



Share The Knowledge!

Lesson 3:

In this lesson, let your students teach each other about recycling. Divide your class into groups and assign each group one of the following topics. Each group will then research their topic and make a presentation to the class. Encourage your students to be creative with their presentation.

Group 1: RECYCLING

Why is recycling important?
What materials can be recycled?
How do Tennessee's recycling efforts compare to other states?
How is waste handled in your city or town?

Group 2: PLASTICS

Discuss PET
What is the manufacturing process for PET plastic?
What is the recycling process for PET plastic?
What are some ways recycled plastics are used?

Group 3: PAPER

What is the history of making paper?
How is paper made? Do an in-class demonstration.
How is paper recycled?
What are some products that contain recycled paper?

Group 4: ALUMINUM

How is aluminum manufactured?
How is aluminum recycled?
What is aluminum used for?
When was aluminum discovered?



Presentation Suggestions:

Posters
Handouts
Overheads
PowerPoints
Skits
Games

In addition to these ideas for visuals, have each group make a quiz about their topic and give it to the class.





Dos and Don'ts of Recycling

Lesson 3:

By now we all know that recycling benefits everyone, but are there specific guidelines about what should or should not be recycled? What about the process of recycling?

Below are a few tips to keep in mind when recycling:

- Make sure things are clean. Rinse bottles and cans, and keeping boxes out of the weather makes them easier to process, and it keeps the bugs away!
- Pay attention to what goes into your bin. A cereal box would be great, but a greasy pizza box might not be best.
- Make sure you take the caps off of plastic jugs and bottles. This makes them easier to process.
- Instead of throwing out your yard waste, create a mulch pile to save room in the landfill.
- Things you probably won't want to recycle: styrofoam, light bulbs, food-soiled paper, wax paper, and ceramics.
- Things you probably can recycle: tin and aluminum cans, newspapers, magazines, plastic bottles, glass bottles and jars, cereal boxes, and other clean and dry cardboard boxes.

Remember: Every community is different with what can be recycled and the way it should be done. If you're unsure about the guidelines in your community, call your local public works department or recycling organization.





Myth or Fact?



Lesson 3:

Test your students' recycling knowledge. Present the myths and/or facts below, and let them decide which is true.

Myth: Paper grocery bags are a better environmental choice than plastic bags.

Fact: Plastic bags use 40 percent less energy to produce and generate 80 percent less solid waste than paper. Plastic bags are 100 percent recyclable for all environmental impacts related to air emissions, water emissions and solid waste.

Myth: Landfills and incinerators are most cost-effective and environmentally sound than recycling options.

Fact: Recycling programs, when designed properly, are cost-competitive with landfills and incinerators, and provide net pollution prevention benefits. Recycling materials not only avoids the pollution that would be generated through landfilling and incinerating these, but also reduces the environmental burden of virgin materials extraction and manufacturing processes.

Myth: Landfills are significant job generators for rural communities.

Fact: Recycling, where instituted, creates many more jobs for rural and urban communities than landfill and incineration disposal options.

Myth: Recycling metal uses more energy than extracting the raw material in the first place.

Fact: Recycling aluminum cans saves up to 95 percent of the energy needed to make new cans from fresh raw material.

Myth: Recycling rates are keeping up to the rate at which plastic is produced.

Fact: The rate of plastics generation continues to accelerate while recovery is static, and plastic packaging is actually declining.

Myth: Most plastic water bottles end up in the waste stream.

Fact: The beverage industry's containers are among the most recycled consumer product packaging in the nation.





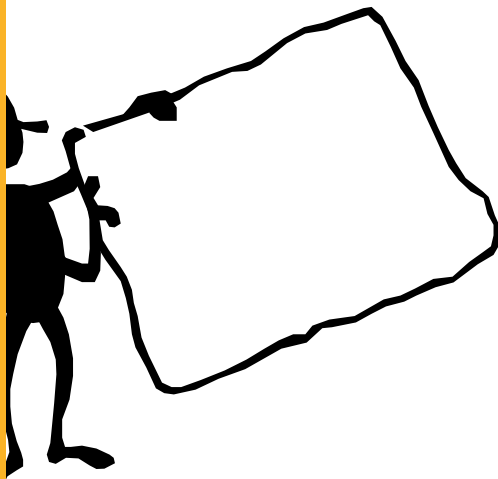
Make a Recycling Poster

Divide the class into groups, and have each group design and create a recycling poster that will be displayed in your classroom. You can even make it a contest where the winning poster will be displayed for the entire school.

Lesson 3:

Here are some tips for getting started:

- Provide posterboard, markers, crayons, scissors, glue, paint, colored paper and any other craft items you have on hand.
- Consider asking each student to bring in a recycled item to somehow include in their poster. This may teach children the meaning of trash and how important recycling truly is.
- Students should minimize the text on the poster and focus on graphics. Let them draw or cut pictures out of magazines to illustrate their idea.
- Consider providing a theme to each group, or to the entire class, such as plastics recycling, paper recycling, etc. Or, leave it general and let the students decide how to portray recycling.
- If you are doing a group poster, divide the poster into smaller sections so each child can add his/her own touch and no one feels left out. This way, the poster will be a collaboration of everyone's ideas.



- Make this truly an in-class assignment. This can be an opportunity for students to get to know each other. If students take the project home it will no longer be a class group project.
- Have each group present their posters to the class. They should explain why they chose the representations they did and what the importance of their poster is.





Create your own Secret Earth Code

Think about all of the words and messages you can create about how to keep our Earth beautiful and clean. Now, change them into code and challenge each other to solve them!

Lesson 3:

Materials:

2 blank sheets of paper

A pen, pencil or marker



Instructions:

1. Write the alphabet on one sheet of paper. Make sure to leave enough space above or beside each letter for your symbol.
2. Start creating symbols for each letter. Be creative - you can color or decorate your symbols too! (See the example below.)
3. Once you've completed your code, use the second sheet of paper to write your hidden message.
4. Let your friends or family take a look and see if they can crack your secret Earth code messages!

Example:

▽ << # Π ∃ < % & Π Φ = @ Φ \$ Π % ^ ♥ \$ ♥ = ^

Φ Ω ♥ # ^ ⊕ ▽ ||| Δ ↔ ! = ∴ ≅ < ∃ + % Π & > * @ Σ \$ -

A B C D E F G H I J K L M N O P Q R S T U V W X Y Z





Unscrambling Words

Unscramble the words below. Each word can be a recyclable material or has something to do with protecting the environment.

Lesson 3:

EPARP _____

SATRH _____

TSEWA _____

SALGS _____

SREUE _____

TAEHR _____

CYRNELGCI _____

CPILAST _____

NREGY _____

NLECA _____

ETP _____





Activities

Lesson 3:

Conduct a Classroom Recycling Game

Place recyclable items, such as pieces of paper, plastic bottles, empty aluminum cans, plastic spoons, pieces of aluminum foil, paper cups, an empty milk jug, etc., around the classroom along with the respective recycling bins. Have the students collect and put the items scattered throughout the room into the correct bins.



Create Your Own Recyclamobile

Have children make a “recyclamobile.” Ask them to bring from home some kind of box or container that could be recycled, such as a cereal box or a plastic margarine container. Then ask them to come up with as many other different uses for the container as they can. The uses can be serious or silly. Next, have children write ideas on small squares of construction paper and attach the squares with yarn to the containers. Hang the recyclamobiles around the room for all to enjoy.



Create Bags for the Environment

Have students bring in their paper grocery bags. Students can decorate the bags with pictures of Earth and environmental messages. Then students return the decorated bags to the grocery store so that the bags can be distributed, full of groceries, to customers on Earth Day. Students can also take the bags home for family and friends or distribute the bags throughout the entire school and classroom.



Create an Environment Bulletin Board

Get children involved in caring for the environment. Have each child choose an activity to do and color. Some children can create their own weekly calendar of recycling duties and others can work on sorting trash into the proper recycle containers. When the projects are finished, display the finished pages on a bulletin board titled “What We Did for the Environment.”





Community Involvement

Lesson 3:

Now that you have learned about recycling in the classroom, it's time to take it to the next level: the community.

Recycling Drives

One way to incorporate the community is to have a recycling drive. The drive could include a competition between each grade level or between schools to see which group can bring in the most recycleable materials. Your drive could collect one type of recycleable product (such as PET Bottles) or it could include them all! Within each school district, elementary, middle and high schools could each collect a different material.



The drive can be promoted with recycling signs (made from recycled materials, of course) designed by the children and displayed around the community. The school or class that recycles the most should receive recognition in the community.

Clothing Drives

Another way to involve the community is to reuse clothing. Plan a community yard sale or consignment sale. Schools can even host themed clothing drives such as used Halloween costumes for elementary schools or used prom dresses for high schools. If school uniforms haven't changed, hand-me-down programs are both environmentally and financially beneficial for schools and families.

Even gently used school supplies can be reused, such as backpacks, lunchboxes, notebooks, and even calculators. If it can be reused, it should be!

Think of things that everyone needs and reuse them if you can!





Earth Day Activities

Lesson 3:

To celebrate Earth Day at your school, you could have a photography, art, poster, or essay contest for students. All the entries can be displayed in the school library for Earth Day.

Your school could also host an educational Earth Day fair. This event could include games, educational booths, and can even incorporate a recycling drive. The fair could include just one school, all area schools, or the entire community. You can even register your event at <http://earthday.net>.

Other Earth Day events could include planting a tree or visiting your school's garden. You could even organize a clean up on the school grounds with each grade level assigned to a different area.

Remember, no matter how you choose to celebrate Earth Day, it's the little things we do individually that make a big difference.

Don't forget to find out about other Earth Day activities in your community! If there are none, consider starting them yourself. You can find an organizers guide at <http://earthday.net>.

