

# RALLY ROUND!



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A Guide to Environmental Action Projects for Grades 4-7



**VSG 94-01**

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**January 1994**

# Rally Round!

## A Guide to Environmental Action Projects for Grades 4-7

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# SECTION I To The Teacher



# INTRODUCTION

Teachers and students all over Virginia are becoming involved in caring for Virginia's environment. *Rally Round!* tells how to do it. In this publication you will find information about types of projects, step-by-step instructions from planning through closure, resources readily available to teachers, ways to make your students' efforts a recognized part of a statewide project, and much, much more.

Upper elementary and middle school students often feel strongly about environmental issues, but lack the skills and information necessary to take responsible and appropriate action. *Rally Round!* is a tool for teachers and students grades 4-7 to use in channeling this interest and enthusiasm into productive learning experiences which result in positive environmental outcomes. *Rally Round!* projects provide a structured approach to open-ended problem solving; teachers serve as facilitators and advisors and students have a real world experience in defining and addressing problems.

Most *Rally Round!* activities will take between one and three months to complete, but time frames will vary with individual project plans. Bay Team teachers are available for consultation throughout the school year; and upon receipt of documentation of successful completion of project activities they will provide recognition for classes in the form of a Bay Team membership award.

Through this project, teachers and students become part of Virginia's growing network of people who are making a difference. Interested educators apply for the program through the Virginia Bay Team at the Virginia Institute of Marine Science. Services and support are available for both informal and formal education groups. Organizations such as Scouts and ecology clubs are encouraged to apply. Groups accepted into the program receive a copy of the handbook, an on-site training seminar, an introductory lesson taught by the Bay Team, and advisory support services. Supplemental inservice training workshops are available on request.

**To rally is to call to action;  
*Rally Round!* is a gathering together  
of a community of students to work for a common  
cause. The bicycle motif you see throughout this book was  
derived from a different kind of rally: a bicycle race in which participants  
may follow varying routes to a common destination. We hope both definitions  
of rally will inspire you as you plan and execute your projects.**

# THE TEACHER AS TEAM LEADER: Rallying Classroom Groups to Action

Teamwork! It's not just for the athletic field — it's the key to a successful environmental action project. Like a coach, the classroom teacher must be a model, a guide, and a counselor for students as they learn to work together to accomplish a common goal.

When students share responsibility for organizing and conducting a project, they begin to develop skills and behaviors which are used not only in team sports, but by scientists, architects, engineers, and many other adults on the job. Students on a project team must communicate ideas, consider options, plan ahead, coordinate actions, anticipate problems, and evaluate results. They apply information and strengthen skills learned in English, social studies, math, and science classes. Team members will also disagree with each other on occasion, and must learn the art of compromise.

As team leader, the teacher has the responsibility of organizing and controlling all of this activity so that it leads students toward achievement of their project goal. The teacher is responsible for safety procedures, any insurance or liability arrangements, and ensuring that projects conform to school policy.

Once the class has decided what their project will be, the teacher should guide the students in the development of a work schedule and a timeline for the project. Using the work schedule as a guide, the class can be subdivided into workgroups, each responsible for a part of the project work. The teacher's knowledge of each student's personality, learning style, and preferences will be invaluable in organizing a classroom full of eager (or not-so-eager) workers into smoothly functioning workgroups.

After the workgroups are established, the teacher must direct and supervise their work, or arrange for other adults to be in charge. Unless the students are very young or have no experience in doing projects, the adults should avoid giving directions which are so structured that the students are merely following a set of "cookbook" instructions. Much of the learning that takes place in this type of activity, as well as the students' sense of ownership and pride, results from the fact that they did a lot of the work on their own. However, they will need guidance from the teacher as their plans emerge, and all activities must be approved in advance by the teacher or other adults in charge.

Among the challenges a teacher faces when managing small group work is making sure that the work is divided fairly and appropriately among the group members, and that all students are contributing to the group effort. Some students will always do more than others; however, no student should sit back and let other people do all the work. Nor should an over-zealous student be allowed to take over and run the show without allowing others an opportunity to participate.

The teacher will need to schedule class meetings at critical points so that each workgroup can report to the other workgroups what has been accomplished.

Students' roles should be so clearly defined that they each know their responsibilities, how to start, and when to complete their work. Individuals in each team should be given role assignments, and clear, written directions defining their job, and deadlines. This information should be sent home to the students' parents so there is communication about what is expected. Parents should also receive information about the academic aspects of projects, such as competency and skill applications in English, mathematics, science, and social studies.

## **Workgroup Assignments**

These roles are broadly defined so that they can be adapted for a variety of project plans. In making Workgroup assignments, consider in particular the needs of differently-abled students. The wide variety of tasks and roles available should provide all students with opportunities to do their best work.

### ***Workgroup Chairperson***

This person is responsible for coordinating the Workgroup so that the job gets done. This student conducts workgroup meetings, makes work assignments (with teacher's help), and makes sure all workgroup members understand their assignments and deadlines. This student will be the teacher's contact person, and will communicate information between the teacher and workgroup members. This student should get along well with people, be a good communicator, and be organized.

### ***Record Keeper/Reporter***

This person is in charge of all written information, including minutes of Workgroup meetings, letters, reports to the class, etc. This student should be skilled in written expression, and can also be responsible for giving oral progress reports to the entire class.



### ***Materials and Supply Manager***

With input from other workgroup members, this student is responsible for developing a list of the materials and supplies which will be needed for the workgroup's assignment. This student will take the necessary steps to obtain the materials and supplies, and be responsible for keeping track of loaned and donated items. Two students may share this role, if there is enough work for both, and all workgroup members will need to pitch in and help provide the needed materials. For example, if the workgroup is in charge of preparing a school site for a butterfly garden, the materials manager would discuss with the workgroup what garden tools are needed, and whether they can be borrowed from parents, the school, or the local garden supply store. During the project, the materials manager keeps track of the tools and, with the teacher's guidance, makes sure they are used and cared for properly. Once the project is complete, the materials manager collects the equipment, and makes sure everything is returned to its owner in good condition,

### ***Technician***

These students will be in charge of particular details which require specific skills and talents. For example, in an advertising or public relations workgroup, a student who has artistic talent could be the technician in charge of the design of posters or flyers. A student with computer skills could be in charge of word processing to assist the record keeper with minutes, letters, and reports., Technicians may also be in charge of a variety of tasks, serving as helpers in whatever type of work the workgroup undertakes.

# ASSESSMENT: Project Portfolios

Life presents everyone with a series of projects, major and minor: from small daily projects like meal planning and preparation to major projects like buying a house or managing a sales campaign. Adults routinely define goals, prepare schedules, coordinate with others, evaluate options, implement procedures, and evaluate outcomes. We usually know both the goals and the performance standards associated with the project's successful discharge. School projects help teach skills that students will need to manage life's projects. Assessment techniques for student projects should focus on and contribute to these skills.

Environmental action projects are by their nature "authentic," that is, they deal with real and realistic situations, and apply content and skills which are actually useful in the real world. Authentic assessment presents some unique challenges, but has the advantage of enabling students to take an active part in shaping their own learning. Portfolios are popular tools for assessing authentic learning situations because they provide a comprehensive view of students' progress in integrating skills and content in personally meaningful ways. The project portfolio allows students to take charge of the setting for their learning, and then to present their work within its own unique context.

## Project Portfolio Guidelines:

The objective of a project portfolio is to provide an evidential record of students' use of skills and information within the pursuit of the project's goals. Teachers who use project portfolios for evaluation typically adjust specifications to meet their individual needs. Factors such as time frame, compatibility with other aspects of the curriculum, existing team and school evaluation practices, and student readiness for independent and cooperative group work will all influence how portfolio requirements are developed. Portfolios may be developed by individual students or by workgroups.

### **1. Introducing Portfolios**

Introduce the concept of maintaining a portfolio as a record of student achievement and a demonstration that students can use information and resources to achieve identified objectives. Solicit students' input on what things would best provide evidence of what the student knows and is able to do. Suggestions might include a statement of reason for the project, a statement of goals, lists of resources available to the class, project plans and schedules, summary of options considered, a project

journal, snapshots, drawings, charts and graphs, lists of certainties'and uncertainties as the project develops, explanation of importance of certain items, copies of letters sent. Decide: does it have to be in ink? have a cover? a table of contents?

## **2. Defining Portfolio Contents**

Decide exactly what records each student has to keep, and in what form you want them kept. Although projects may differ, and individual students may be doing different things, some consistency of format will be helpful. Decide how much material you want in the portfolio; selecting material gives students the opportunity to conceptualize contents, critically evaluate individual entries for applicability, and otherwise synthesize what they want to communicate.

## **3. Guiding Portfolio Development**

Provide students with a list of the basic specifications and time frames for due dates, interim, and final portfolio presentations.

As project planning begins, help groups identify what they will actually need to do. Through class and group discussion identify the standards of excellence associated with project tasks. Use examples of excellence (exemplars) to determine standards. Talk about what project materials students might choose to include in their portfolios to show that they have used the standards effectively.

## **4. Interim Portfolio Review**

Conduct a preliminary review and discussion of portfolios well before projects are completed. Compare materials presented with standards developed by the class. Analyze tasks to determine what needs to be done and what the differences between doing those things well and poorly might be. Try to catch students doing things right.

## **5. Final Portfolio Review**

Require that students turn in, along with their portfolios, an overall essay or notes attached to individual portfolio pieces explaining how and why the pieces selected were chosen, and how the portfolio represents what the student has learned and accomplished.

Have a group conference with each project group, allowing each student to use the portfolio to describe how he or she contributed to the project.

## **7. Grading Portfolios**

Portfolios are not always easy to grade. How do you grade a superb effort which netted a disappointing outcome relative to a project which had impressive results

attributable to a few lucky events? What do you do if some of the workgroup members failed to contribute? What happens to the grade if someone's dog eats the portfolio? No one has all the answers, but the following should help:

- Focus on what is important for getting the job done. Although the results of any project should be meaningful to the students, of far greater importance is students' developing ability to apply skills and content to effective problem solving.
- Rely heavily on the standards which the class identified as attributes of excellence. Apply these standards as numerical rating systems if necessary.
- Collaborate with other teachers on setting standards.
- Use several grades; if one portfolio is submitted by each workgroup, a group grade could be given for the portfolio, and individual grades for essays and performance of individual responsibilities as team members. For a win-win situation, award the group grade as extra credit, assuring that nobody could feel that their grade was damaged unfairly by other group members. A self-evaluation grade could also be awarded by students based on their own assessment of achievement.

## Exemplars: Authentic Excellence

Exemplars are samples of real-world excellence. They can serve as learning tools and set standards for evaluation; Students need exemplars to know how to approach tasks. Exemplars should be posted and discussed, and annotated with explanatory material as projects proceed. For example, many projects would require that students write a letter. Samples of excellent letters should be provided for the class to examine and dissect; what components make them excellent - spelling and punctuation? clear purpose? well organized? neat? looks like a standard business letter? In selecting exemplars, choose items that illustrate excellence but do not directly address the precise topic of the group: Students should not be provided with material that they may be tempted simply to copy.

Students may think of ways that the exemplars you have provided could be made even better, Post the exemplar letters and surround them with notes which explain the components. Students now have ready access to standards of excellence and models, and both you. and the students have agreed-upon criteria useful for evaluation. Use exemplars for all aspects of project development. Will the students be designing a survey? Is a press release going to be produced? Always identify and display the building blocks of excellence.

## References:

Collins, A. 1992. "Portfolios: Questions for Design." *Science Scope*. 15,6: 25-27.

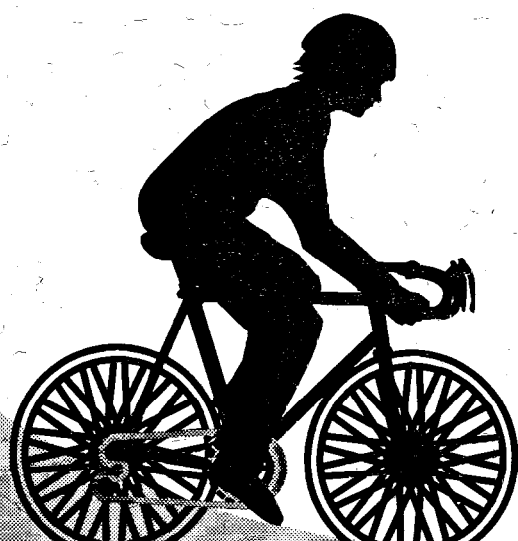
Paulson, F. L., P. A. Paulson, and C. A. Meyer. 1991. "What Makes a Portfolio a Portfolio?" *Educational Leadership*. 48,5: 60-63.

Wiggins, G. 1991. "Standards, Not Standardization: Evoking Quality Student Work." *Educational Leadership*. 48,5:18-24.

Wolf, D. P., P. G. LeMahieu, and J. Eresh. 1992. "Good Measure: Assessment as a Tool for Educational Reform." *Educational Leadership*. 49,8: 8-13.

# SECTION II

## Getting Started





# HOW TO USE THIS BOOK

SECTION I: TO THE TEACHER *Introduction* explains the purpose of this book and gives some general information about its use. *Teacher as Team Leader* and *Assessment: Project Portfolios* provide valuable guidance to teachers for leading their students as they cooperate to plan, carry out, and evaluate their environmental project.

SECTION II: GETTING STARTED *How To Use This Book* (the chapter you are reading right now) explains the different parts of the book and the purpose of each part. *Choosing a Project* will help your group to decide what kind of project you want to do and help you make a plan for doing it. *Established Programs* tells about some existing programs that you might want to join or find out about. There are some projects that are sponsored by organizations around Virginia and the nation. These organizations provide materials, training, and advice to groups who wish to participate in their projects. Most have at least some free informational materials. It's a good idea to review some of these before making final decisions.



SECTION III: PROJECTS contains plans, tips, and ideas for seven types of projects.

## SECTION IV: FOLLOW UP AND

FOLLOW THROUGH is important. It's always nice to get a pat on the back when you have accomplished something

special. *Getting the Word Out* contains information on how to let your local newspaper and television stations know

what you have done. You may want to read this chapter before you get started in case you want to let people know about your project as you are doing it. For example, you may decide to produce a play or musical about the environment for your project.

You will need to advertise your show so that people will come to see it. *Awards and Contests* contains information about getting a different kind of recognition. There are several organizations, in Virginia





and around the country, which give awards to groups like yours for their efforts in working to protect and improve our environment. You may be so excited about what you have done that you will want to nominate yourself for one of these awards.

*Reporting Results* is important for you and for us. If you are part of a class, and your project is part of your grade, your teacher will need to know how to decide what you learned and what you achieved. We also want to know what you did and how you did it. When you finish your project and fill out and send us the reporting forms, we will send you your Bay Team membership materials. We hope that when you finish your project you will want to keep taking action to protect and improve our environment. You may want to continue working on the same project, or you may want to expand it to include a larger area or more people. Some of you may want to go on by yourself to plan your own individual projects. *What Next?* will give you ideas for continuing with efforts to preserve the environment.

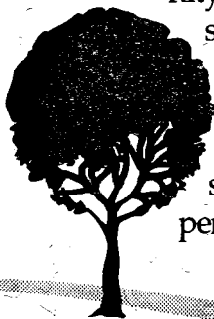
**SECTION V: TOOL KIT** will teach you some new skills and help you to apply some of the skills you have already learned about in solving environmental problems.

# CHOOSING A PROJECT

The hardest part of any project is the very first step: deciding what to do. This chapter will help you to do that, and will get you started on designing your plan for action.

Sometimes it's hard to decide what to do because you want to do everything, and you want to do it all right away. When making a plan for environmental action it's important to choose a project that you can accomplish in a reasonable amount of time, and with the people and materials you have or can easily get. It's very easy to get discouraged by a project that turns out to be more than you can handle. Make your first project a small one.

This book contains examples of and guidelines for seven types of projects as well as a section on established programs. Choose people in your group to read over the examples and think about similar things you could do in your own school or community. After they report back to the group, use their ideas as a starting point to develop a project on which everyone agrees.



To do that, have a group brainstorming session. Choose someone to be the secretary of your group and have that person write down every idea you have, even the crazy ones.

Sometimes the silly ideas can be worked into a really good plan. Once you have your list, sort the items into categories such as recycling, wildlife, rainforest, or energy. (Your list will probably have different categories.) By voting, choose to work with one of the categories.



Once you have decided on a category, do another brainstorming session. This time be a little more specific in your ideas.

Try to come up with a list of 20-30 possible project ideas from your chosen category. Then have the group secretary write down this list. Now go over these ideas, one by one. Some are obviously going to be impossible.

Some are going to be things that you might be able to do, and some will be things you know you can do. When you've finished reviewing your list, take out the project ideas that all of you agree are impossible, or that most of you don't want to do, or project ideas that you know are already being used. You'll probably have three or four good ideas remaining. Choose one.

Write the chosen project idea at the top of the blackboard or a big piece of paper. Have the secretary of your group write the answers to the following questions:

- WHAT are we going to do?
- HOW are we going to do it?
- WHO will do the work?
- From WHOM do we need to get permission?
- WHO will help us?
- WHERE are we going to do this?
- WHAT supplies do we need?
- WHERE are we going to get the supplies?
- HOW MUCH money are we going to need?
- WHERE are we going to get the money?
- WHEN are we going to start?
- WHEN are we going to finish?

You may find when you have done all this that your project is more than you can realistically do. You may not have the necessary time, or supplies, or help. That's okay - just scale your ideas back a little. For example, if it isn't possible to recycle in every classroom in your school, try working with just the classrooms in your grade. If it isn't possible to recycle paper, glass, plastic, and aluminum, try just collecting aluminum. Remember: it's a lot easier to start small and let your project grow later than to start too big and find that you can't do everything.

Perhaps your idea would work best as part of an established program. Read the next chapter, *Established Programs*, for ideas. You may find out that the idea you chose would be completely impossible to do, even with scaling back or with help from an

established program. If that happens, choose another one of your ideas and work through the list of questions again for that idea.

Don't throw away the ideas you don't use. When you have finished your project, they will come in handy to start planning the next one.

After you have answered all of the preceding questions for the project you have chosen, identify all of the major tasks that will have to be done. Divide the class into workgroups responsible for these tasks. Each workgroup should go through the list of questions again, only this time writing down specific actions that will be needed to complete assigned tasks. For example, asking, "What supplies do we need?" will begin a list of items. How are you going to get all the items on your list? -Are you going to make them? Buy them? Borrow them? Select workgroup members to be responsible for getting all the items on your list. Asking, "Who will help us?" will start a list of people. Who is going to be responsible for contacting those people and asking them to help you? Select workgroup members to handle that job. Continue working through each of the questions for each task.

The last thing you need to do before you get started is to make a schedule. You decided when you would start your project and when you would finish. The overall project will have a schedule and each workgroup will have a schedule. Now go through your lists of things you need to do and decide how long it will take to do each of those things. Assign a date for completion of each task. Make a calendar for your project and write all of those dates on it. You may find that you haven't allowed enough time to do everything you need to do to complete your project on time. You will have to decide what to do then. You may want to change the date you expect to finish. You may decide that you don't have to do all those things on your list. You maybe able to think of ways to do some of the things more quickly. You may decide to do a smaller project.

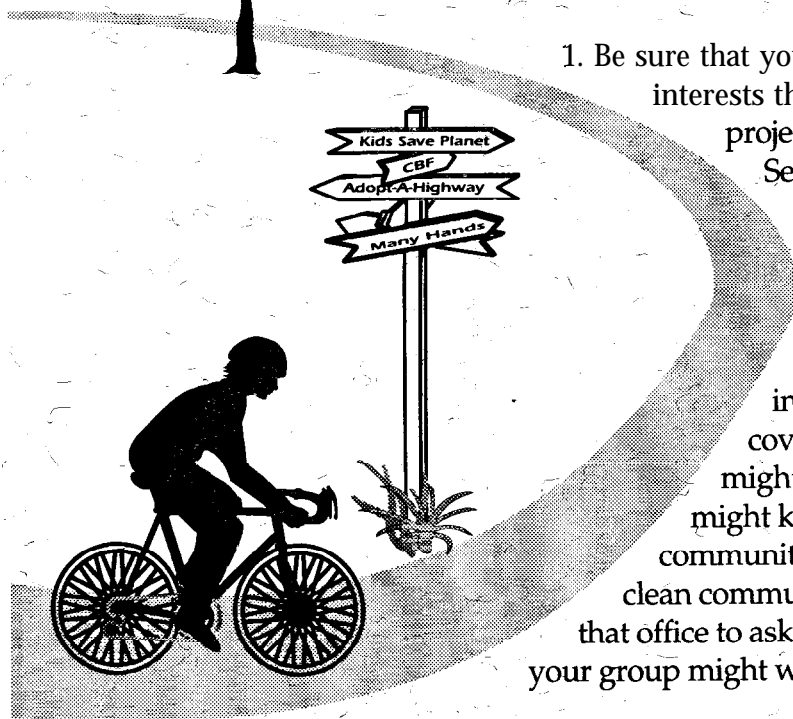
# ESTABLISHED PROGRAMS

Many agencies and organizations are working to keep the environment healthy. Some of these have programs that allow students to help them. There are several advantages to working with established programs:

1. You become part of a larger network of people who are working together toward a common goal.
2. They have already planned and prepared materials for you. That saves you time and effort.
3. There is usually somebody you can call if you have questions or problems with the project.



Established programs are all different. Investigate to decide which one might be right for your group. Some charge for their materials. Some projects are for groups. Some are for individuals. Some are for students and some are for adults. Follow these six steps to lead you to the right project:



1. Be sure that your group has decided what interests them. What kinds of projects do they want to do? See *Choosing a Project* for help.
2. Consider available programs. Select two or three that share your interests. The following list covers a few programs you might investigate. Your teacher might know of others. If your community has a litter control or clean community program, telephone that office to ask about local projects that your group might work on.

3. Use your telephone and letter writing skills to find out more about these programs. See *Writing a Business Letter* and *Making a Business Telephone Call* in the TOOL KIT section. Ask for printed information about the program and ask about costs. Ask if there is an informational videotape that you might borrow. If the program has a nearby office, perhaps you can schedule a guest speaker to tell your group about projects available. See *Choosing and Inviting a Guest Speaker* in the TOOL KIT section. Allow several weeks for this step. You want to be sure that you seek as much helpful information as possible.
4. Carefully read all the information you get. Which projects do you prefer? What might prevent you from doing these projects? List any possible problems. Can you think of ways to solve them? If you need ideas for solving problems, ask your teacher. Teachers have had many experiences solving problems.
5. Pick a project. If nothing is perfect for you, think about designing your own project. Use some of what you have learned through your investigation.
6. Make a plan. Get your teacher's approval.

## Some Environmental Education Programs:

### **Kids Against Pollution**

P.O. Box 775  
Closter, NJ 07624

*Write for materials about what kids can do.*

### **Friends of the Earth**

218 D Street, S.E.  
Washington, D.C. 20003

*Fact sheets for students include suggestions about how to start an environmental action group.*

### **Global ReLeaf**

The American Forestry Association  
.1516 P Street, N.W.  
Washington, D.C. 20005

*Global ReLeaf kits help with tree planting projects.*

### **Chesapeake Bay Foundation**

**162 Prince George Street**

"The Church"

Annapolis, MD 21401

*The Chesapeake Bay Foundation has a series of action plans for a variety of projects.*

*Request "Conservation Projects" plans and information if you are interested in working on any of these topics:*

*Tree Planting*

*School Yard Habitats*

*Consumer Analysis*

*Water Conservation*

*Storm Drain Painting*

*Home Energy Conservation*

*Sediment Control*

*Adopting a Stream*

*Bicycling*

*Oyster Gardening*

### **Household Ecoteam Program**

Global Action Plan  
84 Yerry Hill Road  
Woodstock, NY 12498  
914-679-4830

*This program helps people save money and resources by changing wasteful behaviors at home. Teams receive a workbook and a start-up kit. The program also assigns each team a coach.*

### **Kids Save the Planet**

P.O. Box 471  
Forest Hills, NY 11275

*This is a directory to environmental projects for children.*

### **Earth Matters: A Challenge for Environmental Action**

Girl Scouts U S A  
830 Third Avenue  
New York, NY 10022

*Earth Matters is a resource book offering background information, projects, and information on resources for environmental education. A videotape about the program is available.*

### **Manv Hands**

Children's Alliance for the Protection of the Environment  
P.O. Box 307  
Austin, TX 78767

*This quarterly newspaper contains environmental news, activities, games, pictures, letters and book reviews.*

### **National Directory of Citizen Volunteer Environmental Monitoring Programs**

Rhode Island Sea Grant Office  
Narragansett, RI 02882

*Many environmental organizations use information about the environment collected by volunteers. Most of these programs have adult volunteers, some have materials and programs for students, too.*

### **Adopt-a-Spot**

Virginia Department of Environmental Quality

P.O. Box 10009  
Richmond, VA 23240  
804-762-4570

*This project helps groups to select and care for a specific area. It provides guidelines and instructions. The Virginia Department of Environmental Quality also has information about other anti-litter projects.*

### **Kids for Saving the Earth**

International Headquarters  
P.O. Box 47247  
Plymouth, MN 55447  
612-525-0002

*Kids for Saving the Earth (KSE) is an international program with hundreds of thousands of members. They do all kinds of projects to protect the environment. The Action guide has many ideas for projects. Students who participate in the KSE program form clubs with an adult advisor. They receive a newsletter and other "kid-friendly" membership materials:*

**Adopt-a-Highway**

Virginia Division of Transportation  
1401 E. Broad Street  
Richmond, VA 23219  
1-800-PRIDE VA

*Besides its successful Adopt-a-Highway program, the Department of Transportation publishes the Pickup Express Newsletter. It sponsors the Great State Trash-Off which cares for homes, yards, waterways, and more.*

**Children's Rainforest**

P.O. Box 936  
Lewiston, ME 04240

*Through this project children all over the world buy rainforest land in Costa Rica to conserve it.*

**Save Our Streams**

Izaak Walton League  
Suite 1100  
1701 North Fort Meyer Drive  
Arlington, VA 22209

*Save Our Streams is a network of people monitoring streams. A youth activities kit is available.*

**National Gardening Association**

180 Flynn Avenue  
Burlington, VT 05401

*This organization will provide information about gardening for youth.*

**National Wildlife Federation**

1400 16th Street, N.W.  
Washington, D.C. 20036  
202-797-6800

*The National Wildlife Federation has many activities and publications for students. Ask about the Backyard Wildlife Habitat Program, the Activist Kit, teacher kits, and information about helping wildlife.*

**A Million Points of Blight**

Center for Marine Conservation  
306-A Buckroe Avenue  
Hampton, VA 23664  
804-851-6734

*Storm drains carry pollution to streams, rivers, and oceans. Students, can stencil storm drains with messages that help people remember to keep pollutants out of the water. Information, instructions, and stencils are available. The Center for Marine Conservation has information about beach cleanups and a national data base that compiles statistics about marine debris.*

**Global Response**

Environmental Action Network  
P.O. Box 7490  
Boulder, CO 80306

*Ask them for their "Young Environmentalists' Action Sheets" for ideas about what to do and how to do it.*

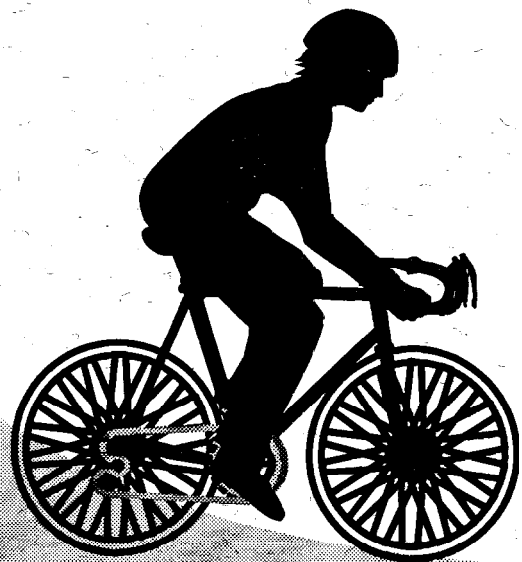
Now,  
get started!





# SECTION III

## Projects



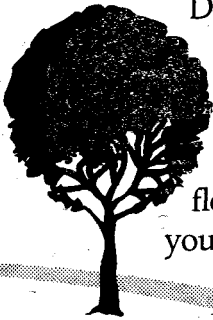


# RECYCLING

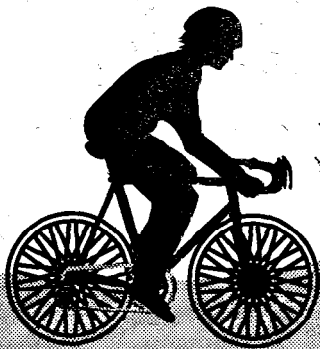
Most of you are probably familiar with the idea of recycling. Your family may already collect aluminum cans or glass bottles and take them to a local recycling center. You probably recognize the three-arrow symbol that says a container can be recycled.

Many groups make a project of collecting materials for recycling. If your county or city has a litter control council or clean community office, they probably can give you valuable advice about planning a recycling program.

If you collect recyclable materials, decide what kinds-of materials you will collect. Most recycling centers accept aluminum cans, glass bottles, newspapers, and some kinds of plastics. Some will also accept office paper or writing paper. Contact your local Department of Sanitation or the waste Division of the Virginia Department of Environmental Quality to ask for information about recycling in your area.



Decide what items you will collect and from whom you are going to collect them. You may start by collecting materials in your school. Later you could expand your collection to your community. However, if your school is large you may decide to start by collecting in just one wing or on one floor. If your project is successful, you can always expand your collection area later.



Decide what kind of containers to use.

Where will you place them? Are you going to use cardboard boxes or plastic bins? Are you going to locate them in the classrooms, the hallway, or the cafeteria?

Sometimes school recycling projects fail because student groups expect the maintenance staff to take care of all problems. Most maintenance crews are happy to work with recycling projects, but they need to be part of planning from the beginning. Decide who is going to be responsible for collecting the materials from the containers.

Decide who will take them to the recycling center. You may

need to ask adult volunteers (parents or teachers) to drive you with the collected materials.

Many people think recycling is over when you drop off your cans and bottles at the recycling center. It's important to know about the entire recycling process. Think about what happens to recycled material. Is it made into new bottles or cans or newspapers? It's very important to collect materials for recycling. It's also important to choose products which companies make from recycled materials. See Recycling for more information about how to prevent trash in the first place.

You might want to try to develop a project about using recycled materials in your community. For example, many school systems are using recycled paper in offices, classrooms, cafeteria, or even bathrooms. If your school is not using recycled paper, you could prepare a report for the principal or supervisor.

Your report might convince them to make that decision. Interview the purchasing office to find out what kinds of paper they are now using. Why did they choose those brands? How much do they cost? Find out about other school systems or other schools that use recycled paper. Ask them why they switched and how they switched. Prepare a list of companies that sell recycled paper goods. Compare their prices to the amounts your school now spends on non-recycled items. If you do a thorough job, you may show that recycled materials are comparable in quality and cost to non-recycled items. You may convince the purchasing office to switch to recycled materials.

Reusing is part of recycling. Reusing can mean using something again for the same purpose or finding a new use for it. For example, you could refill an empty juice bottle with juice made from concentrate, or use it as a vase for flowers. You could sponsor a contest for the most inventive reuse of an item. Have a sale of items students collected and made into new and useful objects. Reusing can also mean finding a new owner for an item. You could collect clothes you and your classmates don't wear anymore. Then donate them to charity.

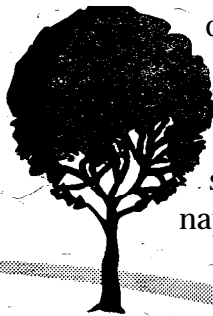
If you will be setting up a school recycling program, you might find this publication helpful. It costs \$5.00.

***How to Set Up a School Recycling Program***  
**Council for Solid Waste Solutions**  
**1275 K Street, N.W., Suite 400**  
**Washington, D.C. 20005**  
**1-800-2HELP90**

# PRECYCLING

Precycling is about thinking before you buy. It means making choices among different products. Sometimes it means deciding to buy nothing. Recycling is something you do with your trash. Precycling is different. When you precycle you do not create trash in the first place.

If you are preycling, you won't have to throw away or recycle as much. You won't be creating as much trash. becoming an active "precycler" means considering carefully the items you buy. It means making choices between brands or sizes for environmental reasons; instead of buying the most popular or least expensive product. For example, you might choose to buy one 20-ounce box of cereal instead of two 10-ounce boxes. Instead of two boxes to throw away, you will have only one. You could choose products with packaging you can recycle instead of throw-away packaging. This is as simple as checking for a recyclable symbol on each plastic container before you buy peanut butter or soda. You could choose to use china dishes and cloth napkins instead of paper plates and paper napkins.



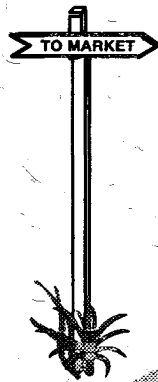
**These** appear to be easy choices, but there are many possible problems to consider. You may decide to use cloth napkins instead of paper napkins. Then you can use them until they wear out. If you use paper napkins, you

will throw them away at the end of each meal. Suppose a cloth napkin lasts for five years. At the end of five years, you would throw

away one napkin. (However, you could reuse it as a dishrag, or a stuffing for a pillow — see *Recycling* for more ideas about reusing.) If you used paper

napkins at every meal for five years, you would throw away 5,475 napkins. That's a lot of trash!

Wait a minute. Someone will have to wash that cloth napkin. Who is going to wash it? How much water must they use? How much soap? Suddenly it's not such an easy decision.



It sounds like precycling often includes making individual choices. How are you going to use your individual choices in a project for your whole group? After you have done everything you can do to precycle, next persuade others to precycle. There are several ways you can do this. ,

Start by finding out why people do or don't precycle. People often have good reasons for making the choices they make. For example, they consider convenience and cost. One project your group could do is to survey people's buying habits. Ask people what they buy. Then ask them why they buy it. Keep surveys (and survey questions) short and simple. Consider the following sample questions: Do you buy products with little or no disposable packaging? Do you buy products in reusable or recyclable packages? Do you buy economy sizes or bulk products? Why or why not? You could target various groups such as classmates, parents, teachers, or others in your community for your survey.

You may find that the survey group is already making the choice to precycle.. If so, that's wonderful! Your project might be recognizing these folks for their actions. See *Awards and Contests* for ideas about setting up your own environmental awards program.

If the results of your survey show people are not choosing to recycle, you can try to persuade them to do so. One approach might be to start an advertising campaign. Your group could design a series of posters for the hallways in your school. You could write a series of articles or advertisements for the school or local paper. See *Getting the Word Out*. Also see *Writing a Press Release* and *Getting into Print* in the TOOL KIT section.

Another project might be to invent a product people could use (and reuse) instead of something they now use and throw away. You could design and produce a cloth lunch sack. Students could use these cloth sacks instead of paper ones they throw away every day. You could design a cup or mug people could use and wash instead of paper or polystyrene cups which they would throw away. Try to think of other items you use frequently and throw away after each use. Then create a durable and reusable substitute for the item.

If you are interested in what other students think about precycling, you might like to subscribe to this publication. A one-year subscription costs \$16.00.

***Zillions: Consumer Reports for Kids***  
**Consumers Union**  
**P.O. Box 3760**  
**Jefferson City, MO 65102**

# CLEANUPS

You probably know that each of us is responsible for cleaning up our own mess. However, we sometimes see places where someone needs to clean up the mess others left behind. An obvious project you can do is to clean up an ugly area in your community. We design cleanups to remove litter from our land or waterways and dispose of it properly. We can put some litter in the trash. We can recycle some items.

Streets and streams are much cleaner than they were 20 years ago. People have been conducting more cleanups. All it took to make places cleaner were groups like your class. Areas remain that we need to clean up. You know cleaning up your own mess can be a big job. Getting help for a big cleanup requires more planning. Some trash piles or other polluted places can be dangerous. Make sure you have plans to protect your health and safety before you start picking up the mess. This chapter describes how you can plan for a safe, successful cleanup.



When people look at trash on the ground all the time, they get careless and think one more piece won't make any difference. Before long all of those single pieces of litter pile up into a big mess. Trash can hurt people, animals, and plants. It makes water unsafe to drink and land unsafe to live or grow food on. When people look at a clean environment, they begin to take pride in that place. They begin to do more to take care of their natural resources. Here's

where your class comes in. Just by cleaning up a dirty lot, you can help people take pride in their community. Then maybe they will take better care of it themselves.



You may easily find a site on your school grounds or in your community that needs to be cleaned up. If your class can't find the perfect cleanup site, here are a few suggestions that might help. It's a good idea to ask the whole class to begin noticing potential cleanup sites in the community. Have your classmates report their findings to the class. Then



you can start a list of possible sites. Look for litter along stretches of roads or highways, and in or along streams and rivers. Even look at lots in town. Consider asking parents, grandparents, and friends to suggest places your class can investigate.

Keep a list of all potential cleanup sites. Decide which is the right site for your class. A couple of factors will help you narrow down your choices. First, consider the size of each site and how dirty each is. If you pick a site that has little trash, your class may not notice much difference after the cleanup day. But you might choose this kind of site if your class wanted to clean up an area regularly, like every month. If you pick a site that is too large, you might not have enough people or time to clean it up very well. Then you might feel dissatisfied with your work. Select a site that is convenient. A site may be so far away from your school that your classmates can't get there to work.

## Advance Planning

Before anyone picks up trash on your cleanup site, adults must help conduct a safety inspection to look for harmful items. Medical wastes and explosives are dangerous. Large containers such as 55 gallon drums may contain toxic chemicals. If you find these items or others you cannot identify, contact your local fire chief to report what you've found. Maybe you can clean up these areas after professionals have removed the hazardous materials. Wait until you receive permission from authorities. Safety is very important. Please talk about it with your teacher and classmates.

If you decide to clean up a section of a road, contact the Virginia Division of Transportation "Adopt-a-Highway" program. If you have decided to clean up a specific spot, the Virginia Department of Environmental Quality can help you with their "Adopt-a-Spot" material. If you've selected a stream, the Izaak Walton League's "Save-our-Streams" program can help. See the list of resources in the chapter on established programs.

Now that you've selected a site, make a plan of action to clean it up. You need to decide who will help. Will your class do the cleanup alone or will you recruit help from other classes or from the community? Be sure to include people in your planning committee who have had experience conducting a cleanup. Cleaning up trash may get the newspaper's attention. To recruit help from the whole community before your cleanup begins, though, you need publicity in newspapers and on radio or TV. See *Writing a Press Release* in the TOOL KIT section of this guide. Even if your class plans to conduct the entire cleanup, you should let the press know what you are doing.

In addition to lining up help and publicity, planning includes scheduling days for cleanups. Be sure to schedule rain dates. There might not be time on a school day to

get everyone to a site and to clean it up. It might be easier to use a weekend day for your cleanup, but, there are problems with weekend cleanups. It may be hard for everyone to come. Most public works departments close on weekends. This means you would have to schedule special pickup times for some materials that you clean up. You can't take heavy items (stoves, refrigerators, furniture) to the dump or recycling site yourselves. If there is a fee for disposing of your trash, you might ask to be excused from paying it. Advertise your rain date, so rain won't wash out your entire project.

Getting permission from the land owners before beginning is an essential part of planning. Even if it's obvious the site needs cleaning, some land owners may not want you on their property. They may worry about having the right kind of insurance. You will need written permission from landowners, teachers, and principals before beginning the cleanup project. Your teacher can help with this. Your school may have forms already prepared.

## Details, Details

You must get necessary equipment for the cleanup. You don't need many special tools for a cleanup, but you will probably need trash bags. You will have some unhappy workers if you run out of trash bags before you finish. Some established cleanup programs provide trash bags. Sometimes local businesses donate them. You will need work gloves. Many people have a pair of work gloves at home or can borrow them. If you need more gloves, ask your school maintenance staff to help you find more. A few yard rakes and shovels could be helpful at some sites. Maybe you can get some of these from home. If you need to borrow them, try contacting your town maintenance shop or government agency. Each cleanup site should have a first aid kit. A responsible adult at the site must know how to use it, and what to do in case of emergencies.

Choose locations for sorting trash into recyclables. Your project will help clean up the environment, and it may also earn money. You may sell aluminum cans to a buy-back center. If you recycle items from your cleanup, you will save natural resources like energy and clean water. You can separate the recyclables out of all your trash after collecting it. You may prefer to put each piece into separate containers for aluminum, glass, or plastic as you pick it up. As you plan, locate the recycling buy-back centers and recycling drop-off locations near your cleanup site.

Consider providing drinks and food for the cleanup workers. Sometimes restaurants, grocery stores, or drink bottling companies will donate refreshments.

Just before cleanup day, meet to go over a map of the cleanup area and to see that everyone knows their job assignments. Make sure you have everyone's signed

permission forms. During this meeting inform your workers about proper clothing for safety. Each person should wear long pants, sturdy shoes, work gloves, and sun protection. Even if your cleanup day is warm, everyone needs to wear a long sleeve shirt for protection from scratches or insects. If your cleanup is near a road, each person should wear a brightly colored vest. The "Adopt-a-Highway" program can provide these.

## On Cleanup Day

If you have done all of the proper planning, the rest should be easy and fun! You'll need a list of each person helping and their assignment. If your cleanup is during a school day you won't have to worry about where to park cars. You'll either be walking to the site or the school bus driver will take care of parking. If your cleanup is on a Saturday, you will need to find a parking place for the cars that bring your cleanup crew. Make a checklist to see that everyone is following these important plans:

- The helpers are dressed properly for their own safety.
  - All necessary permission forms are signed.
  - Someone is responsible for handing out the trash bags.
  - Each team knows its assigned work area.
  - People are working together in teams of at least three people.
  - Each person has instructions about avoiding dangers like snakes and bees
  - Each person knows to watch out for sharp objects like broken glass.
  - Everyone knows break times and quitting time.
  - Each person knows what they should do if someone gets hurt,
  - A responsible adult is prepared for emergencies.

As a follow-up, you could keep track of how many bags of trash you collected and where you found most of the trash. Some established programs ask for this and other information. How large an area did you clean up? How many people helped in your cleanup? How many pounds of trash did you collect? How many pounds of recyclables did you collect? If you choose to work with an established program, someone will tell you what kind of records to keep.

Finally, write thank-you letters to everyone who helped with the cleanup or gave food, drinks, or materials. Remember to reward yourself and your classmates, too, for all of the hard work.

This publication contains helpful information about managing a cleanup project:

***Organizing and Conducting a Cleanup on Public Lands and Waterways***  
**Water Quality Series, Booklet 3**  
**TVA Central Land Resources District Office, 1101 Congress Parkway**  
**P. O. Box 606**  
**Athens, TN 37303-0606**

# OUTDOOR CLASSROOMS

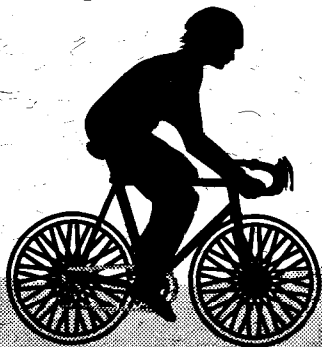
Most of the time when you are at school, you are sitting inside a classroom at your desk, working on your assignments. Sometimes you might look out the window and wish you could be outdoors.

What if your school had an outdoor area which was used for special learning activities? An outdoor classroom can be a very exciting place for students and teachers to learn about weather, plants, animals, geology, history, and many other subjects which you read about in your textbooks. This special area can also make your schoolyard a better place for plants and animals. Plants can cover bare areas, reduce soil erosion, or improve a not-so-pretty view. There are many good reasons to build an outdoor classroom.

Where will you locate your outdoor classroom? Every school is different, so your outdoor classroom will need to be designed to fit your special situation. Consider the following questions:



- What kind of activities will be conducted there?
- What kind of learning activities are important to us?
- How much space is available?
- What areas are accessible to students of all ages and all abilities?
- What are the special features (rocky area, hillside, big trees, pretty view, stream, sunny field, etc.)?
- Are there places with safety hazards which must be avoided, or can these safety problems be solved?



Here are some ideas for an outdoor classroom:

- Gardens for native plants, such as grasses and wildflowers.
- Nature trail.
- Weather study area with equipment to measure weather changes.

If the area you have chosen is small, focus on one idea, such as a bird feeding station or a flower or vegetable garden

You will need permission and support from your principal and the grounds staff to carry out the project. Develop a written plan with a description of your ideas for the outdoor classroom. Include the answers to the following questions:

- Why is this study area important for our school?
- What supplies do we need to construct it?
- Where will we get them?
- If we need money to purchase supplies, how will we raise it?
- What people in the community will help us?
- Who will take care of the area after it is built?
- How will we make sure that the area is safe during construction and after it is open?

When you answer these questions, you show that you have put a lot of careful thought into the project, and your principal will be more likely to approve of your project plans.

Define a goal and purpose for your project. For example, if you want to create a nature trail behind your school, your written statement might read: *"The goal of our outdoor classroom project is to construct a nature study area in the woods behind the school playground. The purpose of the area is to provide a place for students at all grade levels to observe plants, animals, and other natural features. The trail will be safe and accessible to all students in our school. We will plan the construction of the trail so that we do as little harm as possible to the natural area.*

As you work on your outdoor classroom, keep your goal in mind. Refer back to your written statement from time to time, and compare what you have done with what you said you would do. This will help you keep your work on track.

Whatever project idea you choose, there are many resources available to help you plan and carry it out. Some of the places you might contact for help are listed below:

- Local libraries
- City and county parks and recreation offices
- Forestry, biology, horticulture, and science education departments at a local university of college
- , County agriculture extension service
- National or state parks, forests, wildlife refuges
- Science centers, science museums, botanical gardens
- Gardening and landscape centers, and greenhouses
- Garden clubs
- State wildlife department

You may want work with other groups in your school or community. Someone else could produce a guide to the outdoor study areas and develop lesson plans for using your outdoor classroom. See the chapters on guidebooks and teaching and sharing for ideas.

Developing an outdoor classroom will probably take most of the school year. Different types of sites will require different plans, but most plans can be approached in phases.

- **Phase 1** (one month): Survey site and prepare map showing location and special features. Develop budget and fund raising plan. Review plan with principal and grounds maintenance supervisor; revise if necessary.
- **Phase-2** (two months): Present final plan to principal (and, to the school board, if required). Write a press release about the project and send it, with principal's approval, to local newspaper, television, and other media, Begin contacting people who will help with construction. Begin fund raising. Work with group to draft the site study guide. Design explanatory signs.
- **Phase 3** (one month): Continue fund raising and, work on guide. Schedule construction date. Make explanatory signs.
- **Phase 4** (one month): Acquire materials for construction, such as mulch or landscape timbers. Complete guide and have copies printed.
- **Phase 5** (one month): Construct site. Complete plantings. Plan dedication ceremony (including speakers, guest list, press coverage). Establish schedule for routine maintenance. Check site at least weekly and correct problems.
- **Phase 6:** Hold dedication ceremony. Enjoy your new outdoor classroom!

Three publications that might help you to develop an outdoor classroom area:

***A Guide to the Planning and Development of Outdoor Classrooms***

Missouri Department of Conservation

**P.O. Box 180**

**Jefferson City, MO 65102-0180**

***A Habitat-Forming Experience: Cultivating a Native Plant Ecosystem***

***The Science Teacher*, December, 1991, pp. 22-27.**

***BayScapes***

**Alliance for the Chesapeake Bay**

**P.O. Box 1981**

**Richmond, VA 23216**

# GUIDES

You probably know a lot about some of your favorite interests. How did you learn about those subjects? Books can answer questions for us just like other people do. Usually, though, we learn by doing. Even when we're learning on our own, certain kinds of books can serve as guides to help in our understanding. Guide books help people understand interesting subjects and help make their work easier. One type of guide you might consider developing is a "field guide." Another type is a "resource guide." We'll look at how you get started writing your guide, and where you go for help.

## Field Guides

You can take field guides along with you when you go outside, just like the name suggests. This type of guide helps you to identify different plants or animals you might see living out there. For example, people who enjoy watching birds will carry a bird field guide to help them identify birds they see.



There are many different types of field guides. One series of field guides, called the *Peterson Field Guides*, covers about 40 different natural subjects. Subjects include everything from birds and insects, to sea shells and stars. *Peterson's* guides use pictures along with descriptions.



Although these are very popular guides, they don't have something that your guide can have. Yours can give information specific to your local area. Your class researches the area and prepares the guides. Begin by looking at other field guides for information about the plants, animals, or other topics in your general area. Check your library or a bookstore to find these field guides. Field guides can be about any topic you choose. Your class should agree on a field site and decide what your guide will include. Your guide really will be unique.

Your class might watch the different birds that visit your school yard throughout the year. Then you can write a field guide to the birds of your school. Be sure to include all of the knowledge you have about your guide book topic so others can learn from it. For example, in addition to listing the different types of birds (cardinal, bluejay, robin), tell in which season you saw each bird (fall, winter)., Note the behavior of different birds (climbing down the tree upside down) when you saw them. You could even list unique characteristics you noticed to help others recognize the bird.

If your school has a nature area, or if a park is close by, a useful field guide might be a map for that area. Other ideas are guides to plants, animals, trees, history, geology, or water resources of the area. Find out if there is already a guide for the site you chose as the subject of your field guide. For example, many state parks have them.

Whatever the subject of your guide, it should be more than just a list. It should explain why those animals; plants, or rocks are where they are. It should answer interesting questions.

## Resource Guides

You are probably familiar with resource guides too, but you may have a different name for them. What book is the most useful resource guide? How about the phone book? It provides us with sources of information. A resource guide is a list of people places, objects, or services that we can use to get help. Can you think of any other resource guides?

Your class might list all the people in your community who would be willing to visit classrooms and talk about their environmentally related jobs. Instead of listing just the names and phone numbers, your guide should give information about each speaker. It might tell where each works, what each can talk about, when each is available to speak.

Your class could produce a resource guide listing and describing all of the good field trip locations. Include hiking areas or natural places within a certain distance of your community. You should visit each site to see if you like it. Make sure that you have the correct address for each site as well as directions for getting there.

You could write a resource guide explaining where to get seedling trees and how to plant them. The Virginia Department of Forestry probably can help you with this.

Another possibility is a resource guide about what to take on a hike, or what tools you will need to do your own landscaping. Still another idea is a resource guide to environmentally safe household cleaners. Again, remember that you are doing more



than compiling a list. Explain the harmful effects of dangerous chemicals. Tell why the safer ones are better even if they're more expensive.

## General Instructions

- To get started on your guide book project, find a topic that interests you. If another class within your school plans to do one of the other projects from *Rally Round!*, selecting a topic will be easy. For example, if a class is doing a trail cleanup project, what guide would complement that project? How about a field guide for people walking that trail?
- Decide what you want to accomplish with your guide. This is like setting up your **goals** or objectives in the *Teaching/Sharing* chapter of *Rally Round!* Do you want to inform people or convince them to protect their natural environment? Your field guide might name and illustrate the flowers along a trail. People reading your guide may want to preserve the trail when they see the beautiful flowers that grow there.
- Who is your **audience**? Knowing this helps you decide how to write your guide for particular readers to understand it. Would you prepare the guide the same way for adults in the community as you would for third graders?
- **Collect the information** you will offer in your guide. If you are writing a field guide, go to the field site to identify the birds, plants, animals, etc. that you will include in your guide. Existing field guides can be a big help. If you are writing a resource guide, track down the names and telephone numbers of the people for your guide. Get permission from site owners or managers before listing sites in the guide. Give information about how to contact the correct person for groups to get permission to go there.
- **Write text.** Put information in your guide in a **logical order**. For example, if you write a trail guide, you would start by listing plants found at the beginning of the trail (work with English classes).
- **Design** the appearance of the book (work with art or computer classes), and **send a copy** to anyone who needs to approve the guide before printing.
- Decide **how many** copies you need. Arrange for printing them (see *Getting into Print*).
- Arrange for **distributing** the guide books. You may sell them to pay for printing expenses. You might put some in the school office or libraries.

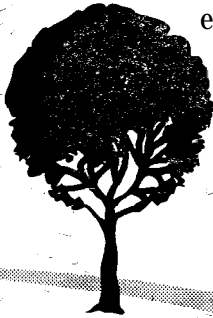
# TEACHING & SHARING

One important project you can do, and, one of the best ways to learn, is to teach other people. Younger people look up to you. They even try to act like you or dress like you. Sometimes adults cannot see and explain things the way you can. You may have this advantage over adults in teaching. Sometimes adults listen to children more than to each other, so at times you can teach adults. This chapter is about helping you design ways to teach others and share the neat things you have learned.

Deciding what to teach may be the hardest but most fun part of teaching and sharing. What do you think? What is important to you?

You can use this chapter to help people understand important issues. You can teach other classes to get involved. You can do a school play or musical to get your whole school involved. You can even write a newsletter or article for your town newspaper

to get the entire town involved in helping your class solve an environmental problem. Your class might start by making a list of environmental problems that they care about. See *Choosing a Project* for help. What group would you like to teach about these issues? Your teacher can advise you about ways to accomplish your teaching plan.



Some people think that they can never teach because they don't know enough. Knowing a lot is not the only important characteristic of good teachers. Knowing where to go to find the answers to hard questions is very important. Good teachers help people to learn.



Since we are all different, we all have different ways of learning. So if you are going to teach somebody you have to think about how they learn. Stop and think about the different ways that people have taught you. How did you learn the most?

Do you learn better when someone tells you what to do, or do you want to experiment on your own? Have you discovered for yourself that you can find your belongings better when you always put them in certain places in your room? Did you have to try certain foods or play certain games to learn which was better? Your parents probably taught you how to ride a bike by taking you outside and actually putting you on a bike. Everybody learns in different ways; but most people believe the best way to teach is to let people make discoveries for themselves. We call this “hands-on” teaching. Use this method as much as possible.

Sometimes people try to teach us by giving us orders or information. For example, has anyone ever ordered you to clean your room? Television commercials tell you that some kinds of food taste better, or that certain toys are more fun. Teachers might use this type of teaching by telling you a story, then asking you to remember what they said. Could you ever learn to ride a bike if someone told you how, but you didn't practice on a bike? Teach by giving information if you are teaching a really big group, and cannot help each person to learn individually.

Once you have decided what you want to teach to other people, try to design ways that allow your students to learn by doing. They learn better through activities that are interesting and fun. For example, instead of showing your audience a video about erosion control, let them design a way to keep soil inside a small area of bare ground when it rains. They would have even more fun if they hosed down the area rather than waiting for rain. Then they could see right away if their plan controlled erosion. How about suggesting that your students try applying different materials to the bare ground to see if any control erosion better than others? They may think to try straw, leaves, or sod. They may enjoy trying some unusual material.

After your class agrees on a topic to teach and you think about how you will teach, then develop lesson plans. Your lesson plan will be the guide you will follow while teaching your lesson. If you spend a little time getting the lesson plan right, then teaching the lesson will be easy. Here are some rules to help you develop a useful lesson plan:

- First list exactly what you want your students to learn to do. These are objectives. Here is an example of one objective: “Students will sort trash into piles of either recyclable or non recyclable.” Some lesson plans may have only one objective, while others may have several. In the example about sorting recyclables, you may want to add the objective “Students will explain what recycling means.”
- After you list your objectives, develop activities you can use to help your students reach each objective. This is the bulk of your lesson, so plan to spend

enough time, or to do enough activities, so your students understand. For example, you might ask your students to make new paper out of old paper, or find objects made from recycled materials. These activities help them understand recycling. Describe the activities and procedures so anyone could teach the lesson with your plans.

- Next, look at your lesson and list any materials you will need to take with you to teach the lesson. Having a list is easier than trying to remember.
- Finally, list follow-up questions, activities, or worksheets that you can use to test your success in meeting your objectives.

Sometimes you can concentrate on teaching just one person or a small group. Using "hands on" teaching works best then. At other times you need to try to teach a whole class or larger group of people. Then it can be fun to develop your own newspaper. You can pick out a name for the paper. Different members of the class can be the reporters, editors, cartoonists, photographers. Others can do the paper layout and design in the school computer lab.

If you want to teach people in your community how to get involved in environmental protection, your group might work together to write a regular column for the local newspaper (See *Writing a Press Release*).

Many school libraries have video cameras. You might consider making a short video to show on school or local TV.

# FESTIVALS

## Environmental festivals

are learning parties. You plan for them as you would plan for any other party. You'll need a theme, goals, a location, a date, a budget, guests, invitations, a schedule, cleanup, and maybe decorations, entertainment, and food. If you have ever given a party, you know all this can be a lot of work, and a lot of fun, too. Organization and planning are the keys to success.

1. First decide exactly what the goal of the event is. This goal should be something you can achieve through a festival. The more specific the goal is, the easier it is to select activities to achieve it. begin by conducting a brainstorming session with the entire class. List as many ideas as you can. Select the few ideas that most interest the group. Consider the resources available. Then discard impossible ideas. Let's say your group's two favorite ideas are hot air balloon rides and toy recycling. You know you have no money, you know you must have the festival on a Saturday morning, and you know that you must have it in your classroom. Hot air balloon rides would not be possible, but you could have a toy recycling "garage sale." Work closely with your teacher to select the idea (or theme) for the festival.

To develop the goal, consider exactly what you expect to happen. Think in numbers (how many or how much?). For example, the goal for a toy recycling festival might be to collect and recycle 75 toys.

2. Now brainstorm a list of all the tasks you can think of that should be done to reach the goal. Think hard and make this a long list. Make sure your list includes contacting people whose help you need, and getting necessary permissions. Note costs for festival activities, decorations, entertainment and food. Decide who will clean up. Decide what informational materials you need. Organize the items on your list into several short lists of jobs that are similar. For example, you could combine putting a news release in the local newspaper, making an announcement on the school loudspeaker, and sending invitations to parents. They all have to do with publicity. Assign the lists to workgroups. Will you think of every thing? You probably will not. Keep the lists posted. As you think of the other jobs that need to be done, add them to the lists.



3. After workgroups meet to make detailed plans, the whole class should meet again. At this meeting choose a definite date and set a complete **master plan** and **schedule**. Allow plenty of planning and preparation time before the event. The class should elect a chairperson (or two "co-chairs") to be in charge of making sure all the workgroups cooperate and stay on schedule. The chairperson is responsible for calling meetings for progress reports, and bringing groups together to solve problems. When necessary, the chairperson would add new jobs to workgroup task lists.,
4. Whatever your plan, be sure your teacher or club sponsor and your principal **approve** it. As you discuss your plans with these people, ask them if there is anyone else whose permission you need. Also ask them who you need to inform about your festival.
5. You might have to pay for printing, photography, postage, telephone, supplies for activities, entertainment, tables, or signs. You must make advance arrangements for these. The school or other organizations may be able to help with some or all of these items with no cost to your class.

We have adapted the following tips and ideas from The *Earth Day Guide* (May 1992, Earth Day Committee of Richmond, Maymont Foundation, Virginia Environmental Endowment)

**Here are several places to call for help with arrangements and advice:**

- Local parks and recreation departments and state parks can offer sites for special events.
- Some youth groups such as Scouts or high school ecology clubs may want to participate in your festival or help in some way. Local recycling associations, environmental groups, outdoor sports clubs, museums, nature centers, and civic groups also may want to join you.
- Businesses related to the environment may donate materials or exhibits.
- Radio, television, and newspapers may publicize your festival.
- Local elected and administrative officials may tell you about tax-supported help available in your community.

**Here's advice for asking local businesses for help:**

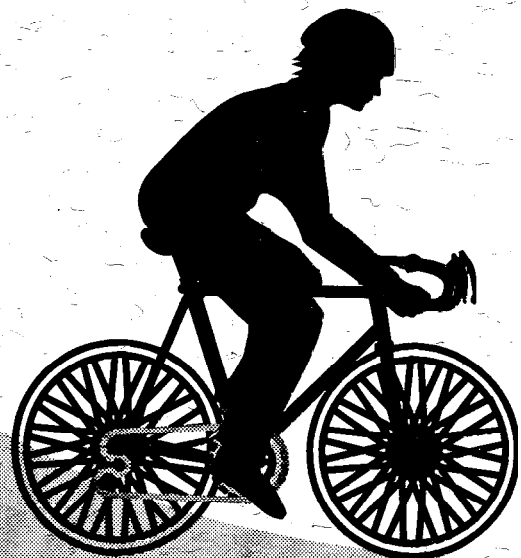
- Call the local Chamber of Commerce to ask to borrow a copy of its membership directory, listing local businesses.
- Use this directory to locate public relations offices of businesses. See *Who Ya Gonna Call for Help* for directions.
- Call or write businesses and offer them the opportunity to donate equipment or

materials, or to sponsor a specific activity. Be sure to specify how you plan to recognize their contributions. See *Making a Business Telephone Call* and *Writing a Business Letter* in the TOOL KIT section for directions.

**Here are a few ideas about hands-on activities and demonstrations:**

- Tree planting
- Recycled paper making
- Recycled art
- Mini-landfills
- Foil ball competition
- Electric or solar power demonstration
- Sample environmental products
- Organic gardening demonstrations
- Natural product demonstrations
- Meet your elected officials
- Mock election
- Surveys
- Learning stations sponsored by classes
- Bag-a-thon litter collection
- Poster contest display
- Story telling
- Environmental personal opinion bulletin board
- Skits and plays
- Environmentally friendly household cleaners demonstration
- Junk mail canceling cards
- Reuse idea contest

SECTION IV  
Follow Up and  
Follow Through







# GETTING THE WORD OUT

Communications projects get the word out. To make a communications plan you need to answer three questions:

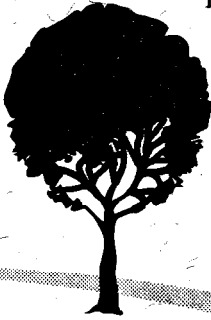
**What do you want to say?**

**To whom you want to say it?**

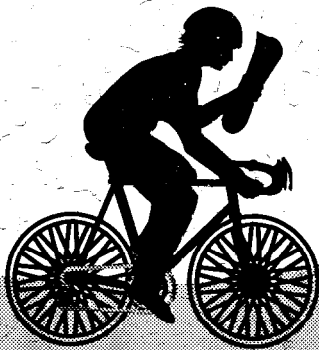
**What do you want your audience to do as a result?**

Talk about these three questions with your workgroup. If the questions are hard to answer, see *Getting Started* for help in deciding what you want to do. Discuss your answers to questions with your teacher or group leader. Make any necessary changes. Now you are ready to begin.

There are lots of ways we can communicate. Look at your answers to the three questions to help you decide which method to use. Pick one (or several) that will bring your message to the group that you want it to reach.



- **Tell people what you want to say.** This is an effective way to share information. It doesn't cost anything, but it may not reach very many people. How many people can you tell in a day? Will they remember your message without a written copy?



- **Put information in the newspaper.** This is an effective way to reach lots of people. *Writing a Press Release* explains how to prepare a message for the newspaper. Newspapers publish press releases, articles, and letters to the editor free. If you want to run an advertisement of some kind, you may have to pay a fee. If the newspaper wants to write about your project, a reporter may make an appointment and visit your group. The reporter would ask questions and may take a picture. Prepare answers to the "who, what, when,

where, and why?" questions before the reporter comes. If a reporter will be visiting your school, tell the principal. Principals usually want to talk to reporters.

- Remember the school **newspaper** and **school newsletters**. If your project will last for several months or longer, you could offer to write a regular column to keep readers informed.
- Use the **school public announcement** system. This method reaches a whole school.
- Put the message on **videotape**. This is fun, but if you want lots of people to see your message, you must plan ways to show the video. Keep video messages short, and make sure they answer the "who, what, when, where, and why?" questions. Think about what meetings your intended audience might attend. See if you can show your video there. For example, if your message is mainly for parents, perhaps you could show your video at a PTA meeting.
- **Go on television or radio**. Local stations usually want local news. Use your telephone skills to make arrangements. See *Who Ya Gonna Call for Help* and *Making a Business Telephone Call*. If you appear on a program, someone will probably interview you. Know the answers to the "who, what, when, where, why?" questions and you should do fine. If you will be on TV, take along a good picture or some interesting objects related to the project.
- **Publish** your information. See *Getting into Print* for some tips on publishing.
- **Post** the message. Most schools, offices, businesses, and some stores have bulletin boards. Make your message short, neat, and attractive. Put it on bulletin boards that your intended audience is likely to see. Use color and art to make your message stand out. Posters publicize your message in an excellent way. Put posters where lots of people will see them. Ask permission before putting up anything. Arrange to remove your notice at an agreed-upon time.
- Use a **computer network**. Virginia's Public Education Network (VA-PEN) is in most Virginia schools. Many teachers use it. Write a short announcement. Then ask your teacher to share with other teachers through the "Environmental Education" newsgroup.
- Inform people by **mail**. If you have a list of the names and addresses of the people who need to receive the message, send them a letter. See *Writing a Business Letter* for directions.

Whatever communication methods you decide to use, remember most people need to hear something several times before they decide to act. Get the word out several ways and several times so people will be sure to hear your message.

# AWARDS & CONTESTS

Do you feel proud of your project? Do you see students and teachers helping the environment? Do you think knowing about environmental successes might help or inspire others to do more or better environmental projects? If so, consider entering a competition, or applying for an award. People want to hear about wonderful projects students do. Don't be shy about sharing your program or helping others to share theirs.

Most awards programs and contests have special forms, deadlines, and requirements. If you apply, follow the instructions EXACTLY. Selection committees only consider applications that follow all the guidelines. Awards programs often change from year to year, so you should ask for current information. Also ask local offices of environmental organizations, litter control programs, and Soil and Water Conservation Districts if they know of any awards your project might be eligible for.



Every award program is different. Some give winners a certificate, a trip, a picture in the newspaper, a plaque, or a present. Awards may honor a class, a student, a school, a teacher, or a group.

Maybe your group likes the idea of awards or contests, but can't find one that is just right. Perhaps you see excellent environmental activities around you but nobody is noticing. Consider designing your own awards program. Sponsor an environmental awards assembly for the school or for your grade: Perhaps local businesses would donate prizes. Maybe the local newspaper or television station would carry a story about your winners.



If you create a new awards program, get sample applications from existing awards programs. These will give you ideas for planning. Write down everything you will need

to do, and the order in which these jobs should be done. Think and plan carefully for fairness. Think of many kinds of actions and achievements your program could recognize. Get students and adults outside your group to review your plans and make suggestions. Read *Festivals* for tips on organizing an event. Make a schedule. Assign jobs to workgroups, and get started.

Here are a few environmental awards programs,

**The President's Environmental Youth Awards**

U.S. EPA - Region III  
841 Chestnut Street  
Philadelphia, PA 19107  
215-597-6685

**The Governor's Environmental Excellence Awards**

Secretary of Natural Resources  
Suite 733  
202 North Ninth Street  
Richmond, VA 23219

**Excellence in Environmental Education Awards**

U.S. EPA - Region III  
841 Chestnut Street  
Philadelphia, PA 19107  
215-597-9076

**Conservation Awards Program.**

Virginia Wildlife Federation  
4602 West Grove Court  
Virginia Beach, VA 23455

**National Environmental Achievement Awards**

Renew America  
1400 16th Street, N.W., Suite 710  
Washington, D.C. 20036  
202-232-2252

**Keep Virginia Green Poster Contest**

Virginia Forestry Association  
1205 East Main Street  
Richmond, VA 23219

**Keep America Beautiful**

9 West Broad Street  
Stamford, CT 06902

**Chesapeake Bay Conservation Awards**

Izaak Walton League  
Suite 1100  
1701 N. Fort Meyer Drive  
Arlington, VA 22209  
703-528-1818

# REPORTING RESULTS

This chapter helps you identify what you achieved in doing your environmental project. It guides you in thinking about the value of your achievements and reporting them. You are welcome to copy the WORKGROUP REPORT and TEACHER/LEADER REPORT.

As a group, discuss the questions. Write answers your group thinks are best in spaces provided. Allow plenty of time to agree on the best answer to each question. Be as specific as possible with your answers. Use your notes and records from your project. After you are done, turn all your answers in to your teacher. Ask him or her to fill out the TEACHER/LEADER REPORT section and mail a copy of both your answers and your teacher's answers to the Bay Team at the address shown at the end of this section.

## Workgroup Report

1. The goals of our project were: \_\_\_\_\_  
\_\_\_\_\_
2. The most valuable way this project changed us was: \_\_\_\_\_  
\_\_\_\_\_
3. The hardest part about this project was: \_\_\_\_\_  
\_\_\_\_\_
4. If we had this project to do over, we would do this differently: \_\_\_\_\_  
\_\_\_\_\_
5. This project benefitted our school, homes, or the community this way: \_\_\_\_\_  
\_\_\_\_\_
6. If we could do another environmental project, we would like to: \_\_\_\_\_  
\_\_\_\_\_

7. Did you have to make any decisions in your project?  Yes  No  
If yes, what decisions did you make?

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8. Did you have to solve any problems in your project?  Yes  No  
If yes, what problems did you solve?

---

---

9. Did you change your mind about anything related to your project after you started?  Yes  No  
If yes, what changed in your mind?

---

---

10. Please put a checkmark next to any of the activities listed below that you did. Use the space provided to tell how many and how much of the activities you did.

We planted or cared for green plants.

Explain: \_\_\_\_\_  
\_\_\_\_\_

We improved habitat for wildlife.

Explain: \_\_\_\_\_  
\_\_\_\_\_

We recycled.

Explain: \_\_\_\_\_  
\_\_\_\_\_

We precycled.

Explain: \_\_\_\_\_  
\_\_\_\_\_

We provided others with information.

Explain: \_\_\_\_\_  
\_\_\_\_\_

We sponsored an event (festival, etc.).

Explain: \_\_\_\_\_  
\_\_\_\_\_

We sponsored a cleanup.

Explain: \_\_\_\_\_

\_\_\_\_\_

We entered a contest or applied for an award.

Explain: \_\_\_\_\_

\_\_\_\_\_

We sponsored a contest or an award.

Explain: \_\_\_\_\_

\_\_\_\_\_

We made a telephone call.

Explain: \_\_\_\_\_

\_\_\_\_\_

We wrote a letter.

Explain: \_\_\_\_\_

\_\_\_\_\_

We made a presentation or speech.

Explain: \_\_\_\_\_

\_\_\_\_\_

We wrote a press release.

Explain: \_\_\_\_\_

\_\_\_\_\_

We used a library.

Explain: \_\_\_\_\_

\_\_\_\_\_

We used a directory.

Explain: \_\_\_\_\_

\_\_\_\_\_

We invited a guest speaker.

Explain: \_\_\_\_\_

\_\_\_\_\_

We used mathematics skills and information.

Explain: \_\_\_\_\_

\_\_\_\_\_

We used science skills and information.

Explain: \_\_\_\_\_

\_\_\_\_\_

We used social studies skills and information.

Explain: \_\_\_\_\_

\_\_\_\_\_

We used English skills and information.

Explain: \_\_\_\_\_

\_\_\_\_\_



# Teacher/Leader Report

Please review your students' answers to the questions, checking for accuracy and completeness. If you are using a portfolio assessment to grade projects, you might like to keep a copy of their answers for their portfolios. These answers can help to identify their achievements, their progress, and the skills they used and mastered.

The Bay Team wants to know what Virginia students are accomplishing and to give recognition to students for their achievements. We also hope to share this information throughout an informal statewide network of teachers using environmental education projects to teach useful skills and competencies. So we ask you to take a few minutes to answer the following questions. Please return them, along with the copies of the student group answers to the WORKGROUP REPORT, to the Bay Team at the address at the end of this section.

I certify that my students' description of their work and projects is accurate.

Yes     No

My name \_\_\_\_\_

School address \_\_\_\_\_

I certify that their achievement merits recognition by the Bay Team.

Yes     No

\_\_\_\_\_

\_\_\_\_\_

I am willing to give advice to others who want to know about this type of project.

Yes     No

Telephone \_\_\_\_\_

VA-PEN \_\_\_\_\_

Please keep me informed me about environmental education in Virginia.

Yes     No

Title of project \_\_\_\_\_

\_\_\_\_\_

Grade level \_\_\_\_\_ No. students \_\_\_\_\_

Please return Leader Reports and Workgroup Reports to

**Virginia Bay Team**  
**College of William & Mary**  
**Virginia Institute of Marine Science**  
**Gloucester Point, VA 23062**

# WHAT NEXT?

So, how did you do? We hope that by this time you have accomplished something of which you can be very proud. We also hope that you want to continue to work and to achieve even more good things for the environment.

This chapter will help you to make plans to continue helping the environment. You may wish to continue with the same thing you have been doing, or to enlarge or expand your project. For example, if you have been recycling in all the classrooms in your grade, you might want to start collecting recyclable materials in all the classrooms in your school. You may want to try a slightly different version of your project; for example, if you have been collecting aluminum cans, you might want to try collecting newspapers. You may want to start completely over with a brand new project.

## Continuing with the Same Project

Let's go back to the example of a recycling project. You determined that your school could use a recycling project, you collected supplies and got helpers, and you got the job done. Now you want to keep doing it.



The first thing you need to decide is, do we really need to keep doing it? Was it successful? Has it served its purpose? Did we do such a good job that there is nothing left to be done?

If you decide to continue with the project, you will need to review your lists of equipment and supplies. You may have borrowed things such as collection bins from other people, and they expected that you would return them when you were through. You will have to ask if you may keep the items longer, or you may want to think about asking someone to donate the items to your group, or you may want to try to raise money to buy what you need. You also need to make sure that

all of the people who helped you want to continue to help you. You may have to find different people to help you; you'll have to make sure that you can teach them what to do.

You will need to ask yourselves if you have the time to do this project. If you originally planned a three month project, and you have decided to extend the project indefinitely, how is that going to be affected by your other activities? If your original project lasted from October to December, and you want to keep it going through the spring, but you're supposed to play on the softball team this spring, are you going to have time to work on your project? Everybody in your workgroup will have to ask themselves those questions.

What if you want to keep going through the summer? Our example of a recycling project isn't a very good one in this case. Since the school would be closed in the summer, there wouldn't be anyone there to throw out any aluminum cans for you to collect. But what if your project was to plant a school butterfly garden? Who will take care of it in the summertime? Your garden will probably just be starting to look nice and attract butterflies when school lets out for the summer. Someone will have to go and water and weed all summer long. You'll probably want someone to take pictures of your garden (and any butterflies it may attract) during the summer so people in your class can see what it looked like when you return to school in the fall. You may need to go through your school office to make arrangements with the groundskeepers at your school to let you use the hoses or any other tools during the summer. You'll probably have to make arrangements to get someone to drive you to school, since the school buses won't be running in the summer.

## Expanding the Same Project

Suppose you collected aluminum cans from all the classes in your grade, and you want to start collecting in all the classes in your school. How many more classrooms is that? How many more collecting bins will you need? How many more people will you have to train to help you? How many more trips to the recycling center will you have to make each week? Who is going to drive you on those extra days? You may find that your new plan is still a little more than you can handle. Just re-adjust and start again — keep working on your idea until you have a workable plan.

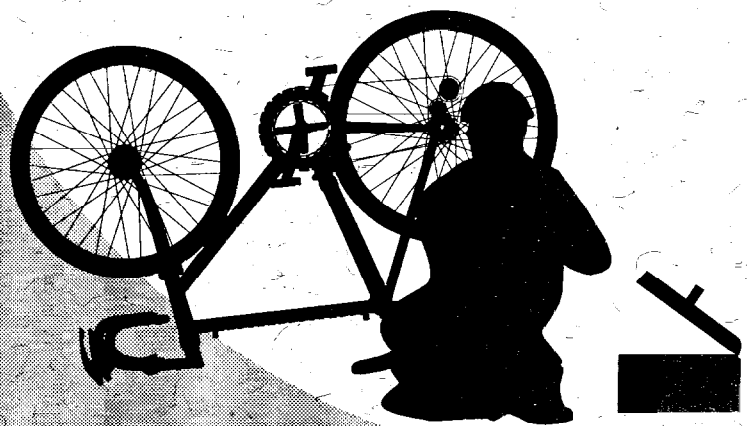
As you can see, there are a lot of things to consider. You shouldn't let that stop you, though. You had to do a lot of hard work and overcome some obstacles to get this far with your project, so you know by now that you can handle it.

## Starting a New Project

That's easy enough — go back to the beginning of the book and work through the section on choosing a project again.

# SECTION V

## Tool Kit





# FINDING ANSWERS YOU NEED IN THE LIBRARY

*Goal:* • to find answers to questions by using the library

*Materials:*

- paper,
- pencil or pen,
- change for photocopying pages (optional),
- library card

## *Directions:*

Have a clear understanding of the **question(s)** you want answered. Discuss this with others in your work group, and write down the question(s). If you ever saw or heard about a book which might answer your questions, try to remember the **title** (even a partial title is useful). Try to remember the **author's** name. Then write down what you can remember.

List on paper words that describe or have something to do with the **subject** or subjects of your question. The whole group should work on this.

In the library, use the **card catalog** or public access computer to discover which books are there. Try searching by the title(s) or author(s) or subject words. Write down the call numbers of the ones which are useful.

Look through the stacks or shelves of books in the library to find the books you want by their call numbers. On each end of the stack you will find the call numbers for books contained on that stack. The call numbers are on the backs of the books. If you can't find what you are looking for, just ask a librarian.

In the stacks you'll notice, that other books nearby are about the same or similar subjects. Look in some of them. Read the **table of contents** and **index** of these books

while you're still in the library. That helps you decide if they're useful or not. You may actually find answers you need or other interesting information. If your question is simple and you find a satisfactory answer right away, just write down the answer. You can find answers to all sorts of interesting and unusual questions by using the *Reader's Guide to Periodical Literature*. It guides you to magazine and journal articles written about the subjects you seek. The librarian can help you use the Guide and to find the actual magazine articles once you know which ones you want. You'll need to read those articles right then and there in the library and take **notes** which answer your questions. Libraries usually don't lend out these magazines or journals. You could choose to use a special machine in the library to copy a page or two. There is a fee for copying. Taking notes is usually better because it saves time, money, and paper.

The reference librarian may be a very valuable person to ask for additional help. This librarian knows all the reference books and may lead you to exactly the right one to find your answer quickly.

You'll probably find answers you need and more, and have a pleasant time, too. If you still haven't found all the information you'd like to answer your question, try another library next.

# WRITING A BUSINESS LETTER TO GET HELP

**Goal:** • to write a letter asking for help such as advice, information, permission, loan of equipment or materials, money, time, talent, or public support of your project

**Materials:** • paper 8 1/2" x 11"  
• business size envelope  
• pencil or pen, typewriter or computer and printer  
• dictionary  
• postage stamps

**Directions:**  
Decide, then write down exactly **what you want** to get as a result of writing this letter.

Find out the **name** and **address** of a person who could provide what you want. Then write it down. If you know a name, but need an address, try looking in the telephone book. If you know a company or organization's name and address, but need the correct person's name, try telephoning their office to ask.

Write a clear, short, polite letter containing a **heading, inside address, greeting, body,** and **closing.** Can you identify those five parts in the sample letter on the following page? In your letter, be sure to tell this information:

- your name and your grade
- what you want
- why you want it
- what you plan to do with it
- when you need it
- how doing what you ask could benefit the person you are writing
- that you appreciate any help you might receive

**Check** to make sure you have used correct spelling, punctuation, and grammar. Check the accuracy of your facts. Be sure that you have stated your request clearly, briefly, and courteously and that you have been very specific. Check to be sure you used active tense, and your writing sounds similar to your most understandable talking. Also see if your letter has even margins and spaces between paragraphs and looks neat. Then make necessary corrections.



Type the letter. Use 8 1/2" x 11" white paper. Ask someone else to double check spelling, punctuation, grammar, and wording of your letter. Your finished letter should be no more than one page. Revise and retype if necessary.

Sign your letter. **Fold** it and any enclosures together neatly into three equal sections. Fold the bottom third up, then fold the top third over that.

Type the name and address on a business size envelope (same as inside address), beginning each line in the center. Type your return address in the upper left. Put the letter and enclosures into the envelope. Put the postage stamp on the upper right of the envelope. **Seal** it and **mail** it.

**Sample  
Business  
Letter**

Davis Middle School  
1435 Todds Lane  
Hampton, VA 23666  
January 18, 1994

Ms. Ima Citizen  
Assistant to the Director  
Super Soccer Stadium  
Stadium Drive  
Hampton, VA 99999

Dear Ms. Citizen:

Our seventh grade class wants to help our community reduce the large volume of recyclable materials that unnecessarily takes up space in our landfills. We want to provide four neat, clean containers for empty aluminum beverage cans at the Super Soccer Stadium. We can arrange to collect the cans, then transport them to the recycling center each Saturday during April and May, 1994. We have enclosed a copy of our project plan.

We would like for you to give your permission for placing these containers inside the soccer stadium and to suggest convenient collection times.

This project could benefit the Stadium in several ways. It would reduce your trash disposal burden and the Stadium would become a very visible partner in the popular community recycling program.

Please write to us at the address above by March 1, 1994 to let us know if we may supply the containers to the stadium. If we may, then please inform us of convenient times on Saturdays when we may come to empty the containers.

Thank you for any help you can provide to our class.

Yours truly,

Jodi Mathews  
Secretary,  
Recycling Project Work Group  
Ms. Evelyn Casey's  
7th Grade Class

Enclosure

# MAKING A BUSINESS TELEPHONE CALL

**Goal:** • to make a business telephone call to get information, make arrangements, or get permission

**Materials:** • telephone

## **Directions:**

Make sure you know the name and telephone number of the **best person** to call. See *Who Ya Gonna Call for Help?*

**Go** over in your mind what you plan to say: Also think about the order.

**Write** it down. Be sure to include these points:

- **your** name, age or grade, and school
- what you want
- why you want it
- what you plan to do with it
- when you need it
- how doing what you ask would benefit the person you are calling
- you would appreciate any help you might receive

Have notes about your plan and the person's name in front of you. Call up someone in your group and **rehearse**. Let the rest of the group listen. After the rehearsal, talk about how the call could have been more effective. Revise the plan and notes. Rehearse again. Does it sound more professional now?

When you are ready to make the call, **dial** the number from a quiet place where there is little or no chance for interruptions.

When someone answers, **state your name** and **ask** to speak to a specific person. Usually in an office a receptionist answers the telephone. You might say, "My name is \_\_. May I please speak to Ms. \_\_?" The receptionist may say, "Just a moment, I'll transfer you to Ms. \_\_."

If the person is not available, **find out** a better time or number to use to reach the person. Thank the person answering the phone for their help

When you reach the person you want to talk to, you must now **introduce yourself**. Simply begin by saying, "My name is \_\_\_\_. I am \_\_\_\_ from \_\_\_\_." For example, you might say, "My name is Sally Goodstudent. I am a Girl Scout from troop #100 here in Norfolk, Virginia." Next state the reason for your call. Use your notes if you need them. Say all of the things that you planned to say very briefly.

After the person responds with the information or permission you seek, thank them. You may say, "Thank you very much for \_\_\_\_" or, "We really appreciate your help with this information."

If your telephone call involved making arrangement for something, you must **follow up** with a letter confirming all the details. It is also important to send a thank-you letter to anyone who helped you.

If the person you talk to cannot help you, **ask** them to refer you to someone else who can. Then ask for that person's name, title and telephone number. You may say, "Would you please suggest someone I might call to request this information?" Then thank the person for their time and their suggestion.

# WRITING A PRESS RELEASE

**Goal:** • to write a press release to tell people about the project your group is doing or has accomplished

**Materials:** • paper  
• pencil  
• typewriter or word processor  
• newspaper  
• photograph (optional)

## **Directions:**

In a brainstorming session with your group answer these questions about your project:

- **What** is being done?
- **Where** is it being done?
- **When** is it being done?
- **Why** is it being done?

• **Who** is doing it?

Then **write down** your answers.

Before you begin to write your release, **look at some newspaper articles.** Find the *who, what, where, when, and why* answers in them.

Select the-main or **most important** points you want to make. In your brainstorming session which one or two of the answers made those points? Include those answers or main points in the first one or two sentences you write. That will be your first paragraph. Look at the sample press release. It answered the *who*, then the *what* questions first.

In the remaining paragraphs answer the rest of the questions from your brainstorming session. Can you find answers to *where when* and *why* in the sample press release? In which paragraph are they?.

**Use simple, direct language.** Use complete words, not abbreviations. Is everything clear? Check for correct spelling, punctuation, and grammar. Ask someone else to read it to make sure they understand it. Revise it if necessary.

Type "FOR IMMEDIATE RELEASE" and the name and telephone number of someone who could answer questions about the project at the top of the press release.

**Now type it double spaced.** Show it to your teacher and make any changes that she or he suggests.

Sometimes newspapers like to have a picture to go along with a story. The picture should be a clear, black and white photograph that shows people doing what the story is about. The photograph should help to tell the story. Label it with one or two sentences telling who is in the picture and what they are doing.

When you have completed your press release, put it in an envelope large enough so the picture fits without folding. Write **Attention: Managing Editor**, the name of the newspaper, and its address on the envelope. Then mail it! It's also a good idea to send copies to school newspapers and community education newsletters.

Newspaper editors seldom use exactly what you send. Sometimes they rewrite it or only use the picture.

If a newspaper publishes your article; you deserve congratulations! Be sure to show it to your parents, teachers and principal.

### ***Sample News Release***

April 9, 1995

#### **For Immediate Release**

Contact: Suzie Goodstudent 642-0000  
or Ms. Veri Goodteacher 692-0000

Gloucester, Virginia... ..Sixth grade students from Page Middle School in Gloucester County, Virginia have sponsored a very successful "Clean the Creek" event.

On Saturday, April 9, sixty students, nine teachers, and fourteen parents removed fifty pounds of trash between 9:00 a.m. and noon. Participants found glass, plastic, iron, and aluminum along twenty-five yards of the south shore of Timberneck Creek next to the County public boat landing.

The students conducted this "Clean the Creek" event as part of coordinated class environmental projects they designed to reduce solid waste pollution in local waterways. They worried about valuable Chesapeake Bay animals becoming entangled in debris such as discarded fishing line, plastic six pack rings, nets, and bags. According to the project leader, Ms. Veri Goodteacher, "Projects like this help students learn important and useful skills: They also learn faster than in the classroom and have a clearer understanding."

Some classes will continue their projects by sorting out recyclable materials. Then they will transport them to the County recycling collection area.

# CHOOSING AND INVITING A GUEST SPEAKER

- Goals:**
- to select an interesting speaker who has had experiences that relate to your project.
  - to invite that person to speak to your group

- Materials:**
- telephone
  - scratch paper
  - stationary for thank you notes

## **Directions:**

Decide with your group what knowledge you need to do your project. Name all the people or places where you might find this knowledge. See *Who Ya Gonna Call for Help* about identifying the person to call in an organization. When you have a list of knowledgeable people, try to find out who has heard any of them speak. Then ask for opinions of their speeches. In your group consider the information about the experiences, knowledge, and speaking skills of each person on your list. Then shorten the list to your group's first, second, and third choices.

Choose several acceptable **dates** for having a guest speaker. Be sure there is plenty of time to prepare before any of the dates you name. Get your teacher's approval for speakers and dates.

Decide **who will contact** your first choice speaker to offer the invitation and **how to contact the person**. If by telephone, see *Making a Business Telephone Call*. If by letter, see *Writing a Business Letter to Get Help*. You could make the contact in person. If your first choice is not available, try your second, then third choice if necessary.

When a speaker has accepted your invitation, find out how you and this speaker can most easily contact each other between now and the visit. Decide which one of you will keep in touch with the speaker.

## PREPARE YOUR SPEAKER

- Discuss with the guest speaker **what types of information or experiences** would be most helpful for your group. Ask what he or she could share with you. Discuss ideas for activities in which all the members of your group could participate. Ask the speaker to bring objects or pictures or give a demonstration, if possible. **Find out** what kind of space and equipment your group will need to provide.
- **Agree** on a place, a date, a beginning time, and ending time.
- **Tell** the speaker **about your group**. How many of you will attend? How old are you? What progress have you made on your project? What are the next plans for it? What special needs such as hearing impairment do any of you have?
- Give clear **directions** for the speaker to find the place for the presentation and the place to park.
- A few days before the scheduled visit, call the guest speaker to **confirm** all the plans. Review the date, time, place, equipment, and activities.

## Prepare Your Group

- Remind your group who their guest speaker is and explain all the plans.
- Discuss the rules for polite behavior towards guests.
- Prepare name tags to wear so the guest may call you by name.
- Assign students to teams if the speaker is planning team activities.

## On the Day of the Visit

- Select two or three members of your group to **greet** the guest and **offer help** when she or he arrives.
- Check to see that the room and equipment are ready.
- **Introduce** your guest speaker to your group. Set a good example by paying close **attention**. Offer to help if any opportunity arises. Keep your mind open for ideas for follow-up activities or discussion topics. **Thank** the speaker for visiting.

## After the Visit

- Write and send **thank you notes** to the guest. The notes might mention what you learned, what you liked most about the presentation, and how you will use what you learned. Drawings or photos are always welcome, too.
- Decide with your group what **follow-up activities** you will do. There may be an activity from the day of the visit that you now need to complete.
- **Share** what you learned with other people. If you'd like to put an article about it in the newspaper, see *Writing a Press Release* for advice.
- Now that you've learned how to choose and invite a guest speaker, you may want to repeat these steps. **Invite other guest speakers** who can offer your group an exciting variety of information and experiences.

# SPEAKING TO A GROUP OF PEOPLE

**Goal:** • to inform or convince people through public speaking

**Materials:** • note cards  
• audio-visuals such as very large pictures, or models, or recorded sounds

**Directions:**  
There are two thoughts that may be in your way before you begin. One is, "I can't do this." The other is "I can do this without thinking or planning." You can do this and do it well, but **only** through careful thinking, planning, and practice.

First, **develop** a clear and specific **purpose**. What exactly do you want from your audience after your speech? If you want them to know and use some information, you must know it and how and why to use it. If you want to convince them to do something, you must know exactly what that is. Having a clear purpose in mind helps you to leave out unnecessary ideas which could distract from your main point. They could make your speech too long. Speeches should be shorter than twenty minutes,

**Prepare** to write your speech by learning as much as you can about the subject. You can add to what you already know by using the library, calling, writing, or interviewing experts. Give yourself more information than you need. That extra knowledge will give you the confidence you need as you speak, and may help you glide easily through answering questions afterwards.

Find out about your **audience**. What are their interests? How old are they? How much do they already know? Keep them in mind more than yourself. You don't want to waste their time showing off what you know.

**Organize** what you want to say into an outline. The three main speech parts are **introduction**, **body**, and **summary**. Compare these parts to sandwich parts. Introduction and summary are like two pieces of bread, the body like peanut butter and



jelly. Write down on note cards the important points you want to make in each of these three parts. You'll probably need more note cards for body of the speech than for the other two parts.

In the introduction tell the purpose of your speech. Help people in the audience feel comfortable with you. One way is to share a little something about yourself with them. Doesn't that get your attention and put you more at ease when you're listening?

The body of your speech can instruct, persuade, or inspire. If you'd like to persuade the audience, try appealing to wishes you believe they already have. For example, they may wish to help homeless animals, to enjoy pretty scenery, to gain acceptance, and respect from their community. In the body you might use visual aids or sound effects to help explain some of your points.

In the summary briefly state each of your main points again without supporting facts, illustrations, or explanation. Did you intend your speech to tell how to provide plants that would feed and shelter migrating birds? Then you should repeat the steps for them to follow. You might say, "*Select appropriate plants, location, and planting season, prepare the soil; then plant bushes and trees; water and fertilize responsibly.*"

Give your audience a sign that you are beginning the summary part. You might say, "*In summary I'd like to remind you to..*" If you intended your speech to persuade or inspire, you might say, "I'd like to leave you with this one final thought." You want your final statement to be memorable, maybe inspirational. You want to tell once again the main purpose of your speech.

Practice your speech in front of a mirror or in front of friends or family. It's okay if you don't say the exact same words each time, as long as you remember to include all your main points. Speak clearly and a little more slowly than in conversations. Check on the meaning and pronunciation of words you use. Check the timing to see if you need to leave out minor points.

Now the presentation itself should go well, especially if you follow a few other hints:

- Be enthusiastic and show it!
- Wear clothes that are comfortable, neat, and make you feel you look your best.
- Look at three or four people who have happy, friendly expressions on their faces.
- It's okay to look at your notes sometimes, but do not read your whole speech.

Remember these points. Know your purpose; gather information; write main points on note cards; organize them under introduction, body, and summary; practice your speech. Then present it with confidence. You'll make a fine speech!

# GETTING INTO PRINT

*Goal:* • To produce a publication that communicates a message clearly

*Materials:* • Smooth white paper  
• typewriter or word processor  
• black ink marker or pen for illustrations

**Directions:**  
An English teacher can advise you about the rules for clear, well-organized writing. Always use an outline when you write for publication. Always have your writing checked by someone else for proper spelling, grammar, and punctuation. Your message should be complete, short, and clear. The less your audience has to read, the more likely they will read and remember all. And, the shorter your message the more trees you save.

How you prepare your message for publication depends on what resources you have. The two ways people usually copy pages are photocopying and printing. Most schools and offices have photocopy machines. They are great for making a few copies. Often an adult can arrange for you to make a few copies free. However, if you need many copies of your publication; take your material to a professional printer. It is usually easier, faster, and cheaper.

Decide exactly what you want to print. Determine how many pages there will be. Then talk to the printer. The printer does not need to know about the subject of your publication. You will need to give the following information:

- number of pages
- if there will be photographs
- whether you want a cover
- whether to fold or to staple the publication
- if you want it printed on front and back
- if you want recycled paper
- color of paper

- color of ink
- number of copies
- when you need them

Ask the printer to write down the cost. If the cost is too high, ask the printer to suggest a less expensive way to do the job. The printer will probably be glad to answer your questions. He or she may even explain how the printing press works, if you ask.

No matter how you plan to copy your material, you will need to prepare good quality originals. The printer can tell you how to prepare your pages for printing. Usually the printer suggests using plain white paper and black ink. The printer can print your publication on colored paper and use colored ink if you prefer. You may type your originals, or prepare them on a word processor or computer, or neatly write them by hand. Black and white drawings can help to explain your message, and make your publication look good. If your art is too large for the space on the page, a photocopy machine can make it smaller, or the printer can make it smaller. Photographs generally do not photocopy well, and they can be expensive to reproduce on a printing press.

# “WHO YA GONNA CALL” FOR HELP?

*Goal:* • to locate the best person to call on the telephone to ask for the information or help you need

*Materials:* • telephone book  
• business, school, college, university or government directory  
• telephone

**Directions:**  
List all you need to do for your project; then go through each item and note which will require help.

Working together, name people, companies, organizations, or agencies that might help you. Consult the government sections of the telephone book for some ideas. There are separate listings for city, county, state, and U.S. government offices. If no one knows anyone who could help, maybe a teacher, friend, or relative could suggest someone. Write all the suggestions down.

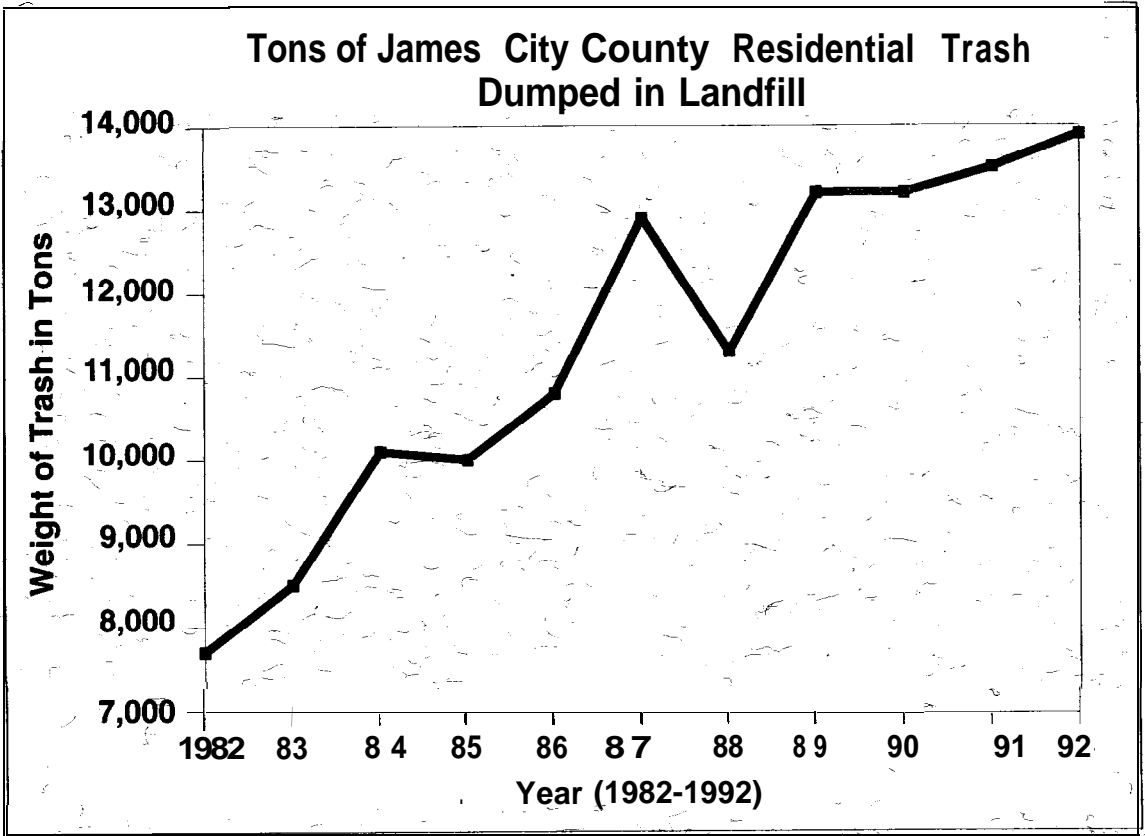
Now **decide** which ones to contact by telephone. You may choose to contact some people by letter, and others in person.

Use directories to **find** telephone numbers for the people in companies, schools, or organizations. Look for directories in your school or public libraries or guidance office or business offices. To find something in a directory, check the table of contents. Some list last names alphabetically (like the white pages of the telephone book), some list by type of service, work, or agency. If you don't find what you need right away, think about different ways the directory might list it.

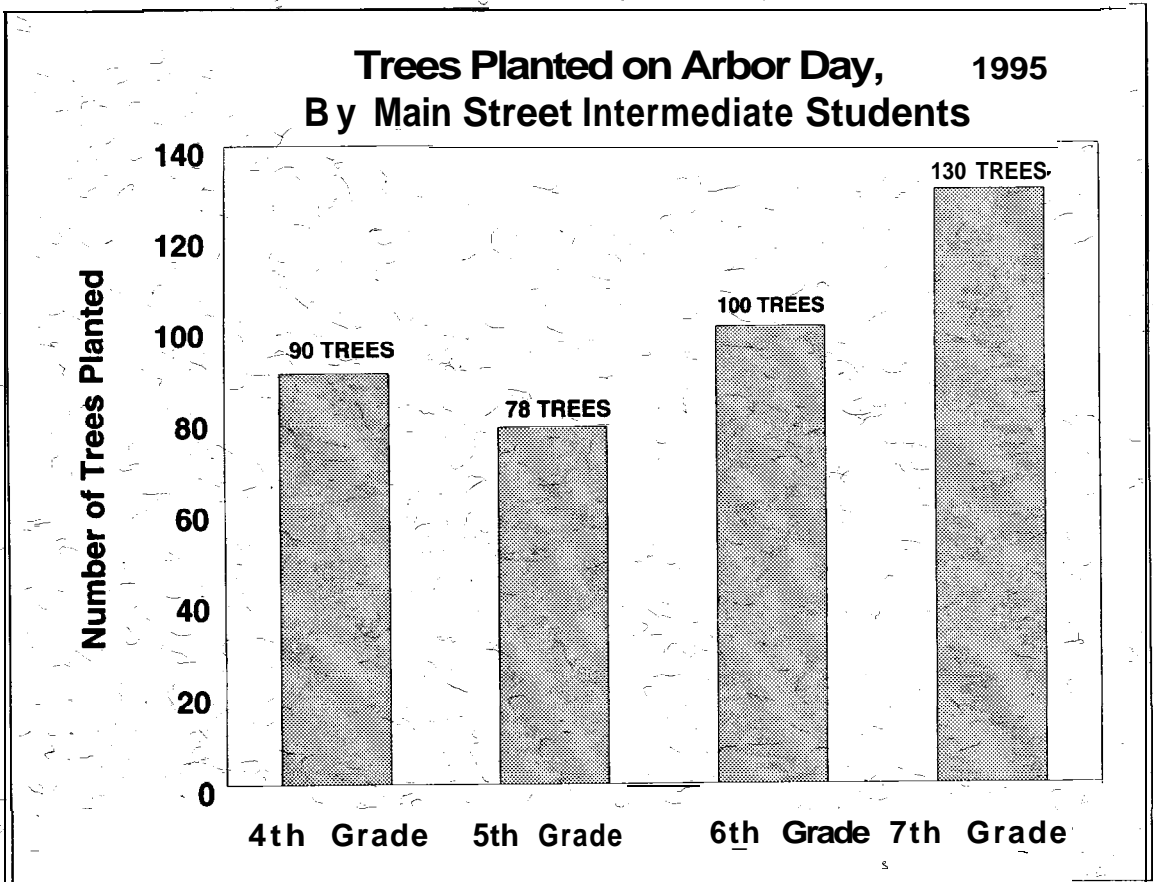
If you know names of organizations or companies but cannot find directories for them, use the telephone book to call the organization. Their receptionist or telephone switchboard operator may be able to tell you the name and telephone number of the best person to talk to for the help you need. If not, ask to be connected to the Public Relations Office, and explain what you need to them.

If you call someone and they cannot help you, ask them to suggest someone who can. Thank them, then write down the name, title, and telephone number they suggested.

Sample Line Graph



Sample Bar Graph



# CHOOSING AND USING GRAPHS

- Goals:*
- to select a type of graph that strongly supports your project
  - to make a graph

*Materials:*

- math books
- for bar or line graph:  
graph paper, pencil & pen,  
eraser, ruler
- additional materials for  
pictograph: construction paper,  
photographs, drawings,  
magazine pictures, glue, scissors
- for pie chart: compass,  
protractor, paper,  
pencil & pen

*Directions:*

A graph sends a powerful message. There are many kinds of graphs. Think about **pictographs, bar graphs, line graphs, and pie charts**. Then talk with your group about which to use. Discuss your purpose for using a graph. Your message may be one you could show with several kinds of graphs.

Discuss what you each like about pictographs, or bar graphs, or line graphs, or pie charts. Choose one.

You may have a message you can send more clearly with one kind of graph than with others. If you want to show change over time, you might choose to use a line graph. The sample line graph shows a change (an increase) in the amount of trash dumped into the James City County landfill from 1982 through 1992, according to the county's Department of Solid Waste Management.

A bar graph could also show this increase. Taller bars would represent the higher number of tons of trash people brought to the landfill during certain years. Each bar's label would show the year it represented. A line graph may show this change or increase over time in a way people can understand better.

You can show two different changes over the same time on a line graph. You might have information about increases in population in James City County from 1982 through 1992, in addition to information about tons of trash. Another line on the

same graph as the sample line graph could show that, too. You must say which line shows the population change, and which shows tons of trash. Maybe you'd use a dotted line for population and a black solid line for the changing weight of trash as in the sample.

Graphs often make us think about information in new ways. Imagine a line graph showing two different changes during the same period and in the same place; We wonder if one change might have caused the other.

Always include a title to tell clearly what your graph shows., It's important to **label** what the vertical axis or edge of a graph represents. Also label what the horizontal axis represents. **What** real measurement does each vertical and each horizontal **unit** represent? You must state that on the graph.

Bar graphs, pictographs, or line graphs can be effective when you want to show how one measured value (or number fact) compares to another., For example, you may want to show the number of trees fourth grade students in your school planted on Arbor Day. You also want to show how that value compares with the number of trees students from each other grade planted. If you make a bar graph; the tallest bar would present the most trees. In the sample bar graph, you can tell which grade planted the most trees. The label under the tallest bar shows it.

Your group might prefer to give the same message with a pictograph. Instead of drawing different size bars, you might draw different size trees. You could even cut pieces of green construction paper, or magazine pictures, or photos: Then glue them to form a collage illustration of different size trees. The tallest tree picture, of course, would represent the most trees planted. Your label under the tallest tree would tell which grade planted the most trees

A pie chart type graph illustrates parts of a whole. You could use one to describe a cleanup project. It could show what part (fraction or percent) of all the trash you collected was recyclable aluminum, what part was recyclable glass, and what part was non-recyclable material

When planning the budget for a project you might make a pie chart. You could show what part of your money you plan to use for each expense. Make a pie chart to show your plan for budgeting your time, too.

Look in math books and ask math teachers for guidance if you have questions about how to make your graph. You can use your math and your art skills when you make a graph.

