



Lesson: Lunchroom Trash

Grade: K-3

Subject: Social Science, Math, English

Objective:

Students will:

- take a first-hand look at excess packaging and determine ways to reduce waste

Teaching Time: 10 minutes before lunch; 35 minutes after lunch

Materials: Four brown grocery bags and one plastic bag for collecting dry materials and food scraps; worksheet, Reducing Waste-What I Can Do; Garbage R's Game instructions; take home handout, Waste-Less Picnic

Background:

Some of the foods and other things we buy have a lot of packaging, or material used to cover, protect, and market the product, while others use little or no packaging. Consider some examples of "packaging intensive" products (fast food meals, individually wrapped cheese slices, and 'ready-to-eat' snacks or other one-time use products like small juice boxes). Compare these to products with natural packaging (bananas, oranges, onions, potatoes, apples, corn on the cob, etc. and things that can be purchased in larger quantities, such as juice, and placed into reusable containers like thermoses or water bottles).

Procedure:

- Label four paper bags-metal, glass, plastic, paper. Label a plastic bag: food.
- **Everyday activities, like eating lunch, create a great deal of trash. As a class, we are going to look at the trash from just one meal.** Have students predict which of the five bags will have the most trash after the meal. You might list predictions on board and make a graph of the actual results.
- For older students, assign a bag with a label to five students. Tell them that they are responsible for collecting that material from each person in the class after they have eaten their lunch. (For drink boxes, etc. tell students to make sure they empty the containers completely before placing them into the bag).

Reflection/Response:

- After lunch, hold up the bags and compare. **Which material is present in the greatest amount? Does this match your prediction? Now pull out any of these materials that are recyclable.**
- Discuss why the food leftovers were created. In some cases, the food is not edible--such as a fruit core or peel, but some is created when we take too much food, or don't like certain things. **It's important not to waste food whenever we can help it because then it just becomes a solid waste (garbage) problem!**
- **What are some of the things in this collection that we could reduce by finding products with little or no packaging?**
- **Are there any of these materials that we could get rid of by switching to a package that is recyclable?**
- As a class, plan the contents of a NO-TRASH lunch. You might take the lunch on your next field trip. Don't forget about tupperware and other reusable single-serving containers and avoid using plastic wrap or aluminum foil. Whenever possible, all containers should be durable or recyclable.
- Have each student complete the worksheet "Reducing Waste-What I Can Do"

Play the Garbage R's game

- Hand out the "Waste-Less Picnic" activity for students to share with their families.



Extension:

- Have students do the Waste-Less picnic activity as an optional weekend assignment and tell the class how they did it, or write a summary about the contents of their picnic and how they chose items that created less waste.
- For a class project, set a No-Trash Lunch display in or near the cafeteria for other students to learn by example. (See Extension Activity in the Teacher Resource section).

Common Curriculum Goal:

Mathematics: Statistics and Probability

- Interpretation of Data
Read, construct, and interpret displays of data (e.g., charts, tables, graphs) using appropriate techniques and technologies.

Social Science: Analysis

- Define and clarify an issue so that its dimensions are well understood.

Grade 3 Benchmark:

- Collect, organize, display, and describe simple data using charts, tables, number lines, bar graphs, and line graphs.
- Identify an issue or problem that can be studied.



Garbage R's Game

There are more than just three R's actually! We can add to the list for this game: REDUCE, REUSE, RECYCLE, REJECT, RETHINK.

Step 1: Have each student take a piece of paper and carefully tear it into four sections. Sit with the class and brainstorm about trash. Have students write down the name of one thing they usually throw away (be specific) onto each section of paper. (Write each type of object only once - assign a student to write them down).

Step 2: Place the papers into a hat or bowl that will act as the "garbage can" for the game. Make a spinner out of a soda bottle or other object.

Step 3: Get students into a circle and take turns spinning the spinner. When it points to someone, they must pull the paper out of the garbage can and help "remove it" by using one of the R's. For example, they might reuse an item for something else (for example, using a jar for holding pencils), they might reject the purchase of this item for a more environmentally friendly one (such as buying in bulk rather than an individual size) or rethink the purchase of an item that is made for disposal rather than durability (such as a refillable pen instead of nonrefillable). Try to get rid of all the objects in the garbage can! Students will probably need suggestions, but encourage them to be creative. Remind students that waste is just a resource that we just haven't found a use for yet!

Step 4: (optional) Older students can use the dictionary to find other "R" words that would apply. A suggested list is to the right. Or, use the list on the right and have students finish the sentence when you call out a word, for example, RESIST (purchasing a disposable product), REMANUFACTURE (used products into new ones), etc.






Resist
Remanufacture
Rebuild
Reclosable
(container)
Redeem (bottle bill
deposits)
Redo
Refurbish
Regenerate
Regrow
Renewable
Remake
Rent (things not used
very often)
Renovate
Respectful
Restore
Rejuvenate
Retain (our natural
resources)
Revive
Reusable



Worksheet: Reducing Waste - What Can I Do?

Student Name _____

In each box, circle the item that makes less waste or uses less packaging.

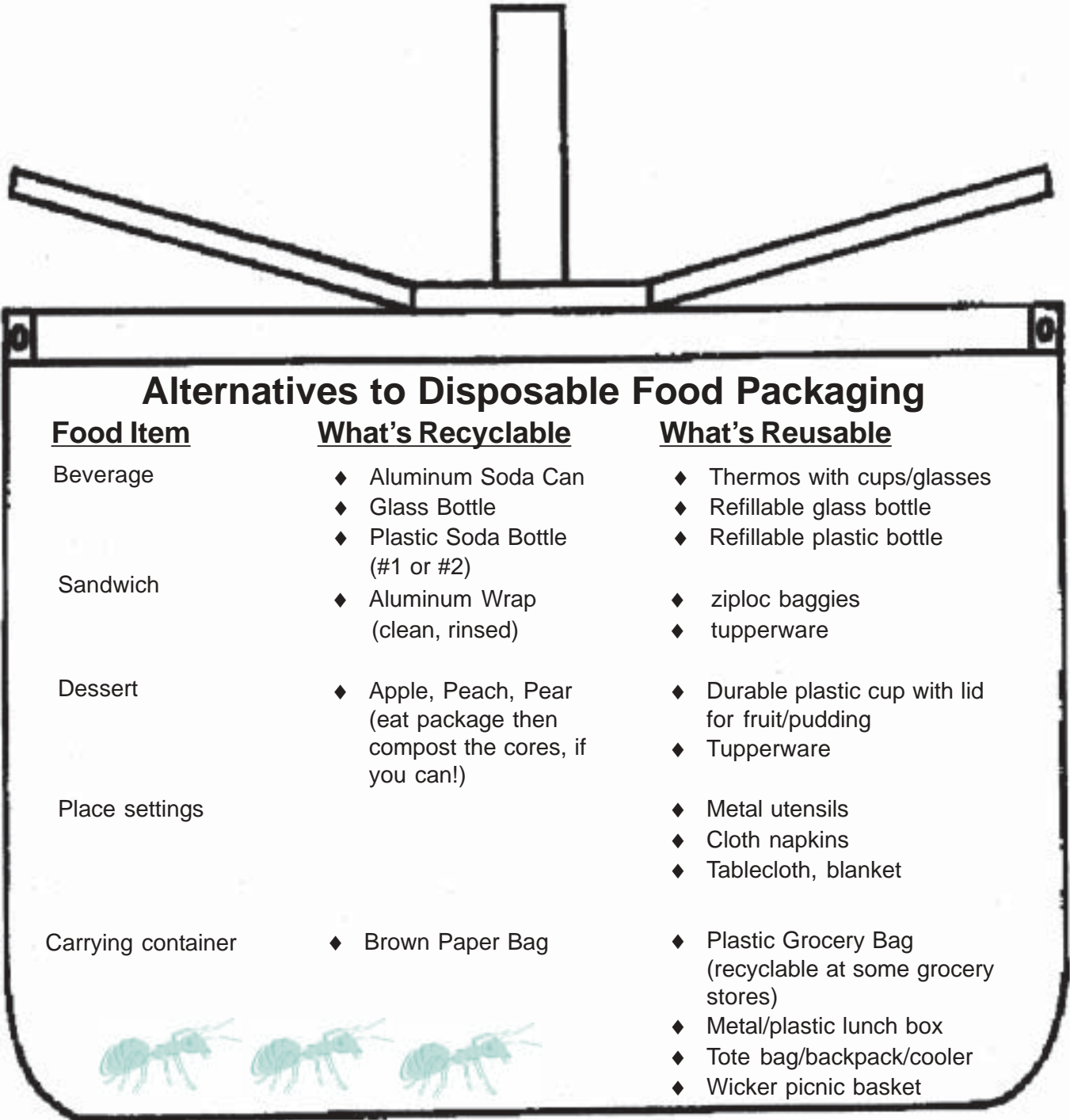
	
	
	
	



Activity: "Waste-Less Picnic"

Dear Parents: This weekend, or sometime soon we'd like your family to enjoy a picnic... a No-Trash picnic that is. At school, your child is learning how to substitute reusable and recyclable items for disposable ones to help create less waste and conserve natural resources. Choose items that are recyclable in your community and substitute reusable containers for things you would throw away.

Thank you for your participation. Watch out for the ants!



Alternatives to Disposable Food Packaging		
<u>Food Item</u>	<u>What's Recyclable</u>	<u>What's Reusable</u>
Beverage	<ul style="list-style-type: none"> ◆ Aluminum Soda Can ◆ Glass Bottle ◆ Plastic Soda Bottle (#1 or #2) 	<ul style="list-style-type: none"> ◆ Thermos with cups/glasses ◆ Refillable glass bottle ◆ Refillable plastic bottle
Sandwich	<ul style="list-style-type: none"> ◆ Aluminum Wrap (clean, rinsed) 	<ul style="list-style-type: none"> ◆ ziploc baggies ◆ tupperware
Dessert	<ul style="list-style-type: none"> ◆ Apple, Peach, Pear (eat package then compost the cores, if you can!) 	<ul style="list-style-type: none"> ◆ Durable plastic cup with lid for fruit/pudding ◆ Tupperware
Place settings		<ul style="list-style-type: none"> ◆ Metal utensils ◆ Cloth napkins ◆ Tablecloth, blanket
Carrying container	<ul style="list-style-type: none"> ◆ Brown Paper Bag 	<ul style="list-style-type: none"> ◆ Plastic Grocery Bag (recyclable at some grocery stores) ◆ Metal/plastic lunch box ◆ Tote bag/backpack/cooler ◆ Wicker picnic basket

