water then flows from smaller streams into a larger river. Finally, the river empties into the ocean or another large body of water. The entire area drained by the river is called a watershed. A watershed includes all of the land, small creeks, and streams that drain into the river. Some watersheds are smaller, while others can take up large parts of a continent.

- 1. Research your watershed.** Use the Internet, maps, or local government environmental agencies to learn more about your watershed. Some questions to ask as you are doing your research include:

- What are the names of the major rivers or streams in your area?
- What is the closest creek or stream to your home? To your school?
- What is the name of your watershed?
- Is your school in the same watershed as your home?
- How large is your watershed?
- What are some point and nonpoint sources of pollution in your watershed?
- What types of wildlife live in your watershed?
- Are there any community environmental groups that focus on keeping your watershed clean and healthy?

- 2. Draw a map of your watershed.** Include the locations of the following locations:

- your home
- your school (if it is in the same watershed)
- parks
- rivers, creeks, streams, and other tributaries

- 3. Create a brochure** to give to your school mates, friends, family, and community members in your watershed. Have your teacher help you make a small size photocopy of your map for the brochure cover. In the brochure, include general information about your watershed from the research questions in step 1. Write a few sentences telling people why it is important to keep your watershed clean.

NAME: _____



Activity Two



Pollution and the Ocean Research Your Favorite Ocean Animal

In this activity, you will learn more about how pollution affects wildlife in the ocean.

Step 1

Choose ONE animal that lives in the ocean. You may pick one from the list below, or choose one of your own favorites.

white sharks grey whales sea otters sea lions tuna fish

Step 2

COLLECT information about your animal. Use the Internet or books from the library to find answers to the following questions:

- In what part of the ocean does your animal live?
- Where does your animal lay eggs or give birth to young?
- What types of pollutants can be found in the areas where your animals live or give birth?
- Is your animal affected by toxic waste, such as mercury, lead, or oil?
- Is your animal affected by solid waste, such as plastics?
- How do these wastes affect your animal?
- What is the source of the pollutants that affect your animal?

Step 3

Use the information you learned to CREATE A POSTER. The poster should include:

- visuals, such as drawings, maps, photos, and/or diagrams
- labels for your animal, pollutants, and locations
- brief text to explain how your animal is affected by pollutants

Display your poster at school.

NAME: _____



Activity Three



Hazardous Waste and You Research Effects of Hazardous Waste on Your Health

In this activity, you will learn more about how household hazardous waste can harm your health.

Step 1

Choose ONE type of household hazardous waste from the list below. If you know of another type of household hazardous waste that you would like to know more about, run the suggestion by your teacher.

spray paint batteries insecticide bleach motor oil

Step 2

COLLECT information about the hazardous waste you choose. Use product labels, the Internet, or books from the library to find answers to the following questions:

- How does your hazardous waste harm people?
- In what doses is your hazardous waste harmful?
- What cautions should people take when handling your hazardous waste?
- How should people safely dispose of your hazardous waste?
- Does your hazardous waste build up in the environment?
- Does your hazardous waste cause pollution that harms people or animals?

Step 3

Use the information you learned to write a SAFETY FACT SHEET about your household hazardous waste. The safety fact sheet should include all of the answers to the question in step #2.

Ask your teacher for help making copies of your safety fact sheet. Post one copy at home, and one at school. Give additional copies to friends and family members that may also use the same product.

NAME: _____



Activity Four



Post-Consumer Waste in Your Classroom

Write a plan to reduce, or lessen, the total amount of waste thrown away in your classroom.

1. Find out what types of wastes are thrown away.

In order to make a good plan, you must first find out more about your classroom waste at present. Post a pen and paper near your classroom waste bin. Ask your teachers and classmates to write on the list everything they throw away in the classroom for one week. They can write a simple description, such as "piece of paper" or "empty pen."

At the end of each school day, collect the list. On the bottom of the list, make a note of about how full the waste bin was. For example, "three-quarters full."

At the end of the week, look over all of your lists. What types of waste were most common? Possibilities include paper, school supplies, and packaging. What was the usual amount of waste in the waste bin each day?

2. Write a plan to reduce classroom waste.

Your plan should be a set of action steps that you, your classmates, and your teachers can take. Begin by brainstorming ways to reduce the most common type of waste. Ask yourself the following questions:

- Are people throwing things away that are not completely used up?
- Can some things be reused instead of thrown away?
- Are there other choices besides disposable items?

Come up with **at least ten action steps** that people can take to reduce your classroom waste. Present these steps to your class mates and teachers, and post the steps around the classroom.

Continue to check the amount of waste in the waste bin at the end of each school day. Let your classmates and teachers know if they have been successful in reducing the amount of waste.



Activity Five



Start a Waste Management Company

Imagine that you are starting up a waste management company that will serve your region. You will receive money to pay for facilities and equipment, but you must first write a business plan.

PART A: Your BUSINESS PLAN should outline the following...

- All of the services you will provide
- All of the equipment you will use
- All of the facilities you will run

Begin by brainstorming a list of all of the waste management services a region needs. Ask yourself the following questions:

- What waste services do homes need? What equipment will the company need to take wastes from homes? What type of facilities will handle the household waste?
- What waste services do businesses need, including factories, hospitals, automobile mechanics, etc.? What type of facilities will handle waste from businesses and industry?
- What type of equipment will be needed to process waste in the waste management facilities?

PART B: Write your plan.

Write a one-page business plan for your new waste management company.

At the top, write a 1 to 2 sentence summary of the importance of waste management.

Include the headings shown in the plan at the right. Write bulleted lists under each heading, with short descriptions for each item in the list.





Activity Six



Making Choices about Packaging

Packaging can add cost to a product. It can also cause added damage to the environment. As a consumer, you often have choices between products with different types of packaging. For example, when you are buying juice, you might have the choice between glass bottles, plastic bottles, drink boxes (also called aseptic packages), or cans.

In this activity, you will learn to organize information to help you make choices about packaging.

1. Choose a product. Pick from the list below, or choose another product that comes in different packaging choices.

- juice
yogurt
pudding
apple sauce
ketchup

2. Make a list of all of the different ways that your product comes packaged in stores. You may want to visit a grocery store to complete this step.

3. Gather information. Use the Internet or library books to learn how each type of package is made. Questions to ask include:

- What raw materials are used in the package?
- How are those raw materials gathered?
- How is the package manufactured?
- How much extra cost does the package add to the product?
- What types of pre-consumer wastes result from the package?

4. Make a comparison chart. In your chart, list the pros and cons for each type of package. You may set up your chart like the one below.

glass bottle		metal can		drink box	
pros	cons	pros	cons	pros	cons