

A Little R&R

Objectives

Students will be able to:

- ➔ Understand the difference between the words and symbols for “recycled” and “recyclable”;
- ➔ Discuss the various raw materials used to create different products, and
- ➔ Identify types of recycled content products.

Method

Students will examine various products looking for recycled content and recyclable language. They will then sort the products according to recyclable, recycled content or both.

Materials

- Products that are recyclable and contain recycled content material such as an aluminum can, a steel food can, a glass jar and newspaper.
- Products that are recyclable and may or may not contain recycled content such as a plastic bottle, cardboard box, cereal box, envelope, notebook paper, telephone book, plastic bag and magazine.
- Products that contain recycled content such as compost, plastic lumber, certain carpet and polyester fleece and some facial and toilet tissue.

Time

30 minutes

Vocabulary

- recyclable
- recycled
- recycling markets
- pre-consumer
- post-consumer

Background

The Difference between “Recycled” and “Recyclable”



Products may be marked in a variety of ways with the recycling chasing arrows symbol. The traditional recycling symbol means the product is “recyclable”. However, this logo is not regulated nor is there a national standard. So it is important to check with your local solid waste and recycling office to see if the product is recyclable in your community. Products marked with the word “recyclable” or with the recycling symbol may or may not be made of recycled material.

If the recycling symbol has a circle around it that means it contains “recycled content”. Products and/or their packaging made with recycled content may use the word “recycled”, the phrase “made of recycled materials”, or a phrase with a similar meaning. The product information may also include the percentage of post-consumer waste included



recycle product



product made from recycled content

in the material. This is most often found on paper products.

The ability for a product to be “recyclable” or not is dependent upon global recycling markets. If there isn’t a manufacturer making a new product from a recyclable commodity, there is no need to collect and process the material because there is no demand to use it as feedstock for a new product. Recycling markets are an excellent example of supply and demand.

The Difference between “Pre-Consumer” and “Post-Consumer” Waste

PRE-CONSUMER waste is generated during the manufacturing process and includes industrial scraps, trimmings and overruns. POST-CONSUMER means the material has been used by a consumer, collected, processed and used in the creation of a new product.

Procedure

1. Students will research and discuss their local community’s garbage and recycling collection. By using the internet or telephone book identify their local KAB affiliate, solid waste or recycling provider and/or their city or county solid waste department, etc., students should answer what recyclable materials their community collects.

After the students have finished their research, lead a discussion with the class answering the previous question.

2. Stress to students that a general rule for recycling collection is to follow the rules for their community and that those rules may not apply to other communities. Discuss with the students how the rules change from community to community and why (availability of markets, program costs, etc.). For additional information, see “How We Manage Our Garbage” section.
3. Discuss with the students the difference between collecting and recycling. In order to have a recycling program after collection, the recyclables collected must be processed, manufactured, and sold as a recycled content product.
4. Explain to the students that they are now going to have a Recycle and Recycled Content Sort Race. Divide the class into two groups and place two bins approximately 30-50 yards in front of each team. Each team should have one bin that says “Is Recyclable” (in your community) and one bin that says “Contains Recycled Content” (contains a percentage of recycled material). This game can be played outside on a playground, or in a gym.

5. Divide the products into two even groups. Each team will get a group of products. The object of the game is to pick up a product, run to the bins, and place the item into the correct bin. Students will have to read the labels on each item carefully before selecting the appropriate bin. The team that finishes first AND has the most items in the correct bins wins.
6. As you are tallying the number of correctly placed items, discuss with students any incorrectly placed items. How did they decide where to put each item? Which ones had post-consumer content?
7. Discuss what is used to make different recycled content products. If the product didn’t contain recycled content, what raw material would it come from? For example – aluminum = bauxite ore, paper = trees, plastic = petroleum or natural gas, etc.
8. Discuss how all products are NOT easily identifiable as having recycled content and/or being recyclable. As a consumer, it is important to read labels and understand the difference between something that is recyclable and something that has recycled content.

Assessment

- Ask students to write a paragraph on what their community collects for recycling and any recycled content products they use at home.
- Suggest students open a school store that sells recycled content notebook paper, book covers, pencils, ink cartridges, etc.

Connection

- Students can use the internet to research recycling markets and how recycled content products affect the global economy.
- For more information about recycled content carpet, visit Mohawk Flooring - <http://www.mohawkflooring.com/green-flooring/green-carpeting/default.aspx>
- For more information about recycled content polyester fleece, visit Patagonia - <http://www.patagonia.com/us/patagonia.go?assetid=2791>

Enrichment

- Students may choose to open a school store that sells recycled content notebook paper, book covers, pencils, ink cartridges, etc.