E-mail: recycle@thegreenteam.org www.thegreenteam.org

SLASH TRASH! Reducing, Reusing and Recycling Our Way to Zero Waste

OBJECTIVES

Raise awareness about the problems associated with waste disposal and help students discover how to reduce, reuse and recycle instead. Help students track and measure the results of their actions and see the difference they can make.

BACKGROUND INFORMATION

What is the problem with trash?

Traditional waste disposal methods, landfilling and incineration, can cause environmental problems such as air and water pollution. As waste decomposes in a landfill, methane gas is released, contributing to the greenhouse effect and global warming. If the amount of trash generated by our society continues to rise, future generations will be faced with greater environmental problems as a result.

How can we solve the trash problem?

1. **Reduce -** We can cut down on the amount of trash requiring disposal by not creating it in the first place. Ways to reduce waste include avoiding disposable and over-packaged products, buying reusable products, and getting off "junk mail" lists. Home composting can keep nearly half of our household waste out of the traditional disposal system. Items that can be composted include fruit and vegetable scraps, leaves, grass clippings, weeds, garden debris, and nonrecyclable paper products (paper towels, napkins, plates, coffee filters, tea bags, tissue, waxed paper).

2. **Reuse -** We can cut down on the amount of trash requiring disposal by reusing items instead of throwing them away. Examples of reuse include donating unneeded clothing or household items to charities or swap shops, repairing broken items, and reusing items like shopping bags, boxes, containers and aluminum foil.

3. **Recycle -** Many items that cannot be reduced or reused can be recycled, a process that converts them into new products. Newspaper, white paper and cardboard can be recycled into new paper products. Glass, metal and plastic items can be recycled into new containers and the raw materials needed to build a variety of other products, like steel bridges and cars. Organic waste from restaurants, grocery stores and food processing plants can be recycled into compost. The list of materials being recycled continues to grow as new businesses are developed to use waste materials in place of virgin materials in the manufacturing process. It is important to close the recycling loop by buying products made with recycled materials.

ACTIVITY

Discussion

Discuss the problem of trash with your students. Explain the concepts of reducing, reusing and recycling. Ask them for examples of items that commonly get thrown in the trash that could be reduced, reused or recycled instead. Show them such examples.

THE GREEN TEAM Slash Trash Lesson

A program of the Massachusetts Department of Environmental Protection

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Slash Trash Report

By participating in this activity, your students will have an opportunity to see the results of their waste reduction efforts at home.

- Use the template on the reverse to make a copy of the Slash Trash Report for each student. Ask them to use the report to keep track of the number of bags of trash disposed and the waste reduction methods used in their homes each week for a month. Encourage students to help their families reduce the amount of trash thrown away. Provide an opportunity for students to share waste reduction ideas and activities with each other.

- At the end of the month, collect the cards and review the results with the students. Help them calculate how much waste they reduced individually and as a class. Empower them with the knowledge that their actions achieved measurable results and that they can make a difference. Encourage them to continue the waste reduction activities they started during the month and to develop new ones as well.

"Slash Trash Report" Step by Step Instructions



1. **Before starting** to track their trash, students begin by writing down the number of bags their family usually disposes each week on the first line of the form (before Week 1). This provides a "baseline" number that will be used to measure differences seen after new recycling and composting activities are used.

2. **Week 1:** Students encourage their families to reduce, reuse, compost and recycle. They circle each activity used in their home that week. At the end of the week, they record the number of bags disposed in the blank "trash bag" in the left column.

3. **Weeks 2 through 4:** Students try to reduce the amount of trash disposed by adding new recycling, composting or other waste reduction activities. If an activity is not listed, students may write the activity in the "other" category. They continue to record the number of bags disposed for each week.

4. **At the end of the 4th week,** students who used new waste reduction activities during the month should be able to observe a reduction in the amount of trash disposed. The number of bags at Week 4 should be smaller than the baseline number filled in on the first line. Some students' forms may show a decrease in the amount of trash disposed on Weeks 1, 2, 3 and 4. Some students may already actively recycle and compost at home and may see little change in their disposal rate. As a measure of their current success, a typical family of four that recycles and composts can keep their trash down to one bag per week. To reduce more, other waste reduction activities such as purchasing in bulk can be added.

5. **To figure the amount of trash reduced on a weekly basis,** subtract the number of bags disposed in a given week from the baseline number. This is how much trash the students and their families eliminated that week by reducing, reusing and recycling. Encourage your students to continue the waste reduction activities they used during the month so that the environmental benefits of their actions will continue.

   To tally the total amount of trash slashed by each student during the month, subtract the number of bags reported at Week 1 from the baseline number of bags. Enter this number in the "Bags Eliminated" column. Repeat this process for Weeks 2, 3 and 4. Add up the number of bags eliminated each week to determine the total number of bags of trash eliminated that month. This is the impact the student and their family made during the month by recycling, composting and using waste reduction activities.

   To tally the amount of trash slashed by the class as a group, add up the number of bags slashed by each student. This is how much trash your class eliminated by reducing, reusing and recycling!

THE GREEN TEAM Let's Talk Trash/How You Can Help

"Let's Talk Trash"

In Massachusetts each person creates over 4 pounds of trash each day. Below is information about various categories of waste and recyclables, followed by suggestions for reducing, reusing, recycling, and composting.

Aluminum

- Recycling a single aluminum can saves enough energy to run a television or computer for three hours.
- Using recycled aluminum instead of virgin materials decreases water and air pollution and energy use by 95%.
- You can make 20 cans out of recycled material with the same amount of energy it takes to make one new one.

Glass

- Recycling 1 glass bottle saves enough energy to light a 100-watt light bulb for 4 hours.
- In the coming decade, Americans are projected to throw away over 11 million tons of glass bottles and jars.
- Recycling saves 25-30% of the energy used to make glass from virgin materials

Plastics

- Americans throw away enough plastic bottles each year to circle the earth four times.
- Five recycled plastic bottles make enough fiber to stuff a ski jacket.
- Every hour, we throw away 2.5 million plastic bottles (22 billion plastic bottles per year).

Paper

- A 12-foot high wall could be built from New York City to Los Angeles with all of the office and writing paper thrown out in the U.S. each year.
- Recycling one ton of paper saves 17 trees.
- One tree can filter up to 60 pounds of pollutants from the air each year.

Steel

- Every ton of steel recycled saves 2,500 pounds of iron ore, 1,400 pounds of coal, and 120 pounds of limestone.
- Enough energy is saved each year by recycling steel to supply Los Angeles with electricity for almost 10 years.
- The steel industry recycles nearly 19 billion steel cans into new products each year - about 600 cans recycled every second!

Organic Waste

Almost one third of the waste stream by weight is organic waste like food, leaves, and grass.

- In Massachusetts, leaves and yard waste make up approximately 17% of our waste stream.
- Each person in Massachusetts creates about 530 pounds of food and yard waste each year. If all that material was piled onto a football field, the pile would be 2,067 feet high, higher than Mt. Wachusett.

"How You Can Help"

- Help your family recycle. To find out what can be recycled in your community, visit **www.earth911.com**.
- If there is no recycling program at your school, work with your teacher to help start one.
- Help your family compost fruit and vegetable scraps, leaves, and grass clippings.
- Reduce junk mail at your house. To learn how, visit **https://www.mass.gov/guides/consumer-guide-to-stopping-junk-mail.**
- At the store, choose products with less packaging and those made with recycled materials.
- Save paper. Use both sides of paper at school and at home.

DON'T EVER THINK YOU CAN'T MAKE A DIFFERENCE, YOU CAN!

Slash Trash Report

This is your baseline number

Before we started tracking our trash, we usually had _____ bags of trash each week. For four weeks, I kept track of how we slashed our trash by recycling, composting, reducing and reusing. Here are my results:

		BAGS ELIMINATED
WEEK 1	 WHAT DID YOU DO? We Recycled (circle): paper • glass • aluminum • metal cans • plastic • other: _____ We Composted (circle): leaves and grass • food scraps • other: _____	_____
WEEK 2	 WHAT DID YOU DO? We Recycled (circle): paper • glass • aluminum • metal cans • plastic • other: _____ We Composted (circle): leaves and grass • food scraps • other: _____	+ _____
WEEK 3	 WHAT DID YOU DO? We Recycled (circle): paper • glass • aluminum • metal cans • plastic • other: _____ We Composted (circle): leaves and grass • food scraps • other: _____	+ _____
WEEK 4	 WHAT DID YOU DO? We Recycled (circle): paper • glass • aluminum • metal cans • plastic • other: _____ We Composted (circle): leaves and grass • food scraps • other: _____	+ _____

To find out how many bags of trash your family slashed, subtract the number of bags reported each week from the baseline number on line 1. Write this number in the "Bags Eliminated" column. Add up the number of trash bags eliminated each week. This is the impact you and your family made during the month.

Compare your results each week. How low did you go?

Total Bags Eliminated

= _____

This Month!

Slash Trash Report

This is your baseline number

Before we started tracking our trash, we usually had _____ bags of trash each week. For four weeks, I kept track of how we slashed our trash by recycling, composting, reducing and reusing. Here are my results:

		BAGS ELIMINATED
WEEK 1	 WHAT DID YOU DO? We Recycled (circle): paper • glass • aluminum • metal cans • plastic • other: _____ We Composted (circle): leaves and grass • food scraps • other: _____	_____
WEEK 2	 WHAT DID YOU DO? We Recycled (circle): paper • glass • aluminum • metal cans • plastic • other: _____ We Composted (circle): leaves and grass • food scraps • other: _____	+ _____
WEEK 3	 WHAT DID YOU DO? We Recycled (circle): paper • glass • aluminum • metal cans • plastic • other: _____ We Composted (circle): leaves and grass • food scraps • other: _____	+ _____
WEEK 4	 WHAT DID YOU DO? We Recycled (circle): paper • glass • aluminum • metal cans • plastic • other: _____ We Composted (circle): leaves and grass • food scraps • other: _____	+ _____

To find out how many bags of trash your family slashed, subtract the number of bags reported each week from the baseline number on line 1. Write this number in the "Bags Eliminated" column. Add up the number of trash bags eliminated each week. This is the impact you and your family made during the month.

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This Month!