



Field Trip Ideas:



There's no better way to learn than by first-hand experience. Take your students on a field trip to learn about recycling in their community.

Lesson 5:

Visit a recycling facility.

Learn first hand how waste is handled in your school's community. Take an afternoon trip to a recycling center or landfill in your area. If a field trip is not possible, ask a representative from the center to visit your school.

Visit www.cleanup.org to find out what facilities are in your area.

Spend a day outdoors.

Take an afternoon and clean up your community. Take your class to a nearby park, river, lake or mountain range and have the children help beautify their community. When you return discuss what you saw and what you can do help prevent nature from being polluted.

Visit a local manufacturing company.

To understand more about recycling it is important to learn how the products are manufactured. Take your class to a local bottling company or any other company that produces a recyclable material so children can have an appreciation for how everyday goods are produced.

Talk to the experts.

Find a local environmental or recycling expert to talk to your students. He or she can provide first-hand knowledge, statistics and information to your students about recycling and the environment.





Lesson 5:

How does a recycling facility work?

1. Construction debris is brought on site. Cardboard, wood, metal and concrete are separated. All hazardous and illegal materials are removed at this point to be disposed of in their proper facility.



2. Metal and cardboard are sent to recycling facilities. Wood is ground to produce mulch. Concrete remains on our site for crushing. With the rising costs of stone, recycling concrete is quickly becoming the product of choice.

3. Residual debris is screened allowing for the recovery of dirt, rock, sand and gypsum. This product is available in filling applications as opposed to costly topsoil.

4. Finally, the greatly reduced residual material is sent to the local landfill.

How is plastic recycled?

1. Plastic bottles for recycling are collected from bottle banks or from curbside recycling boxes.

2. The bottles are taken away by a truck to be sorted and then squashed into big blocks.

3. The blocks are then taken to a factory, where they are cut up into small flakes – like little, colorful corn flakes.

4. The flakes are washed and dried, then taken away to be melted and made into new plastic objects.





Make a Recycling Center at School

You're a recycling pro by now! So get everyone together, and start a recycling program at your school! Here are some tips for creating your own recycling program.

Lesson 5:

- Decide what can be recycled in your school district (paper, plastic, printer cartridges, batteries, etc.). Then, make sure to sort objects according to the rules.
- Determine how you will sort your recyclables. For instance, will each grade level have a recycling area? Will you have small stations in each classroom? Consider having a contest between grades or classes to challenge each other to recycle.
- Form a recycling club to be responsible for the program. This club should include faculty, students and parents who will brainstorm ideas, set up recycling stations, determine who will get recyclables taken to the local facility, etc.
- Be creative: Use different colors and shapes for all different recyclables. Have your students create maps with all recycling stations marked on them. These can be placed throughout the school so everyone knows where to throw their trash. Make sure to use recycled paper!
- Have your students create brochures or fliers about recycling to share with parents and the community to encourage recycling and showcase your school's program.
- Watch the details: Make sure you know how many classroom, lounge and cafeteria recycling containers will be needed--you don't want to have an overflow of recyclables!
- Brag on your program! Enter the Good Sports Always Recycle challenge to have your recycling program recognized.
- Continue the education. Your recycling program should have an educational component to ensure students understand the importance of recycling. You might want to start an environmental club so more people can get involved.





Create your Own Paper Mache Project

Paper mache is one of the most environmentally friendly projects. Here is how students can have fun, while being earth friendly at the same time:

Lesson 5:

You Will Need:

- Newspaper
- Mold (such as a balloon)
- 1/2 cup all-purpose flour
- 2 cups cold water
- 2 cups boiling water
- 3 tbsp. sugar

To Make Paste:

Mix together flour and cold water in a bowl. Add this mixture to the boiling water and allow it to return to a boil. Remove from heat and stir in the sugar. As the mixture cools it will thicken.

You can also just make a quick paste by putting flour in a bowl and adding water until you have kind of a soupy paste.

To Make Your Shape:

1. Tear (don't cut) narrow strips of newspaper or newsprint. Narrower strips work best when using a rounded mold. For flat or rectangular surfaces, larger strips are ok.
2. Dip the strips into the paste, coating completely. As you lift the strip out, run it between your thumb and forefinger to squeeze out excess paste.
3. Then drape the strip across your mold. Overlap strips slightly as you go - the torn edges will blend together and your final product will have a smoother finish. You may need more than one layer of paper. It's best to allow each layer to dry before putting another on - this means some projects could take several days!



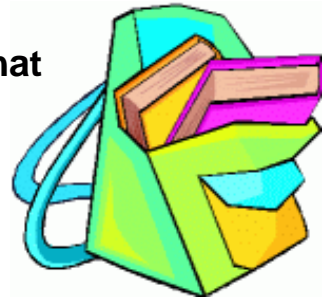


Classroom Activities

Lesson 5:

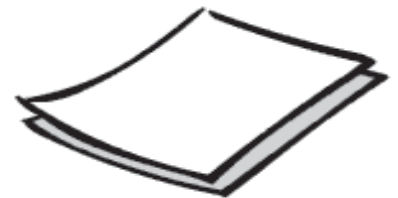
Locate and list items in the classroom that could fit into the following categories:

- Biodegradable
- Non biodegradable
- Recyclable
- Reusable for something other than its primary purpose
- Can become litter
- Can be made into compost
- Can produce hazardous smoke if burned
- Can injure wildlife



Use your imagination:

1. Think of 15 different uses for a soda can.
2. Find 15 new uses for an empty 2-liter bottle.
3. What can you do with an old greeting card?
4. Think of 15 ways to reuse an empty plastic bottle, such as a plastic soap bottle.
5. Think of different ways you can reuse aluminum.
6. What can you use an old sheet of paper for?
7. What can you do with old batteries?





Create Your Own Landfill

Lesson 5:

A landfill is an area used to store trash. A hole is dug out, lined with protective coverings, filled with trash, and then covered by soil. When the landfill is full, a final covering of clay and soil is placed over the trash. To remove methane gas (a by-product of decomposition) pipes are placed into each level of trash.



MATERIALS:

- plastic cups
- clay
- trash
- metric rulers
- plastic trash bags
- soil
- straws

PROCEDURE:

Line a plastic cup with approximately 2 mm of clay. Be sure to leave a 5 cm x 5cm window covered by clay.

Cut a piece of the trash bag to fit over the clay (leave the window uncovered).

Place about 4 cm of trash in the cup.

Insert a straw, straight up and down, inside the trash layer.

Cover the layer of trash with 1 cm of soil and compact.

Make a second layer of trash repeating steps 4, 5, and 6.

Cover the upper layer of soil with 2 mm of clay.

Cover the clay with 2 mm of soil.





Suggested Reading

- **All About Compost: Recycling Household and Garden Waste**
By Pauline Pears
- **How on Earth Do We Recycle Plastic?**
By Janet P. D'Amato
- **How Paper is Made**
By Meish Goldish
- **How to Recycle a Disposable Planet**
By Tommie Clendening
- **Jazzy Jewelry: Recycle Materials to Make Cool Stuff**
By Rebecca Craig and Dawn Brend
- **Plastics, Recycle, Reduce, Reuse, Rethink**
By Kate Walker
- **Recycle: Make Your Own Eco-Friendly and Creative Designs**
By Moira Hankinson and Nicholas Hankinson
- **Save Our Planet: 750 Everyday Ways You Can Help Clean Up the Earth**
By Diane Maceachern
- **The Toilet Papers: Recycling Waste and Conserving Water**
By Sim Van Der Ryn

