WASTE REDUCTION AND RECYCLING:

WHAT YOU CAN DO!

OBJECTIVES:

- Students will gain an understanding of the issues surrounding waste reduction and recycling.
- Students will gain an understanding of the important role that all individuals play in reducing the amount of waste they produce.
- Students will gain an understanding of the importance of protecting and preserving our precious natural resources.
- Students will generate ideas for poems, illustrations and slogans to be entered in the America Recycles Day Poetry and T-Shirt Design Project.

MATERIALS:

Student handouts: Book List, Web Site List, Glossary (italicized words and phrases are defined in the Glossary).

TIME REQUIRED:

2 class periods.

ACTIVITY INSTRUCTIONS:

1. Students should be given an opportunity to read the handout.
2. Teacher should facilitate a discussion focusing around the information provided in the handout, emphasizing the fact that waste reduction is an important issue that impacts each and everyone of us as well as providing students with ways they can help reduce the amount of waste they produce by reusing and recycling.
3. Students should split into groups of two or three and brainstorm to come up with slogans and ideas for artwork using the handout as an information source.

STUDENT HANDOUT

RECYCLING AND HOW YOU CAN REDUCE WASTE

Did you know?

- Each person in Florida produces about 7 lbs of trash a day!
- Americans throw away enough aluminum each year to rebuild the entire commercial air fleet every 3 months.
- Americans throw away enough office paper each year to build a 12 foot high wall of paper from New York to Los Angeles.
- Americans throw away enough plastic soda bottles each year to circle the Earth four times.
- Americans throw away enough motor oil each year to fill 120 supertankers.
- Americans throw away 20 million tons of grass clippings, dead leaves and branches a year (an average size family's yard waste can make about 300-400 pounds of finished *compost* a year!)

***Recycling* helps reduce waste as well as reducing air and water *pollution*, *conserving energy*, saving *landfill* space and preserving *finite resources*.**

Throw it out – Not in the bin!

Curbside *recycling* is now available throughout Hillsborough County and the City of Tampa, providing residents with an easy, effective and environmentally-beneficial way to reduce waste. The following items can be *recycled* by placing them in the blue plastic *recycling* bins and on the curb on your pick-up day.

Newspaper and Magazines: including inserts
Plastic Bottles: soda, milk, juice, shampoo, detergent bottles
Glass Bottles and Jars: all colors
Cans: Aluminum beverage cans
Other Containers: orange juice and milk containers, juice boxes, soy milk containers

*Be sure to rinse all containers clean.

These items are turned into new products for us to use. Believe it or not, plastic bottles are even being made into park benches, canvas bags and fleece jackets! Don't throw away that soda can or newspaper. They can all be recycled! Each of these items can be made into new products for us to use instead of taking up space in a pile of junk somewhere.

Where Does it all End Up?

Most of Tampa's trash ends up being burned at the **McKay Bay *Waste-To-Energy Facility*** with some being disposed of in *landfills*. A *landfill* is a place where trash is dumped, compacted, and covered with dirt to control blowing paper, odors, insects, and to keep water out of the *landfill*. The McKay Bay *Waste-To-Energy Facility* provides dependable and environmentally-safe disposal for the City of Tampa's solid waste. The process used at McKay Bay is a form of recycling. Trucks deliver trash which is burned and electricity generated. This electricity is then sold to the Tampa Electric Company (TECO). The facility processes up to 1,000 tons a day of *municipal solid waste!*

Unfortunately, trash is sometimes dumped along roadsides, in the backyards of larger properties or in other illegal locations. Discarding trash in unsafe ways and in non-approved places can endanger the environment upon which we depend. This means each of us is responsible for what we throw away and the impact that this waste has on our environment.

What You Can Do

The best thing you can do is to try and not create any trash. Unfortunately that's impossible. No matter how hard we try, we'll always have something to throw away. But there are many ways to make less trash. You can start by looking at what is thrown away at home and in your community. Each person's "small amount" of trash adds up to create a lot of trash. By making less trash, you help your community and the environment.

Everyone produces some waste, but you don't have to be a "super consumer." Think about the things you buy, activities you do, and services you buy. In what ways do they contribute to the solid waste problem? How could you purchase and dispose of items in ways that generate less trash?

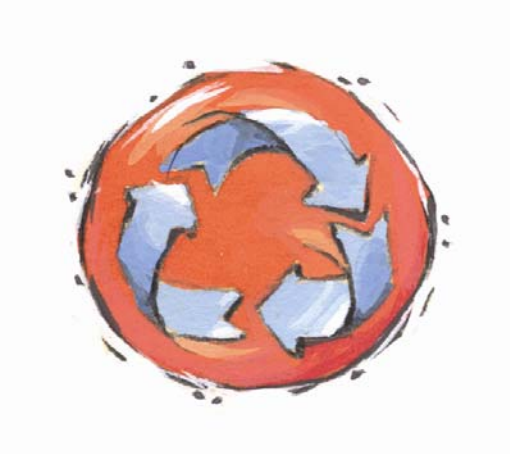
Here are some ways you can help the environment, preserve our *natural resources* and reduce the amount of trash produced:

- Buy items in returnable, *reusable*, or recyclable containers and then return, *reuse* or recycle them.
- Buy items or packages made with *recycled content*.
- *Reuse* items to make gifts or science projects.
- Take a cool lunch box to school with reusable containers inside instead of a paper bag and throw-away wrappers.
- Say "No bag please" when you buy a small item at a store that you can easily carry without a bag. That's what pockets are for!
- Donate used items and outgrown items to charities. Get a receipt that your parents can use as a tax deduction and save money!
- Save your old clothes for a garage sale or give them to a charity. If they are ripped or torn and cannot be repaired, then use them for cleaning rags (cut off and save the buttons first).
- Write on both sides of a piece of paper. If you only need to use one side, save the paper in a "*reuse*" box for future use. Make your paper last twice as long.
- Use a pencil and erase any mistakes. If you need a perfect copy, practice on one of the papers from your "*reuse*" box and then copy it over.
- Borrow books or magazines from your library instead of buying your own. Books and magazines can be used many times by the whole community instead of just once by you.
- Wrap gifts in old newspapers. Use the sports pages for athletes, comics for kids, etc.
- Collect and recycle aluminum cans and plastic bottles. Recycling one aluminum can saves enough energy to keep a light bulb lit for 12 hours!
- Save broken crayons in a can for future coloring or art projects. Buy a crayon sharpener to make points on round edges.

- Buy in bulk or buy larger packages and put the amount you need for school or snacks in reusable containers. Buying in bulk is usually cheaper than buying individually-wrapped servings and requires less packaging.
- Use a hand towel for drying your hands and dish cloth or sponge for wiping up spills. They can be cleaned and used again instead of being used once and thrown away.
- Save *energy* by turning off lights, radios and stereos when you're not using them.
- Take part in *America Recycles Day*.
- *Compost* food wastes, leaves and grass clippings.
- *Litter* is everybody's problem and responsibility. Do your part by picking it up and disposing of it properly, perhaps even recycle it!

Use this recycling and waste reduction information to brainstorm your own creative recycling messages to incorporate into your poem or artwork for entry into the *America Recycles Day* Poetry and T-Shirt Design Project.

There are also many more resources listed on the Recycling and Waste Reduction Book List and Useful Web Sites List!



Remember To Recycle! It's The Right Thing To Do!

CORRELATIONS TO THE SUNSHINE STATE STANDARDS

The following correlations to the Sunshine State Standards have been identified as having the potential for achievement through the use of this activity and associated materials. Whether or not a given standard is achieved depends upon the individual teacher and the degree of involvement with which the activity is implemented in the classroom.

Science

(Grades 3-5): SC.D.2.2.1, SC.G.2.2.1

(Grades 6-8): SC.D.2.3.1, SC.D.2.3.2, SC.G.2.3.1, SC.G.2.3.2, SC.G.2.3.4,

Language Arts

(Grades 3-5): LA.A.1.2.3, LA.A.2.2.8, LA.B.1.2.1, LA.B.1.2.2, LA.B.1.2.3, LA.B.2.2.3, LA.B.2.2.4, LA.C.3.2.3

(Grades 6-8): LA.A.1.3.3, LA.A.2.3.5, LA.A.2.3.6, LA.B.1.3.1, LA.B.1.3.2, LA.B.1.3.3, LA.B.2.3.1, LA.B.2.3.4, LA.C.3.3.3

Visual Arts

(Grades 3-5): VA.A.1.2.1, VA.A.1.2.3, VA.A. 1.2.4, VA.B.1.2.1, VA.B.1.2.2, VA.B.1.2.4, VA.E.1.2.1

(Grades 6-8): VA.A.1.3.3, VA.A.1.3.4, VA.B.1.3.1, VA.B.1.3.2, VA.B.1.3.3, VA.A.1.3.4, VA.E.1.3.1

Recycle Today… Save Tomorrow.

GLOSSARY

America Recycles Day: November 15th every year is designated as America Recycles Day in an effort to educate and inform people of the importance of waste reduction and recycling, and to encourage Americans to recycle and to buy recycled products.

Compost/Composting: Composting is Nature's way of recycling. Compost is a rich, soil-like substance that can be added to a garden to help plants grow. Grass, leaves, paper, and some types of food can naturally decay and turn into compost.

Conserve: To use wisely, avoiding waste.

Energy: The power to do work. Making new items from recycled ones takes less energy than making products from brand new materials.

Finite resources: Or nonrenewable resources are natural resource from the Earth that exist in limited supply, like oil or coal. Once this supply is used up, the resource is gone forever.

Landfill: A specially constructed site for safely and effectively disposing of garbage.

Litter: Waste that is improperly disposed of on the street, sidewalk, lakes and other bodies of water, and in the general environment.

Municipal solid waste: more commonly known as trash or garbage—consists of everyday items such as product packaging, grass clippings, furniture, clothing, bottles, food scraps, newspapers, appliances, paint, and batteries.

Natural Resources: Materials in nature, like trees, that are necessary for life. Resources provide ingredients for food, fuel, and goods.

Pollution: Contamination of air, soil, or water with harmful substances.

Recycle: To make new products from old ones. Recycling used items, such as paper, cans, or bottles, saves energy, produces less pollution, and uses up fewer natural resources.

Recycled content: The amount of pre- and post-consumer recovered material introduced as a feed stock in a material production process, usually expressed as a percentage (e.g., 30% post-consumer content).

Reuse: To clean or repair something old and use it again instead of throwing it away.

Virgin Materials: Any basic materials for industrial processing that have not been previously used, such as petroleum for plastics manufacture, iron ore for steel manufacture, wood pulp for paper manufacture, or bauxite ore for aluminum manufacture.

Waste-To-Energy Facility: Also called Refuse-To-Energy Facilities, use municipal solid waste as part or all of their fuel supply. In Tampa, the incineration of around 1,000 tons of waste per day at the McKay Bay Waste -To-Energy Facility produces energy which is sold to Tampa Electric Company, which is the equivalent of supplying all of the electrical needs of 12,000 Florida homes.

Waste reduction: Actions that reduce waste, such as package design, double-sided copying, recycling.