

Recycle School Composting

The Environmental Action Program for Schools Guide



The Environmental Action Program for Schools (EAPS) is a program designed to encourage the entire student body of a school to adopt new 'earth-friendly' habits and to develop a more holistic view of the environment through four activities or actions that the school chooses and completes.

Flexibility is built into the EAPS program, enabling schools with varying needs and resources to participate. Virtually any school can proudly be certified as an 'Environmental Action School.'

Less Toxic Waste Prevention

Buy Recycled Environmental Curriculum

Become a Collection Site Letter Campaign



ACKNOWLEDGEMENTS

Contra Costa County Health Services Department

California Department of Resources, Recycling and Recovery (CalRecycle)

San Francisco Department of the Environment

California Department of Education

www.StopWaste.org

King County of Washington State

Contra Costa County Board of Education

U.S. Environmental Protection Agency

Environmental Science Associates

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Model Schools Program

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(800)750-4096

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Environmental Action Program for Schools

The **Environmental Action Program for Schools (EAPS)** is a guide to help schools take actions that will help the environment. Most children and young people want to help preserve the environment and are often eager to make a difference. By participating in this program, they can. To participate, individual schools, including students, teachers and staff, undertake activities that fall in four of the below Action Areas. The activities are designed to help instill new environmentally beneficial behaviors in students and all involved. Schools are certified as an 'Environmental Action School' when they have completed activities that can help the environment in at least four of the Action Areas below.

Schools choose activities from four of the eight Action Areas below:

EAPS PROGRAM ACTION AREAS:

- ✓ Recycle
- ✓ Letter Campaign
- ✓ Buy Recycled
- ✓ Environmental Curriculum
- ✓ Less Toxic
- ✓ Become a Collection Site (fund raiser)
- ✓ Waste Prevention
- ✓ School Composting

Schools can design their own Action Area as a substitute for one or more of the above

IS IT A LOT OF WORK?

The EAPS program is designed to accommodate almost *any* level of effort. Your school's Actions can be extremely simple or very comprehensive and challenging, depending on how much time and energy can be devoted. Some simple and challenging sample programs are outlined below.

PROGRAM BASICS:

The EAPS Guide contains information on how to accomplish each of the eight Action Areas. It also contains detailed information on how to complete the suggested program steps. Please use the **Check-list** in the Toolbox to make this easier.

You may choose to follow these instructions precisely, or you may choose to not follow them at all and simply complete the program in your own manner. However, to become a Certified Environmental Action School, you must complete four environmental activities and submit a completed Certification Report, which is approved.

PROGRAM STEPS (*optional except those in bold*)

- Assemble an EAPS program committee or 'Green Team' (See page 5 and the **Green Team Discussion Points** in the Toolbox)
- Find out how much trash your school is throwing away (See **Waste Assessment** in the Toolbox)
- Choose four Action Areas
- Make plans on how to complete your four Action Areas
- Announce EAPS program to the school community (See **School Announcement** in the Toolbox)
- Hold a kick-off event
- **Implement and document four Action Areas** for the **Required Certification Form** in the Forms
- **Send in completed Certification Report** (See **Required Certification Form** in the Forms)
- Receive and display framed Certificate of Completion and framed Summary of Actions

EXAMPLE OF A SIMPLE PROGRAM:

- **BUY RECYCLED:** Switch to recycled content paper cups, plates and napkins for class parties
- **LESS TOXIC:** Wipe up ants with soapy water instead of spraying them with insecticide first
- **SCHOOL COMPOSTING:** Use chicken wire to make a composting hoop and fill according to composting directions
- **WASTE PREVENTION:** Allow homework written on the back of used paper and set up swap area for used school supplies

EXAMPLE OF A CHALLENGING PROGRAM:

- **KICK OFF EVENT:** Hire a school assembly group with a recycling theme to introduce the EAPS program, and/or allow some student volunteers to perform a skit about the program in which they act out the four actions your Green Team has selected
- **RECYCLE:** Begin recycling cardboard and food cans from the school kitchen
- **BECOME A COLLECTION SITE:** Become a drop-off/collection site for California Redemption Value (CRV) containers including aluminum, plastic and glass
- **ENVIRONMENTAL CURRICULUM:** Do a four-week curriculum for the whole school
- **LETTER CAMPAIGN:** Conduct a school-wide letter campaign to manufacturers
- **HAVE A PARTY:** Have a big Earth Day party commemorating hardest workers and raffle off recycled content sports equipment you bought with some of the CRV proceeds

Regardless of how you achieve Certification, make sure the students know what is being done and why. Involve them at every opportunity. The more involved the students are, the more they will get from the experience. Changes in habits often become second nature with the passage of time. One of the goals of the program is to help facilitate and instill new and environmentally beneficial habits.

AFTER COMPLETION:

Each school, upon completion, will receive a Certificate of Completion framed for display. Along with the certificate, your school's specific actions will be written up in summary form. This is called the Summary of Actions, and it too will be framed for display for all to read and admire.

RE-CERTIFY AGAIN:

Schools can complete four more activities to be re-certified. In this manner, being an Environmental Action School is an ongoing process of improvement.

WHAT DOES IT MEAN TO BECOME AN ENVIRONMENTAL ACTION PROGRAM SCHOOL?

- It means your school is committed to a process of improvement.
- An Environmental Action Program School has taken ownership of its responsibility to the environment and has chosen to act.
- A school that participates in this type of program may experience higher school morale and school spirit.
- A closer camaraderie among students and staff could be cultivated because working together for a good cause, as we all know, makes people feel good about themselves and each other. Some activities in the program could create fond memories that may last for years to come.
- A school that is certified should take pride in their accomplishment.

Perhaps one of the best outcomes of this program may be that kids (and adults) learn environmentally friendly habits. Such habits are needed; especially in children, so they can grow up with these habits ingrained in their behavior and carry them throughout their lives. Everyone benefits when our environment benefits. Our children are the future, and they deserve a clean and plentiful planet.



INSTRUCTIONS

All steps in the program are optional except for completing four Action Areas and turning in a **Certification Report Form**. Your program may run more smoothly and effectively, however, following the suggested steps and using the Checklist in the Toolbox will help too. If any of the steps will hinder your school's progress in completing the program, don't take them!

STEP	PURPOSE AND/OR BENEFITS
ASSEMBLE A GREEN TEAM	<p>Typical Green Teams are made up of around six people. A planning team can help the school decide which Action Areas to choose and which of the other program steps are appropriate for your school. This guide provides detailed information on how to complete each Action Area and all the program steps, but a planning group can work out who will carry out various tasks and details of the program. If responsibility is organized and distributed through a planning group, the program may have better potential for success, with less inefficiencies or roadblocks. See the Green Team Discussion Points in the Toolbox link.</p>
CONDUCT A WASTE ASSESSMENT	<p>You may be unaware of and surprised by what your school is throwing away, and the related costs. Conducting a waste assessment will help you discover this. A waste assessment can be very informative and can lead you to see which Action Areas will be the most effective towards reducing waste and, if there is potential for saving money in avoided disposal costs. You can find a Waste Assessment Tool in the Toolbox.</p>
CHOOSE YOUR FOUR ACTION AREAS	<p>The Action Area pages describe how to complete each of the eight Action Areas. Each Action Area page has been kept to two pages or less for simplicity. If more information is needed in any area, the Resources on page 30 of this guide lists many sources of federal, state and local assistance, or, you can contact your EAPS program coordinator.</p>
MAKE A WRITTEN PLAN	<p>Writing up your school's plans on how the program will be executed can keep you from having to rethink things over again and keep the program streamlined and on track. It can also serve as a reminder as to what tasks each person is assigned. The sample written plan in the EAPS Program Guide can serve as a template.</p>

STEP	PURPOSE AND/OR BENEFITS
<p>SCHOOL COMMUNITY ANNOUNCEMENT</p>	<p>This step lets staff know that the school is participating in the program. Staff awareness of the program is important because the more school personnel who know what is going on, the more support can be 'on the ready' throughout the school. The student body as a whole can be readied to participate in the program and will be made aware of the four Action Areas the school has selected to pursue. Students can be instructed to take the School Announcement home and have it initialed by parents so they can provide support to their student in the program and possibly get caught up in the enthusiasm. One of the goals of the EAPS program is to increase awareness of environmentally beneficial actions, behaviors, and attitudes. Introduction to the program can begin to bring people in the school community into the program and its ideals. You can find the School Announcement in the Toolbox.</p>
<p>KICK-OFF EVENT</p>	<p>A kick-off event can, of course, add lots of strength to the program. Elected officials, media, parents, community organizations, sponsors and local businesses could be invited. See kick off and momentum building (page 24) for kick-off event ideas.</p>
<p>LETTER TO POTENTIAL SPONSORS</p>	<p>Finding sponsors can help pay for costs the program may incur. See page 29 for a sample sponsor letter.</p>
<p>RESOURCES</p>	<p>See the Resources (pages 30-31) for information, assistance and free materials that can help your school develop excitement and share knowledge about reducing waste. Many great federal, state and local resources are available to schools and can be found in this section.</p>
<p>COMPLETE YOUR CERTIFICATION REPORT</p>	<p>This is your chance to tell us all the work you did to Certify in the program. We want you to boast, brag and shine in your report. The information in the report will be used in the Summary of Actions you receive. Since the Summary will be for display at the school and ready to copy and disburse to sponsors, parents, local officials and helpers in the EAPS program, make sure not to leave anything out. Go to the Toolbox to find the Certification Form.</p>
<p>CERTIFICATE OF COMPLETION AND SUMMARY OF ACTIONS</p>	<p>When you receive your Certificate of Completion and Summary of Actions, hang them up in a prominent place. Be proud. Announce over the intercom system that the school is a Certified Environmental Action Program School and read the Summary of Actions to all. Encourage students, staff and helpers to revel in the accomplishment - the Earth is a better place due to their efforts!</p>





FORM A GREEN TEAM

It is very helpful to establish a ‘**Green Team**’ or steering committee so the responsibilities of the program can be shared and to keep the program on track. The team can be responsible for completing all necessary tasks that will lead to Certifying your school as an Environmental Action Program School. However, team members don’t have to be the only ones carrying out responsibilities and should be free to allocate responsibilities and tasks to students, parents and staff outside the team, if they wish. Share the **Green Team Discussion Points** in the Toolbox with your team.

Most successful **Green Teams** include these key members: a school administrator, a secretary/purchaser, a food services supervisor, a custodial services supervisor and one or more teachers. Keep in mind, in almost any group of people there are likely to be environmental enthusiasts who will likely make great members on your Green Team.

The Positions

You should attempt to get a volunteer on the **Green Team** from each category below:

1. Secretarial / Purchaser: A person who has experience with or has access to the purchasing process at school. Depending on your four Actions, your school may need to purchase particular items. For instance, if you are switching to vinegar and water instead of a toxic spray cleaner for the “Less Toxic” Action Area, you may need to purchase empty spray bottles, labels, permanent markers and vinegar. If your Action is, Buy Recycled, then a person familiar with the purchasing system can be very helpful because at times, finding appropriate and available recycled content items can be challenging.

2. Kitchen: Someone from the kitchen, preferably supervisory, who can provide input on how the kitchen can participate. Their efforts are needed when: choosing where to place collection bins in eating areas and in the kitchen; coordinating the separation or sorting of recyclables and/or compostables: replacing items such as small condiment packets with large condiment servers; educating and informing other kitchen personnel of the logistics of any cafeteria or kitchen program. A high percentage of a school’s recyclable materials are generated from kitchen related activities. These materials include cardboard boxes, steel cans, plastics, glass and food discards.

3. Custodial: Custodial staff involvement may be crucial if your Action Area is Recycle or Less Toxic. The members of this staff will be the ones actually handling the recyclables or using the less toxic products in most cases. They will be learning and incorporating new job procedures. Having a custodial supervisor on your **Green Team** is very important in this case because he or she can be responsible for explaining a new routine, and seeing the transition through.

4. Teachers: Teachers can provide the classroom perspective and help develop the logistics of classroom involvement. They can help decide where bins should be placed in the classroom. They can help decide when a kick-off event should take place (if you have one) so it won’t interfere with other classroom itineraries or activities. They can provide feedback on what they feel can be accomplished in the classroom to attain Certification.

5. Administrative: A school administrator on the team can be quite beneficial. An administrative **Green Team** member can assure the school’s ongoing commitment to achieving success in the program. They can also help smooth out bumps and snags in program implementation that can be more easily addressed by an administrator.

6. Green Team Students: Student **Green Team** members can be responsible for collecting recyclable materials from the classrooms and offices (if custodians are not) or help educate other students in the school about program activities. Some student **Green Team** members could be responsible for going around to each classroom in pairs to introduce the EAPS program or a component of it such as one Action Area. Student **Green Team** members can include representatives from one, a few, or all classes or can be made up of an entire existing club or class such as a science class or environmental club. Student **Green Team** members can be carried for their own ideas on what they would like to do for the EAPS program. Or, maybe you'd like them to be on hand just to run errands.

7. Parent Volunteers: Parents can make excellent **Green Team** members and **Green Team** helpers. The PTA might provide a good source for parent volunteers. Your school's PTA could even create a position such as, Environmental Chairperson, to take an annual post on your **Green Team**.



Team Responsibilities

- ✓ Determine four Action Areas (can conduct waste assessment using the **Waste Assessment Tool** to help decide).
- ✓ Develop plans on how to complete the four Action Areas (see sample written plans on page 26).
- ✓ Announce, introduce and educate staff and then students about the EAPS program and your Action Areas (See sample **Announcement** using the Toolbox).
- ✓ Put your plans into action and complete your four Action Areas.
- ✓ Fill out the **Certification Form** and send it in (preferably well before Earth Day in April).



Tips for the First Meeting

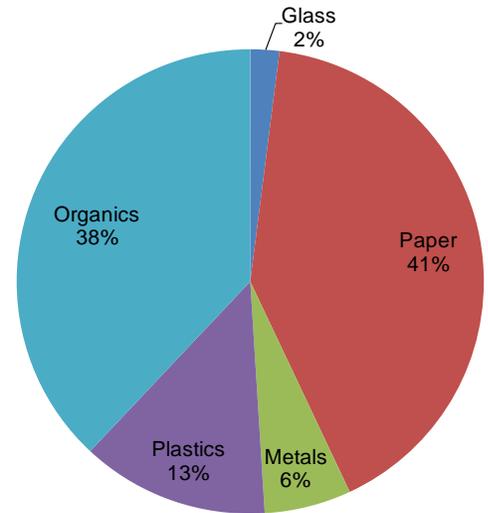
- ✓ Determine how often and when the team should meet.
- ✓ Include a history of school waste management, recycling, and environmental activities.
- ✓ Principal should provide opening remarks to show his or her support for the program, to encourage optimal participation throughout the school, and discuss the benefits.



CONDUCT A WASTE ASSESSMENT

Knowing what you have is the first step to knowing what to do about it. A waste assessment can be rich with information. Most schools generate basically the same types and percentages of wastes (see pie chart). However, specific information about *how much* and *where* waste is being generated can guide you to the most effective waste reducing activities.

The following five steps can help you evaluate your school's needs to get the most 'bang for your buck' from your efforts and resources.



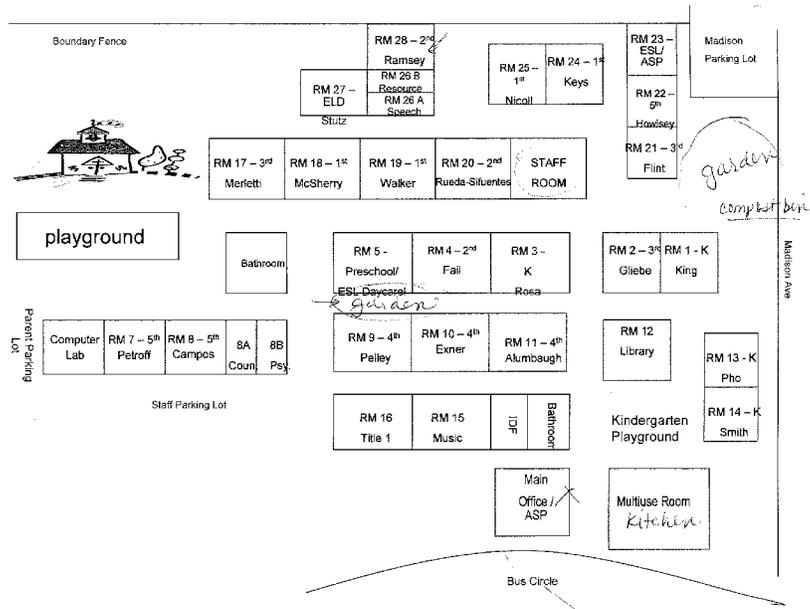
STEP ONE: Determine how much your school is spending on waste removal.

Using information from the school's most recent garbage bill, begin to fill out the **Waste Assessment Tool** found in the Toolbox.

STEP TWO: Prepare for your walk through.

Be sure to bring or do the following prior to your walk through:

- ✓ Clip board and writing instrument
- ✓ **Waste Assessment Tool**
- ✓ If possible get a copy of a school site map (or draw your own) to mark where waste cans, recycling bins and dumpsters are located (see sample at right)
- ✓ Ask one or more custodial to staff accompany you on the walk through for assistance in locating all the trash cans, recycling bins and dumpsters on site.
- ✓ If trash is in clear bags it will be easier to see what is in them. If clear trash bags aren't used at your school, you may wish to ask custodians to use clear bags for a short period of time (during the week you are completing this Waste Assessment).
- ✓ Try to schedule the walk through at a time when all or most receptacles will be full. Custodial staff or your garbage company should know when this is. If you do your walk through after the trash has been collected, there won't be anything to see!



STEP THREE: Site walk through.

On the walk through, try to be as thorough as possible. Visit every trash can, recycling bin and dumpster. While doing so, fill out the **Waste Assessment Tool**. Ask the custodian or personnel for each area to tell you what kinds of wastes are typical of that area. Mark on the school site map the location of each trash can, recycling bin and dumpster by writing a 'T', 'R' or 'D' respectively, or use some other system you like. Peek inside each receptacle to see what is inside. Make notes accordingly on the **Waste Assessment Tool**. Fill out each column as best you can. The column farthest to the right, 'Possible waste reducing activity that could be started or expanded', can be filled out during or after the walk through.

STEP FOUR: Determine what should be targeted for reduction.

A good choice would be one or more materials that are generated in large quantity AND have the potential to be reduced, reused, recycled or composted or switched for something less toxic. Look over the Action Areas to see if there are some 'natural matches'. For example, if in your waste assessment you see significant amounts of:



Soda cans and bottles...then consider the 'Become a Collection Site - Fund Raiser' Action Area.

Grass and yard trimmings... then consider the 'School Composting' Action Area.

Toxic products containers... then consider the 'Less Toxic' Action Area.

Paper products...then consider the 'Buy Recycled' Action Area and buy paper products with recycled content.

Ketchup packets... then consider buying ketchup in large serving containers for the 'Waste Prevention' Action Area.

Your waste assessment could even be used to decide which manufacturer staff members could write to for the Letter Campaign Action. For example, you could write to a manufacturer if you see that a product could have been made differently to make it easier to recycle, break less easily, or could have been packaged with less or recycled packaging.

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: \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ **DON'T FORGET** \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$:
:
• As you implement any waste reduction or recycling activities, you may benefit by reducing the
• amount you pay for garbage hauling services. If you have started recycling one or more materials,
• it may be possible to reduce your garbage service accordingly. For example, if you started recycling
• cardboard boxes and tin cans from the kitchen area, say 1 cubic yard of cardboard per week and
• 2 cubic yards of tin cans per week, this may allow you to reduce your weekly garbage service by
• 3 cubic yards. In many cases **this could save around \$100 per a month...or \$1,200 per year.**
:
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ENVIRONMENTAL CURRICULA

-ACTION AREA #1-

Purpose/goal: School lessons learned can benefit a student for a lifetime. Environmental lessons learned can benefit the environment for a lifetime. Students should come away from this Action Area with a new appreciation and awareness of how the environment can be damaged, improved or preserved by human actions.

To satisfy this Action Area: Choose and finish at least one environmental curriculum. Your curricula can be any from this list or one you already have or want to get. **All classrooms** must complete one unit or activity from an environmental curriculum. However, all classrooms do not have to complete the same one. In your Certification Report, make sure to list the name of each curriculum each class completes. The name of the curriculum each classroom completes must be recorded in the Certification Report to receive credit for completing this Action Area. You may wish to designate a coordinator to keep track of this information. This same designee could also be in charge of collecting teachers' choices of curricula and orchestrate the ordering of materials.



The Education and the Environment Initiative (EEI) Curriculum: (Offered by California Department of Resources, Recycling and Recovery) California is poised to lead the nation in environmental literacy with the Education and Environment Initiative (EEI). More can and should be done to understand our relationship with the environment, and we believe the best place to begin is in California's classrooms. With education and a thriving economy at the forefront of the state's priorities, California's landmark EEI Curriculum is a national model designed to help prepare today's students to become future scientists, economists, and green technology leaders.

The K-12th grade curriculum is comprised of 85 units teaching select Science and History-Social Science academic standards. Each EEI Curriculum unit teaches these standards to mastery using a unique set of California Environmental Principles and Concepts.

The curriculum was created to bring education about the environment into the primary and secondary classrooms of more than 1,000 school districts serving over

6 million students throughout California, the EEI Curriculum is the result of a multi-agency education and environmental partnership. Current key partners include the State Board of Education, the Office of the Secretary for Education, the State Department of Education, and the California Natural Resources Agency.

Grades: K-12 | **Cost:** Free

Contact: EEI@calepa.ca.gov, (916) 341-6762

Curriculum Location: www.calepa.ca.gov/Education/EEI/Curriculum/Default.htm

Closing the Loop: (Offered by California Department of Resources, Recycling and Recovery) Closing the Loop is a compilation of 50 lessons to help students discover and nurture an environmental ethic and stewardship for natural resources. The activities focus on solid waste and environmental awareness topics including landfills, recycling, packaging, resource conservation, waste prevention, worm composting, and more. Each lesson encourages students to explore their natural environment, identify waste management issues, and engage in personal and community action.

Grades: K-12 | **Cost:** Free

Contact: CalRecycle (916) 341-6769

Curriculum Location: www.calrecycle.ca.gov/Education/curriculum/CTL/TOC.htm

Let's Reduce and Recycle - Curriculum for Solid Waste Awareness: The United States Environmental Protection Agency (EPA) produced this 144-page curriculum with 36 environmental activities.

Grades: K-12 | **Cost:** Free

Contact: EPA Hotline at 1-800-424-9346. Ask for document # EPA/530-SW-90-005 or print PDF.

Curriculum location: <http://nepis.epa.gov/Exe/ZyPURL.cgi?Dockey=10001A5U.txt>

"Earth Works" Environmental Program – Making Progress and Facing Problems: (Offered by the Contra Costa Times) Developed for the Contra Costa County area, the curriculum is offered each spring and focuses on local issues, linking the student to the community. The goal is two-fold: 1) to communicate the environmental information contained in the booklet, and 2) to make students, teachers, residents, and businesses aware of the resources available from various local government agencies. The program offers free newspapers, a Teacher's Guide and age-based curriculum.

Grades: K-12 | **Cost:** Free

Contact: Contra Costa Newspapers in Education program (866) 444-READ

Project Learning Tree: You can join an international network of more than 500,000 formal and non-formal educators using PLT materials. Aside from the Energy & Society Kit, the Biodiversity module, and Billy B Sings About Trees CD, you are required to participate in a professional development workshop in order to receive the PreK-8 Activity Guide, or any of the Secondary Modules. PLT workshops are organized through our network of sponsors, coordinators, and facilitators. In the United States, more than 70 coordinators work with a cadre of over 2,500 volunteer facilitators to conduct workshops in their local communities.

Grades: K-12 | **Cost:** Free to teachers attending a workshop

Contact: (202) 463-2462 or visit their website at www.plt.org

Alameda County Waste Reduction and Recycling: (Offered by StopWaste.Org) Doing the 4Rs - A Classroom Activity Guide to Teach Reduce, Reuse, Recycle and Rot includes 24 California standard-based lessons and five thematic units developed for educators teaching fourth and fifth grades.

Grades: 4th and 5th | **Cost:** Free

Contact: www.stopwaste.org

Curriculum Location: <http://stopwaste.org/home/index.asp?page=1078>

The Worm Guide: A Vermicomposting Guide for Teachers: (Offered by CalRecycle) In a school setting, vermicomposting (worm composting) can set the stage for a variety of interdisciplinary activities that can utilize school cafeteria waste for the worm bin, can provide a variety of interesting experiments while maintaining the bin in the classroom and can culminate in a school or classroom garden using the finished product. Many of these ideas, including worm facts, classroom activities, lab activities, case studies and more are contained in CalRecycle's teaching guide to worms. Workshops are available for teachers.

Grades: K-5 | **Cost:** Free

Contact: CalRecycle (916) 341-6769 for more information.

Curriculum Location: <http://www.calrecycle.ca.gov/Education/Curriculum/Worms/>

School Garden Websites: www.calrecycle.ca.gov/Education/Links/Garden.htm

Composting Across the Curriculum: (Offered by Marin County) This teacher's guide to composting uses activities to connect composting to social studies, language arts, math, science, fine arts, music and physical education. 18 pages.

Grades: 2-12 | **Cost:** Free

Contact: Marin County Office of Waste Management, 10 N. San Pedro Road, Suite 1022, San Rafael, CA 94903-4155, (415) 499-6647 for more information.

Curriculum Location: <http://mcstoppp.org/acrobat/Composting%20Curriculum.pdf>

Composting Curriculum: Wastes to Resources: (Offered by Cornell University) An outdoor composting guide including posters and activities.

Grades: K-12 | **Cost:** Free

Contact: Media Services Distribution Center, 7 Cornell Business and Technology Park, Cornell University, Ithaca, NY 14850 for more information.

Curriculum Location: <http://cwmi.css.cornell.edu/compostingwastestoresources.pdf>

Natural Science: Heather Farms The Garden at Heather Farms offers a wide variety of science and environmental education programs for preschool through 5th grade students. Programs are designed to support your classroom curriculum and reinforce concepts from the California Science Framework. Call to request a brochure describing the 15 different classroom programs and fieldtrips.

Grades: Preschool & K-5 | **Cost:** Most sessions are \$100 unless subsidized locally, call to find out.

Contact: The Gardens at Heather Farm (925) 947-6712

Curriculum Location: www.gardenshf.org/youth-programs.html

Pathways Through Resources - A Case Study - Oil: (Offered by California Department of Resources, Recycling and Recovery) A series of 18 companion lessons derived from the Earth Resources--A Case Study: Oil curriculum targeted for upper grade and high school students. Aligns to the California Science Content Standards for specific grades/courses. Published by CalRecycle in partnership with the K-12 Alliance.

Grades: 6 - 12 | **Cost:** Free

Contact: CalRecycle (916) 341-6306

Curriculum Location: www.calrecycle.ca.gov/publications/Schools/56001005.pdf

NatureBridge: Interactive presentations and curricula on global environmental issues for children and youth. The program strives to provide students with the knowledge and skills needed to investigate and evaluate environmental problems, make informed decisions, and actively participate as environmentally responsible citizens. Bilingual. Programs take place in Sausalito or at their Yosemite school site.

Grades: 3-12 | **Cost:** Sliding scale available

Contact: Pacific Environmental Education Program, 1055 Fort Cronkhite, Sausalito, (415) 332-5771 x 15

Website: <http://naturebridge.org/headlands/school-group-programs>

WASTE PREVENTION

-ACTION AREA #2-

Purpose/goal: The purpose of this Action is to learn why waste prevention is so important (see paragraph below) while enacting waste preventing measures at school.

To satisfy this Action Area: Two waste prevention activities must be accomplished (many are very easy). You may choose from the activities below or think of your own. When completing activities, make sure students are involved and know which waste prevention activities are taking place at your school. Students should be well aware of the impact their school's actions may be making.

Waste prevention is very important. You have heard the slogan, 'Reduce-Reuse-Recycle'. Reduce comes first in the slogan because by preventing the creation of waste, the environment experiences much less of an impact. For example, if the school cafeteria were to stop offering drinking straws, then fewer natural resources would be extracted from nature, processed into a product and transported. This is best for the environment. 'Reuse' is second in the slogan. If straws could be sterilized and reused, this would lessen the impact on the environment a great deal, but not as much as eliminating straws because natural resources are still being used and eventually thrown away or recycled. Third is 'Recycle'. Recycling the straws would mean transporting the straws to a facility to be used in manufacturing a new product. This avoids the extraction of additional resources and is far better than landfilling the straws, but the environmental impact is greater than Reducing and Reusing.

Waste prevention can be accomplished by Reducing or Reusing. Below are some ideas

CHOOSE TWO or you can think up your own:

- ✓ Donate unwanted computers or get used computers for your school. Call the County Recycling Hotline for information on used computers at (800) 750-4096.
- ✓ Reuse manila envelopes.
- ✓ On handouts that take up only one side of paper, use a half sheet instead.
- ✓ Use cloth dishtowels in kitchen and teachers lounge and classrooms.
- ✓ Begin using cloth towel rolls instead of paper towels in school lavatories.
- ✓ Have a waste free lunch day where all students and teachers bring reusable containers for entire lunch.
- ✓ Allow students to submit homework on the backside of used paper.
- ✓ Use refillable coffee cups.
- ✓ Purchase solar calculators instead of battery operated ones for students to use.
- ✓ Hold an art contest or art show where students create art out of discarded materials.
- ✓ Obtain surplus office supplies and/or equipment from a government agency.
- ✓ Set up an area in the lunchroom for unwanted food items such as fruits and drinks instead of throwing them away.
- ✓ Maximize use of overhead projector and blackboard to minimize use of dittoed information (paper output alternatives).
- ✓ Have a school swap meet or rummage sale.
- ✓ Set up a table at end of semester for students to donate unwanted pencils, notebooks, etc. Bring these materials out at the beginning of the next semester for students to use.
- ✓ Use reusable flatware, dishes and cups for classroom parties.
- ✓ Switch to reusable trays, flatware, dishes or cups in the cafeteria.
- ✓ Attempt to minimize food waste by wise food management. Example, if the kitchen manager notices a certain item doesn't get eaten, stop serving it.
- ✓ Purchase or make reusable displays that can be borrowed or traded with other teachers.



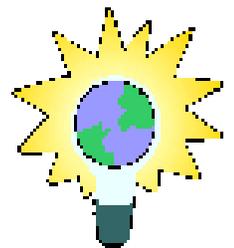
- ✓ Purchase items that are easy to repair.
- ✓ Eliminate straws from the cafeteria.
- ✓ Eliminate paper cups for fruit whenever possible.
- ✓ Contact Calmax, California's material exchange program. Obtain free or low cost materials or list unwanted reusable items from your school. Go to www.calMAX.org or call (877) 520-9703.
- ✓ Purchase goods with minimal or no packaging. Ask product vendors to ship items with less packaging if you notice over packaging.
- ✓ Grasscycle (leave short grass clippings on lawn instead of throwing them away). Call the County Hotline at 1-800-750-4096 for information and a free video or visit www.ccrecycle.org.
- ✓ Donate unwanted items at school for reuse.
- ✓ Utilize pump containers instead of individual packets for condiments in cafeterias and snack bars.
- ✓ Buy the largest containers of supplies to minimize waste.
- ✓ Use refurbished furniture.
- ✓ Duplicate handouts using both sides of paper and avoid printing extra handouts.
- ✓ Use erasable lapboards for classroom work.
- ✓ Place wall decorations directly on walls or bulletin boards without paper linings.
- ✓ Conduct a waste prevention poster contest. Specify that posters must be made from used materials.
- ✓ Hold a 'Creative Reuse Extravaganza' at your school (see the 'KICK-OFF and MOMENTUM BUILDING IDEAS' page).
- ✓ Begin a policy to purchase arts and crafts supplies from second hand stores such as the East Bay Depot for Creative Reuse in Oakland. Go to www.creativereuse.org or call (510) 547-6470.
- ✓ Take books the school no longer uses to non-profit organizations such as Books for the Barrios in Concord, who are set up to take used books from this country to countries that can't afford books. Go to www.booksforthebarrios.org for more information.
- ✓ Set out a bin for unwanted gym clothes. A volunteer can prepare clothes for give-away at various school functions such as at orientation before the beginning of the school year, at your school's Earth Day celebration, PTA meetings, or in the school office year around.
- ✓ Set up a collection system for foam packing peanuts. Collect them in clear plastic bags or leave them in cardboard boxes. Get a volunteer to drive them to a packaging store (e.g. Mail Boxes Etc. or the UPS Store) for reuse. Call first.
- ✓ Provide staff training on waste prevention. Educating staff on cost savings/benefits will empower them to identify alternatives.
- ✓ Award or recognize waste prevention efforts.
- ✓ Set up monthly "No-Waste Days" where the object is to create as little waste as possible. Eventually, the event may turn into habit.

- ✓ Keep a box for used paper in each classroom and office to use other side for scratch paper, homework or staple together to make note pads.



Need more ideas?

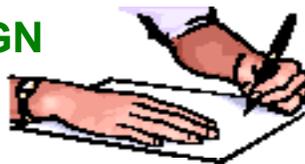
Hold a waste prevention contest where students submit their own waste reduction ideas. The best ideas can be implemented to fulfill your school's waste prevention requirements. Recognize the winners at your celebration for becoming a Certified Environmental Action School.



Waste prevention activities can be more successful with support from the top. Top administrators could have a waste reduction resolution or policy that provides support for waste prevention and recycling practices to be implemented at the school. For a sample, contact your EAPS program coordinator.

LETTER CAMPAIGN

-ACTION AREA #3-



Purpose/goal: To help students learn how to make a difference in their global community and increase awareness of the environmental impact related to the products they use.

To satisfy this Action Area: Students should write a letter to a company requesting an environmental improvement. Staff can write letters too if they wish! A copy of this page can be shared with students to give them ideas.

Have you ever bought something and felt it had too much packaging? Most people probably have. Have you ever looked at a newspaper or book and wondered if the ink they used was harmful to the environment? Probably not. How about this one; have you ever written to a manufacturer to ask them to change something they do to benefit the environment? After this assignment, that's what you will have done. Most people feel they have no voice when it comes to decisions big companies make. The truth is, you do have a voice, and manufacturers want to hear your ideas, comments and suggestions. They make money because they sell products you want to buy. So if you tell them you want better environmental practices in their products, there is a good chance manufacturers will take it into consideration.

Your assignment today is to go shopping! Find a product you like that has room for improvement in an environmental sense. You don't have to buy it. Find the name and address of the company and write it down. Make a note of what you think could be changed about the product or packaging that would make it better for the environment. Later, write a short letter to the company on your own piece of paper or stationary.



INCLUDE IN YOUR LETTER



- Name of Manufacturer or Company, Address, City, State & Zip
- Your Suggestions, Comments or Ideas
- Your School's Name, Classroom Number, Address, City, State & Zip



Here are some questions to think about when trying to find ideas:

Could it have paper packaging instead of plastic?

Could it have less packaging?

Can plastic foam be replaced?

Could they make the product so it could easily be repaired instead of replaced when it breaks?

Could they use any non-toxic materials in place of toxic ones?

Could the item be made using recycled paper, recycled plastic or other recycled material?

Ask if the manufacturer has a recycling program at its plant. If they don't suggest they start one.

Is the packaging easily recyclable?

Could the company be using soy-based ink?

Could packaging be eliminated altogether?



RECYCLE

-ACTION AREA #4-



Purpose/goal: Recycling helps save natural resources by breaking the cycle of “extract-use-discard” to which our society has become accustomed. By learning to place items aside for recycling, people not only reduce demand for natural resources and the energy used to extract, process and transport them, but also change their habits and perhaps their values. By realizing that materials we use can and should be reduced, reused and recycled to keep our home, the Earth, healthy and vibrant, we are taking a step toward breaking the “extract-use-discard” cycle. The primary goal of this Action Area is for the students to be actively recycling by physically putting aside the materials; in the hopes that this leads to recycling becoming second nature for them.

To satisfy this Action Area: Your school must institute a recycling system for at least one new material. Make sure students know what is being recycled and what a difference it is making. Explain that recycling conserves natural resources and energy and reduces water and air pollution. Also, describe the types of new products that could be made from the material(s) when they are recycled.

What’s recyclable at a school?

Different cities and different areas of the County all have varying recycling programs available. To find out what’s recyclable in your area:

- 1) **Call the County Recycling Hotline at (800) 750-4096** to find out if materials from your school can be recycled locally.
- 2) **Go to the County Reuse and Recycling Guide** at www.cccrecycle.org.
- 3) **Contact local waste/recycling hauler(s)** (see page 30 for contact information) to see what recycling options they offer.

The materials listed below are often recycled at schools:

- ✓ Aluminum
- ✓ Cardboard
- ✓ Drink boxes/milk cartons
- ✓ Glass
- ✓ Newspaper
- ✓ Office paper
- ✓ Plastic
- ✓ Steel cans

From shop classes and school maintenance areas:

- ✓ Metal waste
- ✓ Motor oil/antifreeze/solvent
- ✓ Wood waste

\$\$\$\$ Don't forget, some items can be turned in for cash such as California Redemption Value (CRV) containers and scrap metal.

Aluminum:

Bins for aluminum need to be placed in areas where canned beverages are consumed and next to vending machines. *

Cardboard:

Flatten cardboard and place in bins. *

Glass:

Put collection bins where glass is generated; kitchens, offices, lunch areas for students and staff. *

Steel:

Steel cans are usually only generated in the kitchen so put bins there. *

Newspaper:

Put bins where newspaper is generated, like offices or teachers lounge.

Paper:

Paper bins will need to be in each classroom, next to all copy machines, and near or in all offices. *

Plastics:

Bottles made from plastic #1 and #2 are the only plastics accepted by many recyclers. Place bins where these plastics are generated such as in the cafeteria, offices, lunch areas and kitchen. *

Paper is a good material to recycle at schools because it is often about 40 % of the waste generated by schools. Paper is one of the only “recyclables” that are made from a living thing and recycling it prevents destruction of living trees.

FROM UNTREATED SHOP CLASSES AND SCHOOL MAINTENANCE AREAS:

Motor oil/antifreeze/solvent: Collect auto shop materials according to recyclers' specifications. *

Wood: Wood scraps may be collected in boxes or bins and taken to a wood-recycling center. *

Scrap metal: Metal scrap and irreparable metal items (desks, chairs, pipe, heater housing), can be collected and taken to a scrap metal recycler. *

*Ask your local recycling service to give you specifics on preparation and collection.

What should YOUR school recycle?

If you have performed a waste assessment for your school (see the [Waste Assessment Tool](#) found in the Toolbox) you will have a good idea of what to recycle. If not, look through your waste cans and dumpsters at school. See what's in them. You may see trends of certain recyclables in certain areas; paper in classrooms and offices; drink containers in eating areas, tin cans from the kitchen area etc. Determine which recyclables are most abundant.

While contemplating where to place recycling bins, keep in mind, if it is more work to go to the recycling bin (such as longer trip), than to the trash can, then materials might not get recycled, so **place bins strategically**. Be aware that inadvertent placement of non-recyclables in collection bins can contaminate recyclables. Clear signs, smaller openings on bins, education of students and staff, periodic reminders and locking outdoor bins all can help.

Don't become disheartened with obstacles you encounter, for problem solving assistance please call your EAPS program coordinator.

The custodial supervisor on your Green Team will most likely be responsible for instructing the custodial crew on how recycling will be set up. ***Stress to the crew that they are not handling more materials, just handling them in a different way.***

See if you can start a fund for students: Ask your principal or school administrator if the school can use a portion of any savings or earnings the Environmental Action Program for Schools generates for a fund for the students.

Prior to starting or expanding your school-recycling program find the answers to the following regarding recycling services:

- ✓ Which materials do they accept?
- ✓ What recyclables can be mixed together?
- ✓ Is there a minimum weight or volume required for collection?
- ✓ Do they provide outdoor recycling dumpsters for free or is there a charge?
- ✓ Do they collect recyclables for free? If not, what is the charge?
- ✓ Do they provide recycling bins/totes for inside the school?
- ✓ Who is responsible for keeping bins/totes/recycling dumpsters clean?
- ✓ Can the school get credit for the value of the materials?
- ✓ Do they provide education and training?
- ✓ Do they include signs, labels or teaching materials?
- ✓ Will they provide data on amounts of materials recycled from the school?

Make sure you establish:

- ✓ Pickups. Identify the number of pickups desired each week/month.
- ✓ Bins. Determine how many bins are needed.
- ✓ Reports. Specify whether you want monthly reports of all tonnage and/or weight tickets.
- ✓ Contamination. Find out what happens if loads are contaminated. (e.g. Will the recycling service refuse the contaminated load?)

If you have difficulties establishing a recycling collection program, please call your EAPS program coordinator.

BECOME A COLLECTION SITE \$\$\$\$ (FUND RAISER) \$\$\$\$

-ACTION AREA #5-

Purpose/goal: The purpose of this Action Area is to implement a collection system for bottles or cans that have a California Redemption Value and turn them in for cash to raise money for your school's Environmental Action Program or other causes.

To satisfy this Action Area: Your school will need to set up a collection area for California Redemption Containers and redeem the collected containers for money.

California Redemption Value (CRV) beverage containers (those that require a deposit when purchased) can bring in money to fund activities in the Environmental Action Program for Schools or for other special programs your school may have.

There are many different sizes and types of CRV containers. Basically, any ready-to-drink beverage container will require a CRV deposit and have a redemption value.

Many people are eager to recycle and are willing to take their CRV containers to special drop-off locations. The recyclers who utilize your drop-off site may more aptly be referred to as "donators", inasmuch as they are willing to forfeit their CRV deposit for your school.

With clear, simple instructions and convenient, well-designed sites, recyclers (or donators) will readily separate, prepare, and deliver market-quality materials.



LOCATION, LOCATION, LOCATION

The old real estate maxim applies to drop-off sites too. Donators are more likely to participate if drop-off sites are easy to access. The drop-off site should be clearly marked, attractive, and easy to reach. Try to place facilities in well-known, heavily traveled areas. Distinctive signs will help direct people to the site.



Plan the site layout with convenience in mind. Since donators may bring bags and boxes to carry recyclables, misplaced trash may be mixed in with recyclables. To avoid this, place clearly marked trash containers beside the recycling bins for non-CRV materials. Of course, if your school recycles cardboard, you can ask people to put the boxes in a space designated for cardboard near your CRV drop-off bin(s).

Residents and businesses nearby may welcome a well-designed and well-maintained drop-off location. Most people consider about two miles a convenient driving distance to a drop-off site. Some donators (elderly or businesses that don't have time) may wish to have CRV containers picked up. Your school may wish to consider this option.

The public's understanding of material requirements can make or break a drop-off program. People should be thoroughly familiar with the specific containers wanted before they arrive at the site or they may deposit unacceptable materials just to avoid taking them back home or to more appropriate sites for disposal.

Homes and Businesses. Leaflets or posters for homes and businesses will help people select and prepare containers correctly. Make sure people know what you accept and that you don't accept any other containers. If you wish the containers to be rinsed with water first or crushed you need to state this. Include hours of operation on your flyer. Additionally, you may want to include a small informative section on the flyer extolling your school's participation in the Environmental Action Program for Schools and that this activity is filling a requirement and earning money to support this or other programs.

Use simple, active language in instructions. A list or graphic showing a "Yes" container and "No" container can be particularly helpful. Consider including a telephone number to call for further information or to schedule a pick up if you offer them.

CLEAR SIGNS AT THE SITE



When people arrive at the drop-off site, they need to know exactly what to do. They'll generally be in a hurry so signs, graphics and instructions should be visible, brief and easily understood.

Line drawings communicate better than photographs because they emphasize the important information and eliminate distracting details (shadows, backgrounds and so on).

- ✓ Set up your bins so that they are user friendly. Many people find lids heavy and awkward to hold while they place materials inside the bin. This encourages them to “bulk unload” (to toss recyclables into the bin in the boxes or bags used to transport them). Bulk unloading introduces unwanted materials in your bins that take extra time to remove.
- ✓ Cutting a hole in the collection bin lid of the appropriate size to accommodate the item(s) eliminates the need to lift and forces recyclers to deposit containers one piece at a time. To further discourage bulk unloading, lock the bin's access door. At a school it is recommend that the hole also be sealed and locked after hours. Passers-by may drop trash or other unwanted items in the bin.
- ✓ Keep the site clean and tidy. Over-flowing trash and collection bins attract pests, become unsightly and discourage participation. If necessary, clean the site daily and arrange for more frequent trash pickups and recyclables removal.
- ✓ It is strongly recommended to start with only one material. The material best suited for school collection is aluminum. Cans can be crushed down to save storage space and they don't break. On the other hand, when considering plastic, it doesn't crush down as small. You'll need more storage space and each trash bag will weigh only 3 pounds. Glass has the potential to break of course; a trash bag full of glass bottles weighs 40 pounds. You would probably have to use cardboard boxes to store and transport them and truck or trunk space will fill quickly. After one type container collection is refined and you have some experience under your belt, you may wish to expand to others.



There is a load limit at recycling centers that accept CRV containers. If this limit is exceeded, they cannot pay for the load unless you are certified by the Department of Conservation. This load limit is:

PER VISIT: 500 lbs of aluminum - 500 lbs of plastic - 2500 lbs of glass

To become certified, contact www.calrecycle.ca.gov or call (916) 324-8598.

If you don't want to transport materials yourself, you may make arrangements with a recycling service. If you choose this route, the recycling service may provide a dumpster or collection container and help you choose the proper location for bins at your school site. They may also have signs and public information materials. Look online for recycling services or contact your EAPS program coordinator.



To find the latest CRV prices go to:

www.calrecycle.ca.gov/bevcontainer/



SCHOOL COMPOSTING

-ACTION AREA #6-



Purpose/goal: Schools and the environment can benefit from composting because it saves money, energy, water and landfill space. Composting teaches students about the environment and can easily be integrated into many areas of study like Math, Science and English. Composting gets students outside and teaches them to work together and to manage a project. It produces a soil amendment to use in school gardens and gives students a product to sell for fund-raising. It is a great way to build self-worth and self-esteem and can encourage students to compost at home.

To satisfy this Action Area: Your school can choose one of the four composting systems described below, or you may design your own composting program. Your composting system must be actively used on site to compost materials generated at the school.

Over one third of the garbage generated by the average school is made up of cafeteria food scraps, leaves and green waste.

The four basic types of composting systems successfully used in schools include:

- 1) Food composting with indoor worm boxes.
- 2) Food composting with outdoor worm boxes.
- 3) Landscape composting with standard outdoor compost bins.
- 4) Combination food and landscape composting, using both kinds of bins.

Each composting system is described in brief below.

1) INDOOR WORM COMPOSTING:

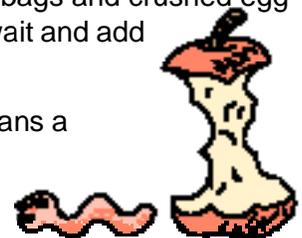
Indoor worm composting can be accomplished by setting up worm bins in classrooms and/or common areas. You should use one bin for each classroom. Most teachers prefer the 10 to 14 gallon plastic storage bins. Bins need 1/8" holes drilled in the sides, top and bottom. They also need newspaper shredded into 1" (or smaller) strips. Fill the bins to two-thirds with the newspaper. Worms can be ordered through the mail. Worms are a bit pricey, up to \$20 a pound through the mail, so you might want to consider a sponsor or talk to a worm supplier to see if you can get a bulk discount. Bait shops sell red worms (the only type you should use) and so do some nurseries; however, these are more costly than ordering by mail. Each bin will need around a half pound of worms to start, although a pound is recommended (worm populations can double in three to six months). When you get your worms, wet the newspaper in the bin with a spray bottle until it is as wet as a wrung out sponge. Sprinkle a handful of dirt on top (worms have gizzards and therefore need grit to enable them to digest food). Then pour out the worms on top. They will burrow down into the newspaper. Worms do not like light and seek out dark places.



Begin to feed your worms after a few weeks. They will have acclimated to their new surroundings by then and will have eaten some of the newspaper during this time (newspaper is good for them as is cardboard and other paper). They should always have a three to six inch layer of shredded newspaper over them. Their surroundings should always be as moist as a wrung out sponge. Use a spray bottle to keep bedding moist as needed. Use a burlap cover over the newspaper if your bin becomes too dried out on a regular basis or to avert fruit flies.

Feed your worms fruit and vegetable scraps and trimmings, coffee grounds, tea bags and crushed eggshells. Avoid meats, dairy products and fats and oils. You can feed every day or wait and add food after the previous feeding has been consumed.

Worms can consume two times their own body weight in food each day. This means a pound of worms can consume 3.5 pounds of food each week.



2) OUTDOOR WORM COMPOSTING:

Most schools that are successful at outdoor worm composting make their own wooden bins. Construct a bin out of wood and locate it in the shade. Worms cannot get too hot or dry. This type of worm bin can vary in size from 2' x 1' x 18" to 4' x 4' x 2'. They all need a snug fitting lid to detract animals. As a rule of thumb: for each square foot of surface area, feed one pound of scraps a week. So, a 4' x 4' bin can consume up to 16 pounds a week. To find out how many worm bins you'll need you could do a pilot program for a few weeks, collecting scraps in five gallon buckets at lunch time and weighing the results. You will need to educate students and kitchen staff thoroughly on what goes in these bins. Big, easy to read labels on buckets will help. Many schools use volunteer students to stand near bins as monitors. This helps to reduce unwanted items in collection buckets. When you find out how many pounds of compostable material your school produces each week, you will know how many bins you need. If more food scraps are produced than you wish to process, you could limit what type of scraps go in the bins until the desired amount of pounds are being collected. If you live in an area that freezes you may wish to provide extra insulation to prevent loss of worms. Recommended resource for this activity: 'Composting in Schools' (see Resources).

Extra activity for worm composting: Harvesting worm 'castings' (worm manure) for use or sale can be great fun. You must separate the worms from the castings first. This entails carefully placing the contents of the worm bin on a sheet of plastic. Then make piles of dirt with pointy tops, like small pyramids. As the worms burrow down to escape from the light, scoop the top of the pyramid off. It can take 10 minutes or more for the worms to burrow down far enough. After each scoop, reshape the mound into a point again. When the castings are harvested, bag them up in zip shut plastic bags, put cute labels on them and sell them as a super fertilizer for plants that the students have created from their lunch scraps.



3) STANDARD YARD WASTE COMPOSTING:

This is the simplest way to do school composting. There are several kinds of yard waste composting bins. There is the stack type, where you restack the bin each time you turn the compost. There is the dump and run type, where you simply fill the bin and wait six months to a year for the contents to become compost. You can just make a pile of yard debris and not use a bin. If you choose standard yard waste composting, you can get information on the various types of bins you can purchase from the publication, "Choosing a Compost Bin for Your Community" (see Resources). In order to build a compost bin, see the publication, "Building your Own Compost Bin: Designs for your Community" (see Resources). You'll need to ask the grounds maintenance staff to start using the compost bin for yard debris. Be sure to keep diseased or pesticide-laden materials out of the bin.

Here is what goes in a composting bin: Greens and Browns, Air and Water:

2/3 browns + 1/3 greens = ideal composting conditions

Greens: All fruits, all vegetables, tea bags, coffee grounds and filters, grass clippings, green leaves and fresh plant trimmings,

Browns: Dry leaves, dry grasses, wood chips, chopped woody prunings, horse and cow manure (no meat eating animal feces).

Air: Compost needs air; make sure your bin has holes. The best way to provide air in your compost is to turn it (remove contents of bin and put them back in) every couple of weeks. If you don't turn your compost it will take longer to get finished compost.

Water: Keep the compost as moist as a wrung out sponge. It is best to add water when turning compost. Placing the bin within reach of a garden hose is a good idea.



4) COMBINATION FOOD WASTE AND YARD WASTE COMPOSTING:

Schools who do both kinds of composting have a cafeteria food waste collection program using outdoor worm bins and yard waste bins for overflow. If food waste on any given day is greater than normal you can bury the extra in a yard waste bin. These yard waste bins are used for yard waste as usual, but simply perform this extra function as needed. Make sure food is covered with a thick layer of leaves (browns) or shredded newspaper (in both type bins) to discourage flies and vermin. Yard waste bins are usually located near worms' bins with this type of setup.

Lots of great composting info is available at www.calrecycle.ca.gov/organics

Information in this section was taken from the publication, "Composting in Schools a 'How to' Guide", produced by the San Francisco Department of the Environment.



BUY RECYCLED

-ACTION AREA #7-



Purpose/goal: Recycling is not complete until we close the loop by purchasing recycled products. Buying recycled products stimulates markets for recycled items, which in turn strengthens the whole recycling loop. The higher the demand for recycled products, the more businesses will manufacture them, and the more demand there will be for the items we place in our recycling bins.

To satisfy this Action Area: The school as a whole, or all classrooms, must start purchasing one or more recycled content items on a regular basis.



Purchasing recycled content products for school use will probably need to start small. To help you identify some of the items that are available on the market with recycled content see the list below.

After you have identified some products that you feel are good candidates, talk to the person in charge of purchasing supplies for the school (this may be the school secretary). See if there is a way for the school to purchase any of the items you have identified. Many recycled content products are 'no brainers' because it doesn't matter if the product is made with recycled content or virgin resources. 'No brainers' include regular colored office paper, writing paper, envelopes, construction paper, message pads, file folders etc. The school may have no problem with purchasing such products with recycled content.

Many items are only purchased once a year for schools. In this case, you may have to wait until next year to purchase those products. However, you could submit a request to the appropriate person, that one or more recycled content products you have identified be included in next year's purchase. That way, you'll be all set up to buy recycled for next year.

There may be products you can buy without going through the school office. You can still satisfy this Action Area by buying recycled content items for classroom parties (paper towels, napkins), projects (craft supplies, certified recycled wood, aprons) and prizes (sports balls, tote bags). If you go this route make sure every classroom participates and that your Certification Report reflects these.

Over time, your school can work its way up to bigger purchases that have more impact. Achievements in the Environmental Action Program for Schools are meant to build on themselves year after year.

Below is a partial list of supplies typically made with recycled content. On the following page is a partial list of online resources that will direct you to recycled content vendors.

OFFICE AND CLASSROOM SUPPLIES

- ✓ alphabetizers
- ✓ binders
- ✓ bookmarks
- ✓ bus. card holders
- ✓ calendars
- ✓ calendar refills
- ✓ clip boards
- ✓ computer paper
- ✓ desk pads
- ✓ desk caddies
- ✓ drawer trays
- ✓ envelopes, all kinds
- ✓ folders
- ✓ hanging folder rack
- ✓ index cards
- ✓ index card boxes
- ✓ ink jet paper
- ✓ key keepers
- ✓ letter trays
- ✓ letterhead
- ✓ magnets
- ✓ paper, all kinds
- ✓ paper pads
- ✓ paper plates
- ✓ pen and pencil cups
- ✓ pencils
- ✓ pens
- ✓ phone mess. pads
- ✓ portfolios
- ✓ Post-it dispensers
- ✓ Post-it trays
- ✓ rulers
- ✓ storage boxes
- ✓ tape dispensers
- ✓ toner cartridges
- ✓ transparency film
- ✓ bound note books
- ✓ wipe off-boards

BAGS/BINS

- ✓ lunch bags
- ✓ recycling bins
- ✓ tote bags
- ✓ trash bags
- ✓ trash liners
- ✓ waste cans

CLEANING

- ✓ napkins
- ✓ paper towels
- ✓ toilet paper

CLOTHING/ACCESSORIES

- ✓ aprons
- ✓ backpacks
- ✓ baseball caps
- ✓ lapel pins
- ✓ safety vests

BUILDING & GROUNDS

- ✓ car stops
- ✓ carpet
- ✓ certified recycled wood
- ✓ compost bins
- ✓ paint
- ✓ plastic lumber

SPORTS & RECREATION

- ✓ baseballs
- ✓ footballs
- ✓ Frisbees
- ✓ playground equipment
- ✓ sports and rec. mats
- ✓ yo-yo's

Did you know? You may be buying recycled already! Many everyday items purchased are made from recycled feedstock like aluminum cans, carpet padding, cardboard boxes, glass bottles, nails, newspapers, tin cans and recycling bins.



Tips and Resources: Many recycled products can be found in local stores. Look for labels with the “chasing arrows”  symbol indicating that the item or packaging contains post-consumer recycled content. In addition, you can find many recycled content products on the internet:

Go to: www.calrecycle.ca.gov/buyrecycled and learn about procurement opportunities and explore the Recycled Content Product Directory.

Go to: www.stopwaste.org/home/index.asp?page=372 to learn about environmentally preferable purchasing guidelines and resources.

Go to: www.greenschools.net/display.php?modin=54&uid=61 and download the green school supplies directory.



Go to: www.clutterfreeservices.com/resources.html for a list of resources simplify, reduce, reuse, recycle unwanted items.





LESS TOXIC -ACTION AREA #8-



Purpose/goal: Teach by example that less toxic alternatives are better for several reasons: 1) they are generally readily available at low prices, 2) they are effective and, 3) by using these less toxic alternatives, the environment and those who use them, will benefit through reduced exposure to harmful substances.

To satisfy this Action Area: Choose one or more less toxic alternatives the whole school can use year around. Try looking in supply areas (custodial, grounds maintenance, office, teachers) and see if there are opportunities for less toxic alternatives. When switching, make sure custodians or those who will actually be using the alternative product know that it is not only better for the environment, but better for them too. They won't have to be in contact with those harsher chemicals or fumes any more.

AB 405, signed into law in 2005, prohibits the use of experimental and/or insufficiently tested pesticide products on school sites. Additionally, AB 405 prohibits the use of pesticide products on school sites that have been designated for phase out or for which registration has been canceled or suspended. For more information, go to <http://www.environmentalcalifornia.org/results/environmental-health-results/healthy-schools>



Less Toxic Cleaning Choices

'An ounce of prevention is worth a pound of cure'
especially while keeping our environment healthy.

- ✓ Substitute present **glass** cleaner with 1/4-cup white vinegar, mixed with 1-quart water. The pros add a small squeeze of dish washing liquid. Apply with cloth or spray bottle; dry with clean cloth or newspaper.
- ✓ To clean varnished **wood**, use a mild vegetable oil soap (like Murphy's).
- ✓ For **sinks** and **counters**, mix a paste of baking soda & water or pour baking soda onto wet cloth; apply to surface, rinse and wipe dry.
- ✓ Switch to a non-chlorinated all-purpose cleanser such as 'Bon Ami'.
- ✓ Make an all-purpose cleaner with one gallon hot water and 1/2-cup washing soda (sodium carbonate, a dry powder found where you purchase cleaning supplies and soaps). Mix well; wash surface and rinse.
- ✓ Mix 1/2-cup vinegar with 1/2-cup water and 1/4 cup lemon juice to wash **appliances** and **fixtures**, then rinse. Acidic properties in vinegar will cut grease and cleanse; lemon juice will smell good.
- ✓ To clean **vinyl tile** and **linoleum**, mix 1/4 cup white vinegar, 1/4 cup of washing soda (sodium carbonate, a dry powder found where you purchase cleaning supplies and soaps) with 1-gallon warm water.
- ✓ Mix 1/2-cup vinegar with one gallon water to clean **linoleum** and **no wax floors**. Rinse.
- ✓ For clogged **drains** use **baking soda and vinegar**. Before you begin, plug any overflow drain with a wet cloth. Pour 1/4-cup baking soda into the drain followed by 1/2-cup vinegar. Cover the drain, sealing in the carbon dioxide gas bubbles as they agitate your clog loose. Let sit 15 minutes. Flush with hot water, follow with plunger.
- ✓ Put a strainer on all **drains** to avoid the need for chemical drain openers. Also, do not pour grease down drains.
- ✓ Pour boiling water down kitchen **drains** once a week to keep them unclogged.
- ✓ Try fine grain wet/dry sandpaper (400 grit) to remove marks in **porcelain sinks**.
- ✓ For a less toxic **toilet bowl** cleaner, mix 2-cups Borax with 1-gallon water to clean and deodorize.
- ✓ To remove mineral deposits around **faucets**, cover deposits with strips of paper towels, soaked in vinegar. Let set for 1 hour and clean.
- ✓ Bleach mildew with hydrogen peroxide (a disinfectant and an environmentally safe alternative to chlorine based products).

Less Toxic Pest Management Choices

- ✓ Wipe up **ants** & remove ant trails (to keep more ants from following) with soapy water instead of using a chemical spray.
- ✓ For **roaches**, set out trays containing equal parts of sugar and baking soda (the sugar attracts and the baking soda eliminates).
- ✓ For **insects** on indoor or outdoor plants, gently sponge or spray leaves with mild soapy water, then rinse (use discretion so as not to 'burn' plant foliage).
- ✓ Use non-toxic **wasp** traps.
- ✓ Kill **weeds** before they begin to flower and produce seeds (don't use harsh chemicals in doing so).
- ✓ Introduce frogs, toads or lizards around plants, where possible, so they can help take care of **bug problems**. Make sure they can survive where you release them.
- ✓ Copper stripping (2" or wider) mounted around planting beds keeps **snails** and **slugs** out. Snails won't cross copper. Be sure to capture all snails already in the area.
- ✓ In general to control garden pests, baits, traps, barriers, insecticide soaps and horticulture oils are better for the environment and for people.

Your school can make it mandatory that its landscaper(s) use alternatives you choose!



Other Less Toxic Choices

- ✓ Use/buy solar calculators instead of battery operated ones.
- ✓ Use latex or water-based paints instead of more toxic oil-based paints

Avoid products that have **Danger, Toxic or Carcinogenic** or other such warnings on the label.

Let us know in your Certification Report if you find other good ideas or any superior, less toxic cleaners and pest control solutions.

KICK OFF & MOMENTUM BUILDING

After your **Environmental Action Program for Schools (EAPS)** is organized and when you are ready to begin activities, a kick-off event may be an excellent way to promote the process. If your **EAPS** program could use some added momentum; the following may prove fruitful. Take a look at the assemblies, program boosters and ideas, fieldtrips and tours listed below.



Assemblies and Classroom Presentations:

The assemblies listed below are environmentally oriented. You can ask the group who provides the assembly to alter their program to be tailored to introduce the **Environmental Action Program for Schools**. Or, you can simply hold the assembly as is and have your own speakers introduce the program before, during or after the show. The following businesses may charge for their services.

- ✓ **The Magic of Recycling-** www.mcleodmagic.com/education/recycling.html
- ✓ **Junkology - Creative Reuse of Manmade Refuse-** www.junkology.com | (604) 420-2261
- ✓ **Earthcapades-** www.earthcapades.com | (650) 557-4258
- ✓ **Creative Reuse Extravaganza** - A festival of games and fun creating useful items out of common discarded materials. Twelve stations are set up around the multi-purpose room for students and their families to explore at their own pace. www.creativereuse.org | (510) 547-4733
- ✓ **Mt Diablo Recycling (East County only)-** School presentations for students preschool to 12th grade. Presentations are about 45 minutes long and include interactive games and question-and-answer period. www.mtidiablomagic.com | (925) 692-2224

Once an assembly or kick-off day has been scheduled, you may want to invite key people including members of the school board, parents, city officials, city councilpersons, members of the County Board of Supervisors and local media.

Should reporters cover the event, be sure to have someone who knows about the program on hand to answer any questions. This person could provide a brief description of the EAPS program to distribute to reporters including a name and phone number should there be any additional questions.

Program Boosters and Ideas

- ✓ To unify the program and heighten visibility, create an environmental logo, slogan, or mascot. Use the theme in all publicity about the **Environmental Action Program for Schools**. Place the logo on all recycling containers and any correspondence. You may consider sponsoring a contest to acquire a suitable logo.
- ✓ Send a newsletter to parents, local businesses, and community leaders informing them of your program efforts and accomplishments. The newsletter could detail requests for assistance such as volunteers to help set up a composting area or to announce an aluminum can drive with information on how, when and where to bring donated aluminum cans.
- ✓ Ask your recycling company or waste services company to visit the classrooms or hold an assembly to discuss recycling, setting up a recycling system and how recycling can satisfy an Action Area in the Environmental Action Program for Schools.
- ✓ Students could put together a skit, rap or play on helping the environment and perform it for the school during a special assembly.

- ✓ Hold a Recycle Rodeo or Fair with booths reflecting different aspects of waste reduction and recycling, including recycled art objects, etc. You could use 'recycled' refrigerator boxes to make booths.
- ✓ Create a 'Recycle Jeopardy' game or a similar game show that introduces the what, how and why of recycling or aspects of your chosen Action Areas to the whole school.
- ✓ Produce a video about completing your school's Action Areas and present it to the parents and students.
- ✓ Hold a poster contest. Each class can produce a poster that illustrates one or more of your schools' chosen Action Areas. Award prizes.
- ✓ Have special T-shirts, hats or buttons made up that promote the EAPS program.
- ✓ Selected students could go to each classroom to describe the Environmental Action Program for Schools and what the student body can do to participate and support the program.
- ✓ In a prominent place, keep track of the amount of recyclables collected, recycled content items purchased and so on. You could place a 'thermometer' in a common area showing the volume of toxic cleaners reduced at the school or how much food waste has been diverted from the landfill. Graphs and charts provide great visuals.
- ✓ The local news media may like to interview students and film them while recycling or performing other program activities to demonstrate the 'hands-on' aspect of your program.
- ✓ Students could be instructed to create and publish an Environmental Action newsletter in their language arts class.
- ✓ Send out a press release to the media about your EAPS program. Your EAPS program coordinator can assist you with this.

Fieldtrips/Tours

- ✓ Central Contra Costa Sanitary District Plant Tour. www.centrialsan.org Grades 6-12. Students see how to clean wastewater and how pollution can affect the waters of the bay. Contact 'Central San' at (925) 229-7316. (Only for Central San service area - most of Central County)
- ✓ Contra Costa Water District Plant Field Trip. www.ccwater.com/education The Oakley plant and Concord plant offers classroom 2- 6 has a 90-minute tour, which covers the water cycle, the properties of water and the ozone water treatment process. Teachers guide, 35 student workbooks and educational giveaways are provided. Free. (925) 688-8307. (Only for Contra Costa Water District service area)
- ✓ NatureBridges. www.naturebridge.org Field trips cover five global pollution issues. Ocean pollution presentations and beach clean ups are offered for grades 3-12. 415.992.4700
- ✓ Recyclemore. Field trip to the West County recycling facility and landfill. Get a closer look at curbside recycling sort line, concrete recycling, municipal yard waste composting, the self-haul waste sort line, and methane gas electricity production at the landfill. Free tour is available to all schools with free bus service open to limited number of West County classes. Call (510) 215-3021 and leave a message to request an application form.
- ✓ The Gardens at Heather Farms. www.gardenshf.org Based in Walnut Creek, schools can come to the farm or they will come to your classroom for grades K -5. A fee may apply depending on where your school is located. (925) 947-6712
- ✓ Mt. Diablo Recycling. www.mtdiablorecycling.com/ Offers free facility tours of the daily operation of Mt. Diablo Recycling in Pittsburg, CA. The tour is about 45 minutes long. (925) 692-2224.

SAMPLE WRITTEN PLAN



The following is a sample written plan made for a hypothetical school called Valley Elementary.

The basic components of this written plan are:

- ✓ State the goal of the program
- ✓ State the four Actions your school has chosen to complete
- ✓ List who's on the Green Team and, when it will meet
- ✓ State what needs to be done prior to school-wide announcement of the program and kick off
- ✓ Write a detailed description of how Green Team members will ensure completion of each of the four Action Areas
- ✓ Name who will contact any prospective sponsors, how any student Green Team members will be used and any other remaining program details that need to be included
- ✓ Name who will complete and submit the Certification Report.

Your written plan may be much less complex if you are doing a simpler program as opposed to the challenging program for which this was written.

The goal of Valley Elementary is to become Certified in the Contra Costa County Environmental Action Program for Schools by completing the following Four Action Areas:

1. Recycling - set up paper recycling
2. Less Toxic - switch to vinegar and water cleaning solution for windows and counters school wide
3. Letter Campaign - conduct a letter campaign to manufacturers
4. Buy Recycled – switch to buying recycled content lined paper.

The Valley Elementary School's Green Team consists of the following voluntee

- ✓ Margareta Consuelo-Teacher
- ✓ Arnold DeVille-Vice Principal
- ✓ Maggie Smith-Office Secretary
- ✓ Joseph Capps-Lead Custodian
- ✓ Ken Sabat-PTA Green Team representative, Parent
- ✓ Amy Moulton-Teacher



The Green Team will meet the second and fourth Tuesday of each month at 3:30 p.m. for the first couple months and then as needed until program completion.

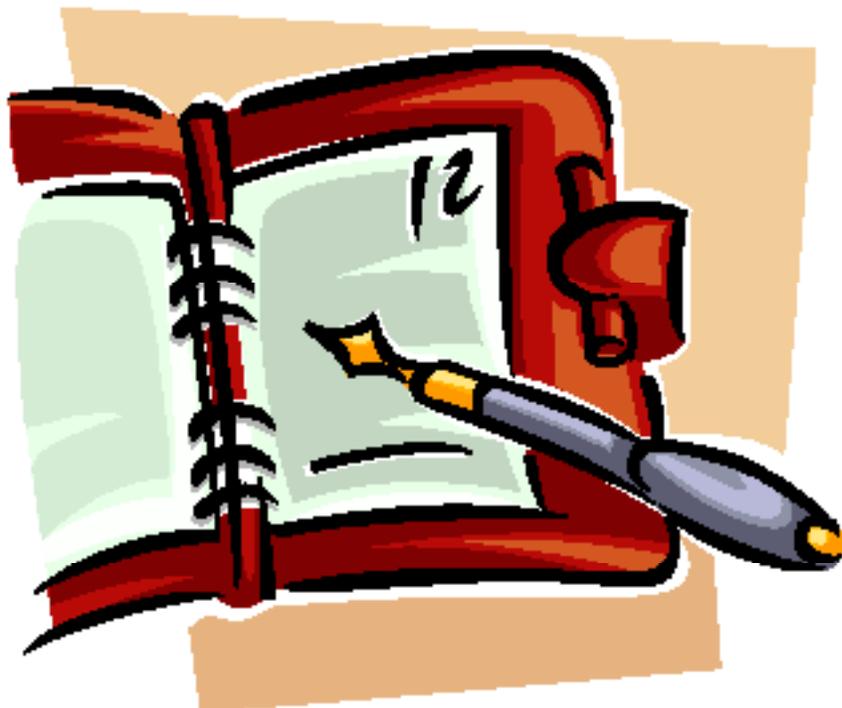
Duties for Green Team members:

Conduct a waste assessment: Amy will be responsible for completing a waste assessment. Joseph or other custodial staff will assist Amy. Amy will report her findings and give suggestions on which Action Areas are appropriate for our school. The Team will use this information to make a final decision on which Action Areas the school will complete.

Prior to program kick off: Maggie will be responsible for checking off the appropriate boxes on the master copy of the Student Announcement notice and make enough copies of the checked off master for all students. Extra copies should be made for posting in all classrooms and around the school and to have available at the office counter and at the kick off event. Arnold will brief teachers about this stage of the program and they will be instructed to distribute them to each student. Arnold will use the intercom system to introduce the program to students and announce when the kick off event will take place.

Ken will organize the kick off event which will include an: assembly with a program overview of the Environmental Action Program for Schools given by Ken and, an announcement that the school wants to be Certified by Earth Day so that completion of the program can be celebrated at the annual Earth Day Festival.

- The written plan will be copied and distributed to all Team members and any one else who might need one.
- Ken will be in charge of searching for sponsors to defray costs, such as purchasing recycling bins, purchasing spray bottles and to help finance the kick off event.
- Todd can be called on to run errands such as delivering Staff & Student Announcement notices, distributing recycling bins and helping Arnold distribute the assignment sheet and collect the written letters for the Letter Campaign.
- Margaretta will fill out the Certification Report after the four Action Areas are completed. Specifically when the paper recycling program is running, the new filled spray bottles are in use, responses from manufacturers are received and the purchase of recycled content products has begun.
- Arnold will write updates and articles about progress towards becoming Certified for the school newsletter and find graphs and charts to use.
- Arnold will monitor the garbage dumpsters. When the dumpsters are no longer filling up, he will contact the school's waste hauler to reduce service. Any money saved by reducing garbage service will be described in the school newsletter.
- The school has agreed to deposit half the savings accrued from recycling, in the Earth Day celebration fund. At the Earth Day celebration there will be a booth with recycled content prizes offered to students.
- A special thanks and awards will be presented to the custodians for their contribution to the EAPS program at the Earth Day celebration. Ken will put this together.
- Arnold will showcase large charts at Earth Day of progress toward and attainment of EAPS program Certification.



Action Area #1: BUY-RECYCLED: Maggie Smith will locate and make arrangements to purchase recycled content lined paper. This paper will eventually replace the lined paper now stocked in the supply area and in all classrooms. If Maggie runs into obstacles, such as the district does not retain a supply vendor who carries this product, Arnold will take further steps in procuring the product. If this fails Maggie and Arnold will find another recycled content product that the school can purchase.

Action Area #2: LESS TOXIC: Joseph Capps will hold a short meeting with the custodians to discuss the logistics and implications of switching to vinegar and water to replace the window/counter spray cleaner used now. Joe will explain that 1) it works well, 2) after a short while everyone will get used to it and it won't seem any different, 3) they won't be breathing noxious fumes any more as they did from the old cleaner and 4) the kids and the school will really appreciate their cooperation. When the new empty spray bottles are purchased, each one will be marked with a 'fill line' for vinegar (1:8 ratio with water, don't forget the tiny squeeze of dish soap). Eventually the classrooms too, will switch over to these bottles as present supplies of the old cleaner dwindle. Joseph will determine the number of bottles needed and ask Maggie to order the bottles, vinegar and dish soap. As the bottles of the vinegar and water get used up, they will be returned from various parts of the school to the custodial closet and refilled. Empty bottles will be stored on the shelf next to the full bottles in a cardboard box (so they don't fall off the shelf) until a large batch is ready. When refilled they will be placed back on supply shelves where they can be picked up by teachers and staff in the same locations that the other product was kept.

Action Area #3: RECYCLING: Margaretta will contact the school's waste hauler to see if they offer paper recycling. If they don't she will locate a paper recycler by calling the County Recycling Hot-line or the EAPS coordinator. She will determine any pick-up costs, if the recycling service supplies classroom bins and if there is cost for the bins and make the arrangements for setting up a recycling program. Margaretta will calculate the number of paper recycling bins needed - one in each classroom, office and copy room. She and Joseph will determine how many outdoor recycling dumpsters will be needed and where they should be located with the help of the company providing the recycling service. If there is no lock for the outdoor paper dumpster, Margaretta will ask Maggie to order one to protect the recycled paper from contamination. Joseph will explain the new paper recycling routines to custodial staff. He will let the custodians know that they are not picking up more waste, just collecting it differently. Paper collection bins will be emptied from each classroom, office and copy room and dumped into a larger collection receptacle for custodians to transport the paper to the recycling dumpsters. There is a padlock on the dumpster which must be locked after completion to avoid other debris from contaminating the paper. He will reiterate to the crew that they are handling the same exact amount of material. They are just handling it differently than before.

Action Area #4: LETTER CAMPAIGN: Arnold will be in charge of making copies of the Letter Campaign page. There needs to be enough for every student in the school. He will distribute them to all the teachers and explain how this activity will be carried out. To save the school money, each student should bring a stamped envelope from home and should have the school as the return address so students' privacy will be respected and so that any responses from companies won't be misplaced and can be shared with the school. Teachers should check the content of each letter before they are sealed. Arnold will collect and tally the total number of letters the school is sending. This information will be given to Margaretta to be recorded in the Certification Report.



SAMPLE LETTER TO PROSPECTIVE SPONSORS



The local community is an excellent source of support and, possibly, funding. If you think you may fall short of funding for any part of the **Environmental Action Program for Schools**, consider looking to businesses and companies in your local area. As soon as you realize you may need help with funding, send a personal letter to the owner, manager, president or public relations director of businesses in your area. Describe your school's efforts in the EAPS program in writing and how appreciative the students and school would be to have them as a sponsor.

Companies could be asked to donate funds for expenses such as recycling bins, project materials or special program boosters like T-shirts. You can offer visibility to the company through school newsletters and press releases etc. Also, the Environmental Action Program for Schools Summary of Actions will include sponsor honorable mentions (you must remember to tell us about your sponsor in your Certification Report). Remind the companies that their participation will likely enhance their reputation in the community.

Dear local hardware store:

Valley Elementary is participating in a new environmental program. **The Environmental Action Program for Schools requires schools to take action in four different areas.** There are eight 'Action Areas' to choose from: Recycle, Buy Recycled, Less Toxic, Waste Prevention, Letter Campaign, Environmental Curriculum, Become a Collection Site, and School Composting. We have chosen to have a 'No Waste Day' where students bring lunches that have 'zero trash' to satisfy the **Waste Prevention Action Area.** We are switching to using a vinegar and baking soda mixture to unclog drains in classrooms instead of a chemical drain cleaner for the **Less Toxic Action Area.** We are switching to purchasing trash bags made out of recycled plastic to be used throughout the entire school for the **Buy Recycled Action Area.** To satisfy the remaining activity we will begin a composting program to manage cafeteria food waste and yard waste for the **Composting Action Area.**

The students and staff are very excited about working on our Certificate of Completion for this program. However, we are a little short on funds and we are hoping to find a sponsor who would like to help us get the materials we need to build a composting bin (specify needs).

We will be sure to send the local newspaper a press release about our sponsor if we get one. We will also include thanks in our school newsletter and our sponsor will be mentioned in our school's written 'Summary of Actions' for the Environmental Action Program for Schools. This summary will be displayed on the wall in the school office near the Certificate of Completion for the program. Our sponsor will be given a copy of the Summary of Actions to display also. We also plan to place a stamped, brass, sponsor commemoration plate on the front of the compost bin with our sponsor's name on it.

We feel teaching kids environmentally sustainable habits now will enhance their futures as well as the Earth's. We hope you will consider being a sponsor for our program. Thank you for your time in reading this letter, and helping to make a difference.

Sincerely,
Ken Sabat
Valley Elementary PTA - Environmental Chairperson
(925) 555-5555
k.sabat@valleyPTA.com



RESOURCES



ENVIRONMENTAL PROTECTION AGENCY (EPA)

EPA Website

www.epa.gov with great pages for kids, students and teachers.

Educational Resources Information Center (ERIC) (800) 276-0462 or NSCEP@bps-lmit.com

Some Free EPA Publications (800) 490-9198

For a full alphabetical listing of publications, visit: <http://nepis.epa.gov/EPA/html/pubal-phaindex.html>

- ✓ Adventures of the Garbage Gremlin-Comic Book #530/SW-90-024
- ✓ Don't Trash It! Super Fun-Activity Kit #530/K-95-005
- ✓ Recycle Today: Educational Materials for Grades K-12 #530/SW-90-025

Online Resources

- ✓ Cool the Earth Global Warming Program— www.cooltheearth.org or call (800) 474-9804
- ✓ Kid's Corner from Allied Waste of Contra Costa and Solano Counties— www.alliedwasteservicesofcontracostacounty.com/kids.cfm
- ✓ Bay Area Junk Mail Reduction Campaign— www.stopjunkmail.org
- ✓ Plastic Bag Recycling— www.plasticbagrecycling.org/plasticbag/index.html
- ✓ GreenBiz.com— www.greenbiz.com
- ✓ The Imagination Factory, creative recycling by making art— www.kid-at-art.com
- ✓ Laptop Lunches, bento-style no waste lunch-boxes— www.laptoplunches.com
- ✓ Waste-Free lunches— www.wastefreelunches.org
- ✓ Sustainable Contra Costa County— <http://sustainablecoco.org>
- ✓ Bay Area Green Business Program— www.greenbiz.ca.gov
- ✓ Green School's Initiative – www.greenschools.net

CONTRA COSTA COUNTY

Recycling Hotline (800) 750-4096

(press 2) (serves entire County)

Call for local 'Reduce, Reuse, Recycle, Rot and Buy-Recycled' information or request the free Contra Costa County Recycling Guide and/or the Reuse Directory. Website: www.cccrecycle.org

Central Contra Costa Solid Waste Authority (CCCSWA) (925) 906-1804

(serves Lafayette, Orinda, Walnut Creek, Danville, Moraga and surrounding unincorporated areas including Alamo, Diablo, Saranap and Blackhawk)

To learn more about the CCCSWA's mini-grant program that is available for qualifying school projects see the website below. CCCSWA mini-grants range from \$250 to \$5,000. Website: www.wastediversion.org

West Contra Costa Integrated Waste Management Authority (WCCIWMA) (510) 215-3125

(serves El Cerrito, Hercules, Pinole, Richmond, San Pablo and surrounding unincorporated areas including El Sobrante, North Richmond, and Rodeo)

To learn more about the WCCIWMA's mini-grant program that is available for qualifying school projects see the website below. WCCIWMA mini-grants range from \$250 to \$5,000. Website: www.recyclenore.org/

CONTRA COSTA COUNTY GARBAGE COLLECTORS

West County:

Richmond Sanitary Services
www.richmondssanitaryservice.com
(510) 262-7100

Central County:

Pleasant Hill Bayshore Disposal
www.awsgcc.com
(925) 603-1383

East County:

Garaventa Enterprises:
www.mtdiablomrecycling.com/
(925) 682-9113

CONTRA COSTA COUNTY GARBAGE COLLECTORS

Bayview Refuse and Recycling:
(510) 237-4614

Valley Waste Management:
www.valleywaste.com
(925) 935-8900

BAY AREA

East Bay Depot for Creative Reuse

Become a member of the Green Educator Program. Membership benefits include: field trips, help with project ideas and FREE materials. Teachers can come to the depot located in Oakland for a variety of great educational supplies for FREE!

Grades: K – 12 | Cost: Sliding Scale
Contact: greenteachers@creativereuse.org
Website: www.creativereuse.org

CALIFORNIA DEPARTMENT OF RESOURCES, RECYCLING AND RECOVERY (CALRECYCLE)

School District Waste Reduction Tools

School District Waste Reduction Tools -- Whether you are a school district administrator concerned about increases in solid waste disposal costs, a recycling-conscious teacher or student, or a city/county recycling coordinator working with your local school district, setting up or improving an existing school waste reduction program can benefit everyone involved. California Department of Resources, Recycling and Recovery has resources to support your efforts at www.calrecycle.ca.gov/ReduceWaste/Schools/default.htm

Materials Exchange Program

For information on reuse sites for school supplies: <http://www.calrecycle.ca.gov/reuse/links/school.htm>

School Garden Websites

The page contains links to garden, compost and vermicompost sites: www.calrecycle.ca.gov/Education/links/garden.htm

Vermicomposting is the practice of using worms to transform food waste into a nutrient rich finished product called vermicompost. In a school setting, vermicomposting can set the stage for a variety of interdisciplinary activities that can utilize school cafeteria waste for the worm bin, provide a variety of interesting experiments while maintaining the bin in the classroom and can culminate in a school or classroom garden using the finished product.

RecyCool Club for Kids

Recycle Rex, the “spokesdinosaur” for has a simple message: “Recycle, reduce, reuse and close the loop.” Recycling is one of the easiest and best things we can do for Planet Earth. By recycling and then buying recycled products for home, school and play, we can really make a difference. The RecyCool Club, designed for children ages 5-13, provides fun recycling education projects through the mail and online. A teacher’s packet gives educators a sampling of publications as well as referrals to other environmental education resources. Publications include brochures, flyers, posters, and electronic media, and cover topics such as recycling at school, recycling as a fundraiser, teaching youth to recycle, reasons why we should recycle, and the collection and processing of recyclable materials. www.calrecycle.ca.gov/RecycleRex/default.htm

Earth 911

This site can help you locate recycling centers by commodity and zip code. <http://earth911.com/>





SAMPLE

SUMMARY OF ACTIONS

VALLEY ELEMENTARY SCHOOL - 2011/2012

ENVIRONMENTAL ACTIONS



RECYCLE **LESS TOXIC**
LETTER CAMPAIGN **BUY RECYCLED**

Valley Elementary School is a Certified Environmental Action School for school year 2011/2012.

Teachers, students, staff, volunteer parents and surrounding community members all worked together to successfully implement four new environmentally beneficial activities.

- ✓ **RECYCLE:** The school is recycling cardboard and thereby removing 10 cubic yards of cardboard out of the waste stream every month and 120 cubic yards for the year. As an added benefit this activity has saved the school 5% on their waste-hauling bill. Half of the savings accrued has been generously given to the student 'Party on Earth Day' fund.
- ✓ **LESS TOXIC:** The school has switched from using commercial window cleaner and counter spray to a vinegar and water solution. Fifteen 32-ounce bottles a month of toxic cleaner has not entered the environment as a result. The cost savings for the year is \$360.00 after purchasing empty spray bottles and the vinegar. As an added benefit, the custodians no longer have to breathe the fumes or come in contact with the discontinued toxic product. Half of the savings went to the Party on Earth Day fund.
- ✓ **LETTER CAMPAIGN:** The school conducted a 'Letter Campaign'. 376 student written letters were sent to manufacturers all over the country and beyond requesting less packaging, recycled content, environmentally safer production practices or other environmentally beneficial requests. 259 responses have been received so far. A responding manufacturer has indicated that they will begin using recycled content packing.
- ✓ **BUY RECYCLED:** The school now purchases 100% recycled content lined paper. This activity diverts 4 trees from being cut down each month and 45 gallons of fuel from being burned in the manufacturing process.



In becoming a Certified **Environmental Action School**, we hope all involved now carry a great sense of pride. You have taken an active part in helping the environment. You have done so by changing your daily habits for the betterment of the earth and have truly helped preserve the environment for future generations.

Become a Collection Site Letter Campaign

School Composting

Certificate of Completion

This certifies that
Valley Elementary School
has successfully completed the

Environmental Action Program for Schools

by completing four Action Areas during the 2011/2012 school year:

Buy Recycled
Letter Campaign

Less Toxic
School Composting



*Presented by the Contra Costa County
Conservation and Development Department*

Environmental Action Program for Schools Coordinator _____ Date _____

Waste Prevention

Less Toxic

Recycle

Environmental Curriculum Buy Recycled