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Where does cardboard come from? Where does it go?

Almost everything we buy comes in a cardboard box. In fact, we end up with about 217 pounds of cardboard per person each year! That's a lot of cardboard ready to be recycled. This cardboard comes from trees that have been cut down, chipped, and mixed with lots of water to become "pulp."

The good news is that cardboard is easy to recycle. You start by breaking down and flattening the boxes. This makes the cardboard easy to stack and handle. It also saves space in bins, making room for more cardboard.

After collection, recycled cardboard is turned into pulp. This pulp can be used to make new cardboard, can be combined with other recycled paper pulp to make paper towels and toilet paper, and can be added to wood fiber to create fiberboard and other manufactured wood products. Using recycled cardboard to make these products requires 75% less energy and creates less pollution than making pulp from freshly harvested trees.

Before recycling your cardboard, consider *reusing* it to package, ship, or store other items. You can also *repurpose* the cardboard in many ways. Cover a cardboard box with wall-paper scraps, bits of fabric, or your favorite magazine images, and then use the box to contain some of the stuff you have in your room.



By breaking down cardboard, you can take a pile that looks like the one on the left and make it easy to stack and manage, like the pile on the right.

You can also build things with old boxes. Pictured here are spaceships, cars, desks, mazes, and even a village made from cardboard. If this looks like fun, see what you can create. Take a picture of your creation and send it to our office. There may be a prize in store for you. Mail your picture to Northwest Indiana Solid Waste District, P.O. Box 731, Monticello, IN 47960, or email it to info@nwiswd.org.



What could you create from old cardboard boxes? Use your imagination, do some crafting, and then send us a picture.



RUNNING INTO RUN-ONS

Instructions: Rewrite these run-on sentences. You have two options: create one sentence with correct punctuation and joining words; or make two sentences with correct punctuation.

- Tyler planted an oak tree seedling on Arbor Day the oak is America's National Tree.
- Jessica wrote an Earth Day play her class will perform it on April 22.
- Diego and Jayden planned a litter cleanup at the park they made posters to invite their classmates to join them.

SUM FACTS

Instructions: Use your math skills to find the answers to these questions.

- How many pounds of trash does the average American create each day?
Add these numbers: 1.32, 0.63, 1.99, 0.56
- In the U.S., what percentage of trash is recycled? Find the products and then add them together: (3×4) , (4×4) , (2×2.6)
- In 2008, what percentage of glass containers were recycled? Add the numbers that are evenly divisible by 4: 15, 8, 18, 20, 26
- In 2008, what percentage of yard trimmings were composted? Find the quotients and then add them together: $(735 \div 21)$, $(7 \div 10)$, $(144 \div 12)$, $(75 \div 5)$, $(16 \div 8)$
- What year was the first Earth Day celebrated? Find the differences and then add them together: $(2,003 - 999)$, $(125 - 57)$, $(1,673 - 775)$
- In 2008, recycling and composting saved an amount of energy equal to how many billions of gallons of gasoline? Find the quotients and then add them together: $(95 \div 19)$, $(72 \div 18)$, $(18 \div 15)$

Bonus: Find a fun number fact and create a math puzzler like one of the problems above. Share it with a classmate.

Sorting Central

Daniela has just taken a job at the recycling center. She is supposed to sort materials into the proper bins. She's in a hurry today, so she needs your help. For each material, locate the proper bin. Write the letter of the column and the number of the row for each item.

	A	B	C
1	PETE (#1) Plastic Bottles	HDPE (#2) Plastic Jugs	Steel Cans
2	Aluminum Cans	Glass Jars	Magazines & Catalogs
3	Paperboard Boxes	Newspapers	Other Papers

It's all in the preparation

Instructions: Complete this chart by filling in the circles below the proper preparation instructions for each recyclable material.

Recyclable Materials	Preparation Instructions						
	Remove food residue	Empty	Rinse	Discard caps and lids	Flatten	Break down	Keep dry
Steel "Tin" Cans	○	○	○	○	○	○	○
Aluminum Cans	○	○	○	○	○	○	○
Plastic Bottles and Jugs	○	○	○	○	○	○	○
Glass Bottles and Jars	○	○	○	○	○	○	○
Paper Boxes	○	○	○	○	○	○	○

There's More: Using the information above and other information you've read in this newsletter, create a **Recycling Brochure**. A brochure doesn't tell readers everything about a subject, but it gives them the information they need to perform a task, such as recycling at home. Your brochure should instruct others on what materials to recycle and how to prepare them. You should use the back and front of one 8½ by 11 inch sheet of paper to create a folded brochure. You may use the computer to create your brochure or make it by hand using drawings and photos cut from magazines. Plan your brochure on scratch paper before you create your final draft. Be sure to include the basic information about preparing recyclables properly. Be creative with titles, lists, images, and captions.

Don't forget to add our contact information (see the back page) so that your readers know where to get more information!

Fraction Action

Instructions: Read the story problem. Write the answers on the lines.

Diego and Jayden planned their cleanup at the park for Saturday. It was a beautiful day, and 42 people joined them to help pick up litter. Of the helpers, $\frac{1}{6}$ were relatives of Diego and Jayden, $\frac{1}{7}$ were teachers, and the rest were classmates.

- How many of the helpers were relatives of Diego and Jayden? _____
- How many were teachers? _____
- How many were classmates? _____

LOGICALLY SPEAKING

Jessica's Earth Day play has five speaking parts: Air, Person, Plant, Soil, and Water. Person speaks after Plant. Air does not speak last. Soil speaks before Plant. Soil speaks after Water. Water speaks second. Who speaks first?

It's the only planet we've got



NASA

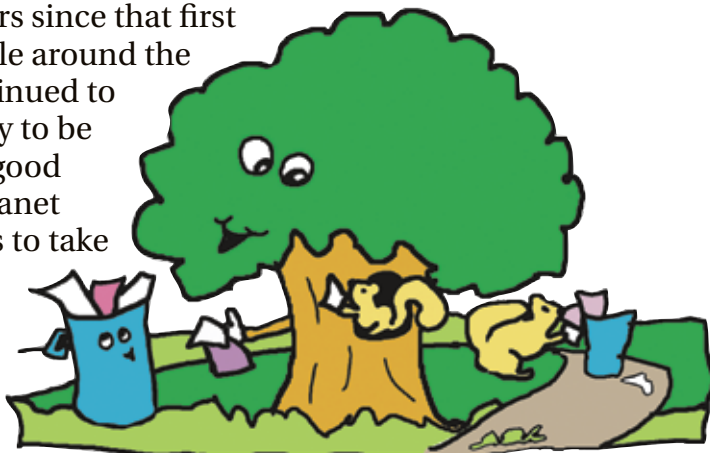
In early 1969, people around the world got their first glimpse of the earth as seen from space in a photo taken by an Apollo space crew. The earth, which seems vast and limitless from where we live, looked fragile and alone. After seeing this photo, people began to think about the earth, the planet on which we rely for our air, water, food, and shelter, in a new way.

It's not surprising that little more than a year later, 20 million Americans took part in the first Earth Day. At rallies, cleanups, and other events, children, parents, business people, students, lawmakers, and more looked at our environment and decided to improve it. The actions that followed led to many changes, including cleaner air and safer water.

In the 40 years since that first Earth Day, people around the globe have continued to set aside one day to be grateful for the good things on our planet and to find ways to take better care of it.

Here are some ways that you can celebrate Earth Day in April and all year long:

- Pick up litter at your school, in a park, along a shore or beach, or beside a nature trail.
- Organize a nature hike through your neighborhood.
- Take a tour of a wastewater treatment plant, recycling facility, or landfill.
- Start vermicomposting in your classroom.
- Turn off lights in rooms you aren't using.
- Unplug electronics and chargers that aren't in use.



- Replace burned-out light bulbs with compact fluorescent lamps (CFL bulbs).
- Recycle everything you can.
- Make posters that show others what and where they can recycle.
- When shopping, buy recycled-content products.
- Conserve water by taking shorter showers and turning off the water while you brush your teeth.
- Plant a garden, or visit a farm or farmers market to buy fresh fruits and vegetables.
- Start a compost pile at home.
- Carpool to practices, performances, and games.
- Ride your bike or walk whenever possible.
- Avoid bottled water. Instead, use a glass, or wash and refill a reusable bottle.
- Take reusable bags into the store when you shop.
- Write a play, song, or poem about the environment, and perform it on Earth Day.
- Make cards on reused paper to wish your friends and family members a happy and healthy Earth Day.



Get the 411

Do you and your friends need the 411 on reducing waste and litter, recycling, and composting? We can help. We have presentations that show *and* tell. We are happy to visit classes, clubs, and youth groups. If your school doesn't have a recycling program, we can help you get one started. If you'd like to improve your existing recycling program, we can help with that, too! Ask your teacher or club leader to contact us with questions or to schedule a visit.

In the meantime, if you're looking for some fun games online, visit <http://funschool.kaboose.com/globe-rider/earth-day/>. Try your hand at "Michael, Michael, Go Recycle!" or one of the other activities.

