



Developed by Mary S. Allen, Recycling and Education Director

A Note to Educators: The Solid Waste Agency of Northern Cook County (SWANCC) designed this educational game to be used as an activity for America Recycles Day, which is observed each year on November 15, but can be used for Earth Day, observed each year on April 22, or any time during the school year!

How to Play: Post the game board in an area of the classroom where students will be able to see it. Each morning read the daily question. Have a brief discussion with students. Then read the answer provided by SWANCC. At the end of each week there is a suggestion for an activity. A sheet is provided to record the students' research. Review the newly found information as time allows.

Tips:

- Highlight each game day to mark progress.
- Rewrite the daily question on the chalkboard or white erase board and include the answer. Leave it up for the entire day.
- Make a book for the school's library with these questions and answers – be sure to add colorful illustrations.
- Learn how to reuse and recycle items that can't be put in your curbside bin (such as hangers, packaging peanuts, motor oil, paint, batteries, etc.) by visiting SWANCC's website at swancc.org. Click on the *Reuse and Recycling Directory*.

SWANCC hopes that every participant learns something new about recycling and has fun learning!

• Week 1

Day 1: What are the Three environmental R's?

Reduce – Reuse – Recycle and (Refuse, Repurpose, Repair, Rethink)

What do they mean?

Reduce means to prevent or cut down on the amount of garbage we throw away. Ways to practice reduce include using washable dishes, cups and napkins rather than one-time-use disposable ones, taking a reusable bag to the grocery store rather than using paper or plastic bags, and buying items with little or no packaging.

Reuse means to lengthen the lifespan of an item, whether for its original use or to fulfill a different purpose. Gently used clothing, books, games and puzzles can be given to a family member or donated to a favorite charity and some items can be used for “Trash to Treasure” repurposed art projects.

Recycle means that materials such as paper, cartons, glass, aluminum, steel/tin and plastics get *reprocessed* - chipped up, melted down and made into new and sometimes different products.

Day 2: What does the recycling symbol mean?



1. The meaning of the first arrow going up is to collect materials for recycling.
2. The meaning of the second arrow at the top is when the materials go to the materials recovery facility (MRF) to be sorted and then get reprocessed.
3. The meaning of the third arrow coming down is when new products have been made from the recycled materials.

In order to keep the cycle of recycling going, it is important to purchase items made from recycled materials. Some say that you're not truly recycling unless you buy recycled-content products.

Day 3: Why should we recycle?

Raw materials are taken from our Earth to make things that we buy and use. When materials already made are used as feedstock to make new products, it conserves or saves natural resources (both renewable and nonrenewable), energy and water, creates jobs and keeps landfills from filling up too quickly.

Day 4: What does recycled-content mean?

Recycled-content means that a percentage of the materials used to make a new product come from materials that were recycled.

A consumer is a person who buys and uses things. **Post-consumer recycled-content** means that a new product is made, at least in part, from a material that was recycled by consumers.

Whereas, **post-industrial recycled-content** means that a new product is made, at least in part, from a material that was recycled by an industry. An example of post-industrial recycling is using blue jean trimmings to make pencils or writing paper.

Day 5: Activity One – Look for products when you are shopping at a grocery or general store, or that are in your pantry at home that have been made from recycled paper. List the product, brand name and the name of the store where you saw or purchased the product. Use the Recording Sheet provided in this packet for Activities 1, 2 and 3.

• Week 2

Day 6: What materials are collected for recycling in your city or village?

Please refer to “SWANCC’s Recycling Guidelines” attachment.

Day 7: What happens to the materials collected for recycling?

Materials collected for recycling are taken by a truck to a materials recovery facility (MRF) where they are sorted by people, robots and technology into piles of the same material and put in bales (size of a hay bale). The sorted materials are sold to companies that will use the materials to make new products.

Day 8: Generally, how do you prepare materials for recycling?

Place acceptable bottles, cans, containers and paper/cardboard in the recycling cart **loose** – not in plastic bags. Put lids back on plastic bottles. Make sure all materials are **Empty**, **Clean** and **Dry**!



Do not put plastic bags
in your recycling cart.



Place recycling loose in
your recycling cart.

Day 9: How many trees are saved each time you recycle one ton of paper?

Approximately 17 trees are saved each time one ton of paper is recycled. It takes 20 to 25 years for a “paper” tree to mature.

Day 10: Activity Two – Look for school supplies, such as pencils, pens, book covers, folders and paper that have been made with recycled-content materials. List the item, brand name and the name of the store where you saw or purchased the item.

• Week 3

Day 11: What do the numbers on the bottom of plastic bottles and containers mean? How many different numbers are there?

The number on the bottom of plastic bottles or containers indicates the type of plastic polymer (resin) used to make it. There are seven different types of plastics used for packaging beverages and food products. Please refer to the attachment “**Plastic Resin Identification Codes**” for more information. Not all plastics can be recycled, so check with your school’s operations coordinator.

Day 12: How long does it take for aluminum cans to be recycled?

Aluminum cans return to the store shelf in as little as 60 days. The can is collected for recycling, then melted, rolled into a sheet, made into a new can, filled with product and taken to a store. That means that a consumer could basically purchase the same recycled aluminum can from a store shelf every nine weeks, almost six times a year.

Day 13: What percent of recycled steel is used to make a new steel can?

According to the Steel Recycling Institute, all steel cans made in the United States today contain about 28% recycled steel. Since the 1970's, major appliances like stoves and refrigerators contain as much as 80% recycled steel.

Day 14: Can you put all types of glass in your curbside recycling bin?

No. Only food and beverage jars and bottles (clear, green or brown) can be put in the recycling bin. Other glass like ceramic cups and plates, light bulbs, window glass, crystal, heat resistant ovenware or mirrors cannot be put in your recycling bin. Please try to reuse these items or dispose of them properly.

Day 15: Activity Three – Access the following websites to learn about aluminum, glass, paper, plastic and steel. Record three facts for each material.

Aluminum: cancentral.com (Can Manufacturers Institute)

Glass: gpi.org (Glass Packaging Institute)

Paper: afandpa.org (American Forest & Paper Association)

Cartons: recyclecartons.com (Carton Council)

Plastic: americanchemistry.com (American Chemistry Council)

Steel: recycle-steel.org (Steel Recycling Institute)

Bonus Challenge:

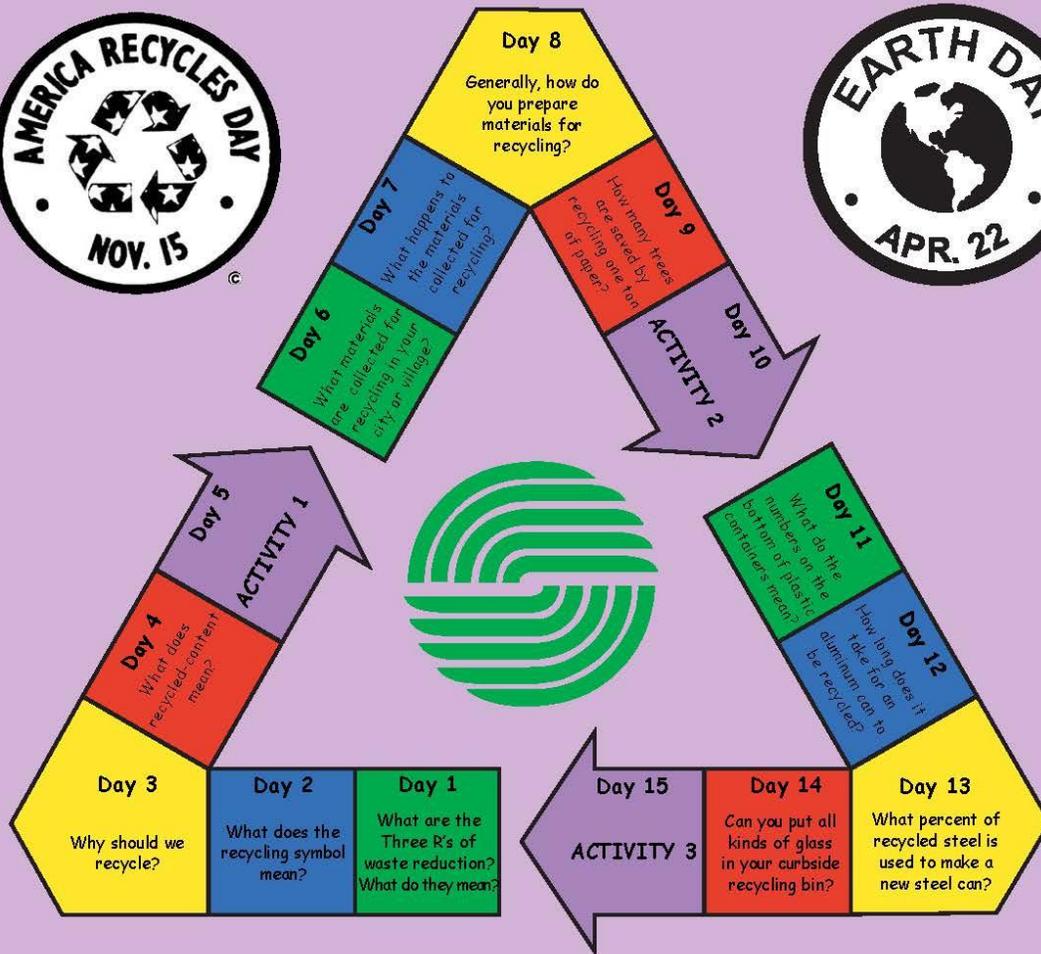
This activity suggests that the entire class compose a letter and send it to a manufacturer encouraging them to cut down on the amount of packaging they use in their product, or write a letter complimenting a manufacturer for not over-packaging their product or for using recycled-content materials in their product. Some research is necessary for this activity.

√ Write a letter to a manufacturer and encourage them to use less packaging in their product. Be specific about their current method of over-packaging.

√ Write a letter to a manufacturer that doesn't over-package their product or that uses recycled content materials in their product and congratulate them for their environmental efforts.



Recycling Facts Game®



Printed on Recycled Paper

ACTIVITY 1	ACTIVITY 2	ACTIVITY 3	BONUS CHALLENGE
<p>Look for products when you are out shopping at the grocery store/general store (or in the pantry at home) that have been made from recycled paper. List the product, its brand name and the name of the store where you saw or purchased it.</p>	<p>Look for school supplies, such as pencils, pens, book covers, folders and paper that have been made with recycled-content materials. List the items, their brand names and the name of the store where you saw or purchased the items.</p>	<p>Access the following web sites to learn about aluminum, glass, paper, plastic and steel. Record three facts for each material on the sheet provided.</p> <p>Aluminum: www.cancentral.com (Can Manufacturers Institute)</p> <p>Glass: www.gpi.org (Glass Packaging Institute)</p> <p>Paper: www.afandpa.org (American Forest & Paper Association)</p> <p>Plastic: www.plastics.org (American Plastics Council)</p> <p>Steel: www.recycle-steel.org (Steel Recycling Institute)</p>	<p>Write a letter to a manufacturer and encourage them to use less packaging in their products. Be specific about their current method of over-packaging.</p> <p>Write a letter to a manufacturer that doesn't over-package their products or that uses recycled-content materials in their products and congratulate them for their environmental efforts.</p>



Provided by the **Solid Waste Agency of Northern Cook County**
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Recycling Facts Game[®]

SWANCC's Recycling Facts Game Activity Recording Sheet

ACTIVITY ONE: List paper products

Product **Brand Name** **Where Found**

ACTIVITY TWO: List school supplies

Product **Brand Name** **Where Found**

ACTIVITY THREE: After visiting the industry websites, record two facts about each material listed:

ALUMINUM

- 1.
- 2.

GLASS

- 1.
- 2.

PAPER

- 1.
- 2.

Cartons

- 1.
- 2.

PLASTIC

- 1.
- 2.

STEEL

- 1.
- 2.

Curbside Recycling Guidelines

**Materials go in cart LOOSE!
Empty & Clean!**



Plastic
Bottles - Caps On Preferred,
Tubs, Jugs, Jars
No Bags or Film
No Foam



Glass
Bottles & Jars



Metal
Steel & Aluminum



**Mixed Paper &
Cartons**
Flatten Boxes

Verify details with your community's recycler!

Do Not Put in Recycling Carts!



**No Electronics
or Sharps**



**No Plastic
Bags or Wrap**



**No Food, Liquids,
Diapers, or
Shredded Paper**



**No Clothing
or Shoes**



**No Hoses, Wires,
or Hangers**

Visit swancc.org or check IEPA's interactive site at bit.ly/recycleil.

Plastic Resin Identification Codes

	PETE	Polyethylene Terephthalate		soft drink and water bottles, food packaging, fruit, juice containers and cooking oil, shampoo bottles
	HDPE	High Density Polyethylene		milk, water, juice jugs, yogurt pots, soap dispenser, cleaning products, grocery bags
	PVC	Polyvinyl Chloride		pipe and window fitting, thermal insulation, car parts, trays for sweets, bubble foil, food foil
	LDPE	Low Density Polyethylene		frozen food bags, bread bags, food bags, shopping bags, magazine wrapping
	PP	Polypropylene		ketchup bottles, microwave meal trays, wall covering, syrup bottle, yogurt container
	PS	Polystyrene		cosmetic bag, plates and cups, CD cases, egg cartons, protective packaging
	OTHER	Other		5-gallon water bottles, other plastic including acrylicnylon, fiberglass, baby bottle