

# Team Earth Activity Manual (T.E.A.M.)

*Produced by:*

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## Reducing Materials From the Waste Stream

Source reduction is a simple, common sense approach to waste management. Source reduction decreases the amount of waste created, therefore there is less waste to be disposed of in a landfill, incinerator or through recycling! For schools to reduce their waste stream they must be creative and open to new ideas.



A great way to start on the road to source reduction is to Precycle! Precycling is environmentally friendly shopping of any kind, with the purpose of purchasing products that will have minimal impact on the environment in production, use and disposal.

#	Activity	Points
RD1	<p><i>Implement school wide policy on double sided copies:</i> Have the principal make a school wide policy that everybody using the copy machine makes double sided copies when applicable. This not only reduces the amount of paper that is used but it also saves the school money!</p> <p>As part of this activity estimate the amount of paper saved (also calculating the number of trees not cut!) over the school year through implementing double sided copying.</p>	6
RD2	<p><i>Make paper pads from used paper:</i> Take paper which has only been used on one side and make recycled paper pads from it – thus using both sides of the paper! You can sell the paper pads to teachers, parents, neighbors, etc. as a fundraiser to support your recycling program.</p> 	6
RD3	<p><i>Use e-mail and e-files:</i> If you haven't already, have the principal institute a school wide policy for using e-mail rather than paper memos.</p> <p>E-files eliminate the need to print on paper. Estimate the reduction of paper waste through implementing of this policy.</p>	6

RD4	<p><i>Save paper:</i> Post notices on a bulletin board, use the PA System, or use interoffice envelopes (10" x 13" manila envelopes with 40-56 name blocks on the front can be purchased at office supply stores. Each time it's re-used, simply cross out the old name and put new name in the next block).</p>	 <p>4</p>
RD5	<p><i>Use Coffee mugs:</i> Encourage teachers to use refillable mugs in the faculty rooms. Consider selling mugs with the school's recycling logo on them as a fundraiser or to kick off the program.</p>	<p>2</p>
RD6	<p><i>Promote a town wide campaign to reduce junk mail:</i> Make fliers or send a press release to your local paper to promote a town wide campaign to reduce junk mail at school &amp; at home!</p> <p>To have names removed from junk mail lists, write to:  Direct Marketing Association  1120 Avenue of the Americas  New York, NY 70036-6700</p> <p>Or email: <a href="http://www.directmail.com/mail_preference">www.directmail.com/mail_preference</a></p>	 <p>10</p>
RD7	<p><i>Educate your school about precycling:</i> Make a display poster which explains what precycling is and how that can help reduce waste. The heading could say: Shop Smart, Precycle!</p> <p>Some links to help you out:  <a href="http://www.halifax.ca/recycle/precycling.php">www.halifax.ca/recycle/precycling.php</a>  <a href="http://www.planetpals.com/precycle.html">www.planetpals.com/precycle.html</a></p>	<p>4</p>
RD8	<p><i>Conduct a Locker Clean-Out Party:</i> Lots and lots of paper can be found in the depths of a locker by the end of the school year. Be prepared to salvage this "waste" by offering to recycle it and save resources as well as school dollars.</p> <p>Remember, an item recycled is a disposal fee avoided!</p>	 <p>10</p>

## Reusing Materials From the Waste Stream

The practice of reusing materials is not new; it's been around for centuries! Unfortunately, society has lost its reuse focus and moved toward the "Age of Disposables." At one time, throwing away an item after one use was considered wasteful, now it's too often second nature.

By reusing an item, its useful life is extended, thus demanding fewer new products to be made from natural resources. As with source reduction, schools must be creative and imaginative to reuse items from the waste stream.



#	Activity	Points
RE1	<i>Reuse Small Jars or Bottles to Hold Art Supplies, such as Paint</i>	2
RE2	<i>Reuse Metal Cans to Store Classrooms Supplies</i>	2
RE3	<i>Reuse Empty Milk Cartons for plant Seedlings</i>	2
RE4	<p><i>Reuse your old greeting/birthday cards: You can make new cards, ornaments, tags for next year's gifts or decorate gift bags. Here are some websites for ideas:</i></p> <p><a href="http://www.makingfriends.com/readers_cards.htm">www.makingfriends.com/readers_cards.htm</a></p> <p><a href="http://www.activityvillage.co.uk/christmas-cards-recycling-ideas-and-christmas-card-crafts">http://www.activityvillage.co.uk/christmas-cards-recycling-ideas-and-christmas-card-crafts</a></p> <p>Show us what you have done so we can share it with others.</p>	6
RE5	<p><i>Have a Book Exchange: For example:</i></p> <p><b>Class Book Exchange:</b> Each student should bring a favorite book to class that they no longer want. Place all the books in a box and randomly hand them out to the class students until each person has a book that is new to them.</p> <p><b>School Wide Book Exchange:</b> Have students bring in books from home that are in good condition and they no longer want. These</p>	4

	<p>might be books the students have outgrown. The students get credit for the number of books they bring in. Once the event starts the students can take out at least as many books as they have credits. Any leftover books can go to the students who had not attended the event, as well as to the teachers for their classrooms.</p>	
RE6	<p><i>Hold a <b>WASTE-FREE</b> lunch day:</i> Promote a day that each student brings lunch in a reusable bag with washable napkin, silverware and containers.</p> <p>For ideas, check out some of these websites:</p>  <p><a href="http://www.wastefreelunches.org/">www.wastefreelunches.org/</a>  <a href="http://www.epa.gov/wastes/education/pdfs/lunch.pdf">http://www.epa.gov/wastes/education/pdfs/lunch.pdf</a>  <a href="http://www.ecoliteracy.org/downloads/rethinking-school-lunch-guide">http://www.ecoliteracy.org/downloads/rethinking-school-lunch-guide</a></p>	10
RE7	<p><i>Hold a Swap Shop:</i> Provide a Swap Shop Area for Students to Swap Their Unwanted Items.</p> <p>Publicize the event by making a poster. You might be able to open it to the students during lunchtime! Items to swap can include clothes, books, toys, book bags, video games, DVD's, cd's, etc. Any leftover goods can be donated to your local Goodwill.</p>	4
RE8	<p><i>Design Earth Day grocery bags:</i> One of the many ways to celebrate Earth Day is to design your own grocery bag. There is a special website dedicated to this project <a href="http://www.earthdaybags.org">www.earthdaybags.org</a>.</p>	6
RE9	<p><i>Conduct an Inventor Fair:</i> Hold an inventor fair in science class where the machines and contraptions must be made from reused materials.</p> <p>Try this resource: <a href="http://www.ehow.com/how_7543562_make-invention-using-recycled-materials.html">www.ehow.com/how_7543562_make-invention-using-recycled-materials.html</a></p>	10
RE10	<p><i>Make a bird feeder or birdhouse:</i> A fun way to use recycled items, such as milk jugs, soda bottles, etc. is to make a birdfeeder or birdhouse. There are many resources on the web to choose from; here's one we found:</p>  <p><a href="http://www.dnr.state.wi.us/org/caer/ce/eeek/earth/recycle/rbirds.htm">http://www.dnr.state.wi.us/org/caer/ce/eeek/earth/recycle/rbirds.htm</a></p> <p>Perhaps this is another opportunity for fundraising by selling the birdfeeders you make. Points are earned if you complete this project as a group, not per birdhouse.</p>	6

## Recycling Recyclables

It is estimated that every American throws away four pounds of trash per day, that's almost one ton per year!

Society has three disposal options for the trash it creates at home, school, work, and play: it can be buried in a landfill, burned in an incinerator, or reused through recycling!



#	Activity	Points
RR1	<p><i>Start a holiday tree recycling program:</i> This could be a great fund raiser for your school! For more info, try:  <a href="http://www.huffingtonpost.com/2013/01/03/christmas-tree-recycling-2012-portland_n_2404896.html">www.huffingtonpost.com/2013/01/03/christmas-tree-recycling-2012-portland_n_2404896.html</a>            For other tree recycling ideas, check out:  <a href="http://www.realchristmastrees.org/dnn/allabouttrees/howtorecycle.aspx">www.realchristmastrees.org/dnn/allabouttrees/howtorecycle.aspx</a></p>	10
RR2	<p><i>Recycle packing-peanuts:</i> Collect packing peanuts for recycling at any of the locations listed on <a href="http://www.loosefillpackaging.com/">http://www.loosefillpackaging.com/</a>. You might also want to find out how they would like to receive them.</p> <ul style="list-style-type: none"> <li>• If you collect packing-peanuts on a regular basis for <b>one school year</b>.</li> <li>• If you hold a <b>one-time</b> collection event at your school.</li> </ul>  <p>For other ways to use packing peanuts, go to:  <a href="http://www.thisoldhouse.com/toh/photos/0,,20349692,00.html">http://www.thisoldhouse.com/toh/photos/0,,20349692,00.html</a></p>	10 4
RR3	<p><i>Maintain a school composting program:</i> Start and maintain for at least one year a school composting program. For more information about how to implement a program <a href="#">click here</a>.</p>	10

RR4	<p><i>Maintain a worm composting bin:</i> Start and maintain for at least one school year a worm composting bin in your classroom. For more information on how to implement a program <a href="#">click here</a>.</p> 	10
RR5	<p><i>Buy recycled products:</i> Have the school start a policy to purchase recycled paper. Many products schools use on a regular basis, including copy paper and notepads, are available with recycled content from your regular office supply vendors.</p> <p><b><i>For every 20 cases of recycled paper substituted for non-recycled paper, you save 17 trees, 390 gallons of oil, 7,000 gallons of water, and 4,100 kWh of energy. In addition, you eliminate 60 pounds of air polluting emissions. That's a BIG benefit from using a product that is as good as the product you use now!</i></b></p>  <p>An essential part of recycling is buying products made from recycled materials, better known as "closing the loop." Look for products with the highest post-consumer content which are products made from recyclables used by the consumer rather than the manufacturer (pre-consumer waste).</p>	10
RR6	<p><i>Participate in the annual NRRA Spring Compost Bin Sale:</i> The compost bin sale offers schools the opportunity to raise money while providing local residents with an easy to use backyard compost bin at a low price! The sale works very much like a Girl Scout cookie sale. To find out more information, click <a href="#">here</a>.</p> 	10

## Taking a Trash Tour

Before starting or expanding a school recycling program, it helps to know what materials exist in the school's waste stream. One way to find out is to take a *Trash Tour* of the school!

The goal of a *Trash Tour* is to record and identify who's throwing out what and to target areas for source reduction, reuse and recycling. The tour should include all areas of the school where trash is generated, i.e., the cafeteria, classrooms, offices and custodial areas.



Interview the key personnel of each area visited to get their opinion on the school's waste composition. Remember, these are the real recyclers of the program, make sure to include them in the process of developing or expanding a recycling program by asking their opinion.

#	Activity	Points
TT1	<i>Conduct a full waste audit:</i> A waste audit enables you to see what your school's garbage is made up of so that you can make a plan for reducing, reusing and recycling. For more information on how to conduct a waste audit, <a href="#">click here</a> .	10
TT2	<i>Make a poster on your schools Waste Audit Results and display it at your school.</i> Use the information you have gather from your waste audit to show what is in the school's waste and what can/should be recycled.	4
TT3	<i>Educate teachers and students about your waste audit results:</i> Using the poster and perhaps examples of the type of material found in the school's waste stream, conduct classroom and staff presentations on your audit results. Use this as an opportunity to educate the school's population on what can be recycled!	4
TT4	<i>Go on a fieldtrip:</i> Coordinate a class field trip to a local recycling or composting facility to help educate students on the many ways to recycle.  Take pictures to send to the CLUB so we can include them in the next <a href="#">School News You Can Use!</a>	6
TT5	<i>Interview the school's local community recycling contact:</i> Find out and learn how, why, what and how much the town recycles.	6

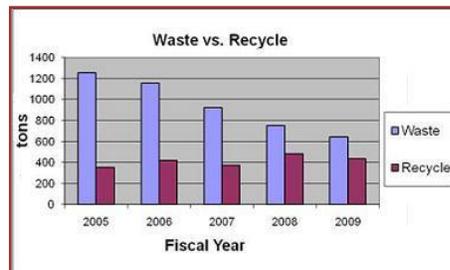


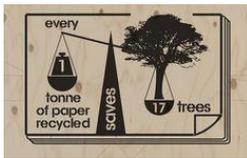
## Keeping Records of the School's Recycling Efforts

As students and staff become more familiar with and committed to the school's recycling program, more recyclable materials will leave the waste stream.

Keeping track of these changes is a great way to blend a school's recycling program into classroom activities, as well as provide the rest of the school with the visual progress of the recycling program.

Students can apply math skills by tracking waste generation and recycling efforts with the use of charts, tables, graphs, percentages, etc.



#	Activity	Points
KR1	<p><i>Weigh your recyclables:</i> Ask the school's waste hauler for the weight slips of the recyclables and solid waste for 3 to 6 months.</p> <p>Graph the monthly changes.</p> 	6
KR2	<p><i>Determine your school's recycling rate:</i> Calculate and graph the amount of waste materials generated and recycled; then calculate the resulting recycling rate for the school.</p>	6
KR3	<p><i>Calculate how many trees your school saved:</i> Calculate the number of trees saved as a result of the school's recycling efforts (2,000 Pounds of Recycled Paper = 17 Trees Saved).</p> <p>Make a poster of your findings so that the entire school can see the important environmental impact their recycling program is having.</p> 	4
KR4	<p><i>Post your results:</i> During the entire school year post weekly or monthly recycling quantities in the halls of the school to let everyone see the recycling progress of the school.</p>	10
KR5	<p><i>Use a paper shredder:</i> Work with the school administrator to have confidential documents shredded so that they can be easily recycled.</p> 	6

## Promote Recycling Within the School

For a school recycling program to be successful, there must be a commitment from all parties involved -- from the students to the custodial staff. Continuing education and promotion is necessary for the longevity of any school recycling program! Oftentimes, a school recycling program is started with great fanfare and is a booming success, and then, unfortunately, the promotion stops.



Without constant reminders, participation rates can drop and the program can begin to fade away. To help combat this problem, many schools have reinforced their initial promotion of a school recycling program through periodic fun and entertaining activities!

#	Activity	Points
PR1	<i>Hold a Recycling Assembly:</i> Plan a school recycling assembly to introduce everyone to the school's recycling program and to motivate them to participate.	10
PR2	<i>Conduct Recycling Presentations:</i> Conduct short, classroom presentations to explain the recycling program to each class, to motivate them to recycle and to answer any questions they may have. You can earn 10 points for every 5 presentations you conduct.	10
PR3	<i>Host a School CLUB Workshop or Technical Assistance Training:</i> For each Workshop or STAR Assessment: For each Technical Assistance Training:	2 5
PR4	<i>Develop a Recycling Bulletin Board:</i> Create a bulletin board in the school to inform students and faculty about recycling-related issues like what can be recycled, how can it be recycled and why it should be recycled.	6
PR5	<i>Develop a school recycling website:</i> You can most likely tap into your current school website and add a page to host your website. Consider asking your webmaster or technology specialist for help. Some examples of school & district recycling websites: <a href="http://www.bend.k12.or.us/education/components/scrapbook/default.php?sectiondetailid=4093">www.bend.k12.or.us/education/components/scrapbook/default.php?sectiondetailid=4093</a> <a href="http://stafford.schoolfusion.us/modules/cms/pages.phtml?pageid=150145&amp;&amp;sessionid=863a223786e990e02e0947af360b6325">http://stafford.schoolfusion.us/modules/cms/pages.phtml?pageid=150145&amp;&amp;sessionid=863a223786e990e02e0947af360b6325</a>	10



PR6	<p><i>Have regular School Recycling/Conservation Announcements:</i> Add a “Recycling Tip of the Week” to the daily announcements of the school.</p> <p>Some Examples:</p> <ul style="list-style-type: none"> <li>• Recycle your plastic grocery/shopping bags at your local supermarket.</li> <li>• Make book covers out of paper grocery bags.</li> <li>• Share the message “Reduce, Recycle and Reuse” with others</li> <li>• Recycle cans, bottles and plastics.</li> <li>• Reuse your greeting cards by cutting out pictures and gluing them onto new cards.</li> <li>• Recycle your holiday trees by bringing them to your local transfer station or garden center.</li> <li>• Don’t throw away old crayons. Recycle them with the Crazy Crayon program - <a href="http://www.crazycrayons.com/">http://www.crazycrayons.com/</a></li> <li>• Turn off the water while brushing your teeth.</li> <li>• If you find a leaky faucet in your home or yard, ask an adult to fix it.</li> <li>• Put a 'no junk mail' sticker on your letter box. You'll be amazed at how much this reduces your rubbish.</li> <li>• Change out your light bulbs with low-energy light bulbs.</li> <li>• Turn off your computer at night.</li> </ul>	6
PR7	<p><i>Produce a School Recycling Newsletter:</i> Create a newsletter twice a year that contains information about the school’s recycling program.</p> <p>Some ideas of what to include in your newsletter:</p> <ul style="list-style-type: none"> <li>• A column with tips about recycling for the school.</li> <li>• What parents and kids can do at school.</li> <li>• A description of a new recycling program at the school.</li> <li>• Charts and graphs about how much the school has recycled and how many trees and/or money the schools saved.</li> </ul>	8
PR8	<p><i>Write a Letter to the “Editor” of your newspaper:</i> Let the community know what is happening with the school’s recycling program by writing an informative letter to the editor of the local newspaper.</p>	4
PR9	<p><i>Write two letters to the government:</i> Write at least two letters to government officials and world leaders about the importance of recycling.</p>	4
PR10	<p><i>Write five letters to local companies:</i> Write at least five letters to local stores, restaurants, ski areas, etc. about starting or enhancing a recycling program.</p>	10



PR11	<p><i>Create a Recycling Poster Series:</i> Create six posters displaying what materials can be recycled and reasons to recycle them.</p>	8
PR12	<p><i>Organize a Recycling Logo Contest:</i> Have a fun and rewarding contest between classrooms to design a new logo for your school Recycling Club. You could give the students a slogan that would fit the logo, for example:</p> <ul style="list-style-type: none"> <li>• Continue the cycle. Recycle.</li> <li>• Reduce, Reuse, Recycle.</li> <li>• Don't Trash Our Future.</li> <li>• Trash, you can't hide from it.</li> </ul> <div style="text-align: center;">  </div> <p>Once the logo has been finalized use it on T-shirts, mugs, etc. to promote and expand your recycling program.</p>	10
PR13	<p><i>Institute "Students Teaching Students:"</i> A great way to promote recycling in general is to have older students make five presentations to the younger students on recycling!</p>	10
PR14	<p><i>Participate in Community Projects:</i> Students can learn first-hand what is happening in their community and the community can see the energy and the enthusiasm that the students have for their community! For ideas on community volunteering contact your local Recycling Coordinator, Chamber of Commerce, City or Town hall.</p>	8
PR15	<p><i>Educate the public:</i> Develop a program to educate the public about their local recycling program. For example:</p> <ul style="list-style-type: none"> <li>• Make a poster showing everything that can be recycled in your town and display it at your library.</li> <li>• Have a display at a local event (i.e. Town Meeting) where you talk about recycling and what's available in your town.</li> <li>• Send out six different monthly press releases to the local press.</li> <li>• Develop and hand out "How To Recycle" educational flyers to residents.</li> </ul> <div style="text-align: center;">  </div>	<p>2</p> <p>4</p> <p>8</p> <p>8</p>
PR16	<p><i>Celebrate Earth Day and America Recycles Day:</i> There are many resources on the web with suggestions and ideas for Earth Day and America Recycles Day. Here are some links to help you get started:</p> <p><a href="http://www.earthday.org/edunetwork/edn-curriculum/">www.earthday.org/edunetwork/edn-curriculum/</a>  <a href="http://www.earthday.envirolink.org/">www.earthday.envirolink.org/</a>  <a href="http://www2.epa.gov/earthday">www2.epa.gov/earthday</a>  <a href="http://americarecyclesday.org/">http://americarecyclesday.org/</a></p> <div style="text-align: center;">  </div>	<p>2 to 10 (depending on the activity)</p>