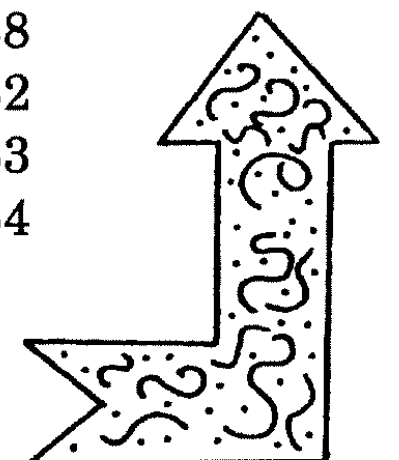
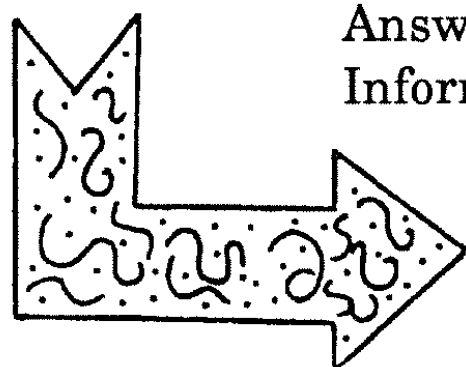
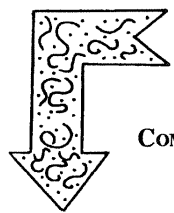


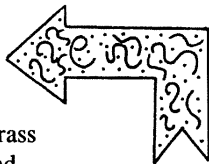
# Table of Contents

Definitions of Environment Words .....	3
Class Introduction to The Environment .....	4
Water Cycle .....	5
Environment Match .....	6
How Our Environment Can Be Harmed .....	7
Landfill and Recycling .....	8
What Can Be Done? .....	9
Enviro-rap .....	10
Science Experiment: Understanding the Effects of a Polluted Environment.....	11
Maze: What Can We Do With Our Garbage .....	12
Recycling .....	13, 14
The Green Classroom .....	15, 16
Air Pollution .....	17
Acid Rain .....	18
Science Experiment: Acid Rain .....	19
Door and Wall Posters .....	20
Art Using Recycled Materials: Papier Mâché .....	21
Flower Pots .....	22
Stained Glass .....	23
Sculptures .....	24
Crazy People and Creatures .....	25
Design Your Own Airplane .....	26
Math Games with Recycled Materials .....	27, 28
Musical Instruments .....	29
Catchers and Vases .....	30
Find the Hidden Words .....	31
Word Search .....	32
Picture Crossword Puzzle .....	33
Be An Environment Detective and Solve the Secret Messages .....	34
Fill In The Blanks .....	35
Surveys .....	36
School Environment Survey .....	37
Home Surveys .....	38
Survey Questions: Lunch .....	39
Environment Merit Award .....	40
Helping Our Environment Board Game .....	41-47
Environment Check and Safety List .....	48
Research Projects .....	49-52
Answers to Word Games .....	53
Information .....	54





## Definitions of Environmental Words



**COMPOST:** Compost is a mixture of plant parts, such as leaves and grass cuttings and/or leftover fruit and vegetables, i.e. carrot and potato peelings, apple cores, all mixed together. The compost is put in a large container and when mixed with some dirt and water, decomposes (breaks down) into a soil mixture useful as fertilizer and humus in the garden.

**ENVIRONMENT:** Our environment is the place where we live and everything in it—the ground we walk on, the air we breathe and the water we drink. We share our environment with all the birds, fish, animals and plants and trees who live in it.

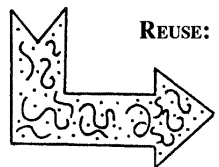
**ENVIRONMENTALLY FRIENDLY:** Things are called environmentally friendly when they do not harm the ground, earth, water, air, or living species in our environment. Environmentally friendly things may be specially prepared soaps, household cleaners or laundry detergents.

**LANDFILL SITE:** A landfill site (or garbage dump) is a large hole in the ground which is filled with the garbage from our homes, schools, shopping centres, factories, offices and hospitals.

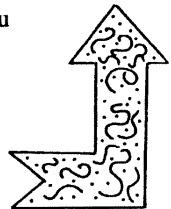
**POLLUTION:** Pollution is the waste material such as garbage, chemicals and unnatural things that do not belong in the water, air, or ground. When too much of the wrong or harmful things get into the wrong places we say the place is polluted. For example, when exhaust fumes from cars, trucks and factories are released into the clean air we need to breath, the result is air pollution.

**RECYCLING:** Recycling is changing something that is no longer useful into a new, useful product. Metal cans are melted down to make new cans. Old car and truck tires can be broken down to make filler for new roads. A plastic jug can be made into a bird feeder.

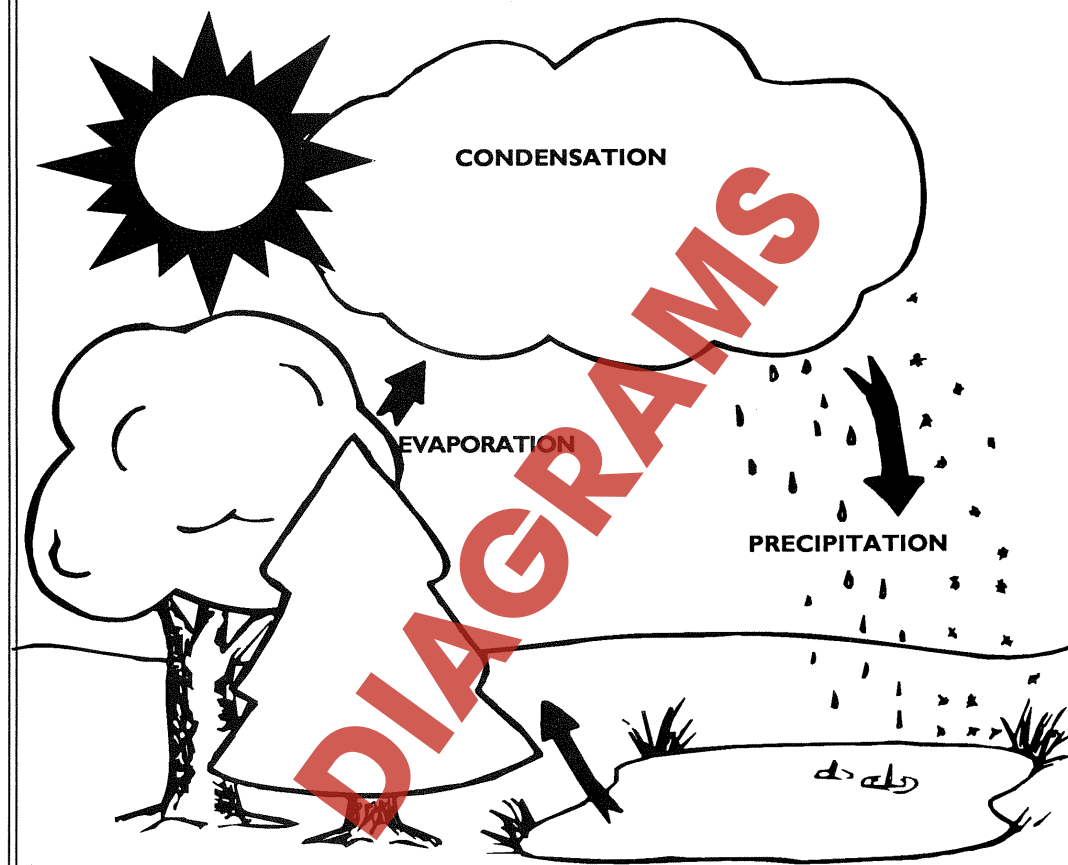
**REDUCE:** When we refer to "reducing" we mean we use less of a product. If you want a drink of water, you only take what you need instead of letting the tap run. Using less is reducing.



**REUSE:** To use something over and over again is reusing. Pop bottles can be cleaned and refilled with new pop again and again. Taking your plastic bags back to the store for your new groceries is reusing. Reusing allows us to reduce the amount of garbage going to the landfill sites.



## THE WATER CYCLE



Reproduce this on an overhead or draw it directly on the board.

Name: \_\_\_\_\_

### Environment Match

Cut out the animals or persons and glue them in their correct environment.



### Activity 3: Landfill and recycling

Define a landfill site.

Bring in a large cardboard box and have the children bring in 3 pieces of garbage that they would have thrown out in the last few days.

Place more garbage in the box than it can hold. Refer to the list of garbage items and recycling ideas (pgs. 13-14).

This activity will help to demonstrate one of the problems with landfill sites. Start by explaining that the box will be the landfill site. Once it is overflowing ask the students, "What are we going to do?" There are no more landfill sites available.

Have the class remove the garbage from the box.

"Let's take a good look at our garbage to see what else can be done!"

Let's talk about the 4 Rs

**Reduce:** Do not use as much, do not waste things.

Recycling and reusing things will reduce the amount of garbage going into the landfill site.

**Recycling:** Bluebox and compost.

Make it into something new.

**Reuse:** Use it over and over again.

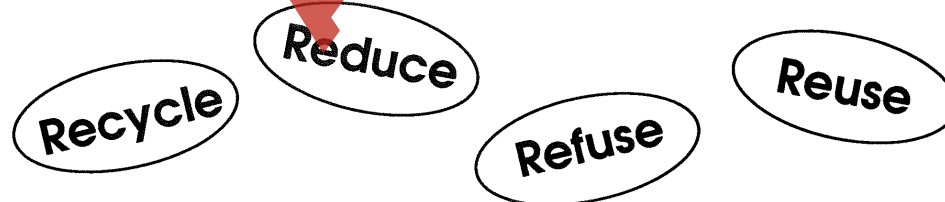
Take pop bottles and bags back to the stores to be reused.

**Refuse:** Do not buy things that are over-packaged.

Think, "Do I really need it?"

Now take your pile of garbage and sort it out to fit in one of the four groups. Have the class hold a brainstorming session and make a list of their ideas.

What can we do with all this garbage?



Now how small is the garbage pile?

Put the class suggestions into the everyday operation of your classroom.

## Science Experiment

### Understanding the effects of a polluted environment.

(Teach science skills, encourage scientific language.)

**Purpose:** How well can plants grow in a polluted environment?

**Equipment:** 2 clear plastic containers (containers from the bakery department, or clear 2L pop bottles cut open on one side)  
soil

bean seeds

clean water

dirty water (save the dirty water after washing off the tables or cleaning paint brushes. Mix with vinegar to represent acid rain, one-half dirty water and one-quarter acid rain.)

Bits of garbage to represent pollution (candy wrappers, plastic wrap, tin can lid, pieces of foil).

A nylon stocking (cut up a pair of pantyhose) to represent smog/air pollution.



**Method:** Prepare the two containers for planting.

Container #1 has soil, seeds, clean water, and is placed in a sunny location.

Container #2: make a mixture of garbage and soil, plant the seeds, then water with dirty water and acid rain mixture, cover with a nylon stocking and place it beside the first container.

Water both containers every other day with their own water mixers.

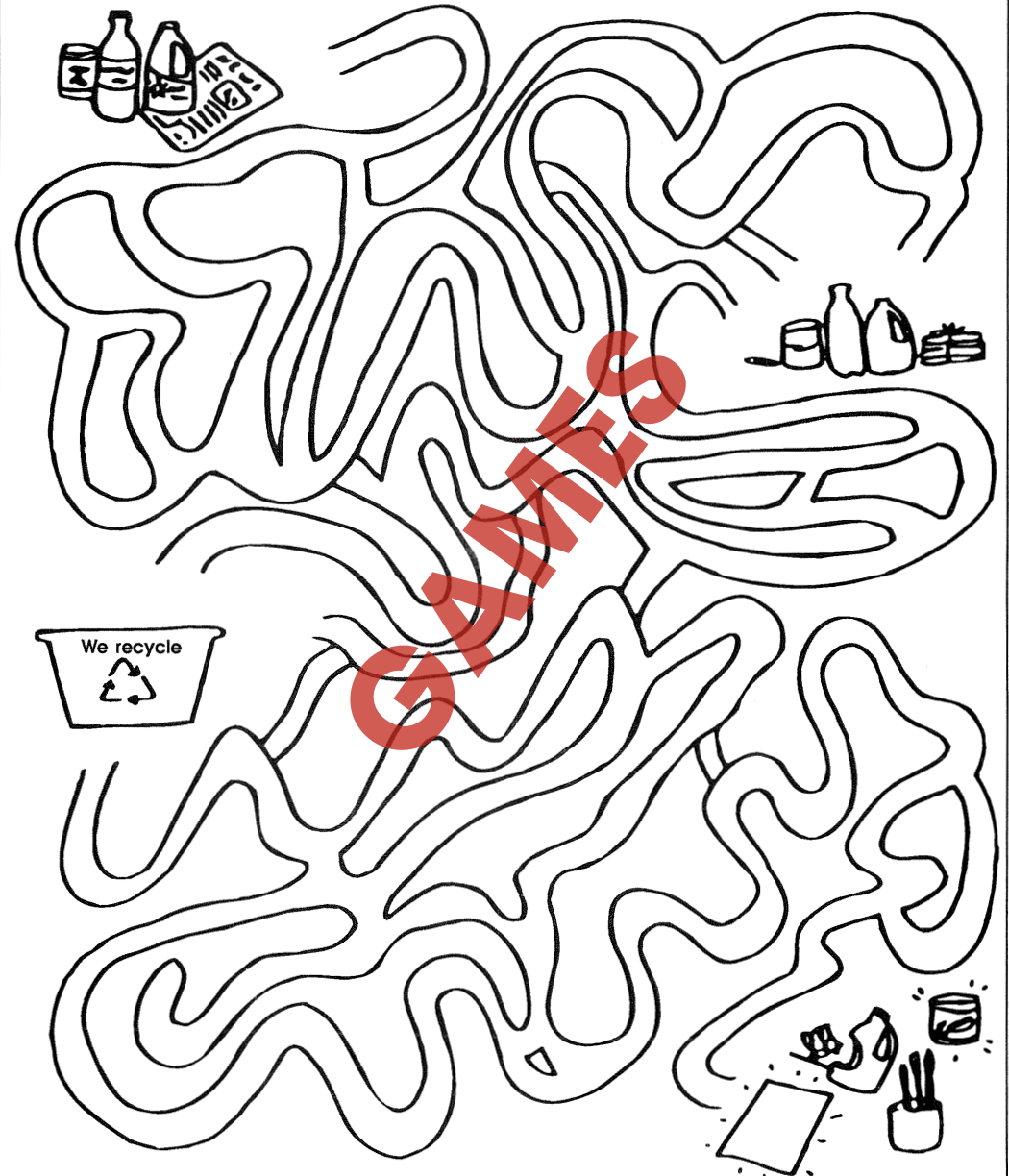
**Observation:** Record your observation on a comparison picture chart.

Day	Container 1	Container 2
1		
2		
3		
4		
5		
6		

**Conclusions:** Discuss your conclusions in group form.  
What are the differences in each container?  
Why did one plant grow better than the other?  
What happened to each plant? Why?  
What plant would you like to eat the beans from?  
What does this experiment tell us?

Name: \_\_\_\_\_

## What We Can Do With Our Garbage



## Acid Rain

### What is acid rain?

When fossil fuels (gas, coal, oil) are burned to make energy or heat, they also make gases (nitrogen oxide) that are released into the air. Smelters and paper mills also make gases (sulphur dioxide) which float into the air. These gases can be pushed through the air by the wind for hundreds of kilometres. When these gases mix into rain clouds and it rains or snows, the gases fall back to earth as acid rain (nitric and sulphuric acids).



Reproduce the picture to help explain the acid rain cycle. It can be enlarged to make a poster for your room or traced onto an overhead.

### What does acid rain do?

Acid rain hurts trees, lakes, animals, fish, birds, buildings and people. Trees and plants will not grow well. Take a look at some trees, are there fewer leaves at the top? If so, that tree has been harmed by acid rain.

When too much acid rain falls into lakes and ponds it kills the plant and animal life in and around the ponds and lakes. The fish will die. Wild animals will not want to drink the water and they will leave.

Although acid rain will not burn your skin, over years it damages the bricks and stones of buildings. The more acid rain that falls the more damage will be done.

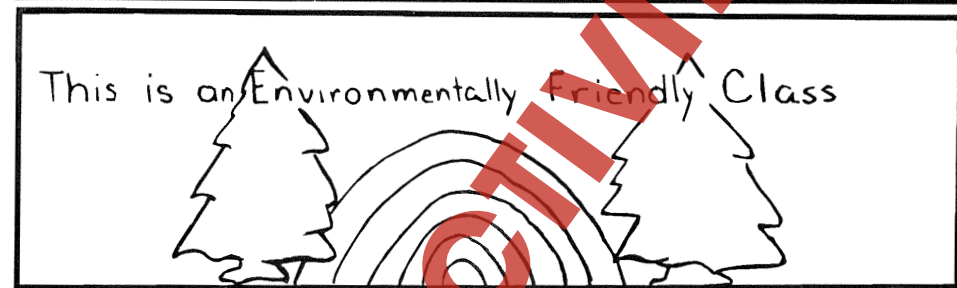
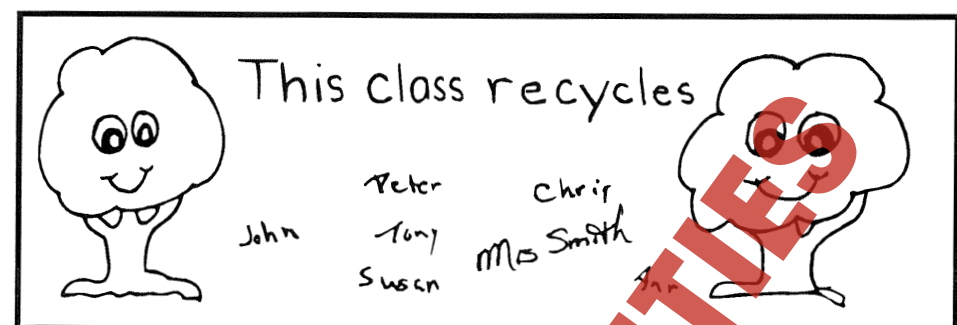
### What can be done?

Use fewer things that burn fossil fuels. Use the car less, walk, ride a bike or form car pools.

Conserve electricity. Use recycled paper products. They take less energy to manufacture and companies do not need to cut down new trees to produce them. Have the students write to the government to see what is being done to control or stop acid rain.

## Door and Wall Posters

Decorate the door or walls to show others how your class is getting involved in a positive way! Have the students sign their names on the posters.



Posters can be related to themes or seasons:

**GRADE 3 WISHES EVERYONE  
A MERRY CHRISTMAS AND A  
HEALTHY ENVIRONMENT  
FOR A NEW YEAR**

**PLEASE DON'T POLLUTE  
WE WANT THE EASTER BUNNY  
TO HAVE A  
HEALTHY ENVIRONMENT**

**SAFETY RULES FOR OUR  
ENVIRONMENT**

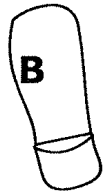
Have the students design their own posters with environmental messages. Put the posters up around the classroom and the school.

## Be An Environment Detective and Solve the Secret Messages

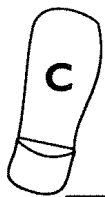
Clues:	1	2	3	4	5	6	7	8	9	10	11	12	13	14
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	o	p	q	r	s	t	u	v	w	x	y	z		



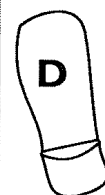
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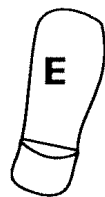
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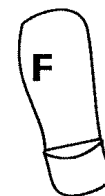
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18, 5, 21, 19, 5. 2, 15, 20, 20, 12, 5, 19. 1, 14, 4.  
2, 1, 7, 19.



4, 15, 14, 20. 20, 8, 18, 15, 23. 9, 20. 15, 21, 20.  
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7, 15, 15, 4. 23, 15, 18, 11. 4, 5, 20, 5, 3, 20, 9, 22, 5.  
14, 15, 23. 18, 5, 3, 25, 3, 12, 5. 20, 8, 9, 19.  
16, 1, 16, 5, 18.

## Answers to word games

### Find the Hidden Word pg. 31

bluebox, can, clean, environment, help, me, paper, plants, recycle, refuse, rest, reuse, test, tire, trees

### Word Search pg. 32

remember the 4 R's and help the environment

### Picture Crossword Puzzle pg. 33

1. bottles 2. bluebox 3. recycling truck 4. water 5. cans 6. compost 7. birds  
8. trees 9. recycle 10. newspaper 11. whales 12. pollution

### Detective Secret Messages pg. 34

- A. Be smart recycle, cans, bottles and papers.
- B. Help Mother Earth, don't pollute.
- C. Save electricity turn off the lights.
- D. Reuse bottles and bags.
- E. Don't throw it out, reuse it again.
- F. Good work detective, now recycle this paper.

### Fill in the Blanks pg. 35

1. bluebox 2. recycle 3. trees 4. reused 5. together 6. garbage 7. air 8. environment  
9. friendly 10. clean

**ANSWER KEY**