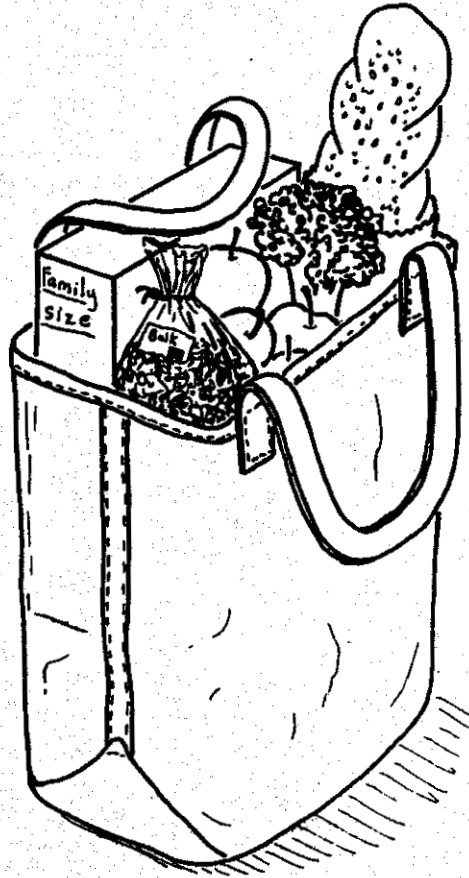


GET THE GOODS OUT OF THE GARBAGE



**A WASTE REDUCTION EDUCATION PROJECT FOR
LIMITED RESOURCE FAMILIES**

**CORNELL COOPERATIVE EXTENSION
DEPARTMENT OF CONSUMER ECONOMICS & HOUSING
CORNELL WASTE MANAGEMENT INSTITUTE**

GET THE GOODS, NOT THE GARBAGE

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We welcome additional comments, suggestions, and ideas to help us improve future versions of **GET THE GOODS, NOT THE GARBAGE**. In addition, we ask you to share any evaluations you may do of your work with this resource. Please send your comments to Jeanne M. Hogarth, Consumer Economics & Housing, Martha VanRensselaer Hall, Cornell University, Ithaca NY 14853.

The **GET THE GOODS, NOT THE GARBAGE** notebook contains 50% recycled plastic.
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Additional copies of **GET THE GOODS, NOT THE GARBAGE** may be ordered from the Resource Center, 7 Business & Technology Park, Cornell University, Ithaca NY 14850. Call 607-255-7660 for ordering information.

May, 1994

GET THE GOODS, NOT THE GARBAGE

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INTRODUCTION

If one of our goals is to protect the earth so that our children and grandchildren can live on a healthy planet, we need to think about the impact of the many things we do. Making wise choices to protect the environment is complex and requires educating ourselves about the environmental impacts of the products we buy.

Solid waste is only one environmental problem, but it is one that we can do something about. Solid waste -- the trash and garbage each of us produces -- impacts the environment not only when we get rid of the waste, but also when we make and transport the products and packages that end up in our trash. In fact, some of the biggest environmental costs come from all the materials and processes that go into making and selling those items before you buy them. That means the very best way to save money and protect the environment is to prevent waste in the first place by not buying and bringing home unnecessary products and packages -- in other words, **Get the Goods, Not the Garbage!**

Making wise choices isn't always easy. There are many things to consider in weighing our choices and decisions. Consider playing your favorite tape. You could use a tape player that plugs into a wall outlet. Or you could use a battery operated tape player with rechargeable batteries. Or you could have a battery operated player with disposable batteries. Each of these options -- electricity, re-carriageable batteries, or disposable batteries -- has pros and cons with respect to the environment and your enjoyment of your favorite tape.

When you really need or want a product, try to get the product with the least amount of packaging. The next best choice is to keep the products (and even their packaging) in use as long as you can. Then, when you no longer have use for them, see that they are recycled back into another useful product. As you will learn from this book, there are many simple ways to reduce waste every day and in every aspect of your life. With the combined effort of consumers and manufacturers, we can reduce solid waste.

Development of **Get the Goods, Not the Garbage**

Get the Goods was developed to be incorporated into nutrition education programs, specifically the Expanded Food and Nutrition Education Program (EFNEP) of the Cooperative Extension System. In EFNEP, low income families have the opportunity to learn about nutrition and food resource management in one-on-one and small group settings. Paraprofessional teaching assistants assess the needs of

learners and develop and deliver lessons based on these needs. **Get the Goods, Not the Garbage**, is also adaptable to:

- Other nutrition education programs
- Life skills community education programs
- Community based recycling and waste prevention programs
- After school child care programs
- Work-site continuing education programs
- Displays and exhibits at fairs and other community events.

In Spring of 1992, a survey of EFNEP participants in Steuben County, New York and sections of New York City was conducted to determine learner needs for waste management education and for ideas on what might motivate low income families to want to reduce waste. At the time of the pilot, Steuben, a rural county in south-central New York State, had mandatory recycling and residential pick-up of both garbage and recyclables in most communities. The Jamaica section of Queens and the Bedford-Styvesant section of Brooklyn, the other pilot areas, both had recycling programs.

The needs assessment survey indicated that Steuben residents had a good understanding of the recycling component of waste reduction, but could benefit from information on other aspects of waste prevention, such as reduction, reuse, and buying recycled products. New York City respondents revealed a need for education on all aspects of waste reduction and prevention. Furthermore, survey results from both NYC and Steuben revealed that families were motivated to reduce waste if it meant a better world for their children and/or if it meant a cleaner neighborhood.

Based on this information, materials were developed and piloted over the Spring of 1993. Nutrition Teaching Assistants (NTAs) surveyed learners on their waste management practices (using the **Waste Reduction Survey**), using the Family Record (information on the family's residence, income, education, family composition and food knowledge and practices) and 24 Hour Food Recall (a record of the foods eaten by family members over the past 24 hours) survey models. The pre-program surveys identified learner needs, allowing NTAs to incorporate appropriate activities into their nutrition lessons. The Nutrition Teaching Assistants then used a follow-up survey to check on knowledge, attitude, and practice changes. Activities for use in the nutrition education lessons were designed around five waste reduction principles or concepts: *Reduce, Reuse, Recycle, Buy Recycled*, and *Respond*. Background information is also included in **Get the Goods, Not the Garbage** to help teaching assistants and learners better understand the broad-based issues in waste reduction and waste management.

How to Use This Book

Selecting Appropriate Activities

Get the Goods, Not the Garbage was designed to be implemented by trained paraprofessional or volunteer community educators or teaching assistants. Each section begins with some **background information** (ivory sheets), useful for both the trainer and the community educator. **Training outlines** for each waste reduction principle to help instructors teach the community educators to use the materials are included on the green sheets in the sections. Ideas and **Ideas for Learner Lessons** (tan sheets) are to be used by the community educators in planning and implementing lessons with learners, either as individuals or in groups. **Masters for handouts** (white sheets) are at the end of each section, and should be available to educators for duplicating as needed.

Get the Goods is meant to be a learner-focused program; that is, community educators assess learner needs, and plan educational activities and experiences to meet those needs. For example, in the case of **Get the Goods**, if the community educator determines that a family is already practicing recycling, there is no real need to teach the concepts and principles in the Recycle section.

To begin implementing **Get the Goods**, administer the **Waste Reduction Survey** (page 7) to assess learner needs. Along with the Waste Reduction Survey, there is a **Glossary** of terms (page 35) for community educators to use as needed when administering the survey.

After learners have completed the Survey, community educators can use the **Waste Reduction Survey Lesson Guide** (page 9) to identify topics where learners need some assistance. For example, if a learner indicates that he/she has not purchased anything with recycled content (Question #3), then the leader could plan an activity from the **Buy Recycled** section of **Get the Goods, Not the Garbage**.

Once the community educator knows what topics to teach, the next step is to select an appropriate learning activity. The **Waste Reduction Activities Grid** shows which activities fit into which nutrition education lessons. For example, if the Family Record and Food Recall surveys indicate the learner needs to know more about iron in the diet, and the Waste Reduction Survey results show that the learner needs to know about reducing waste, teaching assistants would look up **Iron** on the grid, cross over to the **Reduce** activities columns, and pick out an activity from those indicated with a dot.

Administer Waste
Reduction Survey
Assess learner needs

Identify topics to teach

Select learning activities

To help select an appropriate activity, the community educator can turn to the **Activity Outline**. The Activity Outline lists the activities for each waste reduction concept (*Reduce, Reuse, Recycle, Buy Recycled, Respond*); the concepts covered in that activity; and the "props," flipcards, and/or handouts used with that activity. **Get the Goods, Not the Garbage** has masters for the handouts that will need to be duplicated for the learners. If handout materials need to be ordered, ordering information is contained with the activity write-up.

Another way to select an appropriate activity is to turn directly to the section in the notebook which deals with the waste reduction principle of interest and review the activities.

Waste Reduction Principle Sections

Each section of the notebook contains an introduction which provides some background information and a community educator training outline. The **Ideas for Learner Lessons** in each section contains detailed learning activity descriptions, including the basic concepts covered in the activity; props, flipcards, and handouts used in the activity; and details on how to conduct the activity. Ideas for activities to use with children are presented at the end of the **Ideas for Learner Lessons** section. Masters for handouts and flipcards are included at the end of each section.

Training Ideas for Community Educators

Each section contains an outline for training community educators who will work with learners in program delivery. We suggest that initial training include an overview of the waste reduction principles, some background information from all sections to provide general waste management information, and a review of selected activities in each of the sections. Follow-up training can then include more detailed information focused on the needs of the community educators and learners in the community.

To the extent possible, initial training should be localized to reflect current waste management practices in the communities and regions in which the learners and community educators live. As a trainer, you may want to involve someone from your local Cooperative Extension office; many Cooperative Extension offices have agents involved in community development, waste management, environmental issues, and/or nutrition education who can assist in training volunteer and professional community educators. You may also want to invite someone from your local municipal solid waste management department to talk about local policies and programs and to obtain relevant brochures and other informational materials.

Also, you may want to be in touch with firms and organizations in your community who are interested in waste reduction issues, not only to let them know about your program, but also to solicit their support. For example, local supermarkets or grocery stores may be willing to donate reusable cloth or mesh shopping bags to the community educators and/or learners. Alternatively, local merchants may be convinced to underwrite the cost of materials duplication or purchase of additional copies of **Get the Goods, Not the Garbage**.

When training community educators, plan to have copies of the **Get the Goods** notebooks available for them. Alternatively, you can duplicate:

Waste Reduction Survey (pages 7-8),
Glossary (page 35),
Waste Reduction Survey Lesson Guide (pages 9-10),
Waste Reduction Activities Grid (pages 13-18),
Waste Reduction Activity Outline (pages 19-25), and
How to Use the Waste Reduction Activities Grid and Activity Outline (pages 11-12)
Introductory pages (ivory sheets), **Ideas for Learner Lessons** (tan sheets), and masters of the learner handouts (white sheets) from each of the following sections. You will need to make file copies of the flipcards available to the community educators to check out when needed.

Nutrition Teaching Assistants in the pilot project identified follow-up training as a need beyond initial training. Follow-up training could be more technical and detailed than the initial training, using additional activities in the Community Educator Training outlines, going into more depth on certain topics, and helping community educators address questions they have received from learners.

Ideas for Learner Lessons

Each **Waste Reduction Principle Section** contains ideas for activities for community educators to use with learners (see the tan sheets in each section). Depending on the information needed, leaders can select from a variety of activities to teach a particular concept or topic. The objective is to match the activity to the information needed **and** to the learner's preferred learning style (audio, visual, or kinetic). Some **Ideas** use flipcards (in Spanish and English), and others have handouts for use with the learner. (Note: Nutrition Teaching Assistants in the pilot study had substantial training in planning and developing learner lessons; if this is not the case in your organization, you will need to spend some time working with your community educators on

learning and teaching styles. Such training is available through Cooperative Extension, but is beyond the scope of this book.)

There is at least one handout for each **Waste Reduction Principle Section**, so the community educator can leave something with the learner to read and share with their family. As much as possible, the handouts are *interactive*, allowing for some response from the learner (e.g., boxes to check or a place for notes).

Ideas for **Activities with Children** are also included. Since many learners may have pre-school children in their homes, these activities may help to occupy the children while the nutrition and waste reduction lessons take place. In some cases, the community educator may want to engage the children in an activity in order to occupy them while he or she works with the adult learner. In other cases, the community educator may want to offer ideas and suggestions so parents can involve their children or use these ideas with their children at some other time. Finally, it is possible to photocopy the flipcards and have children color them as an activity.

WASTE REDUCTION SURVEY

PLEASE ANSWER NO/YES. IF YES, THEN WHAT?	NO	YES	IF YES, WHAT?
1. Do you recycle any items?			
2. Over the past year, did you buy something because the product or the package is reusable?			
3. Over the past year, did you buy something because the product or the package contained recycled material?			
4. Over the past year, did you buy something because it had less packaging than other products or brands?			
5. Over the past year, did you buy something because the product or the package can be recycled?			

PLEASE ANSWER NO, YES, DON'T KNOW, OR DOES NOT APPLY.	NO	YES	DON'T KNOW	DOES NOT APPLY
6. Do you compost any of your food waste or yard waste at your home or community garden?				
7. Do you have any products in your home that are poisonous to your family AND to the environment?				
8. Over time, are disposable items cheaper than durable items?				
9. Does your community have laws requiring recycling of any items?				

10. Would you rather buy a roll of paper towels that costs \$.89 and lasts one to two weeks or a cloth dishtowel that costs \$1.59 but last one year (knowing you'd have to wash it)?

PAPER

CLOTH

11. Do you think it is more important to buy a product with a well known brand name with excess packaging or a product made by a less known company with less packaging?

BRAND NAME

LESS KNOWN BRAND

DO YOU AGREE OR DISAGREE WITH THE FOLLOWING STATEMENTS?	AGREE	DISAGREE
12. When something is made from recycled material, it is of lower quality than something made from new materials.		
13. I have room to store recyclables.		
14. I know how to recycle.		
15. Shopping with the environment in mind costs more.		
16. It really bothers me to see things go to waste.		
17. I feel proud if I am able to keep using something longer than normal.		

18. Other than price and quality, which **ONE** of the following is the most important to you when you make a decision about what to buy?

CHECK ONLY ONE ANSWER

- ☐ brand name
☐ convenience
☐ environmental impact

THANK YOU

LESSON GUIDE

WASTE REDUCTION SURVEY

If you or your learners want more information on these questions,
look in the unit listed next to the question.

PLEASE ANSWER NO/YES. IF YES, THEN WHAT?	NO	YES	
1. Do you recycle any items?			Recycle
2. Over the past year, did you buy something because the product or the package is reusable?			Reuse
3. Over the past year, did you buy something because the product or the package contained recycled material?			Buy Recycled
4. Over the past year, did you buy something because it had less packaging than other products or brands?			Reduce
5. Over the past year, did you buy something because the product or the package can be recycled?			Recycle

PLEASE ANSWER NO, YES, DON'T KNOW, OR DOES NOT APPLY.	NO	YES	
6. Do you compost any of your food waste or yard waste at your home or community garden?			Recycle
7. Do you have any products in your home that are poisonous to your family AND to the environment?			Reduce
8. Over time, are disposable items cheaper than durable items?			Reuse
9. Does your community have laws requiring recycling of any items?			Recycle

10. Would you rather buy a roll of paper towels that costs \$.89 and lasts one to two weeks or a cloth dishtowel that costs \$1.59 and last one year (knowing you'd have to wash it)?		Reuse
PAPER	CLOTH	

11. Do you think it is more important to buy a product with a well known brand name with excess packaging or a product made by a less known company with less packaging?

BRAND NAME

LESS KNOWN BRAND

**Reduce
Respond**

DO YOU AGREE OR DISAGREE WITH THE FOLLOWING STATEMENTS?	AGREE	DISAGREE	
12. When something is made from recycled material, it is of lower quality than something made from new materials.			Buy Recycled
13. I have room to store recyclables.			Recycle
14. I know how to recycle.			Recycle
15. Shopping with the environment in mind costs more.			Reduce
16. It really bothers me to see things go to waste.			Reuse
17. I feel proud if I am able to keep using something longer than normal.			Reuse

18. Other than price and quality, which **ONE** of the following is the most important to you when you make a decision about what to buy?

CHECK ONLY ONE ANSWER

- ☐ brand name
☐ convenience
☐ environmental impact

**Back-
ground**

HOW TO USE THE WASTE REDUCTION ACTIVITIES GRID AND THE WASTE REDUCTION ACTIVITIES OUTLINE

1. Administer the *Waste Reduction Survey* and compare learner answers to the *Waste Reduction Survey Lesson Guide*.
2. From the *Waste Reduction Survey Lesson Guide*, identify which Waste Reduction Principle to teach.
3. From the Family Record and Food Recall Surveys, or other information on the learner, identify which **nutrition topic** to teach.
4. Using the *Waste Reduction Activities Grid*, find the nutrition topic along the rows and the Waste Reduction Principles across columns. Work across the row and down the columns to find which activities fit with the selected topic.
5. Using the *Activity Outline*, pick an activity to do, noting the concepts covered in the activity, the props needed, the flipcards used, and the handouts available (these need to be duplicated or ordered ahead of time).
6. Read about the activity in detail in the appropriate section in the notebook.

For Example

(1, 2, & 3) Having administered the surveys, you know that the learner needs to know more about *Calcium* and how to *Reduce* the packaging she/he buys (Question #4 was answered "No").

(4) From the *Waste Reduction Activities Grid*, find the *Dairy (Calcium)* lesson row and the *Reduce* activities columns. Work across the row and down the columns to identify the activities with a dot.

The Reduce activities with a dot are: Let's Count the Layers, Package Hierarchy, Milk Carton Models, Cost of Packaging, and Making Large Quantity Purchases Convenient

(5) From the *Activity Outline*, note the concepts, props, flipcards, and handouts available to use with the set of activities.

The concepts covered include: Buy products with minimal packaging; Bulk or large quantities can reduce waste and cost.

Let's Count the Layers has flipcards and requires props such as cereal boxes or packaged tomatoes.

Packaging Hierarchy has flipcards and a handout; it requires using juice containers of various types and sizes.

Milk Carton Model requires milk cartons of different sizes.

Cost of Packaging requires several sizes of cereal boxes, canned vegetables (or their labels), and/or various coffee packages (cans, foil from vacuum-packed brick coffee, etc.).

Making Bulk or Large Quantity Purchases Convenient requires various empty containers and jars.

Based on your knowledge of the learner and learning styles, choose one of the activities to use with the *Calcium* lesson.

For example, you know the learner likes doing something rather than reading something, so choose the Milk Carton Models.

(6) Go into the **Reduce** section of the notebook, and read how to conduct the activity in detail.

Gather appropriate props (in this case, various sizes of milk cartons) and plan what you will say to the learner.

You can also use the **Grid, Activity Outline, and Waste Reduction Principle Sections** in other ways and combinations as well. Suppose you want to teach the **Respond** principle to help the learner feel more empowered in the grocery store:

From the **Activity Outline**, you select the *Vote With Your Dollars* concept.

From the **Activity Outline**, you pick the *Your Money Counts* activity.

From the **Waste Reduction Activities Grid**, find the *Your Money Counts* activity. You see that the activity can be used when teaching *Food Buying*.

Go into the **Respond** section of the notebook and read how to conduct the activity in detail.

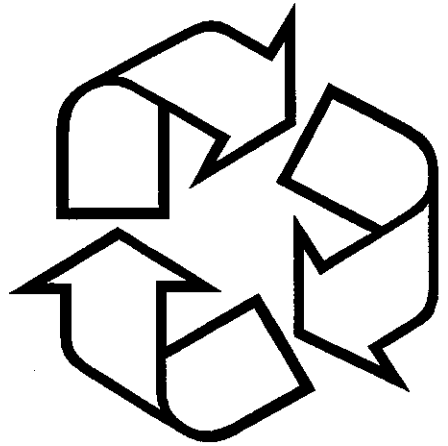
Gather appropriate props (flipcards) and plan what you will say to the learner.



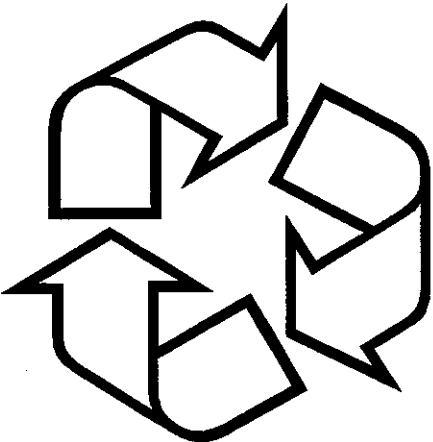
☐ Flipcard with this activity.

BACK- GROUND	REDUCE	REUSE	RECYCLE	BUY RECYCLED	RESPOND
Where Does Our Waste Go?*					
Saving Money <input type="checkbox"/>					
Other Wastes <input type="checkbox"/>					
12 Ideas*					
Let's Count the Layers <input type="checkbox"/>					
Package Hierarchy <input type="checkbox"/>					
Milk Carton Models					
Cost of Packaging					
Make Convenient					
Take Off Excess <input type="checkbox"/>					
Cleaning Substitutes*					
Reuse Scavenger Hunt*					
Reuse Brainstorming <input type="checkbox"/>					
Make the Switch*					
Reuse: What Does it Save?					
Identifying Recyclable Products <input type="checkbox"/>					
Recyclable Plastics <input type="checkbox"/>					
What is Recyclable in Our Area?*					
Space Saving Recycling Bins <input type="checkbox"/>					
Why Should I Recycle? <input type="checkbox"/>					
Composting <input type="checkbox"/>					
What Do I Have to Compost?					
Identifying Recycled Products <input type="checkbox"/>					
Recycled Products W/O Symbol					
Creating a Loop <input type="checkbox"/>					
What Are You Buying?					
Your Money Counts <input type="checkbox"/>					
Tell It To The Manager					
Speak to the Manufacturer <input type="checkbox"/>					
Junk Mail <input type="checkbox"/>					

Introduction - 13

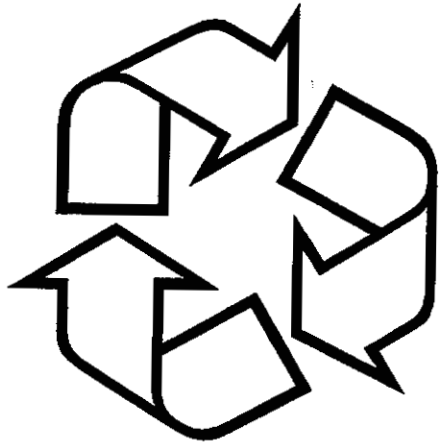


EATING RIGHT IS BASIC - II

WASTE REDUCTION ACTIVITIES												
												
EATING RIGHT IS BASIC - II												

□ Flipcard with this activity.

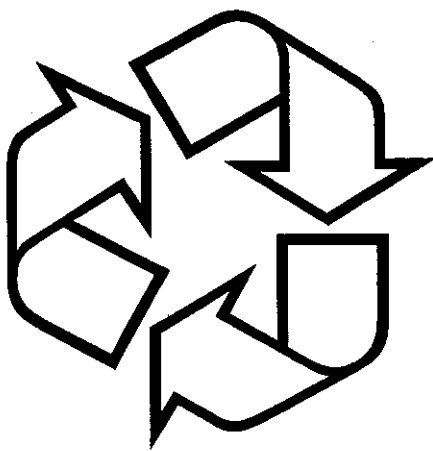
* Handout with this activity.



WASTE REDUCTION ACTIVITIES												
	BACK-GROUND			REDUCE				REUSE			RECYCLE	
											BUY RECYCLED	RESPOND
Master Mix			Where Does Our Waste Go?□*									
			Saving Money□									
			Other Wastes□									
Convenience Foods			12 Ideas*									
			Let's Count the Layers□									
			Package Hierarchy□*									
MONEY MANAGEMENT			Milk Carton Models									
			Cost of Packaging									
			Make Convenient									
More From Your Money			Take Off Excess□*									
			Cleaning Substitutes*									
			Reuse Scavenger Hunt*									
MEAL PLANNING			Reuse Brainstorming□									
			Make the Switch*									
			Reuse: What Does it Save?									
What's Left Over			Identifying Recyclable Products□									
			Recyclable Plastics□									
			What is Recyclable in Our Area?*									
Using Meal Patterns to Plan Meals			Space Saving Recycling Bins□									
			Why Should I Recycle?□									
			Composting□									
Low Cost, Low Calorie Menu Planning			What Do I Have to Compost?									
			Identifying Recycled Products□									
			Recycled Products W/O Symbol									
A Good Breakfast			Creating a Loop□*									
			What Are You Buying?									
			Your Money Counts□									
Feeding Your Preschooler			Tell It To The Manager									
			Speak to the Manufacturer□									
			Junk Mail□*									
Snacks for Young Children												
FOOD PREPARATION												
Recipes Kids Can Make												

□ Flipcard with this activity.

* Handout with this activity.

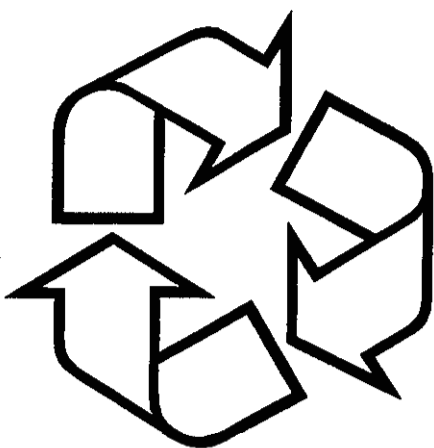


WASTE REDUCTION ACTIVITIES

	BACK-GROUND	REDUCE	REUSE	RECYCLE	BUY RECYCLED	RESPOND
	Where Does Our Waste Go?□*	Let's Count the Layers□	Reuse Scavenger Hunt*	Identifying Recyclable Products□	Identifying Recycled Products□	What Are You Buying?
	Saving Money□	Package Hierarchy□*	Reuse Brainstorming□	Recyclable Plastics□	Recycled Products W/O Symbol	Your Money Counts□
	Other Wastes□	Cost of Packaging	Make the Switch*	What is Recyclable in Our Area?*	Composting□	Tell It To The Manager
Making Yeast Breads		Make Convenient	Reuse: What Does it Save?	Space Saving Recycling Bins□	What Do I Have to Compost?	Speak to the Manufacturer□
Quick Breads		Take Off Excess□*		Why Should I Recycle?□	Creating a Loop□*	Junk Mail□*
Food Substitutes in Recipes	•	Cleaning Substitutes*				
Measure for Tastier Cooking	•		•			
Making the Most of Kitchen Space	•		•			
Tips for a Neat Kitchen	•		•			

☐ Flipcard with this activity.

* Handout with this activity.



WASTE REDUCTION ACTIVITIES

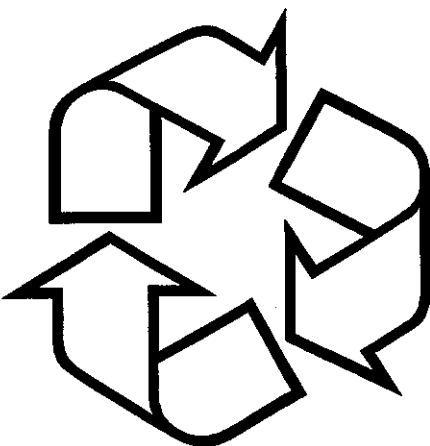
NUTRIENTS IN THE DIET									
Fiber									
Fats In the Diet									
Calories: Definitions & Requirements									
Protein Builds & Repairs									
Vitamin C									
Vitamin A									
Iron									
The 3 B's & Company									
Breads & Cereals									
Carbohydrates									
Dairy (Calcium)									
FUN TIMES WITH FOOD									
Instead of Watching TV									
Setting a Table									

BACK- GROUND	REDUCE	REUSE	RECYCLE	BUY RECYCLED	RESPOND
Where Does Our Waste Go? <input type="checkbox"/> *					
Saving Money <input type="checkbox"/>					
Other Wastes <input type="checkbox"/>					
12 Ideas*					
Let's Count the Layers <input type="checkbox"/>					
Package Hierarchy <input type="checkbox"/> *					
Milk Carton Models					
Cost of Packaging					
Make Convenient					
Take Off Excess <input type="checkbox"/> *					
Cleaning Substitutes*					
Reuse Scavenger Hunt*					
Reuse Brainstorming <input type="checkbox"/>					
Make the Switch*					
Reuse: What Does it Save?					
Identifying Recyclable Products <input type="checkbox"/>					
Recyclable Plastics <input type="checkbox"/>					
What is Recyclable in Our Area?*					
Space Saving Recycling Bins <input type="checkbox"/>					
Why Should I Recycle? <input type="checkbox"/>					
Composting <input type="checkbox"/>					
What Do I Have to Compost?					
Identifying Recycled Products <input type="checkbox"/>					
Recycled Products W/O Symbol					
Creating a Loop <input type="checkbox"/> *					
What Are You Buying?					
Your Money Counts <input type="checkbox"/>					
Tell It To The Manager					
Speak to the Manufacturer <input type="checkbox"/>					
Junk Mail <input type="checkbox"/> *					

☐ Flipcard with this activity.

* Handout with this activity.

WASTE REDUCTION ACTIVITIES													
BACK- GROUND		REDUCE			REUSE		RECYCLE			BUY RECYCLED		RESPOND	
Where Does Our Waste Go?☐*													
• Saving Money☐													
• Other Wastes☐													
• 12 Ideas*													
• Let's Count the Layers☐													
• Package Hierarchy☐*													
• Milk Carton Models													
• Cost of Packaging													
• Make Convenient													
• Take Off Excess☐*													
• Cleaning Substitutes*													
• Reuse Scavenger Hunt*													
• Reuse Brainstorming☐													
• Make the Switch*													
• Reuse: What Does it Save?													
• Identifying Recyclable Products☐													
• Recyclable Plastics☐													
• What is Recyclable in Our Area?*													
• Space Saving Recycling Bins☐													
• Why Should I Recycle?☐													
• Composting☐													
• What Do I Have to Compost?													
• Identifying Recycled Products☐													
• Recycled Products W/O Symbol													
• Creating a Loop☐*													
• What Are You Buying?													
• Your Money Counts☐													
• Tell It To The Manager													
• Speak to the Manufacturer☐													
• Junk Mail☐*													

	Shopping for Food																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
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*** Handout with this activity.**

WASTE REDUCTION ACTIVITY OUTLINE

Background

Activity: Where Does Our Waste Go?

Concepts: Amount of trash an individual throws away
Where trash is taken
Reasons for places trash is taken
There are many ways to reduce waste

Props: Flipcards #1-5

Handouts: Misunderstood Environmental Terms
Tips for Environmentally Aware Consumers
Sixteen Simple Steps

Activity: Saving Money and Reducing Trash

Concept: Shopping with the environment in mind
doesn't have to cost more

Props: Flipcards #10-12

Handout: Checking Out Your Packaging

Activity: Other Wastes

Concepts: We may be wasting natural resources
and energy
Ways to save energy

Props: Flipcard #6

Activity: 12 Ideas to Reduce Waste

Concept: There are many ways to reduce waste

Handout: Consumer Handbook for Reducing Solid Waste

Reduce

Activity: Let's Count the Layers

- Concepts: Buy products with minimal packaging.
Some packaging is necessary
- Props: Flipcards #8-9
Cereal box, tube or packaging from
tomatoes

Activity: Packaging Hierarchy

- Concept: Buy products with minimal packaging
- Props: Flipcards #7-13
Various juice containers
- Handout: Less is Best, Recycle the Rest

Activity: Milk Carton Models

- Concepts: Bulk or large quantity products **can**
reduce waste and cost
Don't over buy
- Props: Milk cartons of different sizes

Activity: Cost of Packaging

- Concept: Bulk or large quantity packaging **can**
reduce waste and cost
- Props: Several sizes of cereal boxes, canned
vegetables, coffee cans

Activity: Making Bulk or Large Quantity Purchases Convenient

- Concepts: Buy products with minimal packaging
(packaging hierarchy)
Bulk or large quantity buying can reduce
waste and cost
- Props: Empty margarine or cottage cheese
containers, yogurt containers, glass jars

Activity: Take Off the Excess: Calories and Packaging

Concept: Buy products with minimal packaging
(packaging hierarchy)

Props: Flipcards #10-14
Various cookie packages, cleaning
product packages

Handouts: Pack a No-Waste Lunch
Choose Well--Avoid Waste

Activity: Substitute Cleaning Products

Concepts: Reduce hazardous materials in your
home
Make your home safe for your family

Handouts: Household Cleaning Products: Are
There Substitutes?
Typical Single Ingredient Alternatives
Other Ideas to Reduce Household
Hazards

Reuse

Activity: Scavenger Hunt

Concept: Reuse creates less waste and can save
money

Props: Flatware, cloth napkins, plastic, glass or
ceramic dishes

Handout: Scavenger Hunt Checklist

Activity: Reuse Brainstorming

Concepts: Reusable containers can be used as
storage containers, portion control
containers, or containers for "make
your own dinners"

Higher quality products may last longer,
save money and reduce waste, but may
be more expensive initially

Reuse creates less waste and can save
money.

There are many items that can be reused.

Props: Newspaper, cottage cheese or yogurt
container, coffee can
Flipcard #15

Activity: Make the Switch: Disposable to Durable

Concepts: Durable products are often less expensive
and produce less waste than disposable
products.

Higher quality products may last longer,
save money and reduce waste, but may
be more expensive initially.

Props: Paper and plastic plates, paper and cloth
towels
Flipcard #16

Handouts: Make The Switch
Smart Shopper Checklist

Activity: Reuse: What Does it Save?

Concepts: Durable products are often less expensive
and produce less waste than disposable
products.

Reusable containers can be used as
storage containers, portion control
containers, or containers for "make
your own dinners," and much more.

Higher quality products may last longer,
save money and reduce waste but may
be more expensive initially.

Reuse creates less waste and can save
money.

Props: Plastic sandwich bags, margarine tub,
margarine sticks box

Recycle

Activity: Identifying Recyclable Products

Concept: Able to identify recyclable items

Props: Plastic dish soap and shampoo bottles,
margarine container
Flipcard #17-18

Activity: Recyclable Plastics

Concept: Able to identify recyclable items

Props: Plastic yogurt container, shampoo
bottle, squeezeable honey jar
Flipcard #17-18

Activity: What is Recyclable in Our Community?

Concept: Able to identify recyclable items

Props: A list of recyclable items and the rules
for recycling, items from the list
(plastic, glass, paper), items not on the
list

Handout: Flyer from local recycling center

Activity: Space Saving Recycling Bins

Concept: Making space for recycling

Props: Cardboard or plastic boxes, paper bags,
small garbage cans
Flipcard #19

Activity: Why Should I Recycle? What Does Recycling Save?

Concept: Reasons to recycle

Props: Flipcards #20-21

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Respond

Activity: What Are You Buying?

Concept: Vote with your dollars

Props: Product advertisements, product package

Activity: Your Money Counts

Concept: Vote with your dollars

Props: Flipcard #27 & #29

Activity: Tell It To The Manager

Concept: Speak to store manager about unavailable products or needed changes

Activity: Speak to the Manufacturer

Concept: Speak to manufacturer about unavailable products or needed changes

Prop: Product packages with manufacturer address and 800-number
Flipcard #28

Activity: Junk Mail

Concept: Other changes (home and community)

Props: Examples of junk mail (advertisements, requests for contributions)
Flipcard #30

Handout: Letter to Direct Marketing Association

Pilot Study Results

Results of these pre- and post-survey results are presented in Table 1. Positive changes were noted in five major waste reduction behaviors:

- 17% more learners bought products with less packaging
- 14% more learners bought products with packages that can be recycled.
- 12% more learners bought reusable products
- 32% more learners bought products with recycled content
- 18% more learners recycled materials.

Four-fifths of those surveyed knew about community recycling laws. This was up 20% after participating in the program. In additions, more learners knew how to recycle, more learners made room to store recyclables, and more learners identified the environment and packaging considerations as important in the buying decision.

Lower proportions of learners reported composting after participating in the program. It is possible that the program helped them learn more about what composting is, and what it is not. By clarifying what composting is, some learners may have given a more accurate answer on the post-program survey. It is also possible that the learners felt more comfortable with the teaching assistants by the end of the program and were more willing to give an honest answer, rather than trying to give the "right" answer.

Another interesting finding is the fact that a larger proportion of learners felt that it cost more to shop with the environment in mind after going through the program. In checking with the NTAs who deliver the EFNEP lessons, we found that EFNEP families are taught to shop for bargains and sales and to buy the lowest cost/highest nutritional value foods they can. The perception was that waste-reduced products cost more and were rarely on sale. This perception was especially strong in New York City, where families shop at small neighborhood stores.

Table 1
Results from Pilot Study
(See **Waste Reduction Survey** on page 15 for full text of questions)

		Combined			Steuben			NYC		
		Pre %	Post %	Change %	Pre %	Post %	Change %	Pre %	Post %	Change %
Do you:										
1.	Recycle	67.7	85.2	17.5	100.0	100.0	0.0	52.4	82.3	29.9
2.	Buy reusable	54.8	66.7	11.9	70.0	88.9	18.9	47.6	61.3	13.7
3.	Buy product containing recycled content	24.7	56.8	32.1	46.7	66.7	20.0	14.3	54.8	40.5
4.	Buy products with less packaging	31.2	48.1	16.9	33.3	61.1	27.8	30.2	45.2	15
5.	Buy product because it can be recycled	44.1	58.0	13.9	70.0	72.2	2.2	31.7	54.8	23.1
6.	Compost	12.9	9.9	-3	16.7	5.6	-11.1	11.1	11.3	0.2
	dk/dna*	19.4	8.6	-10.8	30.0	11.1	-18.9	14.3	8.1	-6.2
7.	Have hazardous materials in home	34.4	4.4	10	50.0	44.4	-5.6	33.3	45.2	11.9
	dk/dna 13.0	14.8	1.8	43.4	55.5	12.1	15.9	16.1	-0.2	

*don't know/does not apply

		Combined			Steuben			NYC		
		Pre %	Post %	Change %	Pre %	Post %	Change %	Pre %	Post %	Change %
8.	Over time are disposable items cheaper than durable? (% yes)	49.5	59.3	9.8	60.0	83.3	23.3	44.4	53.2	8.8
	dk/dna	34.4	12.3	-22.1	20.0	5.6	-14.4	41.3	14.5	26.8
9.	Know community recycling laws	61.3	82.7	21.4	90.0	100.0	10.0	47.6	79.0	31.4
	dk/dna	15.1	4.9	-10.2	6.7	0.00	-6.7	20.6	6.5	-14.1
10.	Rather buy:									
	paper towels	19.4	8.6	-10.8	20.0	11.1	-9.9	19.0	8.1	-10.9
	cloth towels	75.3	87.7	12.4	73.3	88.9	15.6	76.2	88.7	12.5
11.	Willing to pay 5¢ more for recycled egg carton (% yes) than styrofoam	62.4	66.7	4.3	60.0	72.2	12.2	63.5	66.1	2.6
12.	Products made with recycled material are lower quality-									
	Agree	30.1	18.5	-11.6	30.0	72.2	40.2	30.2	19.4	-10.8
	Disagree	66.7	70.4	3.7	66.7	27.8	38.9	66.7	71.0	+6.5
13.	I have room to store recyclables-									
	Agree	49.5	50.6	1.1	60.0	94.4	34.4	44.4	45.2	0.8
	Disagree	48.4	43.2	-5.2	40.0	5.6	34.4	52.4	48.4	-4.0

		Combined			Steuben			NYC		
		Pre %	Post %	Change %	Pre %	Post %	Change %	Pre %	Post %	Change %
14.	I know how to recycle-									
	Agree	63.4	76.5	13.1	73.3	61.1	-12.2	58.7	72.6	13.9
	Disagree	35.5	16.0	-19.5	26.7	33.3	6.6	39.7	19.4	-20.3
15.	Shopping with the environment in mind costs more-									
	Agree	37.6	44.4	6.8	26.7	88.9	62.2	42.9	48.4	5.5
	Disagree	52.7	48.1	-4.6	60.0	5.6	54.4	49.2	45.2	-4.0
16.	It bothers me to see things go to waste-									
	Agree	88.2	90.1	1.9	86.7	94.4	7.7	88.9	91.9	3.0
	Disagree	8.6	2.5	-6.1	10.0	5.6	4.4	7.9	1.6	-6.3
17.	I feel proud if I can use something longer than usual-									
	Agree	91.4	94.2	3.1	96.7	50.0	-46.7	88.9	91.9	3.0
	Disagree	7.5	5.7	-1.8	3.3	16.7	13.4	9.5	1.6	-7.9

		Combined			Steuben			NYC		
		Pre %	Post %	Change %	Pre %	Post %	Change %	Pre %	Post %	Change %
18.	Important in buying decision- Brand Name	25.8	27.2	1.4	20.0	27.8	7.8	28.6	30.6	2.0
	Convenience	46.2	34.6	-11.6	53.3	94.4	41.1	42.9	30.6	-12.3
	Packaging/Environmental Impact	24.7	29.6	4.9	20.0	55.6	35.6	27.0	30.6	3.6
19.	I would pay more attention to garbage if ...									
	it meant a better world for my children	84.9	84.0	-0.9	83.3	94.4	11.1	85.7	82.3	-3.4
	I thought I could make a difference	30.1	37.0	6.9	30.0	55.6	25.6	30.2	32.3	2.1
	I thought I could afford to shop with the environment in mind	22.6	28.4	5.8	23.3	11.1	12.2	22.2	33.9	11.7
	it saved money	61.3	54.3	-7	70.0	77.8	7.8	57.1	48.4	-8.7
	it meant my neighbor- hood would be cleaner	67.7	67.9	.2	56.7	55.6	-1.1	73.0	72.6	-0.4
	I knew what I could do	14.0	8.6	-5.4	20.0	0.0	-20.0	11.1	11.3	0.2

The teaching assistants were pleased with how well resources from **Get the Goods, Not the Garbage** fit into their nutrition education lessons:

...I was quite amazed at how we were able to use the resources.

...The resource binder and materials were very good--the visual aids were great! It allowed me to incorporate the waste management piece into nutrition education easily.

*....**Get the Goods** works really well. Shopping, food safety, fruits and vegetables--these are really good lessons to talk about waste management.*

...The materials are flexible. What I did was include waste reduction in most of the lessons I gave.

...The sequential lessons work very well because it allows you to identify some of the practices of the family you are working with. For example, each homemaker spent a week collecting the nonperishable garbage their family generated for that week. They brought it into the center. We discussed where it came from, how it could be reduced, especially some of the packaging that was involved. They were all surprised at the amount of garbage that was generated by 2 or 3 people in their family.

....Information on waste management could be incorporated into each nutrition lesson--there is a lot more for them.

...I brought in different props, like plastic containers, and I showed them how to reuse it. I actually had demonstrations and I think that makes a difference when they see--showing them made it easier.

....For each nutrition lesson, even though I had already shown them reducing, I showed them reducing again, like when they did food shopping or menu planning. The same for recycling and reusing; we would repeat it. So it would come back again, each time we had a lesson, it would come back as recycling, reducing, reusing, and recyclable. It would all come back.

Perhaps more importantly, the learners responded favorably to the information the teaching assistants shared with them. In fact, our experience in working with the NTAs and learners in the pilot phase of **Get the Goods, Not the Garbage** supports the presence of an environmental motivator among low income families:

...People were very concerned about learning waste management--they wanted to know the correct way of going about it.

...On graduation day, the homemakers expressed their appreciation for having learned environmental and waste management for a better world to live in.

...When they fill out the waste reduction survey, then they want to hear more about waste reduction. They just can't help themselves. They themselves say it will benefit them!

...You take it home with you. It's working for me because my understanding has grown a lot. I'm caring about the waste people generate, especially me and my family, and I'm reducing a lot of waste.

...At the beginning, you thought, "I'm never going to do it!" But then as people see that it is not the end of the world, that it is not as hard as they think it is going to be, they respond better.

Results from the pre- and post-surveys helped us refine some of the activities and add others to fill in gaps that were identified. We hope you will find **Get the Goods, Not the Garbage** helpful in your work and welcome your comments and suggestions.

Ordering Information

Order **Get the Goods, Not the Garbage** from Media Services Resource Center, 7 Business & Technology Park, Cornell University, Ithaca, NY 14850. Call 607-255-7660 for ordering information.

Throughout **Get the Goods, Not the Garbage**, references are made to other publications and resources. Information on ordering these materials follows:

The Consumer's Handbook for Reducing Solid Waste.
EPA530-K-92-003.

"Green" Advertising Claims EPA530-F-92-024

Communications Services Branch (OS-305)
Office of Solid Waste
U.S. Environmental Protection Agency
401 M Street S.W.
Washington DC 20460

Household Cleaning Products -- What about Substitutes?

329FSHCP

Home Composting Brochure ML E88050302

Recycling: Mining Resources From Trash 174RMT

What About Waste? 147WAW

Composting: Wastes to Resources 147CWRF

S.M.A.R.T. Shopping Video

Resource Center
7 Business & Technology Park
Cornell University
Ithaca NY 14850 607-255-7660

Compost at Home, Let It Rot!! It's Nature's Way of Recycling

Cornell Cooperative Extension of Albany County
PO Box 479, Martin Rd.
Voorheesville, NY 12186 518-765-3500

Composting to Reduce the Waste Stream: A Guide to Small Scale Food and Yard Waste Composting

Northeast Regional Agricultural Engineering Service
Cornell University
152 Riley-Robb Hall
Ithaca, NY 14853 607-255-7654

Don't Trash Grass - (video)

Connecticut DEP Recycling Program
165 Capitol Ave.
Hartford, CT 06106 203-566-3672

Easy Backyard Composting

NYS DEC
Division of Solid Waste
Bureau of Waste Reduction & Recycling
50 Wolf Rd.
Albany, NY 12233 518-457-7337

Home Composting - 48 slides/script

Home Grounds Lending Library
Cornell University
20 Plant Science
Ithaca, NY 14853 607-255-3134

Just Mow It! - A Grass Recycling Program (video and guide)

NYS Department of Economic Development
Office of Recycling Market Development
One Commerce Plaza
Room 950
Albany, NY 12245 518-486-6291

GLOSSARY

COMPOST	letting natural waste (such as leaves and food waste) break down into soil
DISPOSABLE	things that are thrown away after being used only once or twice
DURABLE	things that last for a long time; things that take a long time to wear out
ENVIRONMENTAL IMPACT	effect on the environment (natural surroundings such as air, land, water) and your health
FOOD WASTE	unused part of food from food preparations or uneaten food
HAZARDOUS	dangerous, unsafe
INCINERATION	getting rid of garbage by burning it
POISONOUS	products that can injure people or the environment
RECYCLABLE	something that can be processed or remanufactured into the same or another product
RECYCLE	processing or remanufacturing materials so that they may be made into the same or another product
RECYCLED MATERIAL	materials (like glass, metal, paper) which have been reprocessed so they can be used again
REUSABLE	something that can be used again as is
TOXIC	products that have harmful effects on people or the environment.
WASTE REDUCTION	throwing away fewer things; selecting products and packaging that make less waste
YARD WASTE	materials such as leaves, grass clippings, and tree branches

BACKGROUND

Where Does Our Trash Go?

On average, a person in the U.S. throws away four pounds of trash everyday. This is about 1,460 pounds -- or 42 garbage bags -- of trash a year -- per person! People in New York State throw away 18 million tons of garbage every year. The largest proportion of trash is paper and paperboard or light cardboard (37% by weight), followed by yard waste (18%), plastics and metals (8% each), food and glass (7% each), and wood (6%); the remaining 8% is other materials.

Where does all of this garbage go after it leaves your home?

In the early 1990's, 83% of garbage in the U.S. went to *landfills*. Landfills are areas where trash is buried between layers of earth. Landfills are not going to be the solution for all our trash. One reason is the increasing amount of trash produced each year. Another is that people often object to new landfills being located near them. Also, when trash is covered in a landfill it does not receive any rain or sun, which are needed for the decaying process. Therefore, decomposition (the break down of materials) happens very slowly. In fact, 52-year-old newspapers have been found in landfills in excellent condition. New landfills contain the wastes and collect and treat contaminated water (called leachate). Some older landfills do not have proper drainage systems. Without good drainage, toxins from the trash can seep out into our water supply.

Another way to get rid of trash is *incineration*. An incinerator is like a furnace that burns garbage at very high temperatures. Heat from the burning garbage can be used to produce steam. The steam can then be used to heat buildings, power machines, or produce electricity. The electricity can be used at the incineration plant or can be sold to a power company. Incinerators around big cities burn 200 to 4,000 tons of garbage a day at very high temperatures (about 1700 degrees fahrenheit!). However, burning does not get rid of all of the garbage -- some ash is left. If 365,000 tons of garbage is burned in one year, that produces 100,000 tons of waste ash. This ash which may contain toxins, is disposed of in landfills. The release of toxins into the air from the smokestack is also a concern. New incinerators have pollution control devices that trap most of the pollutants.

Trash is also left in the streets and empty lots of our *neighborhoods*, and in waterways or country roadsides or buried in woodstoves or backyard burn barrels. While the amount of trash left in

the neighborhood street or buried at home is small compared to the trash taken to the landfills and incinerators, litter and garbage and improperly disposed wastes makes a messy, unclean and unhealthy environment for us and our children to live in.

We can never rid our world of waste. However, we can reduce the amount of waste that is landfilled or incinerated. The U.S. Environmental Protection Agency (EPA) suggests the following steps to reduce solid waste:

1. source reduction (reduce the amount of waste)
2. recycle and compost
3. waste to energy (incineration)
4. landfill

Reducing the amount of waste we make is at the top of this list because it is the only option that not only avoids the pollution and costs of waste collection and disposal, but also avoids the pollution that is caused by making the unnecessary product or package in the first place. All the steps in making something -- obtaining raw materials, transporting them, manufacturing a product and then transporting and marketing that product -- cause pollution. If we don't really need that product, the **best** option is not to buy it in the first place.

Recycling and composting are next on the list. They allow materials in products and packages to remain useful rather than going into a landfill or incinerator. To be recycled, the product or package is collected and reprocessed to make a new product or package. Using recycled materials rather than making things from new materials saves energy and resources, but recycling does cause some pollution since materials must be collected and remanufactured. That's why waste prevention is even better than recycling.

For consumers, there are several ways to reduce household trash:

1. Purchase items with less packaging (reduce - get the goods, not the garbage)
2. Purchase items that are durable (items that can be used many times) instead of items that are disposed of after one or two uses (disposable) or break quickly.
3. Recycle as many products and packaging possible.
4. Buy products and packaging that use recycled material.

5. Respond and speak out about what you want or need. With the combined effort of manufacturers and consumers, we can reduce solid waste.

What Does It Cost to "Shop Environmentally?"

You don't have to spend more money to shop in ways that help you reduce waste. In fact, shopping with the environment in mind can even save you money! For example, if your community has a pay-per-trash container trash removal system, the less packaging you buy, the less trash you throw out -- and the less trash you throw out, the less you pay for trash removal.

Even if you don't have this user fee trash payment system in your community, you can still save money and shop with the environment in mind. Brenda Cude of University of Illinois Cooperative Extension compared prices of 10 different products where there was an *environmental* choice and a more wasteful choice. Only one product, coffee filters, had a higher price for the *more environmental* product -- and now you can even buy re-usable coffee filters. For example, in Table 1 below, concentrated powder laundry detergent cost 17.9% less than regular liquid detergent and 23.8% less than regular powder detergent.

Table 1. Percent Price Difference Between Environmental and More Conventional Product Choices

Item	% Price Difference
Concentrated Powder Laundry Detergent vs.	
Regular Liquid	-17.9%
Regular Powder	-23.8
Concentrated Fabric Softener vs.	
Regular Liquid	-18.6
Recycled Paper Towels vs.	
Brand 1, not recycled	-38.2
Brand 2, not recycled	-17.6
Recycled Facial Tissues vs.	
Brand 1, not recycled	-27.5
Brand 2, not recycled	-26.9
Recycled Toilet Tissues vs.	
Brand 1, not recycled	-25.3
Brand 2, not recycled	-21.7
Recycled Paper Napkins vs.	
Not recycled	-12.7

Item	% Price Difference
Unbleached Coffee Filters vs.	
Brand 1, no claim	+47.5
Brand 2, no claim	+74.8
Household Cleaner in Recycled Plastic vs.	
Virgin plastic	- 0.1
Furniture Cleaner in Trigger Spray vs.	
Aerosol Container	-5.3
Tampons Claiming Biodegradability vs	
No Claim	-6.0

Research by Paul Ligon of the Tellus Institute shows that in many cases the *environmental choice* is also the economic choice. For example, you can save 70% per serving by buying cereal in a large box (at \$2.79 per pound) instead of single serving boxes (at \$4.10 per pound). The large box also has less packaging waste, so you save money and reduce trash. Some other examples are shown in Table 2.

Table 2. Environmental and Economic Choices

Product	% Price Difference
Cereal	
Individual serving vs.	
Large box	72%
Apple Sauce	
Individual serving vs.	
Large jar	87%
Apple juice	
Mini drink-box vs.	
Regular drink-box	180%
Glass bottle	119%
Popcorn	
Microwaveable vs.	
Conventional	104%
Ravioli	
Microwaveable vs.	
Conventional	82%
Tomatoes	
Packaged vs.	
Unpackaged	24%
Rice	
Single serving,	
microwaveable vs.	
Large bag	1,531%

Buying more durable items can also save money in the long run, although it may cost more at first. Consider buying rechargeable batteries for toys and other appliances. In 1993, two regular disposable size "AA" batteries cost \$1.45 while 2 rechargeable batteries cost \$4.70. A battery re-charger cost \$6. But if you go through a set of 2 batteries every 6 months, then in a little over three and a half years you'll break even and after 4 years you'll be money ahead. Other examples are listed in the Reuse section.

We know that most families try to buy items on sale. We also know that most stores have regular sales. By planning ahead and watching for sales on more environmentally sound products, families can take advantage of sales, save money, and shop with the environment in mind.

Finally, it's important to consider that the price of the products doesn't always reflect the "true cost" of the product. The price of the item in the store includes the costs of the raw materials to make it, the cost to ship it, the packaging, the marketing, the store's cost for staff, heat, lights, and so on. But the price does not include the cost of using the product (for example, some light bulbs use less energy than others) nor the cost of disposal. Also, the cost to the environment in terms of air and water pollution or use of pesticides and herbicides in production may not be included. While there is almost no way for consumers to know the "true social cost" of products, consumers can become more aware about the costs involved in using and disposing of products they buy.

Other Wastes

When we think of waste and waste reduction we usually think of solid waste -- the material we put out at the curb or in a dumpster for collection. Solid waste is the most visible and most talked about waste in our society. However, there are many other wastes that often go unnoticed and unaddressed.

We may also be wasting energy. Recycling products saves energy and natural resources. Some products can be made from recycled materials using less energy than the same product made from new natural resources. There are many other things we can do to save the energy and natural resources we use.

Water is a limited and non-renewable natural resource. The water we have today is the same water we will have tomorrow. As consumers of water, we must be careful not to pollute or use it wastefully. There are several ways to reduce the water we use and the energy it

takes to make it available to us. One way is to put a dam in the toilet tank. A dam blocks off part of the tank so it takes less water to fill the tank. If you flush the national average of eight times a day, a dam would save 2,920 gallons of water a year. Another way is to use a low-flow shower head which costs about \$10. The low-flow shower head reduces the amount of water you use by as much as 50% and could save as much as \$100 a year on the water bill.

The type of lights we use affects energy use and waste. Long life light bulbs and compact florescent bulbs can save energy costs. Fluorescent light bulbs that fit into the regular light sockets are available in hardware stores and supermarkets. There are a few problems with using them in place of regular light bulbs. Fluorescent light bulbs cannot be used in a 3-way switch. Also, because fluorescent bulbs have an odd shape they do not fit easily in all lamps. Finally, the initial cost of fluorescent lights is high, about \$19, compared to an regular light at about \$2. Some utility companies will give you reduced cost or free fluorescent bulbs if you have an energy audit of your house. However, fluorescent lights lasts longer (10,000 hours average life instead of 1,000 hours) and use less energy (incandescent lights use 75-85% more energy than fluorescent lights). You save money since you have to buy replacements less often and your electric bill will be lower.

Another way to save energy and natural resources and to decrease air pollution is to change the kind of cars we drive and our driving patterns. A car that gets more miles to the gallon releases less carbon dioxide. Also, a car that uses less fuel per mile saves you money. The impact on the environment is less since less fuel needs to be refined, saving energy, pollution, and natural resources. If you have a choice, walk or ride a bike instead of driving. If it is impossible to walk or ride a bike, car pool or use public transit. When you are going out, try to run your errands in one trip instead of two or three trips. Plan ahead.

You can also save energy by simply turning off appliances when they are not needed or in use. For example, if no one is watching the television or listening to the radio/stereo, turn it off. When no one is in a room turn off the lights. All of these little things add up to a lot of energy -- and money -- savings.

Still another way to save energy is to keep the thermostat setting at the minimum needed for comfort. Setting the thermostat at 65 degrees instead of 70 degrees can reduce heating use by as much as 15%. If you feel chilly, put on a sweater. The thermostat on the hot water heater can also be turned down to 120 degrees. For every 10 degrees the water temperature is reduced, 1.7 million BTU's are

saved per household per year (BTUs are British Thermal Units, a measure of heat).

Another way to save energy and money in the long term is to insulate your home. Insulating costs may be high initially. But insulation saves money in the long run. Your local utility can do a "blower-door" test to tell where your home leaks heat. They can also do an energy audit to give you other ideas on how to save on energy costs. If a home is properly insulated, it could save the homeowner up to 50% in energy costs.

If you are interested in more ideas for insulation, saving energy and saving money, contact your Cooperative Extension office for further information.

References

- Cude, Brenda. 1993. Does It Cost More to Buy "Green?" *Proceedings of the American Council on Consumer Interests*. Columbia MO: University of Missouri. p. 108-113.
- Ligon, Paul. 1991. Isolating the Cost of Excessive Packaging. *Biocycle* (November, 1991), p. 68-70.
- U.S. Environmental Protection Agency. *Characterization of Municipal Solid Waste in the United States: 1990 Update, Executive Summary*, EPA/530-SW-90-042A, June 1990.

BACKGROUND UNIT

Community Educator Training

Note to the Instructor

This is an introduction to Solid Waste -- it's generation and management. Since many of us don't realize where our trash goes after it leaves our homes, try to use the Background Unit to raise awareness of these issues. Try to stimulate new ideas or thoughts about other wastes (energy, natural resources, pollutants). Families must have an understanding of the size of the problem before habits and value choices can be changed.

Competency

The Community Educator will be able to discuss where trash is now taken locally, other forms of waste, and how waste can be reduced.

Objectives

The Community Educator will:

- ▶ Describe how much trash an individual throws away.
- Tell where trash ends up.
- Explain how the above systems take care of trash.
- Be able to assess the Learner's need for information on the life cycle of trash.
- ▶ Identify ways to shop with the environment in mind and save money.
- ▶ Understand we also waste energy and natural resources.
- Describe ways energy can be saved in the home, in heating the home, in transportation.
- ▶ Describe ways natural resources can be saved.
- ▶ Be able to assess the Learner's need for information on how to make changes.

Points to Teach

Activities

Where Does Our Trash Go?

An individual throws away about 4 pounds of trash a day. This is about 1460 pounds of trash a year. New York State throws away 18 millions tons of trash a year.

Ask the Community Educator to make a list of all the trash she/he threw away today.

If the Community Educator recycles, include those items on the list, but circle them.

Compare how much trash each throws away, then add it all together.

If the Community Educator recycles, compare the difference between the trash she/he would have had if recycling did NOT occur.

There are 5 main places trash ends up. They are:

- Compost
- Recycling centers/programs
- Incinerators
- Landfills
- Neighborhood streets/burn barrels

Ask the Community Educator to brainstorm all the places trash ends up.

Write ideas on large sheet of paper or chalk board as they are stated.

Accept all answers.

Show Community Educator flipcard series "Where Does Our Trash Go?" (#1-5).

As of 1990, more than 80% (4 out of 5 pounds) of trash goes to landfills.

Ask if anyone has ever been to a landfill. If they have, ask them to describe what they saw.

Landfills are areas where trash is buried in the ground between layers of dirt.

Ask the Community Educator to describe what he or she thinks happens at a landfill. Show photos/slides of landfills. (Waste Management Institute slides No.: L4, L9-10, L12,

L16, L18-19, L23, L38-40,
L47, L54-55, L57, L72)

Between 1984-1988, 30% of existing landfills closed because of:

Increased amounts of trash

Realization that landfilling entombs rather than breaks down waste. Landfilled trash does not receive air, rain, or temperature change needed for decay and decomposition.

Potential for groundwater contamination.

Other issues that cause landfills to close may include:

Without proper liners between garbage and ground water, there may be leakage into the water supply.

Uses up valuable land.

If products are thrown away, the energy used to make them is gone forever.

Unsightly and can be smelly.

Brainstorm reasons why landfills are filling and closing.

Write the answers on large sheets of paper or the chalk board.

Discuss these issues with using landfills for trash disposal.

Ask the Community Educator to think of issues regarding landfills, besides their filling up and closing.

Incineration is another way trash can be disposed. An incinerator is a furnace that burns trash at very high temperatures.

Incinerators produce:
Heat-steam-electricity
Reduction in the volume of solid waste

Disadvantages of incineration are:

Does not remove all waste;
365,000 tons of garbage a year produces 100,000 tons of ash a year that still requires landfilling

Ash is taken to the landfill. It may contain toxins which can create environmental and health problems.

Pollutants may escape into the air during burning, landing in undetermined locations.

A lot of trash is needed to keep an incinerator running at full capacity.

Modern incinerators do produce energy that is used by families and industry. Incineration plants have pollution controls, unlike a backyard "burn barrel."

Ask if anyone has ever been to an incineration plant or burns their own trash. If so, what did they see?

Show photos/slides of an incinerator plant (Waste Management Institute slides No.: H1-4, H19, H26-27, H30, H36)

Ask if the Community Educator can think of disadvantages of incineration. Have him or her think of a wood stove and what happens when wood is burned (smoke, ash, heat). Remind them that wood stoves do not burn as hot as incinerators and garbage should not be burned at home.

The most visible place that trash is left is as litter in our neighborhood streets.

It makes the neighborhood an unkept, unclean, unhealthy place to live.

Show photos/slides of trash in the streets (Waste Management Institute slides No.: B17, B35, R93).

Brainstorm problems of trash in the street.

We cannot get rid of waste completely, but we can decrease it by:

Reducing it before we buy

Reusing items

Recycling what is recyclable

Buying products made of recycled materials

Composting certain food and yard wastes

Responding to manufacturers of overpackaged products.

Ask the Community Educator to name ways waste can be decreased.

How Much Does it Cost to Shop "Environmentally?"

People may think environmentally sound products cost more, so they don't buy them.

Ask for a show of hands--"How many of you think "environmentally sound" products cost more?"

Some environmentally-sound products may cost less than the more wasteful alternative.

Share a copy of Table 1 with the Community Educators. Ask Community Educators for examples where the price for the "environmental product" is lower than the "wasteful" product.

Many times, the environmental choice is also the economic choice.

Bring in examples of waste and cost-reduced products:

individual cereal boxes vs a large box

juice in different forms

rice in different forms

Ask Community Educators to compare cost per serving and estimate waste (what would be thrown into the garbage).

When making decisions based on price, sometimes you have to think about the long run costs.

Ask Community Educators if they know of someone who paid more for something initially but saved money in the long run. Discuss with them the annual cost of using durable versus disposable products, using examples such as:
paper vs cloth towels

rechargeable vs disposable batteries

longer life or compact fluorescent light bulbs vs regular bulbs

better quality appliances, clothes, etc.

You can buy on sale and still shop with the environment in mind.

Ask Community Educators to list ways families can combine buying things on sale and shopping with the environment in mind.

Accept all answers.

Try to summarize responses by suggestion that "environmental shopping" is possible if you to know what you usually buy, watch for sales of environmental products, and plan ahead to take advantage of sales.

Other Wastes

Usually we talk about solid waste because it is the most visible waste we generate -- we

all have to take out the garbage. However, there are other wastes that occur in this country.

We also may be wasting the energy and natural resources we use.

We have already talked about the energy and natural resources that can be saved by recycling.

There are other things we can do in our daily lives so we don't waste energy and natural resources.

Water is an example of a valuable natural resource that should not be wasted.

The water we have today is the water we will have tomorrow.

We must be careful not to pollute or waste our water.

Two examples of things we can do to decrease the amount of water we use are:

1. Put a dam or barrier in the toilet tank (this saves 2,920 gallons of water if you flush the national average of eight times a day).

2. Use a low-flow shower head (This reduces water use by 50 percent and could save \$100 a year on the water bill).

The types of lights we use also affect the energy we use and the waste we throw away.

Ask the Community Educator to think of ways to save water that can become a daily habit.

Some possibilities:

When washing dishes, rinse dish in a rinsing pan instead of turning on the water for each dish.

When brushing teeth, fill a reusable cup for rinsing and turn the water off.

Ask Community Educator for ideas about other ways to save energy.

Two types of bulbs are usually used:

- incandescent (regular) bulbs
- fluorescent bulbs

For example: Turn off lights when leaving a room.

FACTS to know:

- incandescent bulbs use 75 to 85 percent more energy than fluorescent bulbs.

- fluorescent bulbs cannot be used in a dimmer or three-way light. The initial cost is higher than incandescent and the odd shape of the bulb may not fit all lamps.

The type of car we drive also affects air pollution and the energy and natural resources we use.

Ask the Community Educator if he or she can think of other ways to save energy and natural resources. Have him or her think of ways to lower air pollution when driving.

FACTS to know:

A 40-mile-per-gallon car releases 1.3 tons less carbon dioxide than a 28-mile-per-gallon car. This saves 12-miles-per-gallon of fuel (a valuable, non-renewable natural resource).

Things to do to save fuel:

- walk or ride a bike to do errands
- car pool
- use mass transit
- get everything you need in one trip instead of several (plan)

Energy can also be saved when heating or cooling your home. There are several things you can do:

- Set your thermostat at 65-degrees instead of 70. This reduces heating by 15 percent.
- Insulate your home. This is a long-term investment. Initial cost is high, but you could save up to 50 percent in energy costs.

Little habits add up to a lot of saved energy and natural resources.

Other things you can do:

- Turn off the TV, radio, and stereo when not listening or watching.

Ask the Community Educator what he or she does to cut energy and heating costs.

Ask the Community Educator to think of daily habits that can be changed to save energy and natural resources.

Show the Community Educator the flipcard #6, Saving energy, water, and resources saves money.

Provide copies of the introduction to this unit, Ideas for Learner Lessons, and Learner Handouts to the Community Educators.

BACKGROUND

Ideas for Learner Lessons

Concepts

Amount of trash an individual throws away.

Where is trash taken.

Reasons for places trash is taken.

There are many ways to reduce waste.

Shopping with the environment in mind doesn't have to cost more.

Sometimes we waste the natural resources and energy we use.

Ways to save energy.

Activities

Where Does Our Waste Go?

Concepts: Amount of trash an individual throws away
Where is trash taken
Reasons for places trash is taken
There are many ways to reduce waste

Props: Flipcards # 1-5,
Trash bag

Handouts: Misunderstood Environmental Terms
Tips for the Environmentally Aware Consumer
Sixteen Simple Steps

Go over the flipcards # 1-5 with the learner, discussing the amount of garbage his/her family generates and how it compares to the "average." Talk about where wastes go (landfills, incinerators and municipal composting if there are any locally, and curbside/roadside litter). When talking about

landfills, discuss what is degradable and what is not. Use the handout, "Fallacies of Environmental Terms" with learners.

If the Learner is interested, have him or her keep track of how much trash he or she throws away each day or week. In a group setting, ask the group to bring in one day's non-perishable garbage (e.g. cereal boxes, non-recyclable plastics) and estimate how much the group generates each week, month, or year. For example:

"Each of us saved up one day's garbage. For the group of 7 of us, that's the same as one week's garbage. Our collected garbage weighs about 30 pounds. That means that if this group were a family, we'd be throwing out about 130 pounds of garbage a month or about 1560 pounds of garbage a year!"

Saving Money and Reducing Trash

Concepts: Shopping with the environment in mind doesn't have to cost more.

Props: Flipcards #10-12

Handout: Checking Out Your Packaging

While showing flipcards #10-12, ask the Learner to think of other examples where the environmental choice is also the economic choice. Think of and bring in examples of:

single serving packages versus bulk or large packages

disposable versus recyclable packages

excess packaging versus minimum packaging

Other Wastes

Concepts: Waste is also the natural resources and energy we use
Ways to save energy

Props: Flipcard #6

While showing flipcard #6, ask the Learner to think of other ways he or she could save energy or natural resources around their homes and in their work.

12 Ideas to Reduce Waste

Concepts: There are many ways to reduce waste.

Handout: The Consumer's Handbook for Reducing Solid Waste

With the Learner, review the 12 ideas for reducing solid waste presented in the EPA booklet, *The Consumer's Handbook for Reducing Solid Waste*. If the Learner is interested in getting their own copy, help him/her write to the EPA to request one. Use the following model letter:

(Date)
Communications Services Branch (OS-305)
Office of Solid Waste
U.S. Environmental Protection Agency
401 M Street S.W.
Washington DC 20460

Dear Sirs;

Please send me a copy of your booklet, "The Consumer's Handbook for Reducing Solid Waste," publication number EPA530-K-92-003. Thank you.

Sincerely,

Learner's name
Learner's address

Activities with Children

Give each child their own garbage bag and go for a walk in the neighborhood and see how much trash you find. Discuss why people should not throw things in the street (makes the neighborhood messy, unclean and unhealthy). Children can help pick up litter, but watch the children closely! Broken glass, sharp metal objects, and unsanitary food packages should be left for the adults to handle! Everyone should wear protective gloves.

Buy some seeds and start a flower box with your children. Take care of it together. Discuss what a flower needs to live. Air? Water? Sun? Compare what a flower needs to live to what people need to live (the same things). Talk about the importance of reducing air pollution.

Read the book *50 Simple Things You Can Do to Help Save the Planet* by the Earthworks Group. Do the suggested activities together.

There are many records and tapes with children's songs which relate to the environment, pollution, and waste reduction (one example is "Songs for a Better World"). As you play and listen to these songs, talk about what the children think about the songs (e.g. if a song talks about writing a letter to their Senator, what would they want to write their Senator about?).

Misunderstood Environmental Terms

Few environmental terms on products have strict legal definitions. Consumers cannot be sure what a term means. Remember the following when buying products.

Recycled - May not mean 100% recycled material. Some items are only 5% recycled material. Also, the recycled material can be scrap material from the factory (pre-consumer) rather than material from a recycling center (post-consumer).

Recyclable - May not mean it is recyclable in your area.

Degradable - Means it can break down or decompose, but only under certain conditions. In landfills without air, water and temperature change, this does not happen for decades.

Biodegradable - Means it can be broken down or decomposed by living things but only under certain conditions. Plastic may contain cornstarch or other materials that micro-organisms can break down. In a landfill without air, water and temperature change, decay does not happen for decades.

Photodegradable - Needs sunlight to decompose; helps roadside litter to decay, but it may be slow. There is no sunlight in landfills.

"Ozone-Friendly" Aerosols - Do not contain chlorofluorocarbons (banned since 1978) but may contain hydrocarbons. Hydrocarbons, like propane, contribute to smog and destroy the ozone layer. Use pump spray bottles when possible.

"Green" Products - Claim to be good for the environment. No product is 100% "green." Some products are better than others. The label may only consider a few "green" features, such as air and water pollution or solid waste.

"Environmentally Friendly" - No product is 100% "environmentally friendly." This is a vague term that can mean almost anything.



Sixteen Simple Steps

Here is a list of sixteen simple steps you can take to help the environment. Put a check mark in the box beside each step you take during a two-week period. Make these steps part of your habits.

PACKAGING

- ☐ Buy products that come in recyclable packages.
- ☐ Buy products in returnable bottles, and return them.
- ☐ Wash and reuse glass jars.
- ☐ Wash and reuse aluminum foil.
- ☐ Recycle aluminum and steel cans.
- ☐ Bring your own reusable produce and grocery bags to the store.



PAPER PRODUCTS

- ☐ Use cloth napkins instead of paper.
- ☐ Buy greeting cards that have been printed on recycled paper.
- ☐ Reuse gift wrap.
- ☐ Recycle newspapers.
- ☐ Write on the front and back of a sheet of paper.
- ☐ Reuse paper lunch bags or carry your meal in a cloth bag or lunch box.
- ☐ Save and reuse cardboard gift and shipping boxes.

PLASTIC PRODUCTS

- ☐ Buy recyclable products whenever possible.
- ☐ When you shop in grocery stores or supermarkets, avoid putting fruits and vegetables in plastic bags.
- ☐ Wash out and reuse plastic produce and grocery bags.

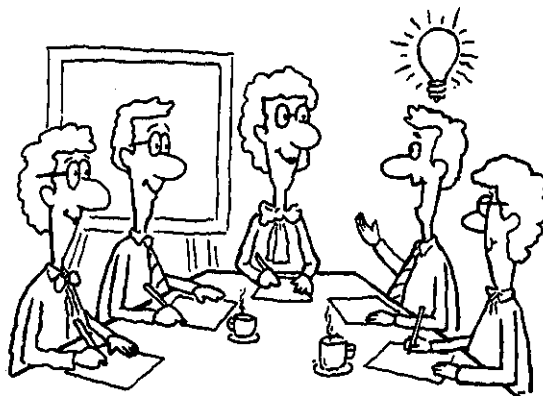




TIPS FOR THE ENVIRONMENTALLY AWARE CONSUMER

Check off the things you do already.

- ☐ 1. Buy reusable products. Avoid disposable items.
- ☐ 2. Buy, take care of, and repair long-lasting fixable products.
- ☐ 3. Reuse bags, containers, paper, boxes and other items.
- ☐ 4. Select products with the most useful, least wasteful packaging.
- ☐ 5. Buy concentrates or larger sizes. Buy in bulk.
- ☐ 6. Buy products and packages that can be recycled -- then recycle them!
- ☐ 7. Buy products and packages made of recycled materials.
- ☐ 8. Buy non-toxic products for use around the house.
- ☐ 9. Compost food and yard waste.
- ☐ 10. Borrow or rent things you don't use very often.
- ☐ 11. Buy, sell or donate used items. These may be clothes, furniture and appliances.
- ☐ 12. Make your choices known to merchants and politicians.
- ☐ 13. Be creative. Look for chances to reduce waste.





When selecting packaging made from more than one material, select packages that allow easy separation of the material.

- Cereal box (cardboard and plastic bag) or food jar (glass jar and plastic or metal cap).



Buy products made from partially or totally recycled materials.



Speak out.

- Talk to the store manager if you don't see products in packages that meet your needs for reduced waste.



Be familiar with your community's Recycling Program.



Make manufacturers aware of what you want and don't want. Call the 800 Consumer number on the product and write a letter.

For more information contact

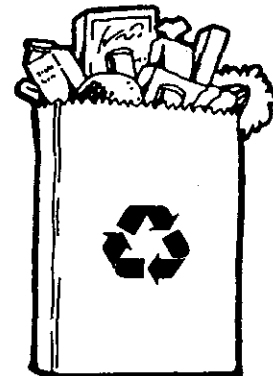
Don't Buy Trash!

*Cornell Cooperative Extension in New York State
Provides Equal Program and Employment Opportunities*

RECYCLE

REJECT

REUSE



REDUCE

Checking Out Your Packaging



Cornell
Cooperative
Extension



Why Reduce Waste?

We are all concerned about the garbage crisis. Garbage disposal prices are skyrocketing. Packaging makes up about one third of what we throw away. We need to find ways to reduce the amount of packaging that ends up in our garbage.

Why Do We Need Packaging?

Packaging preserves and protects the products we buy. It provides sanitation and safety for the shopper. Packaging helps us to identify the product. Sometimes, the packaging exists for the prevention of theft. It supplies us with instructions as to product use and compliance with regulatory standards. Packaging is also a way in which to advertise the product.

What Can Be Done?

Decisions we make in the store can reduce the amount of trash we produce.



Think before you buy.

- Do you really need it?
- Do you have room for it?
- Will it soon be obsolete?
- Can you borrow or rent it instead of buying?
- How will you dispose of it?
- How long will the product last?



Select products with reduced or minimal packaging.

- Products in concentrated form such as frozen juice or fabric softener.
- Choose multiple serving rather than single serving size containers.



Count the layers of packaging.

- What purpose does the packaging serve?
- What purpose does each layer serve? (Is it really necessary?)



Compare the amount of packaged product with the amount of packaging.

- Loose tea compared with tea bags.
- Buy in bulk when appropriate (produce, etc).



Select reusable products.

- Such as cloth napkins and tablecloths, ceramic eating plates and cups, electric razors, canvas grocery bags.



Examine the package.

- Look for these symbols.



Recycled



Recyclable

- Look for SPI code (Society of Plastic Industry).



PETE



HDPE



V



LDPE



PP



PS



OTHER

Currently, most communities are accepting ♻️ & ♻️ plastics for recycling. Check with your local community Recycling Program to see what plastics are being accepted.



Select products with recyclable packaging.

- Products packaged in aluminum, steel, glass, some plastics or some paper.
- Check your community's Recycling Program.

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REDUCE

Packaging makes up about one-third (1/3) of household waste. Although packaging cannot be eliminated, it can be reduced. Packaging has many uses:

- holds and protects the product (imagine cereal without a box!).
- ▶ allows easy transportation of the product.
- ▶ provides convenient storage.
- ▶ assures consumer safety.
- ▶ maintains freshness.
- ▶ displays instructions for using the product.

In addition to the primary packaging, there may be a second and even a third layer of packaging. For example, most cereal is packaged in a waxed or plastic liner (primary), and then in a box (secondary). The boxes are packed in a corrugated cardboard carton (tertiary or third layer) to ship the cereal to the store. As consumers, we can't do much about the packaging used in shipping, but we can choose products based on their primary and secondary packages.

Some products come in packages that do not benefit the product or the consumer. Instead, the packaging is used as a selling tool, creating product appeal. Often that type of packaging requires larger shelf space. More room on the shelf makes the product stand out from competing brands. Packaging can also hide the poor quality of a product.

Extra packaging costs more money to manufacture. This cost is included in the price you pay. On average for food products, packaging costs contribute about ten cents to every dollar worth of product. When shopping you should be aware that you are buying the packaging and the product.

The best way to reduce the amount of trash a household makes is not to bring it home. If you don't buy it in the first place, you won't have to worry about how to get rid of it. Look first for items with no

packaging. Fruits and vegetables come loose for you to choose what you want. Containers and extra outside wrapping may not be needed.

If packaging is necessary, find the product with the least amount of packaging. Minimal packaging means the packaging serves the purposes needed using the smallest amount of material. Shopping for less packaging may mean buying products in different forms.

First, look for products with lighter weight packaging materials. Many packages are being made lighter. In the 1970's, 26 aluminum cans weighed one pound. Now it takes 30 cans to make a pound, because each can weighs less.

Second, look for products with fewer layers of packaging.

Last, packaging waste can be reduced by looking for the largest amount of product in a given size package or by looking for the smallest package size for a given amount of product.

After you've tried to find products with little or no packaging, look for products with packaging that is:

Reusable: anything that can be reused for the same or different purpose, such as margarine containers, glass jars, etc. Be sure to wash containers, especially if you expect to store leftovers in them. Remember to keep your family safe.

Refillable: something that can be filled again with the product at the store, such as water bottles.

Returnable: can be taken back to the manufacturer for redistribution, such as deposit bottles and cans, glass milk jugs and dispenser water bottles.

Consumable: is used up along with the product. Currently, there are few consumable packages, but nature provides us with lots of them, like apples!

Buying products in large quantity only saves on trash if the product does not spoil easily or will be used up before it spoils. If an item spoils before use, you have to throw away the spoiled product and the packaging. Therefore, you need to plan. Make a menu and a list of what you need before shopping, then stick to the list. This will help you cut down on buying products that will spoil before use. Don't over buy!

Reducing trash can also save money. This Background section contains information on ways to save money by buying larger sizes (versus single serving sizes), buying recyclable packages (versus disposables), and buying minimal packaging. Also, if your community has a user fee system that charges you for the amount of trash you throw out, you can save money by reducing the amount of trash you put out on the curb or in a dumpster, or take to the landfill. The less trash you put out, the less you have to pay.

It is also important to reduce the toxicity of products we purchase, use, store, and dispose of. Some jobs around the home require the use of products containing hazardous ingredients. However, whenever possible, try to reduce toxic or hazardous materials in your home:

1. Try some of the alternative cleaning products listed on the fact sheet and handout in this section. A little "elbow grease" can be just as effective as a toxic cleaner.
2. Select the least hazardous product you can. Read the labels carefully. Products labeled "warning" or "caution" are less harmful than those labeled "danger" or "poison." Look for products that do not need a warning label.
3. Buy only what you need and can use. Buying a larger size doesn't save money if you have to throw away the leftovers -- and since it's a hazardous product, it shouldn't be thrown away!
4. Read and follow label directions. The label will tell you how to use and store the product. It will also tell you how to dispose of the empty container. Try not to dispose of leftover toxic material. Use it up or call your local solid waste management department (or department of sanitation) for directions.

Also consider some of these ideas for reducing hazardous waste:

Use rechargeable batteries instead of disposable batteries.

Plant marigolds instead of using insect sprays to keep mosquitoes away.

When you buy hazardous products, use them up. Share them with neighbors if you have more than you can use. Make sure that products have the original label on them, so everyone can know how to use, store, and dispose of the container.

Never mix commercial products together.

The following activities should make the Community Educator aware of what he or she buys. With this new awareness, she/he should be able to decrease the amount of trash produced as well as the trash Learners generate.

REDUCE

Community Educator Training

Note to the Instructor

Packaging makes up a large portion of the solid waste in our country. Packaging solid waste can be reduced with the careful selection of products by consumers and the packaging design changes of manufacturers.

Competency

Will be able to discuss how packaging affects the solid waste problem.

Objectives

The Community Educator will:

- ▶ Describe how much of household waste is packaging.
- ▶ Explain the purposes of packaging.
- ▶ Describe how packaging is used as a selling tool.
- ▶ Explain the "preferred packaging" hierarchy.
- ▶ Describe how bulk or large quantity and refillable containers use less packaging.
- ▶ Be able to assess the Learner's need for information on packaging.

Points to Teach

Activities

Review last lesson questions

Packaging makes up 1/3 of household waste.

Ask the Community Educator to make a list of all the trash (she/he) threw away today.

Put a check (x) next to every item that was packaging.

Packaging is necessary for several things:

- 1) Easy to transport
- 2) Convenient storage
- 3) Consumer safety
- 4) Freshness
- 5) Instructions for product use

Ask the Community Educator to brainstorm why the packaging he or she threw away was needed. (What was its purpose?)

Many times packaging is not for the benefit of the product or the consumer.

Ask the Community Educator to think of some negative effects of packaging for the consumer.

Instead packaging is used

Discuss how to determine if a package is excessive.

- for product appeal
- to take up more shelf space to make the product stand out from competing brands
- to hide the poor quality of the product.

Activity: Let's Count the Layers

Extra packaging costs money. Packaging costs are about 10 cents for every dollar's worth of product.

Review with the Community Educator the "Price of Packaging" (**Learner Lesson: Preparing Grains and Waste Reduction Concerns** from EFNEP Nutrition Teaching Assistant training). Compare prices.

The way to reduce trash is to not buy it in the first place.

Activity: Packaging Hierarchy

The following is the "Packaging Hierarchy" that can help reduce waste if followed:

- | | |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------|
| <p>1. No packaging
Examples are found in the produce section:
- some fruits
- vegetables</p> | <p>Ask the Community Educator to think of products that can be purchased with no packaging.</p> |
| <p>2. Minimal packaging
(uses the least amount)
Includes products with:
- lighter weight packaging
- fewer number of layers
- increased number of items in package
- decrease in package size in relation to product</p> | <p>Ask the Community Educator to think of products that use minimal packaging, e.g. meat wrapped without styrofoam tray.</p> |
| <p>3. Returnable
(can take back to industry for redistribution)
Example:
- Glass milk bottles
- Water bottles from dispenser</p> | <p>Ask the Community Educator if he or she can think of any other examples of a returnable product.</p> |
| <p>4. Refillable
(can fill again with product at store)
Example:
- Spring Water Bottles</p> | <p>Ask the Community Educator if he or she can think of any other examples.</p> |
| <p>5. Reusable
(can reuse for the same or different purpose)
Examples:
- margarine containers
- glass jars, bottles
- plastic pail for peanut butter</p> | <p>Ask the Community Educator if he or she reuse packages, etc. If so, what? Can he or she think of any more?</p> |
| <p>6. Recyclable
(can recycle in your area)
Products that are made of fewer types of materials are usually more recyclable (e.g., glass jars, metal cans). Layered materials</p> | <p>Have the Community Educator review the area's recycling list.</p> |

are less recyclable (e.g., juice boxes).

Note: the recyclable symbol does not mean it is recyclable in your area.

7. **Recycled**
(uses reprocessed materials)

Show the Community Educator the recycled symbol. Point out the difference between the recyclable symbol and the recycled symbol.

8. **Consumable**
(deteriorates while using the product -- not many consumable packages are available. Look for them in the future.)

Show video of S.M.A.R.T. Shopping ideas, available from the Cornell Resource Center.

We can reduce waste by buying products that:

have less packaging

are concentrated (versus diluted)

are larger sizes

are more durable

Many products use less packaging if we buy them in larger sizes or in bulk.

Use milk cartons to demonstrate that you create more trash if you buy several small containers instead of one larger one.

Activity: Milk carton models

Sometimes products bought in bulk or large quantities are not convenient to store or use. If this is the case, they can be divided into smaller sizes to make storing and using easier.

Activity: Making Bulk or Large Quantity Purchases Convenient

Packaging could be compared to calories.

Activity: Take off the excess - calories and packaging

Note: Bulk or large quantity
buying decreases
solid waste if the
product does not spoil
or is used up before it
spoil. If the product
spoil and has to be
thrown out, more
waste is produced.

Refillable, returnable,
and reusable products
only decrease trash if
they are used again.

Recyclable products
only decrease trash if
they can be, and are,
recycled

REDUCE

Ideas for Learner Lessons

Concepts

Don't over buy.

Buy products with minimal packaging (packaging hierarchy).

Bulk or large quantity buying can reduce waste and cost.

Some packaging is necessary.

Activities

Let's Count the Layers

Concepts: Buy products with minimal packaging.
Some packaging is necessary.

Props: Cereal box, tube/packaged tomatoes
Flipcards #8 & 9

This is a modeling activity to do with the Learner to make him or her conscious of what he or she is buying.

By thinking out loud, demonstrate for the Learner how to determine if the packaging is excessive. You can do this by following the steps below (All of the steps should be aloud):

1. Count the layers of packaging a product contains.
2. Name the material the layers are made of.
3. Layer by layer ask, "Is this layer necessary to preserve freshness, for my safety, shipping and storage, or for label information? Answer aloud (yes, it provides... or no, it does not provide...).
4. Could any of the layers be removed and still provide the above?

5. Could he or she use a different material for the packaging to achieve the above with less packaging overall?

Demonstrate the above process for the Learner several times. Examples to use: Pasta salad mix, cereal (especially individual cereal boxes), snack products, tube/packaged tomatoes.

Then, say the steps for the Learner as he/she answers each of them.

When the Learner seems comfortable, have him/her talk his/her way through the steps alone using other products for examples.

Packaging Hierarchy

Concept: Buy products with minimal packaging.

Props: Various juice containers
Flipcard #7-13

Handout: Less is Best, Recycle the Rest

Use the real life examples, pictures from advertisements, or have the Learner visualize the various forms that products come in.

- Show the Learner all the examples for one product or have him/her think of all the forms the product can be purchased (e.g. juice - fresh squeezed, frozen concentrate, glass bottle, plastic container, aluminum can, aseptic juice packs or individual juice cans, bottles).

- Place them in front of the Learner and order them from the least packaging to the most packaging.

- Once the products are in order, review the packaging of each. Start with the least packaging (no packaging; e.g., an orange). Say: "This is an example of no packaging, of minimal packaging, of recyclable, refillable, returnable, or reusable packaging, of excessive packaging," and so on.

- Remind Learner of the preferred packaging hierarchy:
 - no packaging
 - minimal packaging
 - returnable, refillable, reusable
 - recyclable
 - contains recycled materials

Milk Carton Models

Concepts: Bulk or large quantity products **can** reduce waste and cost.
Don't over buy.

Props: Milk cartons of 2 or 3 different sizes

This activity demonstrates how products packaged in bulk or larger quantities can reduce the amount of trash thrown away. Remember, buying products in bulk or large quantities only reduces waste if the products are used before they spoil.

With the Learner, review the information on each milk container regarding: size, amount of servings in each container, how many small containers you need to equal the larger container, etc. Then break down the cartons and compare the amount of packaging waste which comes from each. Identify which packages create more trash (3 or 4 small containers or one large container) for the same amount of milk.

Ask the Learner which would create more waste if it spoiled before it was used? Explain how buying in bulk or large quantities reduces waste only if products are used before spoiling. Buy the largest quantity you can use up!

Cost of Packaging

Concept: Bulk or large quantity packaging **can** reduce waste and cost.

Props: Several sizes of cereal boxes, canned vegetables, coffee

Use real life examples or information from the "Cost of Packaging" sheet (see Learner Lesson: Preparing

Grains and Waste Reduction Concerns from the EFNEP Nutrition Teaching Assistant training materials) about:

- the size of product (oz, lb.)
- the number of servings each contains
- how many of the smaller packages are needed to equal the larger package (use calculator or paper and pencil if necessary)
- the type and amount of materials the product is packaged in
- how much trash each will discard when compared at equal servings.

Then discuss cost. Compare the cost per serving of both products.

For Example, show the large box of oatmeal versus the individual packages of oatmeal or a large box of cereal versus individual packages. Holding one product at a time ask:

- how many ounces is this?
- how many servings does it contain?

Then figure out how many of the single serving oatmeal packages are needed to equal the large box of oatmeal. (Use a calculator if necessary, but only if the Learner has one available to him/her to use regularly; otherwise use scrap paper and pencil.)

You may have to demonstrate where to find all of this information and show how to calculate equal servings and costs.

Demonstrate how many of the individual packages will be thrown away compared to the same amount of product in the large container. Use a numberline for this if necessary.

If a large bag of pancake mix is 36 oz, mark the 36 on the numberline with a colored pencil. Then look

at the shake pancake mix. Each container contains six oz. of product. Mark every six places with a pencil until you reach 36. Now count the marks. How many containers must be thrown away of the shake mix to equal the large bag? (6) Compare the amount of trash and the cost of the six shake mixes to the amount of trash and the cost of the large bag.

Do the same with the other products. Let the Learner do more and more of the procedure until he or she is doing it by his/herself.

As we just demonstrated, convenient items **usually but not always** produce more trash and cost more than large quantity products. However, this does not mean you cannot make a large quantity product easy to use.

Note: Buying bulk products (in bulk sections of some grocery stores) also reduces waste because it allows you to buy only what you need (ex. with bulk buying you can buy 12 oz. of macaroni instead of the 2-3 lb. box you cannot use).

Making Bulk or Large Quantity Purchases Convenient

Concepts: Buy products with minimal packaging (follow packaging hierarchy).

Bulk or large quantity buying can reduce waste and cost.

Props: empty margarine or cottage cheese containers, yogurt containers, glass jars

Sometimes buying products in bulk or large quantities is not as convenient to use or store as the small or single serving products. If this is the case, you can buy some products bulk or large quantity packages and use reusable containers (e.g. empty margarine, cottage cheese, yogurt containers, empty glass/plastic jars, etc.) to create your own single serving portions. These are especially helpful if you have a family that eats at different times or for small children who need small portions.

Be sure to wash reusable containers if you plan to store food in them -- your family's safety is important!

Some examples of making your own portions are:

- yogurt in a large container can be put in small yogurt containers for lunch;
- large container of peanut butter could be put into a margarine container if the large container is difficult for children to use;
- if you want individual servings of pudding for lunch, make the box mix then put the pudding in individual, reusable containers, like yogurt containers;
- instead of buying the snack pack that contains individual servings of crackers, cheese, various luncheon meats, etc. buy the large box of crackers, cheese and meat at the deli and put together your own snack packs using containers that can be washed and reused;
- if you need single serving meals, many pastas (such as lasagna and ziti) and casseroles can be made in advance and frozen in individual serving size. When you want to use one just take it out and reheat - just like frozen dinners;
- For breakfast make your own "Variety Packs." Buy large/bulk cereals then put them in small individual serving reusable bowls with tight lids. (Tight lids are important to keep the cereal fresh and to keep bugs out!) Stack them in the cupboard. When you or your child wants one go to the cupboard pick the kind you want, add milk. If it is served hot, add water and microwave. When finished, wash the container and save it to use again.

Take off the Excess: Calories and Packaging

Concept: Buy products with minimal packaging (packaging hierarchy).

Props: Various cookie packages, cleaning product packages
Flipcards #10-14

Handouts: Pack a No-Waste Lunch
Choose Well - Avoid Waste!

When speaking to the Learner about calories you may also discuss reducing packaging by making the following analogy when working with the Learner.

A person needs a certain amount of calories every day to keep his/her body healthy. A product needs a certain amount of packaging to stay fresh.

If a person receives more calories than the amount needed the body stores them as excess and the person becomes overweight. If a product is given too much packaging it does nothing for the product and is wasted.

Therefore, plan your meals according to your daily caloric needs avoiding excess calories that can not be used by your body. When purchasing products, choose those with the least amount of packaging necessary to keep the product fresh. Buy products with:

- No packaging
- Minimal packaging
- Reusable, refillable, or returnable
- Recyclable packaging

Substitute Cleaning Products

Concepts: Reduce hazardous materials in your home.
Make your home safer for your family.

Handouts: Household Cleaning Products: Are There Substitutes?
Typical Single Ingredient Alternatives
Other Ideas to Reduce Household Hazards

When discussing kitchen clean-up, ask the learner to think about the cleaning products used. With the Learner, review the handout "Household Cleaning Products: Are There Substitutes?" Match each alternative to one the Learner might use (e.g. lemon juice instead of Lime Away). If time permits, talk about other household hazardous waste (e.g. batteries, furniture polish) and ideas for reducing hazardous products in the home.

Activities With Children

Get a box of crackers and let the child open it. As he or she does, discuss the amount of packaging around the item. Was there too much? How many layers were there?

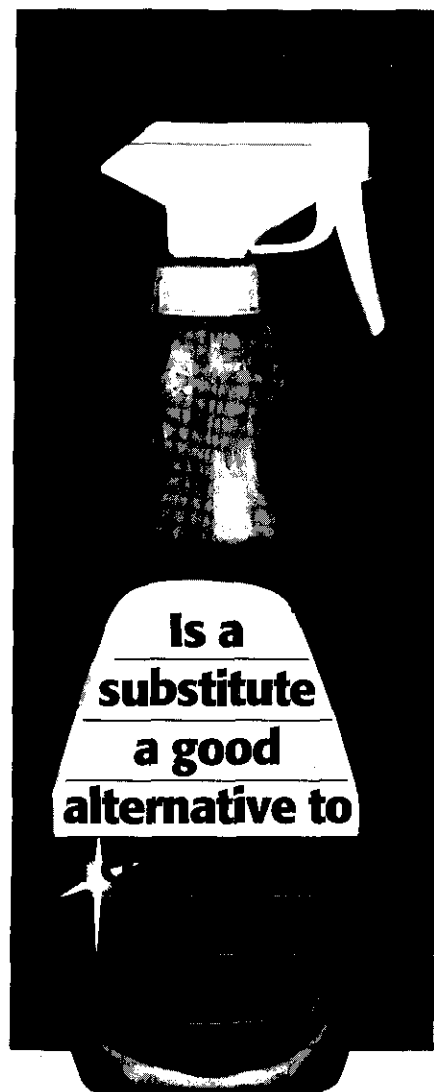
Take out the garbage with the children. Talk about how much lighter it would be if everyone in the family bought items with less packaging.

Bring different size milk and egg containers. Discuss how products packaged in larger quantities can reduce the amount of trash thrown away. Have the children read the labels to determine the number of servings in each container. Help them figure out how many 10 oz. containers one needs to equal the quart container, etc. Then open up the cartons and compare the amount of packaging in each and which creates more trash (three small containers or one large container).

Household Cleaning Products— What about Substitutes?

Cornell Cooperative Extension

College of Human Ecology



Today many people are being encouraged to use alternatives to commercially formulated cleaning products. Before using any substitute, you should consider the following questions:

- Is the substitute more or less toxic than the commercial product?
- Will both the substitute and the commercial product degrade to harmless residues when washed down the drain to either municipal or on-site sewage systems?
- Is the substitute more or less expensive than the commercial product?

- Will the substitute be as effective as the commercial product?
- Is the substitute a homemade mix? Is the formula safe? Has it been tested?

This fact sheet will help you evaluate common substitutes for commercially formulated cleaning products. The common ingredients in commercial products formulated for specific tasks are listed in the following table. Each ingredient enhances the performance of the product, and the mixture has been tested for safety and effectiveness.

Typical Commercial Cleaning Products

Category	Common Ingredients
All-purpose cleaners*	Surfactant, builder, disinfectant/sanitizer
Toilet bowl cleaners*	Acid, surfactant, disinfectant/sanitizer
Bathroom and tile cleaners*	Builder, surfactant, base, disinfectant/sanitizer
Oven cleaners	Strong base
Laundry products	Surfactant, builder, enzyme, brightener
Glass cleaners	Ammonia, alcohol solvent, surfactant (sometimes acetic acid)
Scrubbers, scouring powders*	Abrasive, surfactant, bleach
Furniture polishes	Wax or oil; surfactant to hold dust
Metal cleaners	Surfactant, acid, abrasive, solvent

* These products are usually available with or without a disinfectant/sanitizer or bleach.

Definitions

Surfactant — The major ingredient in soaps and detergents; removes soil.

Builder — An additive to inactivate hard-water ions and to keep soils from redepositing on surfaces.

Disinfectant/sanitizer — Kills disease-causing microorganisms.

Enzyme — Breaks up protein-, fat-, and starch-based stains.

bleach on wool or silk). Also, make sure the ingredients give the desired action.

Bathroom cleaners usually contain a disinfectant/sanitizer, but a paste of baking soda does not. Automatic dishwasher detergents contain ingredients that allow dishes to be cleaned with hot water and the mechanical action of the water; substituting a product that is meant to be used with hand-scrubbing will not give the desired results. Laundry detergents contain special low-sudsing surfactants; substituting a detergent not meant for washing machines could create a suds explosion. Washing soda is a good laundering booster, but using it in place of a laundry detergent means there is no surfactant to remove soil.

When choosing among cleaning products, don't forget to consider the packaging. Concentrated products usually come in smaller packages, which means there is less packaging material to throw away. Some packaging is made of recycled materials. Check to see if the packaging can be recycled in your community.

Finally, to save money and protect the environment, observe this rule: **Follow the directions on the label and use only the amount of product recommended.**

An Ounce of Prevention . . .

You can lessen cleaning jobs by practicing some simple preventive measures. Remember, a quick soak with water, the universal solvent, can cut down on cleanup later.

- Wipe up all spills as soon as possible. This is important for all surfaces, but particularly for ovens and stove tops where soil can become hardened with heat.
- Damp-mop floors with water between major cleaning jobs.
- Rinse and then use a squeegee on shower doors and other glass or tile surfaces to minimize soap scum buildup and hard-water spots. Rinse out the bathtub and the sink immediately after use to avoid soap scum buildup. Use drain strainers to prevent blockages in bathtub and sink drains.
- Pour boiling water down drains weekly to keep them free of debris; use a plunger or snake to clear clogged drains.
- Soak paint brushes (latex paint) in liquid detergent and water immediately after use.

What Is a Disinfectant?

The terms *disinfectant* and *sanitizer* are used to describe products that have germicidal or antimicrobial (kills microorganisms) properties. Disinfectants and sanitizers both clean and destroy infectious microorganisms.

The use of both terms is regulated by the U.S. Environmental Protection Agency (EPA). Products claiming to be either one must list their EPA registration number on the label. Some products may have disinfectant properties, but no EPA designation. If you are particularly concerned about preventing the spread of an infectious illness, use only an EPA-designated disinfectant or sanitizer.



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Household Cleaning Products: Are There Substitutes?

Before using substitute cleaning products, ask yourself the following:

1. Is the substitute more or less toxic than the product you planned to use?

Most harmful products are labeled with the words: Warning, Caution, Danger, Eye irritant, Keep out of reach of children, and/or other warnings.

2. Will the substitute become harmless when washed down the drain?

Most products that are made to be washed down the drain have been tested to be sure they are safe for septic or municipal sewage systems and have safe levels of toxic residues.

Products that are not meant to go down the drain (e.g. furniture polish) should be used up. If you are not sure about a product or a substitute, contact your local waste management department.

3. Is the substitute effective?

Some substitutes are good for a specific job but are not good for general cleaning.

Some substitutes require more rubbing ("elbow grease"). Are you willing to work harder? Can the surface handle the rubbing? You must decide.

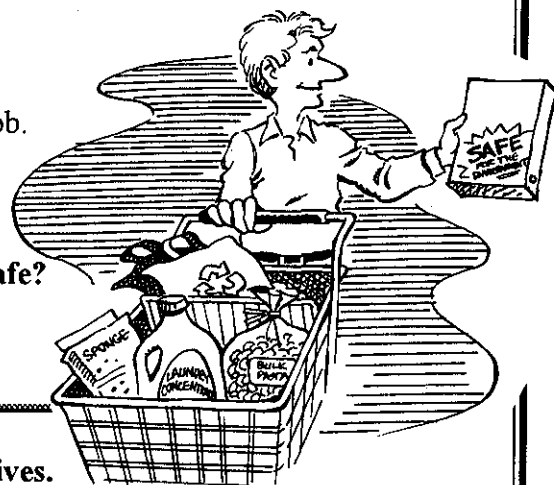
4. Is the substitute more/less effective?

Determine how much is needed to do the job.

Compare prices.

5. Is the substitute a homemade mix? Is the mix safe?

Find out if the mix has been tested.



Use single ingredient alternatives.

Never try your own mixes.

Never mix commercial products - mixing can make toxic gases.



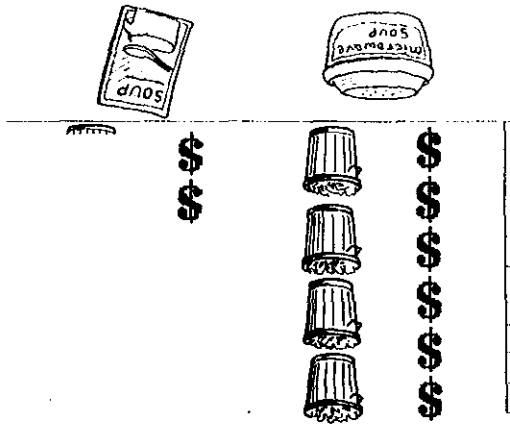
Typical Single Ingredient Substitutes

Alternative	Job	How To Use
Washing Soda (toxic)	Cuts grease	Mix with water on sponge. Milder abrasive than some scouring powders.
Ammonia (toxic)	Cuts grease	Mix with water. Spray on oven. Fumes from bleach and ammonia are toxic when mixed!
Baking Soda	Deodorizer. Cuts some grease. Use for oven spills. Wipe out refrigerator.	Use large amounts. Some rubbing needed.
Distilled Vinegar	Helps remove hard water spots. Helps dissolve soap scum.	Not a disinfectant. Use alone. May need large quantities.
Mild Detergent (hand dishwashing)	Dissolves grease and oily soil	Use alone or with water.
Chlorine Bleach (toxic)	Bleaches some dyes. Breaks down protein stains. Disinfects.	Use with water. Do not mix with other products. Fumes from bleach and ammonia are toxic when mixed!
Boiling Water (can burn)	Softens grease, keeps drain clear, makes some soils more soluble.	Use alone.
Lemon Juice	Helps remove hard water spots.	Use alone.



LESS IS BEST...

RECYCLE THE REST!

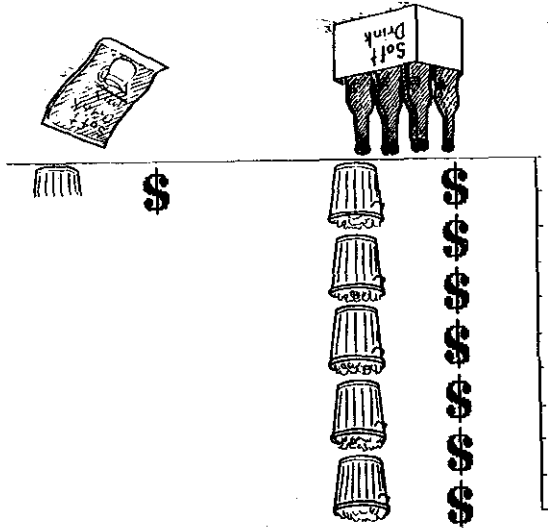


CHICKEN NOODLE SOUP

Microwave single

Instant single saves 70% on your grocery bill and makes 39% less waste than the microwaveable container.

Instant single

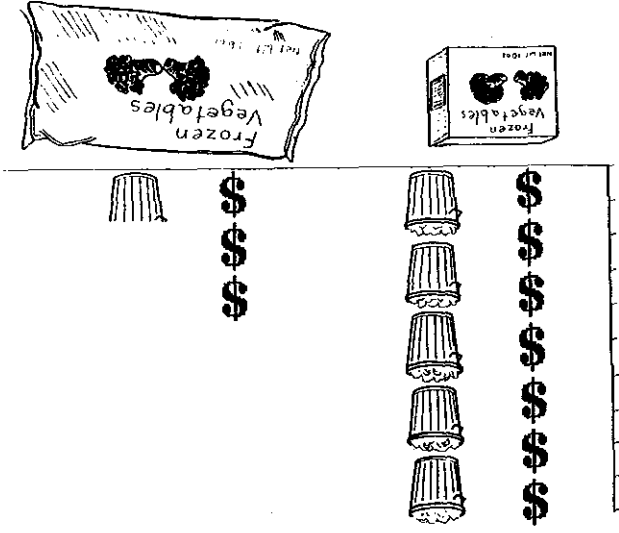


NON-CARBONATED SOFT DRINK

6-pack plastic bottles

Packet saves 93% on your grocery bill and makes 99% less waste than 6-pack plastic bottles.

0.13-oz powder packet



FROZEN VEGETABLE

single serving
4.5-oz box

Bag saves 24% on your grocery bill and makes 89% less waste than the box.

28-oz plastic bag

Research conducted by the Waste Education Section, Minnesota Office of Waste Management. All figures are based on an equivalent amount of product. Prices were determined from shelf labels in fall 1991 and will vary slightly according to location and brand. Volume was uniformly compacted and is a conservative estimate of household waste. Figures do not include the cost of necessary additional ingredients.



Other Ideas to Reduce Household Hazards

Oven Cleaner

Clean spills as soon as the oven cools using steel wool and baking soda. For tough stains, add salt. **Do not use this method in a self-cleaning or continuous cleaning oven!**

Glass Cleaner

Mix 1 Tablespoon of vinegar or lemon juice in 1 quart of water. Spray or wipe on and use newspaper to wipe dry.

Toilet Bowl Cleaner

Use a toilet brush and baking soda **or** vinegar. This will clean but will not disinfect.

Furniture Polish

Mix 1 Tablespoon of lemon juice in 1 pint of mineral oil or vegetable oil, and wipe furniture.

Rug Deodorizer

Sprinkle baking soda liberally on dry carpets. Wait 15 minutes and vacuum. Repeat if necessary.

Plant Sprays

Wipe leaves with mild soap and water. Rinse with plain water.

Mothballs

Use cedar chips, lavender flowers, rosemary, mint, or white peppercorns.

Flea and Tick Products

Put brewer's yeast or garlic in your pet's food. Sprinkle fennel, rue, rosemary, or eucalyptus seeds or leaves around animal sleeping areas.

Outside Insect Sprays

Plant marigolds in areas where you want to keep mosquitoes away.

For any of the above mixes, mix only what you need for the job at hand. Discard what you don't use -- **Your child's safety depends on you.**

DO NOT MIX anything with a commercial cleaning product.



CHOOSE WELL, AVOID WASTE

- 1** Bring your own shopping bag.
- 2** Look for least-amount of packaging.
- 3** Buy in bulk when practical.
- 4** Use reusable containers.
- 5** Avoid disposable and individually wrapped items.
- 6** Buy products packaged with recycled material.
- 7** Buy locally recyclable packaging.
- 8** Buy repairable products.
- 9** Buy returnables and refillables.
- 10** Use concentrates and pump sprays.

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S.M.A.R.T. *basics*

REDUCE

- ☐ Look for least-amount of packaging
- ☐ Buy in bulk, when practical
- ☐ Avoid disposable, single-use items
- ☐ Buy concentrates
- ☐ Buy long-lasting products that can be repaired
- ☐ At checkout, don't take a bag if you can do without
- ☐ Buy only what you need
- ☐ Buy non-hazardous products
- ☐ Buy pump sprays

REUSE

- ☐ Use cloth bags for shopping
- ☐ Reuse items such as bags, jars, and plastic tubs
- ☐ Pack your lunch in reusable food containers
- ☐ Use rechargeable batteries
- ☐ Repair and maintain items instead of replacing them
- ☐ Use refillable, pump-spray bottles
- ☐ Buy milk in refillable bottles

RECYCLE

- ☐ Buy readily recyclable products and then participate in local recycling programs: Glass, aluminum, and newspapers are collected in most communities

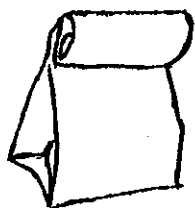
BUY RECYCLED

- ☐ Buy products made from recycled materials. This helps "Close the Loop" in recycling



**PACK A
No-WASTE
LUNCH**

using reusable containers



Cloth lunch bag
or box

Plastic bottle
for juice



Sandwich
keeper



Container for chips



Cloth napkin
(washable)

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using reusable containers



Cloth lunch bag
or box

Plastic bottle
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Sandwich
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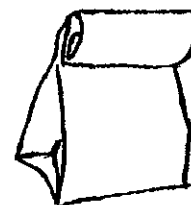
Container for chips



Cloth napkin
(washable)

**PACK A
No-WASTE
LUNCH**

using reusable containers



Cloth lunch bag
or box

Plastic bottle
for juice



Sandwich
keeper



Container for chips



Cloth napkin
(washable)



REUSE

- On average an individual in the U.S. throws away four pounds of trash a day. That is about 1,460 pounds a year.
- New York State throws away 18 million tons of garbage a year.
- One-third of all trash is packaging.

The best way to reduce waste is to reduce the amount of trash you buy. Another way is to reuse things for the same or different purposes. This reduces the amount of trash going to landfills, incinerators and neighborhood streets.

We can also buy durable instead of disposable products. **Durable** products last longer or can be used over and over again. **Disposable** products and packages are thrown away immediately or after several uses. There are many durable products to use in place of disposable products. When we use durable products, we decrease the amount of trash produced. When we throw away reusable or recyclable containers, energy and materials are lost.

Think creatively about chances to practice reusing. For example, to store leftovers or to pack lunches, we could use new plastic bags or storage containers. Or, we could reuse clean empty margarine, cottage cheese or yogurt containers. A plastic sandwich bag costs about \$.01 for only one use. Over a year, using one every day, that costs the consumer \$3.65. Also that means one article of trash is being thrown out every day. The cost of a plastic storage container is \$1.19 - \$2.99. The reusable container costs less and nothing is thrown away.

Note: it's important to use only food grade plastics when storing foods. If food came in a plastic container, such as margarine or cottage cheese, it's a food grade plastic. If non-food items come in a plastic container, don't reuse the container with food.

Containers from other food products can also be used as food storage containers. Suppose margarine in a plastic container costs \$1.49. Margarine in the paperboard box with individually wrapped sticks costs \$1.39. That is approximately \$.10 for the plastic container.

If the container is washed and reused 100 times for packing lunch salads, it saves the consumer the cost of buying a plastic bowl to carry the salad. Again, there is less trash thrown away. However, if the plastic container is not going to be reused, it is best to buy the margarine sticks or buy the large one pound block with only one wrapper. The plastic container takes up more space in the landfill. It may also cost more to ship.

You could also make the same comparison with paper versus ceramic or plastic dishes, paper towels versus cloth towels, or paper cups versus ceramic mugs. Also, refer to the example of rechargeable versus disposable batteries in the *Background* section.

Product packaging comes in many different sizes, colors, materials and shapes. After using the products, use your imagination to reuse the package. The activities within this chapter encourage families to think creatively. They also raise awareness of what is being thrown away. Several things happen when families reuse products and packages, reduce trash taken into the house and recycle. Less trash is taken to the landfill or the incinerator. The amount of trash dumped in the neighborhood street is reduced. The energy to make those products is decreased. And, the consumer may save money.

REUSE

Community Educator Training

Note to the Instructor

Many products and packages have been designed to be disposable. Buying durable products and thinking creatively about how to reuse some of the packaging we buy can help reduce solid waste.

Competency

The Community Educator will be able to discuss how reusing products affects the solid waste problem.

Objectives

The Community Educator will:

- ▶ Describe how reusing a product reduces trash.
- ▶ Explain how buying durable products instead of disposable products saves in the long-term.
- ▶ Explain how buying a more expensive but better quality product saves in the long-term.
- ▶ Explain how reuse saves energy and money.
- ▶ Be able to assess the Learner's need for information on reuse.

Points to Teach

Activities

Review questions from last lesson

The best way to reduce waste is to cut down on the amount of trash you buy. Another way to reduce trash is to reuse product packaging.

Ask the Community Educator to make a room by room list of things he or she reuses. Use the "scavenger hunt checklist" for ideas.

Packages come in many different shapes, colors, sizes and materials. They can be used and re-used in many ways. The only limit is your imagination.

Activity: Scavenger Hunt Checklist

Ask the Community Educator to form several groups (3-4 per group).

- Give each group a list of items. Ask each group to write ways to reuse the items.
- Remember: there are no wrong answers as long as the uses are safe.

Reuse occurs less today than in the past because of the many disposable products and packages available.

Activity: Reuse Brainstorming

Buying durable instead of disposable items also reduces trash. Durable items can be used over and over. Disposable items are thrown away immediately or after a few uses.

Ask the Community Educator to list all of the disposable products he or she uses. Then have him or her list a durable replacement for each.

Buying higher quality items that cost more can also decrease trash because many times the items last longer.

Activity: Make the Switch - Disposable to Durable

Have the Community Educator think of higher quality items that last longer.

By reusing and buying durable products and packages, energy, money and space is saved.

- Every product requires energy to make. By not throwing it away we are conserving the energy longer.

- Money can also be saved. Remember: if a reusable or durable product is thrown away nothing is saved.

Demonstrate: Activity: Reuse - What does it save?

REUSE

Ideas for Learner Lessons

Concepts

Durable products are often less expensive in the long run and produce less waste than disposable products.

Reusable containers can be used as storage containers, portion control containers, containers for "make your own dinners," and much more.

Higher quality products may last longer, save money and reduce waste, but may be more expensive initially.

Reuse creates less waste and can save money.

Activities

Scavenger Hunt

Concept: Reuse creates less waste and can save money.

Props: Flatware, cloth napkins, plastic, glass or ceramic dishes

Handout: Scavenger Hunt Checklist

Walk through the house with the Learner and look at the items there. (Or ask the Learner to imagine walking through the rooms in his or her house and tell you what he or she sees.)

Ask him or her to name all the items that are durable (used over and over again). Ask him or her to name all the items that are reused. Write down everything the Learner names. If necessary help the Learner by asking him or her if their house contains any of the items on the Scavenger Hunt Checklist (at the end of this unit).

Review the list with the Learner. Congratulate the Learner on how much he or she reuses. Explain this is a great start on reducing waste. Ask if he or she can think of any more items that can be reused to reduce waste?

Reuse Brainstorming

Concepts: Reusable containers can be used as storage containers, portion control containers, or containers for "make your own dinners."

Higher quality products may last longer, save money and reduce waste, but may be more expensive initially.

Reuse creates less waste and can save money.

There are many items that can be reused.

Props: Newspaper, cottage cheese or yogurt container, coffee can
Flipcard #15

Show (or describe) an item or review the items on the flipcard. With the Learner, brainstorm uses for the item.

For example, newspaper can be used:

- to wash windows
- as wrapping paper, or party hats (the comics/funnies are the best)
- as a liner or shavings in the pet's litter box or cage.
- Share the newspaper with a neighbor (this decreases the amount of paper used and cuts cost.)
- under the pet's dishes
- for packing around breakable items when moving or sending something
- as a fire starter (not the shiny inserts)
- as paper for kids to paint on

Other used paper: (use the backs)

- Birthday placemats (let the kids draw their own)
- cut into smaller sections and use as note paper
- paper for kids to draw, paint, color on

- wrapping paper (give two presents: a hand drawn picture and the present)

Magazines and books can be:

- donated to local literacy organizations
- given to retirement homes, doctor's offices, hospitals
- shared with neighbors or friends

Washed styrofoam trays from meat packages can be used:

- under house plants to catch the excess water
- as a tray for kids to mix paints on

Washed food grade plastic containers (margarine, cottage cheese, etc.) can be used:

- for storage of leftovers
- to make single serving meals
- as a lunch box container

Washed plastic containers (dishwashing liquid, shampoo, etc.) can be used:

- as scoops
- water gun for the kids (dishwashing soap or shampoo containers)
- garden containers

Washed glass jars can be used:

- as a pitcher for juice from concentrate, ice tea, lemonade, etc.
- for storage of non-perishables macaroni, spaghetti, cereal, etc.

- as a measuring set (1 pint jar = 2 cups, 1/2 pint jar = 1 cup. If the family does not have a pint jar, 16 tablespoons = 1 cup. Measure out the above and mark on the jar)

- for non-food items (screws, buttons, nails, tacks, etc.)

- as garden containers

Coffee cans can be used:

- for storage of non-perishables, or non-food items

- as a canister set - decorate with contact paper

- for tins for baking bread

- as a bank to hold money

- as a receipt file

Clothes can be used:

- as scraps for quilts or patches

- as hand-me-downs if they no longer fit

- for donations to Salvation Army, Rescue Mission, or other charitable organizations

- as aprons, smocks for painting (kids & adults)

- as cleaning rags

Note: There are many more reuse ideas, just be creative. Accept all answers as long as the uses are safe. *It's important to use only food grade plastics when storing foods. If food came in a plastic container, such as margarine or cottage cheese, it's a food grade plastic. If non-food items come in a plastic container, don't reuse the container with food.*

Make the Switch: Disposable to Durable

Concepts: Durable products are often less expensive in the long run and produce less waste than disposable products.

Higher quality products may last longer, save money and reduce waste, but may be more expensive initially.

Props: Paper towels and cloth towels, paper plates and plastic plates
Flipcard #16

Handout: Make The Switch!
Smart Shopper's Checklist

Walk with the Learner through the house (or ask him or her to imagine each room of his or her house). Have him or her name all the products that are disposable. Write these products down.

Then ask the Learner to name durable products that could be used instead.

Examples of disposable and durable products include:

Disposable	Durable
Plates (paper, polystyrene, plastic)	Plates (glass, ceramic, durable plastic)
Cups (paper, polystyrene, plastic)	Cups (glass, ceramic, durable plastic)
Bowls (same as above)	Bowls (same as above)
Napkins (paper)	Napkins (linen, cloth)
Paper towels	Cloth hand towels, Sponges, Mops
Silverware (plastic)	Silverware (metal)
Juice cartons (coated paperboard)	Pitches (glass, plastic)

There are many more. Accept all answers as long as they are safe.

Note: When a product or package is thrown away and taken to a landfill, incinerator or left in the neighborhood streets, the energy and money used to make that item is lost. By reusing products and buying durable products, we are saving energy, money and space in the landfills.

Reuse: What Does it Save?

Concepts: Durable products are often less expensive in the long run and produce less waste than disposable products. Reusable containers can be used as storage containers, portion control containers, or containers for "make your own dinners," and much more. Higher quality products may last longer, save money and reduce waste but may be more expensive initially. Reuse creates less waste and can save money.

Props: plastic sandwich bags, margarine tub, margarine sticks box

Using washed margarine or other reusable plastic containers to store leftovers, to freeze individual servings or to use in the lunch box is just one example of how money, energy, and space in the landfill can be saved.

Use the example of packing a sandwich to point out the cost to the Learner.

- Figure out on paper or with a calculator how much it costs to use just one disposable plastic sandwich bag a day for a year.
- Subtract the cost of the plastic sandwich bags for a year from the cost of the reusable product for a year.
- The answer is the amount saved by buying a reusable product.

Also, point out that by using plastic sandwich bags at least one item of trash is thrown away each day but nothing is thrown out when using the reusable container.

Go a step further and demonstrate that washed plastic food containers (margarine, yogurt, cottage cheese containers, etc.) could also be used. You can use the number line here if a visual aid is needed to demonstrate no trash versus some amount of trash.

Note: Using the plastic food container makes less trash only if it is reused.

- Compare the cost of other disposable and durable products.
- Demonstrate the extra cost and waste involved with disposable products. Calculate the cost of disposables and durables for 1 year (for example paper towels, paper cups, etc.).
- Go over each step with the Learner, thinking out loud about comparing costs.
- Eventually, let the Learner figure out the excess cost and trash of disposable products versus durable products.
- After each item, remind the Learner energy and money and space is saved only if the durable product is used again.

Activities With Children

Have the children draw a picture on a piece of paper. When they finish, show them that they can reuse that paper on the other side for the same activity. Point out that they reuse their crayons over and over again.

With older children -- take them to the kitchen and have them show you how their lunch is packed. Do they use a disposable napkin or do they choose a cloth napkin. Talk about how their sandwich is packed -- does it go in a plastic bag or is it put in a reusable plastic box with a tight fitting lid? Is their beverage in a juice box (which wastes natural resources) or do they put it in a reusable bottle?

Collect small containers (yogurt, margarine, cottage cheese) and clean them out. Use these for stacking activities with toddlers and small children. Add rice or dry beans to the containers and seal them well to make them have different sounds as well as being of different sizes and colors. As always, be sure to supervise your children when playing.

Scavenger Hunt Checklist

*What do you have in your home that is **durable** -- that lasts a good long time?*

*What do you have in your house that is **reusable** -- that you can use again and again?*

Check (✓) if you have durable or reusable:

- ___ plates
- ___ glasses
- ___ mugs/cups
- ___ knives, forks, spoons
- ___ kitchen towels
- ___ containers for leftovers
- ___ mixing bowls
- ___ long-lasting appliances
- ___ plastic containers
- ___ glass jars or bottles
- ___ plastic jars or bottles
- ___ cloth napkins
- ___ toys for your children
- ___ long-lasting clothes for you
- ___ long-lasting clothes for your children
- ___ handkerchiefs
- ___ long-lasting TV, stereo, or VCR
- ___ cleaning rags



Write in other durable or reusable items you find on your scavenger hunt through your home:



Smart Shopper's Checklist

How many of these things do you and your family do?

WE BUY

cloth towels

reusable containers

baking soda

reusable knives, forks, and spoons

reusable plates, cups, and bowls

cloth diapers

compact fluorescent light bulbs

rechargeable batteries

INSTEAD OF

paper towels

plastic wrap

air freshener

disposable knives, forks and spoons

disposable plates, cups, and bowls

disposable diapers

incandescent light bulbs

disposable batteries





Make The Switch!

(from disposable to durable)

What are some more durable items you could use instead of the following?

Instead of

Switch to

Paper plates

Paper cups

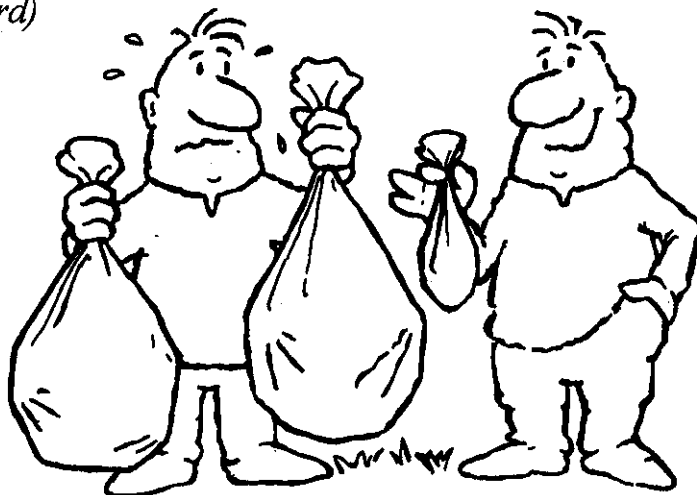
Paper bowls

Paper napkins

Paper towels

Plastic flatware

*Juice cartons (coated
paperboard)*



BEFORE

AFTER



RECYCLE

To reduce waste, avoid buying products with extra packaging. Look for products in packages that are reusable, refillable, returnable, or made from recycled materials. Also, you can reduce solid waste by recycling.

Keep in mind there is no nationwide recycling policy. That means, the terms **recycled** and **recyclable** can mean different things in different communities. **Recyclable** means the product or packaging material can be processed and used to produce a new product or package. A **recycled** product or package is made from scrap or used materials that have been processed to make a new product. Just how much scrap must be part of the new product or package to call it "recycled" is not defined in most states. A few states, including New York, have set standard definitions for using the term "recycled."

Because recycling rules vary from place to place, not every product that claims to be recyclable can be recycled in your community. A consumer must know what items can be recycled in his or her area. Only certain items are recyclable. Plastics are a good example. In most places, only two types of plastics are being recycled. They are PETE (#1) and HDPE (#2). PETE is used for clear plastic soft drink and juice bottles. HDPE is the opaque plastic used for plastic milk jugs, detergent, shampoo bottles and the like.

Recyclable products help the environment only if they are taken to a recycling station or picked up as recyclables at the curb. A recyclable item that is thrown in the trash goes to the landfill, incinerator or on the neighborhood streets. When this happens, natural resources and the energy used to make the product and its package are lost.

Many people ask, "Why should I recycle? The United States has many natural resources." That may be true today. But if the natural resources are overused and mismanaged there will be less left for future generations. For example:

- 40 million tons of recyclable paper is thrown away in the United States each year.
- ▶ 68,860 trees must be cut down to provide enough paper for one day's edition of the *New York Times*.

- One ton of recycled paper saves 17 trees from being cut down.
- ▶ If we recycle the aluminum Americans throw away every three months, we could rebuild the entire United States airline fleet.

The United States may have many natural resources, but it has little landfill space. In fact, 30% of the landfills in the U.S. closed from 1984-1988. Another reason to recycle is that recycling may save energy. Less energy is used to reprocess recycled materials to make new items than if raw materials that must be mined and manufactured are used. In fact:

- ▶ recycling aluminum saves 85-90% of the energy it takes to make another can from ore
- recycling newsprint and cardboard saves 50-75% of the energy it takes to produce new newsprint and cardboard from trees
- ▶ recycling plastic saves 85-90% of the energy it takes to make new plastic materials from petroleum
- ▶ recycling glass saves 8-14% of the energy it takes to make glass from raw materials.

It takes some energy to collect, sort, and ship recyclables to a reprocessing plant. Depending on the materials and the distances, the energy savings from recycling may not be as high as the percentages given above. But recycling does save natural resources and landfill space.

Composting is another way to recycle. *Composting* changes organic wastes into a dark, rich soil-like material. *Organic waste* is material that comes from living or once living things. *Composting happens naturally* almost everywhere in the world. For example, when a leaf falls from a tree and remains for a long time on the ground it eventually disappears. The leaf has decomposed. It has turned into compost. When finished, a dark, rich soil remains. It may be used in gardens, flower pots, flower gardens, and lawns.

Food and yard waste make up 20-30% of our trash. Food waste is any leftover scraps, such as potato peels or stale bread. Yard waste includes grass clippings, fallen leaves, weeds, small twigs and branches.

Garden waste, like weeds, over-ripe vegetables, wilted or bug eaten greens and old flowers could also be included.

The first step in reducing food waste means careful buying and proper storage of food products. By preventing spoilage, the amount of food thrown away is less. The second step in reducing the amount of food and yard waste taken to the landfill is composting.

Composting is easy to do and there are many different types of composting piles. A composting pile contains yard, garden and/or food waste (not meat or grease) that are left to break down. The materials in a compost pile are broken down by microorganisms (you can only see them by using a microscope) and other helpful insects and worms. Animals such as raccoons, rats and mice should not be in your compost pile. These animals usually come to the compost pile if they smell meat and grease. You should not put meat or grease in your compost pile.

Many people have compost piles in their back yards, or share a compost pile with a neighbor. Some communities collect organic wastes and compost them in town or county facilities.

Note:

This is a brief introduction to composting and how it can be used to reduce waste. If a Learner is interested in starting a compost pile, you can find additional material on compost heap designs and instructions through the following publications:

Compost at Home, Let It Rot!! It's Nature's Way of Recycling
Cornell Cooperative Extension of Albany County
PO Box 479, Martin Rd.
Voorheesville, NY 12186

Composting to Reduce the Waste Stream: A Guide to Small Scale
Food and Yard Waste Composting
Northeast Regional Agricultural Engineering Service
Cornell University
152 Riley-Robb Hall
Ithaca, NY 14853 607/255-7654

Don't Trash Grass - (video)
Connecticut DEP Recycling Program
165 Capitol Ave.
Hartford, CT 06106

Easy Backyard Composting

NYS DEC

Division of Solid Waste

Bureau of Waste Reduction & Recycling

50 Wolf Rd.

Albany, NY 12233 518/457-7337

Home Composting Brochure (ML E88050302)

Cornell University Resource Center

607/255-2080

Home Composting - 48 slides/script

Home Grounds Lending Library

Cornell University

20 Plant Science

Ithaca, NY 14853 607/255-3134

Just Mow It! - A Grass Recycling Program (video and guide)

NYS Department of Economic Development

Office of Recycling Market Development

One Commerce Plaza

Room 950

Albany, NY 12245 518/486-6291

Recycling: Mining Resources From Trash

What About Waste?

Composting: Waste to Resources

Cornell University Resource Center

607/255-2080

RECYCLE

Community Educator Training

Note to the Instructor

Recycling is an excellent way to reduce trash, save energy and preserve natural resources. Some recycling centers and programs limit what they will accept. However, recycling will continue to grow and more and more items will be recyclable. You may want to invite a speaker from the local department of solid waste or sanitation or recycling program in your community to assist in this training session.

Competency

The Community Educator will be able to discuss how recycling affects solid waste.

Objectives

The Community Educator will:

- ▶ Define recycling (making a product from materials that were previously used to make another product).
- ▶ Describe what a recyclable product/package is in his/her community.
- ▶ Explain how energy, natural resources and money are wasted when a recyclable product is thrown away.
- ▶ Identify the symbols on recyclable plastic products.
- ▶ Explain why recycling is important.
- ▶ Be able to assess the Learner's need for recycling information.
- ▶ Describe the types of items that can be composted.
- ▶ Be able to assess need for compost information.

Points to Teach

Activities

Review questions from last lesson

Recycling can help reduce the solid waste in our country. However, there are no standards on what is recyclable. You must know your area's program.

In general terms, recyclable means a product/package could be processed and used to make a new product or package.

If a product says recyclable it does not mean it always is recyclable in your community.

When buying a plastic product, check the symbol to determine if it is recyclable in your area.

Many people want to recycle but think they do not have the space or time. The best way to make yourself recycle is to set up a system and make it a habit.

Ask the Community Educator to make a list of the items that are recyclable in their community.

Show the Community Educator the recyclable symbol.

Activity: Identify Recyclable Products

Review the area recycling program with the Community Educator. Compare the actual items and the items he or she thought could be recycled. If there is not a program explain how he or she could start a program (Unit: Respond).

Activity: What is Recyclable in our Community

Review the plastic symbols. Point out which are recyclable in your area.

Activity: Recyclable Plastics

With the Community Educators, demonstrate and have the Assistants make a recycling bin from a cardboard box (see directions at the end of this training section). Brainstorm other ideas for storing

recyclables until they are picked up or taken to a drop off center

The United States has many natural resources. However, if they are overused and mismanaged we will run out.

Show the Community Educator the flip cards he or she will use.

Activity: Flipcards. #17-21.

Facts:

68,860 trees must be cut down to provide enough paper for one day's edition of the NY Times.

When one ton of paper is recycled 17 trees are saved.

40 million tons of paper that could be recycled is thrown away each year.

If we recycle the aluminum Americans throw away every three months, we could rebuild the entire U.S. airline fleet.

It takes only six weeks for an aluminum can to be processed and back on the shelf.

The United States may have many natural resources, but it has little landfill space.

Recycling also saves energy.

Facts:

Typically, less energy is used in the overall process of recycling and manufacturing

than is used in mining and manufacturing raw materials.

Recycling aluminum saves 85-90% of energy it takes to make another can from ore

Recycling newsprint and cardboard saves 50-75% of the energy it takes to produce new newsprint and cardboard from trees

Recycling plastic saves 85-90% of the energy it takes to make new plastic materials from petroleum

Recycling glass saves 8-14% of the energy used to make glass from raw materials

Another form of recycling is composting. 20-30% of trash is food/yard waste. Things that can be composted are:

Food waste: leftover fruit or vegetable scraps. (For example: washed egg shells, banana peels, wilted lettuce, apple cores, orange peels and peanut shells). Don't put meat or grease in your compost pile.

Yard waste: leaves, grass clippings, small twigs and branches, garden trimmings.

Show the Community Educator the flip cards he or she will use.

Activity: Flipcard #22

Demonstrate: Activity: What do I Have to Compost

Note:

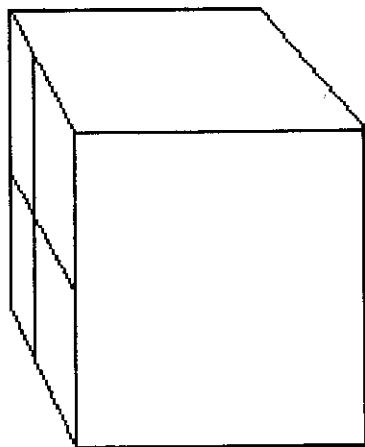
Composting occurs in nature everywhere. It is the breaking down of organic materials by microorganisms (can only be seen with a microscope). When finished, a dark, rich soil remains. It may be used in gardens, flower pots, flower gardens, etc.

Yard/garden waste includes:

grass clippings, fallen leaves, weeds, wilted or bug eaten greens, small twigs and branches, and over-ripe fruit. Do not put meat, grease or fat in your compost pile. It attracts animals.

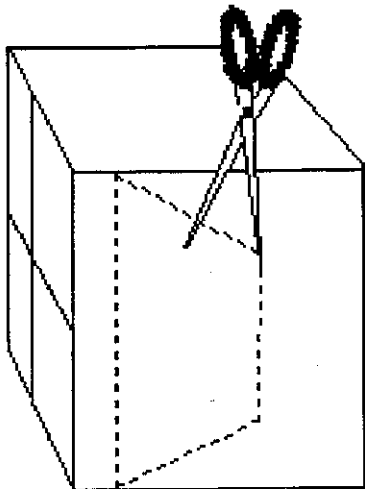
There are many ways to compost. In fact, it can even be done indoors. For more information on the design of compost piles, see some of the Cooperative Extension publications.

Show Community Educator
copies of composting resources
listed at the end of the Recycling
section overview.



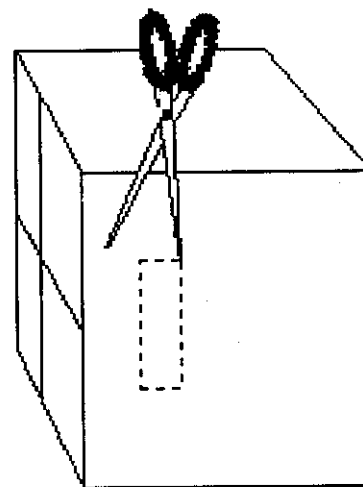
1)

Make sure the top is sturdy.
Tape if necessary.



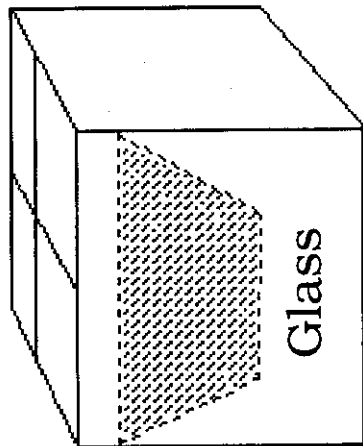
2)

On the front of the box,
cut out a half moon shape.



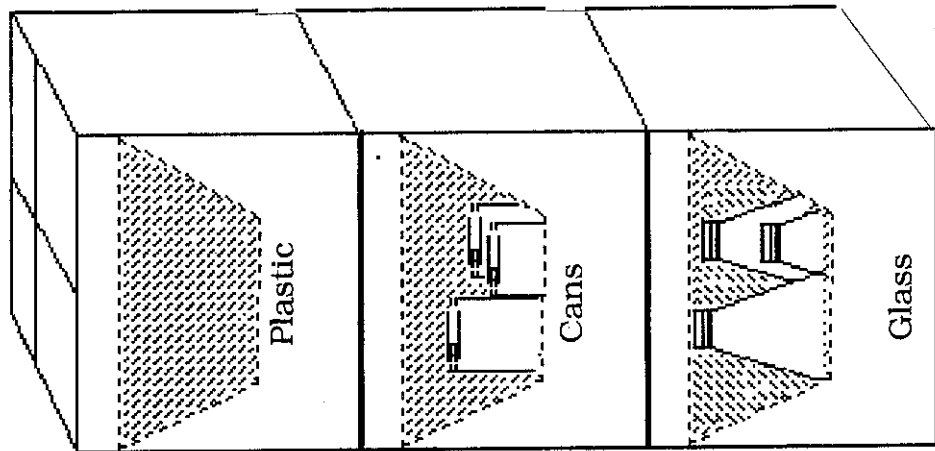
3)

On the back of the box,
cut a rectangular or circular handle.



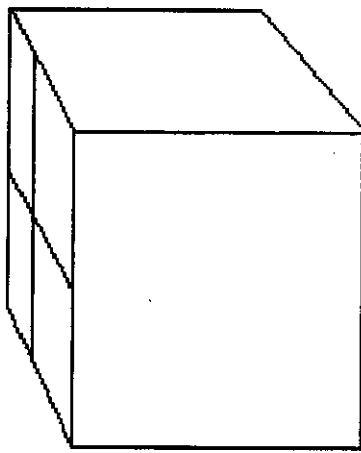
4)

Label the boxes.



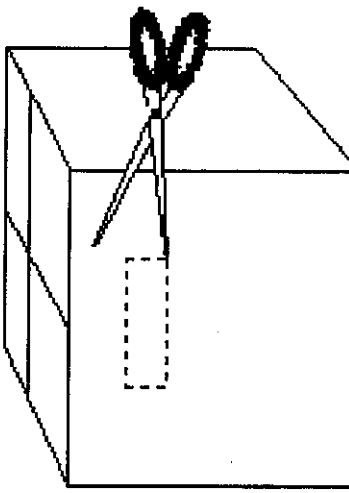
5)

Stack the boxes. Put the box with the heaviest recyclables on the bottom.
Place the recyclables in the correct box.



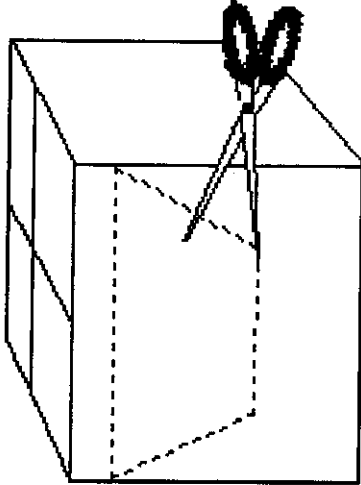
1)

Make sure the top is sturdy. Tape if necessary.



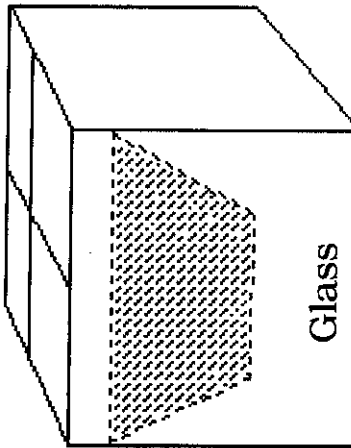
3)

Cut a circular or rectangular handle on the back.



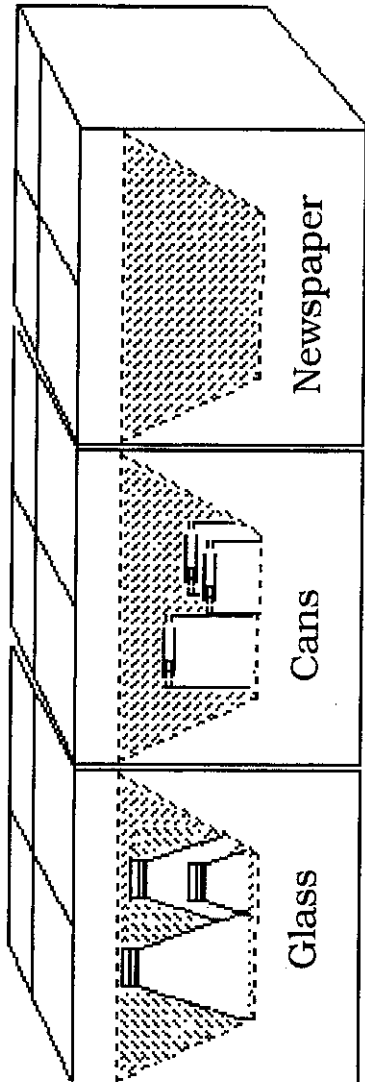
2)

Cut out a half moon shape on the front of the box.



4)

Label the boxes.



5)

Place the recyclables in the correct box.

RECYCLE

Ideas for Learner Lessons

Concepts

Making space for recycling.

Able to identify recyclable items.

Reasons to recycle.

Composting is the recycling of food, yard and garden waste.

Activities

Identifying Recyclable Products

Concept: Able to identify recyclable items.

Props: Plastic dish soap and shampoo bottles, margarine container, plastic juice bottle.
Flipcard #17-18

Show the Learner the Flipcards #17-18 of the recyclable symbol. Ask the Learner if he or she has seen this before. If he or she has, ask him or her where. Ask if he or she knows why it is there. If they do not, explain.

Use the product packaging and identify items that have the recyclable symbol. Have the Learner match the Flipcards with the symbol on the product.

Recyclable Plastics

Concept: Able to identify recyclable items.

Props: Plastic juice bottle, squeezeable honey jar.
Flipcards #17-18

Show the Learner plastic product packages. Some of these may be from the Learners' home. Ask the Learner what type of material they are (plastic).

Point out the different types of plastics (yogurt container is brittle, margarine container is thick, syrup is flexible, etc.). Explain that some plastics cannot be recycled. The manufacturer tells us what kind of plastic a product is by putting a symbol on it.

Show Flipcard #17-18 and the various plastic symbols around outside of card. Point out the plastic symbols that are recyclable in your area.

Have the Learner find the symbols on the plastic product packages and sort them according to the recycling rules. Explain why it is important to put only accepted items in recycling bins--unacceptable items increase the cost in processing the recycled items.

What is Recyclable in Our Community?

Concept: Able to identify recyclable items

Props: A list of recyclable items and the rules for recycling, items from the list (plastic, glass, paper), items not on the list

Handout: Get copies of flyers and brochures from the department that manages recycling programs in your community or county (public works department, solid waste department). Share this flyer with the Learner.

Explain that not all products with the recyclable symbol can be recycled in all areas. Each community recycles different materials. There are different rules to follow to prepare your materials for recycling (no lids, remove labels).

Show the Learner the list of recyclables and rules for recycled materials. Review the list with the Learner. If you are in the Learner's home, find the items the Learner can recycle and explain what to do.

Then, lay several products in front of Learner. Ask him or her to place them in piles according to local recycling rules.

If there are no recycling rules, ask him or her to find products that could be recycled if there was a recycling

program in the area and mention how one could be started (see Respond unit).

Space Saving Recycling Bins

Concept: Making space for recycling

Props: Cardboard or plastic boxes, paper bags, small garbage cans, plastic bags (to hang on door handle)
Flipcard #19

Many times people want to recycle but feel they do not have enough room. The best way to make yourself recycle is to set up a system and make it a habit. Sort and wash before you put it in the bin. No one wants to go back through the garbage and sort and wash before taking the garbage out.

If recyclables do not have to be sorted, use one garbage can or bag for garbage and one for recyclables.

If the recyclables must be separated in different categories and the only space available is **Long, thin, under the counter, up on a shelf, etc.:**

- 1) Go to a local business and ask if you could have four or five (the number you need depends on how many items you can recycle) cardboard boxes that will fit in your space. Usually, businesses are happy to give the boxes away.
- 2) Make sure the box is sturdy and the top can be closed.
- 3) Use a pair of scissors or knife and cut out a half moon shape out of the front of the box (not at the very top or bottom).
- 4) On the opposite side, cut a hole large enough for your hand.

- 5) Label the boxes with a marker, crayon, etc. (Glass, plastic, newspaper, tin, returnables, or whatever categories you need).

Hint: To make the boxes more eye appealing, cover them with contact paper or let the kids paint or color them.

Instead of labeling make each box different so the kids can tell without reading the label which items belong in what box.

- 6) When you have an item that can be recycled prepare it according to the local recycling regulations (wash, remove label, crush) then place it in the designated box.
- 7) When you must take the recyclables to the recycling bin or center just pick up the box using the openings as handles.
- 8) Take the box (boxes) home and use it (them) again.

If you have limited floor space, follow all of the steps above except when the boxes are ready stack them on top of each other. Put the heaviest items (glass, newspapers, etc) on the bottom so they do not crush the other boxes.

Remember to measure your space ahead of time and figure out what size boxes will fit the space and your needs.

Why Should I Recycle? What Does Recycling Save?

Concept: Reasons to recycle

Props: Flipcards #20-21

Use these to demonstrate to the Learner why recycling is important.

Composting

Concept: Composting is the recycling of food, yard and garden waste

Props: Flipcard #22

Use this to talk about composting.

What Do I Have to Compost?

Concept: Composting is the recycling of food, yard and garden waste

Ask the Learner to name all of the food, yard, garden items he or she threw out today or yesterday. Write the items down.

Go over the items with the Learner and have him or her put a check in front of the items that could be composted.

Activities with Children

Give the children some juice or soda to drink from a can (put it in a cup). Then, show them how to recycle the can. Discuss with children why it's important to recycle-saves energy, resources and landfill space.

Tell them that if the can or bottle has a deposit, they can take the can to the store and they will get money for each can. Explain that the refund is for a deposit paid when the soda was bought.

If the can or bottle does not have a deposit, explain that they can still recycle it.

Have the children go on a scavenger hunt. Give them a list of things to find that can be recycled in their community (newspaper, envelopes, plastic shampoo bottles, foil, etc.)

Using the scavenger hunt idea, give each child a small box and have them look for things in their yard that can be composted. Also, go to the refrigerator and identify food items that could be added.

BUY RECYCLED

To reduce waste, reduce extra packaging. Look for product packaging that is reusable, returnable, or refillable. In addition, buy products and packages that are made from recycled materials and recycle the things you buy.

There is no nationwide recycling policy. Therefore, there are no consistent standards for what the terms *recycled* and *recyclable* mean, although some states, like New York State, have established definitions for these terms. Some have also set standards as to how much recycled content an item must contain in order to make a claim that it is made from recycled materials.

Recyclable means the product or packaging material can be processed and used to produce a new product or package. A *recycled* product or package is made from scrap or used materials that have been processed to make a new item. Products that use recycled materials usually have the recycled symbol them. If the recycled symbol is not present, there are other ways to tell if recycled materials are used. A paperboard box (like a cereal box), if made from recycled paper, has a gray interior. Boxes made from new paper are white on the inside. Aluminum and glass packages typically use some recycled material.

In most areas there are no guidelines, so a "recycled" package could be made from 100% recycled material or only 5% recycled material. Also, recycled material could mean the material is bought from recycling centers ("post-consumer") or it could mean that scraps from the factory are used.

Recycling is a worthwhile practice. Yet, recycled material is useless unless it is bought by someone. Thus, consumers not only need to recycle materials, but they also need to choose products and packaging that are made from recycled materials. This creates a loop where very little of the resources used to make the first product will be lost.

Many people may ask what is made from recycled materials. An aluminum can may be made into another aluminum can. Aluminum cans are 100% recyclable. It only takes about 6 weeks from the time a can is bought for that aluminum to be returned, remelted, re-molded and back on the supermarket shelves as a new can.

However, recyclables are not always made into the same product again.

- ▶ Recycled metal and aluminum are used for cans, lawn chairs, window frames, printing plates, car parts, pots and airplanes. If we recycle the aluminum trash Americans throw away every three months, we could rebuild the entire United States Airline fleet. Recycling aluminum uses only 10% of the energy it would take to make new aluminum.
- ▶ Recycled glass is used for new bottles, asphalt, brick, tile, reflective paint for highway signs and fiberglass insulation.
- ▶ Recycled paper is used for making more paper, or game boards, record jackets, egg cartons, grocery store food boxes, book covers, gift boxes, paper towels, toilet tissue, jigsaw puzzles, game and show tickets and cereal boxes. Forty million tons of paper that could be recycled is thrown away in the United States each year. Remember - look for the gray interior when looking for recycled paper boxes.
- ▶ Recycled plastic is used for carpets, fiberfill in pillows, ski-jackets, cushions, sleeping bags, paint brushes, appliance handles and cases, textiles and fibers, non-food containers (such as shampoo and detergent bottles), plastic building material, sinks, boat hulls and flower pots. One company even makes shoes out of recycled plastic! Plastic cannot always be used to make the same product. Therefore, the recycling loop for plastic is limited.

BUY RECYCLED

Community Educator Training

Note to the Instructor

Recycling is an excellent way to reduce trash and save energy and natural resources. However, recycling only works if there is a market for the materials and a way to use the materials in new products or packages. Consumers must learn to look for, ask for and buy products made from recycled materials.

Competency

The Community Educator will be able to discuss how buying recycled products affects the solid waste problem.

Objectives

The Community Educator will:

- ▶ Describe what a recycled product/package is.
- Identify the symbols for recycled contents.
- Describe other ways to know if a product is recycled.
- Name products that are made from recycled materials.
- ▶ Be able to assess the Learner's need for information on products and packages made from recycled materials.

Points to Teach

Activities

Review questions from last session

Recycling can help reduce the solid waste in our country.

Recycling can only work if consumers are willing to purchase items made out of recycled materials.

Recycled means the product or package is made from pre-

Some recycled paper bags tell how much is pre-consumer and how much is post-consumer. If

consumer or post-consumer scrap materials.

Pre-consumer is scrap material at the factory.

Post-consumer is materials from recycling centers.

If a product is recycled, the recycled symbol may be displayed.

Some products use recycled materials even though there may not be a symbol present. They are:

Aluminum

Glass

Paperboard (e.g., cereal boxes will have a gray interior instead of white).

A recycled product may be 100% recycled material or it may only be 5% recycled material.

Recycling products only helps if recyclables are recycled and products and packaging made from recycled materials are bought. This creates a loop.

Recycled materials can be made into many products.

Recycled Paper becomes:
game boards, record jackets,
egg cartons, grocery store
food boxes, book covers, gift

you can, show the Community Educator a bag that states the percentages.

Show the Community Educator the recycled symbol. Ask how it differs from the recyclable symbol.

Activity: Identifying Recycled Products

Activity: Recycled Products Without the Symbol

Activity: Creating a Loop

boxes, paper towels, toilet tissue, jigsaw puzzles and game show/theater tickets.

Recycled Glass becomes: New bottles, asphalt, brick, tile, reflective paint for highway signs and fiberglass insulation.

Recycled Metal and Aluminum becomes: Cans, lawn chairs, window frames, printing plates, car parts, pots and airplanes.

Recycled Plastic: Fiberfill in pillows, ski-jackets, cushions, sleeping bags, paint brushes, appliance handles, textiles and fibers, non-food containers, plastic building material, sinks, boat hulls and flower pots.

Ask Community Educator what he/she thinks is made from recycled paper, recycled glass, recycled metal, recycled plastic. Accept all answers. Show Community Educators the flip cards they will be using.

BUY RECYCLED

Ideas for Learner Lessons

Concepts

Able to identify products that use recycled material.

Create a Loop - buy products that use recycled material.

Activities

Identifying Recycled Products

Concept: Able to identify products that use recycled material.

Props: Product packaging, grocery bags, paper displaying the recycled symbol
Flipcard #17 (from Recycle section)

Show the Learner Flipcard #17 of the recycled symbol. Ask the Learner if he or she has seen this before, if so where. Ask if he or she knows why it is there. If he or she doesn't, explain what it means and why.

Use product packages (cereal boxes, paper towels, napkins, facial tissue, toilet tissue, etc.) as examples. Have the Learner match the symbol on the Flipcard with the symbol on the product.

Recycled Products Without the Symbol

Concepts: Able to identify products that use recycled material
Create a Loop - buy products that use recycled material.

Props: Paperboard boxes with gray and white interiors, soda can

Sometimes products/packages do not have a recycled symbol on them. There are other ways to identify which use recycled materials.

A recycled paperboard box has a gray-colored interior. Show the Learner products that use recycled paper material (cracker boxes, cereal boxes, plastic wrap and

aluminum foil boxes, paper board egg cartons, detergent boxes)

Products that use new paper material are white on the interior. Show the Learner boxes that use new paper (some cracker boxes, cereal boxes, fabric softener dryer sheets, frozen food boxes).

Most aluminum and glass containers contain "some" recycled material. Show the Learner an aluminum and glass bottle (such as a soda can or bottle). Point out that sometimes there is no symbol, although there may be a statement that the container is made from recycled materials. Tell the Learner the product does contain recycled material.

Note: An aluminum can is 100% recyclable. This means one aluminum can makes another aluminum can. It takes only six weeks for the aluminum can to be processed and back on the supermarket shelf.

However, an aluminum can does not necessarily contain 100% recycled materials. In most states a product/package with the recycled symbol or one that uses recycled material could be made of 5% recycled material or 100% recycled material.

Recycled products can be made of materials bought from a recycling center or from scrap materials from the factory.

If possible, show the Learner a product that identifies how much of it is pre-consumer waste (factory waste) and how much is post-consumer waste (material which has been used by consumers and then recycled.) **For example:** some paper bags at grocery stores will have this information printed on them.

Creating a Loop

Concepts: Able to identify products that use recycled material.
Create a Loop - buy products that use recycled material.

Props: Egg carton, greeting card, paper towels
Flipcards #23-26

Handout: Buy Recycled

Sometimes products with recycled materials in them cost more. However, if more recycled products are purchased and more products are recycled the cost will decrease. Therefore, buy recycled products.

Use Flipcards #23-26 to show what products may contain recycled material.

- ▶ Recycled glass is used for new bottles, asphalt, brick, tile, reflective paint for highway signs and fiberglass insulation.
- ▶ Recycled paper is used to make egg cartons, grocery store food boxes, cereal boxes, paper products such as napkins, facial tissue, paper towels, toilet tissue, book covers, gift boxes, jigsaw puzzles, game and show tickets, game boards, and record jackets.
Remember when looking for paperboard products that use recycled paper, the inside is gray.
- ▶ Recycled metals (aluminum and others) are used for cans, lawn chairs, window frames, printing plates, car parts, pots and airplanes. If we recycle the aluminum Americans throw away every three months, we could rebuild the entire United States airline fleet.
- Recycled plastic is used for fiberfill in pillows, ski jackets, cushions, sleeping bags, paint brushes, appliance handles and cases, textiles and fibers, non-food containers, flower pots, plastic building materials, sinks and boat hulls.

Activities With Children

Have the children get their book covers, notebooks, paper and pencils. Look to see if it has a recycled symbol or identifies whether it is made from recycled materials.

Talk about why it is important to complete the cycle of recycling by recycling products and buying goods made from recycled materials.

Give each child a copy of the *Find The Word* game and ask him or her to circle every word he or she finds that is a product that could contain recycled material.

Find The Word

sdfghjkbboxesroidlrtionmakwieo
aluminumeksldkjvsl dkfowejrh s
asphalteusjd hfh sjsodacansldkvj
erjkxcfgsleibookcoverwkdrtdfdfd
flskdvkpaintsl dslznxc mwerplnb
sxairplaneskdmcn vbzporhsjwke
potslplpuzzlesplmnb cottissuekd
jcndjsuytrcanscafpaperdjrfvaub
oplolikjyinsulationdksldkbottles
cartonviksinksgiftboxesiujhytgf
dcarpartssldksldksjklawnchairs
lk sdfnvierytrecordjacketskdfjlsd
irwoerreuseersderereduceerlwe
krokerwocomposterlwklplsignse

cans

compost

lawn chairs

aluminum

tissue

sinks

reuse

boxes

asphalt

gift boxes

pots

reduce

book cover

bottles

puzzles

cartons

record jackets

signs

airplanes

soda cans

paints

insulation

car parts

paper



Buy Recycled

CLOSE THE LOOP

1

*BUY PACKAGING THAT IS
RECYCLABLE AND COLLECTED
LOCALLY, THEN RECYCLE IT.*

*CHECK WITH YOUR COUNTY OR CITY OFFICES TO
FIND OUT WHAT KIND OF PACKAGING IS RECYCLABLE
IN YOUR AREA.*



2

*MATERIAL IS
REMANUFACTURED.
MOST CITIES HAVE CURB-SIDE
COLLECTION. CHECK WITH YOUR
COUNTY OR CITY OFFICES TO
FIND OUT HOW YOU CAN
RECYCLE.*

3

BUY RECYCLED.

*CHOOSE PRODUCTS AND PACKAGING
MADE FROM THE MATERIALS COLLECTED
IN STEP 1. LOOK FOR MATERIALS MADE
FROM POST-CONSUMER WASTE.*

Recycling is more than putting your bottles and cans at the curb. Recycling is a process. So help close the loop: buy recyclable products and packaging, participate in collection programs and choose products made from recycled materials.

RESPOND

Can consumers decide which products will be sold in a store and how they will be packaged? At first, the answer seems to be, "No!" But consumers have a great influence over what is sold and how it is marketed.

Consumers do not manufacture products nor design product packaging. Because of this, consumers believe they are not responsible for the harm to the environment caused by products and packages. But every time you buy a package or a product, you are "voting with your dollars" to support that product, the way it is packaged, and the way it is marketed.

Consumers and manufacturers are responsible together for the environmental consequences of their purchases. Environmental harm from the production and waste of products and packaging is a partnership between consumers and manufacturers in which each play an equal role.

When a consumer buys a product, he or she is not purchasing just the product. The consumer is also buying the marketing of that product. Product marketing consists of several things: how the product is packaged, promoted, advertised, and displayed. If a product sells, product marketing continues. If it does not sell that indicates the consumer is rejecting the product and its marketing.

The manufacturer responds to consumer demands. If a product does not sell, it does not continue to exist. Under that system, the consumer has power. If consumers do not buy a product, the product will be changed to meet the needs and wants of the consumer or production is stopped.

For example: the manufacturing of convenience foods with excess packaging continues to increase. This growth is happening because consumers continue to buy the products. When a consumer buys a product of this type, he or she is telling the manufacturer, "this is a product I want and need."

When a consumer buys or rejects a product, he or she is casting a vote for or against a product and all the marketing involved. Unlike our democratic voting system, consumers do not have to be the majority (51%) of the votes to make a change in product packaging. Only 10-

12% of consumers need to stop buying a product to send a message to the manufacturer. If a product is not selling, the manufacturer or store manager will begin to ask why. If you shop at a supermarket where 1,000 people shop - only 100 people have to stop purchasing a product to make changes happen.

Besides voting with your dollars, there are other ways to change the packaging or products available. One way is to tell the manufacturer or store manager what you do or do not want. Tell the manager what types of products you cannot find in the store. Be sure to give examples and explain why you want these products. Ask the manager to consider these products the next time he or she buys products for the store.

For example, say: "I shop here every week for all of my groceries because it is a clean and friendly place to shop. However, I can only find eggs in styrofoam cartons and I prefer paperboard cartons. So I end up going all the way over to Joe's Grocery to purchase eggs. I would prefer to buy eggs from you in a paperboard carton because the paperboard is made from recycled materials."

Another way to respond is to write or call the manufacturer of the product or package. The manufacturer's address is written on the package, and an 800-number is often listed. When you call or write, give examples of the product. Explain why you do not like it. Tell the manufacturer, what kind of product or package you would like to buy. Ask the manufacturer if there is a reason why the product is packaged the way it is. Some expected reasons may be for freshness, handling or consumer safety. Offer your suggestions for how the problem could be solved.

There are other things that can be done to make changes. If you do not have a recycling program in your area, create interest by speaking to neighbors and friends. If you need help designing a program contact the Environmental Action Coalition at 625 Broadway, New York, New York 10012.

Excessive paper waste also comes from junk mail. Americans receive almost two million tons of junk mail every year, using the paper from 100 million trees. You can cut back on the junk mail you receive by writing Mail Preference Service, c/o Direct Marketing Association, P.O. Box 9008, Farmingdale, NY 11735. Ask them to remove your name from any lists they have. To stop the junk mail you already receive write to the individual company. Ask them to remove your

name from their mailing list and not to sell or give your name to anyone else. Whenever you place an order, be sure to tell them you do not want your name added to their mailing list nor sold or given to anyone else.

All of these actions allow your opinion to be heard. You are an important member of your community, state, and country. As an individual, the choices you make do effect the world in which you and your children live.

RESPOND

Community Educator Training

Note to the Instructor

Often, consumers believe they cannot make a difference or make change occur. Use this unit to empower the Community Educator and the Learner by demonstrating that they are important and can make a difference.

Competency

The Community Educator will be able to discuss how to make changes in the products available.

Objectives

The Community Educator will:

- ▶ Explain the relationship between manufacturers and consumers.
- ▶ Define exactly what consumers buy when they make a purchase.
- Tell what happens when a consumer refuses to buy a product.
- ▶ Explain that consumers need to refuse to buy a product to make change occur.
- Describe where to find the address and phone number for the manufacturer.
- Be able to assess the homemaker's need for information on how to respond.

Points to Teach

Activities

Review questions from last lesson

The consumer and manufacturer are partners in the solid waste problem in this country.

Ask the Community Educator to raise his or her hand if:

he or she thinks it is possible to change the products available in stores.

he or she is responsible for the solid waste problem in this country.

manufacturers are responsible for the solid waste problem.

Take a tally and write it on sheet of paper or chalkboard.

When a consumer buys a product the consumer is buying:

Write down everything you are buying when you buy a product.

the product (e.g., macaroni and cheese)

Use boxed macaroni and cheese as an example

the packaging (e.g., box)

If necessary, ask for reasons why he or she bought a product

How the product was advertised (TV, radio, flyers)

Activity: What Are You Buying?

How the product was displayed (on the shelf with others, on a special display, where it is located on the shelf, or in the store, etc.)

The above describes product marketing. When you buy a product, the marketing will continue because the manufacturer and store manager think this is what you want. If you don't buy a product, you may be rejecting the product or the marketing of it. The

Ask the Community Educator what affect refusing to buy a product will have on the store manager or manufacturer.

manufacturer responds to
consumer demands:

if a product does not sell it
does not exist.

when a product does not sell
the production and
promotion is:

changed to meet the
needs or wants of the
consumer.

stopped

It does not take a majority (51%)
of consumers to make a change.

Ask 10% of the Community
Educators to stand up.

Only 10-12% need to stop
buying a product. In a store
where 1,000 people shop this
is only 100-120 people.

When you shop, buy products
that have less packaging or are:

- reusable
- refillable
- returnable
- recyclable
- consumable

Ask the Community Educator to
name the types of
products/packages that
manufacturers should increase
production of.

Show the Community Educator
what he or she will be using to
demonstrate the above.

Activity: Your Money Counts

Another way to get the products
you want in the stores is to talk
with the store manager. This can
be done by writing to or speaking
to him or her.

When talking with the store
manager:

Ask for a Community Educator
volunteer. Role play with the

Be direct and to the point (do not insult).

Explain what type of product you are unable to find.

Explain why you want or need this product.

Ask if it is possible for him or her to get this product (if not, ask why).

Continue to ask him or her for the product.

If your friends and/or neighbors feel the same, ask them to speak to the store manager.

If a product is only available a certain way, write or call the manufacturer.

An 800 number and address can usually be found on the product package.

When writing or speaking to the manufacturer:

Be direct and to the point.

Give an example of the product/package that is the problem.

Explain why you do not like it and what you would like to buy instead.

Ask if there is a reason why the product must be packaged as such.

Community Educator a conversation between you (the customer) and the Community Educator (the manager).

Have pairs of Community Educators role play and switch roles after a while.

Activity: Tell It to the Manager

Ask the Community Educator to turn to the person next to them and role play a call to a manufacturer on an 800 number.

Activity: Speak to the Manufacturer

Offer your suggestion of how
to solve the
packaging/product problem.

There are other things that can
be changed by speaking out.

Ask the Community Educator to
name other ways or areas
Learners can make changes in
problems with waste.

1) Recycling program

create interest by speaking to
neighbors and friends.

meet and discuss the type of
program you need/want.

ask for assistance, if needed.

develop an "idea" of what
you would like to have
happen in your neighborhood
or community

take your idea to the local
officials in your
neighborhood or community.

2) Junk Mail Reduction

Activity: Junk Mail

American receive 2 million
tons of junk mail every year.

You can stop your name
from being put on new
mailing lists by writing to:

Mail Preference Service
c/o Direct Marketing Assn.
P.O. Box 9008
Farmingdale, NY 11735

To stop the junk mail already
being sent to you, write to
the individual company.
Include the mailing label to
get better results.

RESPOND

Ideas for Learner Lesson

Concepts

Vote with your dollars.

Speak to store manager about unavailable products or needed changes.

Speak to manufacturer about unavailable products or needed changes.

Other changes (home and community).

Activities

What Are You Buying?

Concept: Vote with your dollars.

Props: Product advertisements, product package.

Show or tell the Learner to think of a product. Ask him or her to name all he or she is buying when he or she buys a product. Ask him or her to name reasons he or she buys a product.

- advertisements
- package
- product
- display

This is the marketing of the product.

Your Money Counts

Concept: Vote with your dollars.

Prop: Flipcard #27 & #29

When you buy a product you are buying all the marketing that goes along with it (advertisements, package,

product, display). All of these will continue because the manager and manufacturer receive the message that this is what you want.

If you refuse to buy a product, the manager and manufacturer receive the message that the product is not what you want. Only 10-12% (100-120 people in a store where 1,000 people shop) need to stop buying a product to make the manager or manufacturer ask why a product is not selling and make changes.

Tell It To The Manager

Concept: Speak to store manager about unavailable products or needed changes

Tell the manager what types of products you are unable to find in the store. Give examples. Explain why you would like these products. For example, if you wanted to buy eggs in a paperboard carton you might say the following:

"I enjoy shopping at your store because it is a very clean and friendly place to shop. However, I can only find eggs in a styrofoam carton. I would prefer to buy eggs in a paperboard carton because the paperboard carton is made from recycled materials."

Role play with the Learner. You play the Learner first and have the Learner play the manager. Speak and act just as you would if you were talking to the manager. Stand up if necessary.

Here are some guidelines to follow:

- 1) Shake the manager's hand and say, "I am _____"
- 2) Then explain when you use his/her store, "I shop here every (week, day, two weeks, month)"

- 3) Explain why you shop there (clean, close to home, friendly, fast service, large selection of products, etc.)
- 4) Say what your problem is, "however I cannot find _____. I would like to buy _____ because _____." (See example above).
- 5) Ask if the product/package you want is available and if he or she will consider it the next time he or she buys products for the store.
- 6) Thank him or her for his or her time and attention to the matter.

After you have modeled the procedure for the Learner, switch roles. Continue until the Learner feels comfortable or you feel the Learner has had enough examples.

Some possible items you may want to think about and use as examples with the Learner are:

Canned and Frozen Foods

Buy large cans instead of several small cans.

Buy large portions of frozen vegetables instead of small, use what need and keep the rest frozen for another meal.

Buy vegetables in the least packaging. Use large plastic bags instead of the boxes with the outside layer of paper or plastic.

Fresh Fruits & Vegetables

Many fruits and vegetables have their own packaging. Buy them loose and bring your own reusable bag to put them in.

Fruit Drinks

Concentrates have less packaging and may cost less -- you add the water instead of the manufacturer.

Jars or cans can be reused or recycled, depending on the programs in your area.

Plastic Coated Paperboard (for milk or juice containers)

If you are throwing away garbage instead of recycling, paperboard is less trash than a jar or can (in weight).

Aseptic Juice Cartons

If you throw everything away, these juice packs have less trash compared to other individual servings. But buying a large product and putting it in individual reusable containers is both less trash and money.

Eggs

Paperboard instead of styrofoam

Meats, Fish and Poultry

Least amount of packaging. For example: hamburger in just plastic or freezer paper instead of the styrofoam tray and plastic.

Cheese

Larger portioned packages instead of the small.

Buy cheese that is sliced but not individually wrapped.

Convenience Foods

Products with the least packaging (best to make your own and use reusable containers to store).

Speak to the Manufacturer

Concept: Speak to manufacturer about product availability or needed changes.

Props: Product packages with manufacturer address and 800-number.

Flipcard #28

If a product is not available or is only available in a certain type of package, call or write the manufacturer to let them know how you feel.

On the package of most products is the manufacturers address and an 800-number.

If the Learner wants or needs to practice speaking with the manufacturer follow the same technique as with store managers. Again, give examples of what you like and dislike about the product or package. Ask if there is a reason for manufacturing the product or package as it is. It may be necessary for freshness, transportation or consumer safety.

If you are in a small group, ask if anyone has had a problem buying the products they want in the kind of packaging they prefer. As a group, help write a letter to the manufacturer, telling the manufacturer how you feel.

Junk Mail

Concept: Other changes (home and community).

Props: Examples of junk mail (advertisements, requests for contributions).
Flipcard #30

Handout: Letter to Direct Marketing Association and a copy of the letter for the Learner to fill out and send in.

All the junk mail we receive is also a waste of paper. In fact, Americans receive about two million tons of junk mail every year. Junk mail uses the paper from 100 million trees a year.

Usually, junk mail is not recycled. You can decrease the amount of junk mail you receive by writing the Mail Preference Service. This stops your name from being put on any new lists. To stop the junk mail you already receive, write the company and ask that your name be removed from their mailing list.

Ask the Learner if he or she receives a lot of junk mail. If so ask if he or she would like to send the already typed letter (located at the end of this section) to have it stopped.

Show the Learner the letter. Read it with him or her. If necessary, help get it ready to mail.

Recycling Programs

If your community does not have a recycling program, help start one.

- 1) Get all the information you can on recycling. For assistance, call the local Cooperative Extension, public works, department of sanitation in your area.
- 2) Create interest. Speak to neighbors, friends, others in your community.
- 3) Hold an interest meeting. Discuss what kind of program would fit your needs (alley/curb, drop off centers, etc). If you need help designing a program, contact Environmental Action Coalition, 625 Broadway, New York, New York 10012.
- 4) Speak with local officials about starting a program. If necessary sign and send in petitions.
- 5) Don't give up, the process can be slow, but it is worth it in the long term.

Sample Letter to Reduce Junk Mail

Learner' Mailing Address

Learner's Town and State

Today's Date

Mail Preference Service
c/o Direct Marketing Association
P.O. Box 9008
Farmingdale, NY 11735

To Whom it May Concern:

Our family has become concerned about the amount of waste we generate. In a conscious effort to reduce our waste, we buy products with minimal packaging, we recycle, and we reuse products.

However, we have recently realized much of our remaining waste is unwanted mail and catalogs. This waste is unnecessary. Therefore, we request that you permanently remove our name from your mailing list.

Thank you for your time and the prompt removal of our name from your mailing list.

Sincerely,

Learner's Printed Name

Mail Preference Service
c/o Direct Marketing Association
P.O. Box 9008
Farmingdale, NY 11735

To Whom it May Concern:

Our family has become concerned about the amount of waste we generate. In a conscious effort to reduce our waste, we buy products with minimal packaging, we recycle, and we reuse products.

However, we have recently realized much of our remaining waste is unwanted mail and catalogs. This waste is unnecessary. Therefore, we request that you permanently remove our name from your mailing list. Also, please do not pass our name and address on to other mailing agencies.

Thank you for your time and the prompt removal of our name from your mailing list.

Sincerely,



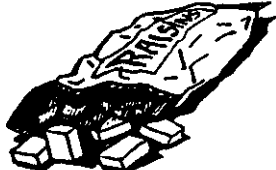
Be **S M A R T** = Save Money And Reduce Trash

o Buy in Bulk

o Use Reusables



1.5 lb. bag



14 mini-snack boxes in a bag



Bulk bag

Reusable container

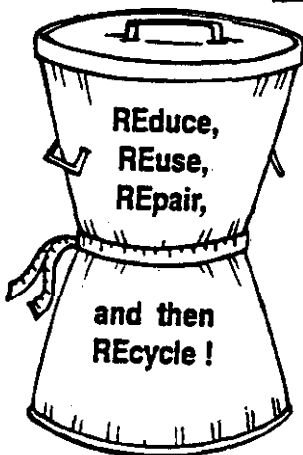
Bag is 47% less expensive and makes
97% less waste than mini-snack boxes

Make your own mini-snacks

For more information call

S.M.A.R.T. logo and facts courtesy of Minnesota Office of Waste Management

Be **S M A R T** = Save Money And Reduce Trash



- o Buy in Bulk
- o Use Concentrates
- o Use Reusables
- o Buy things that last
- o Buy products with *least* packaging

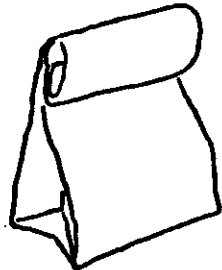
For more information call

S.M.A.R.T. logo courtesy of Minnesota Office of Waste Management



Do you pack a **S M A R T** lunch?

Use reusable containers:



Cloth bag or
lunch box



Containers for sandwiches and snacks



Bottle or thermos



Cloth napkin

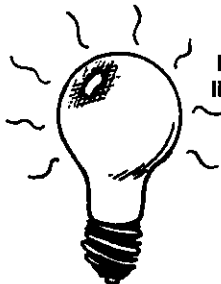
Be **S M A R T** : Save Money And Reduce Trash

For more information call

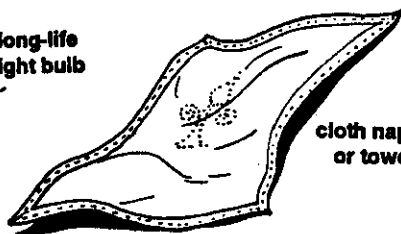
S.M.A.R.T. logo courtesy of Minnesota Office of Waste Management

For A Brighter Future . . .

Develop a lasting relationship with durable, reusable products.



long-life
light bulb



cloth napkin
or towel



refillable
razor



reusable
mug

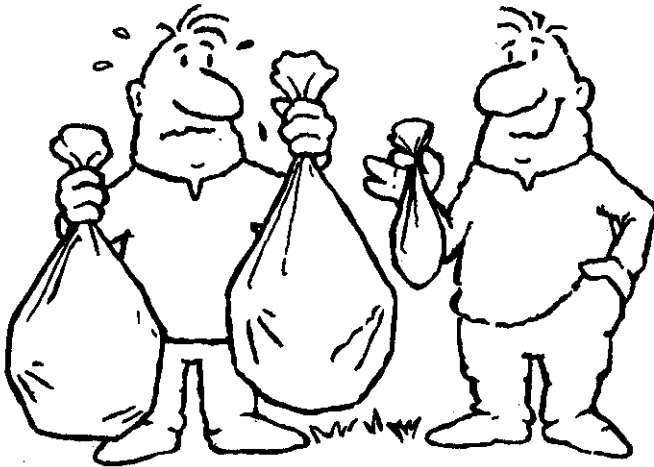
Be **S M A R T** = Save Money And Reduce Trash

For more information call

S.M.A.R.T. logo courtesy of Minnesota Office of Waste Management



Watch Your Waste



BEFORE

AFTER



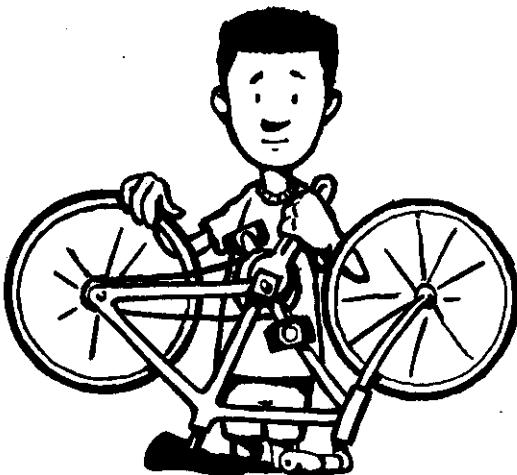
TOTE IT!



Precycling & Source Reduction

Precycling is a term used to explain the source reduction concept. It means reducing the volume of waste at the source by buying items that can be reused or have minimal packaging. By realizing that purchases relate directly to waste disposal, consumers can reduce waste before it enters the home, school or workplace. In this way, both manufacturers and consumers can take responsibility for reducing the amount of waste that is generated.

Source reduction means reducing the amount of waste that each of us creates. This can be accomplished by minimizing the consumption of products and packaging and by extending the useful life of products.



Fix It!



Fix It!



*Use reusable
tote bags.*

*Precycling
& Source
Reduction*



**Look
Before
You Buy**

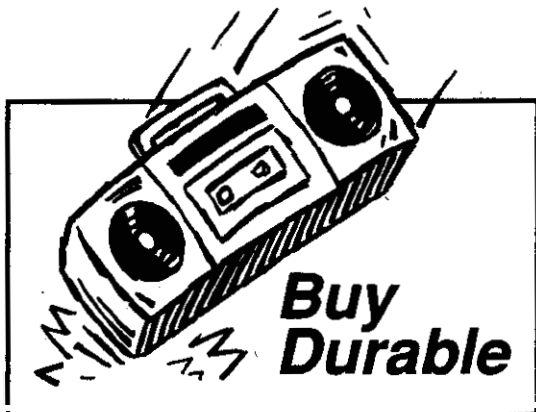


Reduce•Reuse•Recycle

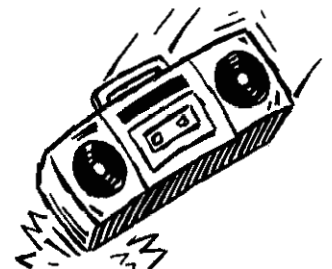
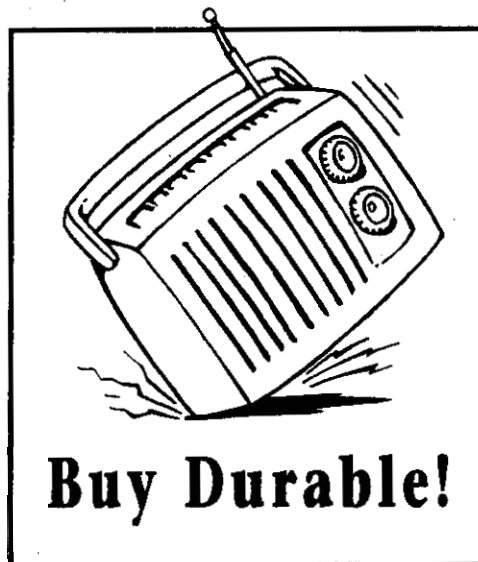
Reduce•Reuse•Recycle

Reduce•Reuse•Recycle

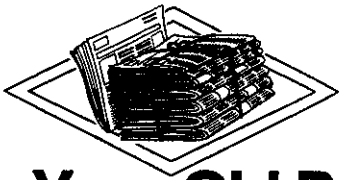
Reduce•Reuse•Recycle



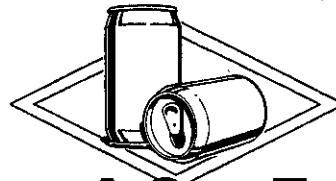
BUY DURABLE!







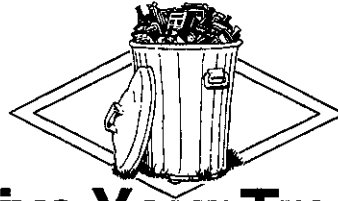
Turn Your Old Paper
Into Good News.
Recycle.



Save A Can From
A Life On The Street.
Recycle.



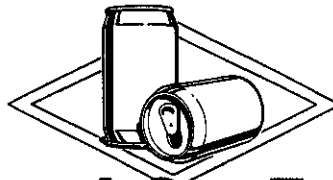
Send Your Leaves
To A Mulch Better Place.
Recycle.



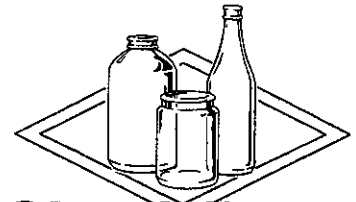
Give Your Trash
A Second Chance.
Recycle.



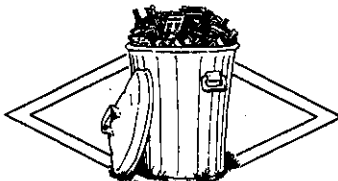
Recycle.
Today For Tomorrow



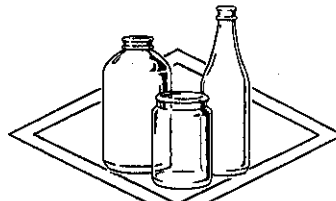
Save A Can From
A Life On The Street.
Recycle.



Give A Bottle
A Decent Break.
Recycle.



Give Your Trash
A Second Chance.
Recycle.



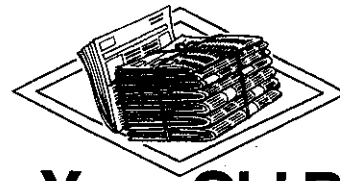
Give A Bottle
A Decent Break.
Recycle.



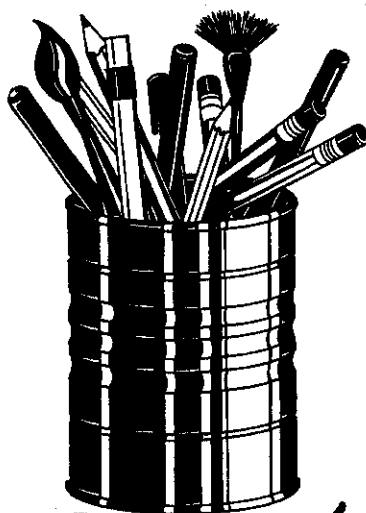
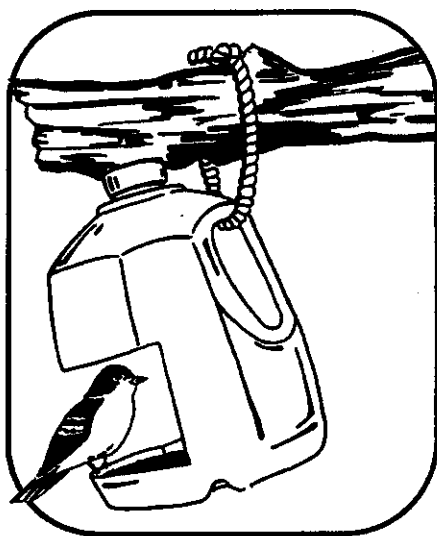
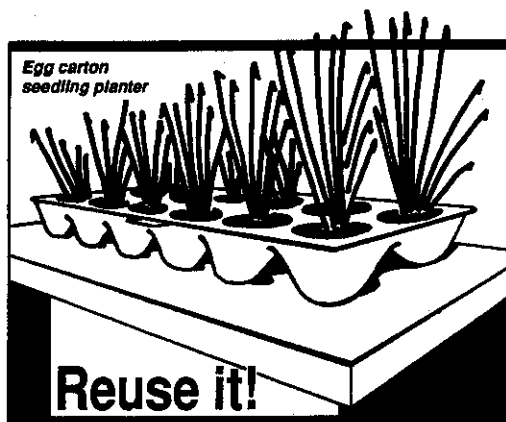
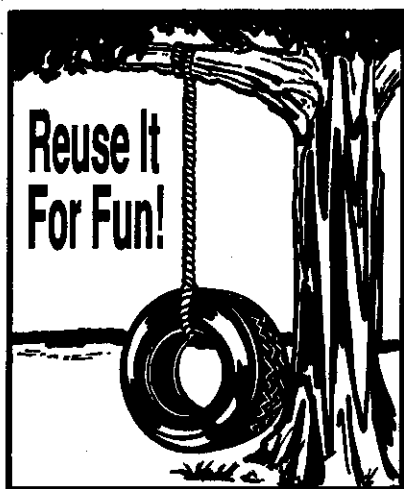
Recycle.
Today For Tomorrow



Send Your Leaves
To A Mulch Better Place.
Recycle.



Turn Your Old Paper
Into Good News.
Recycle.



Think
Reuse!

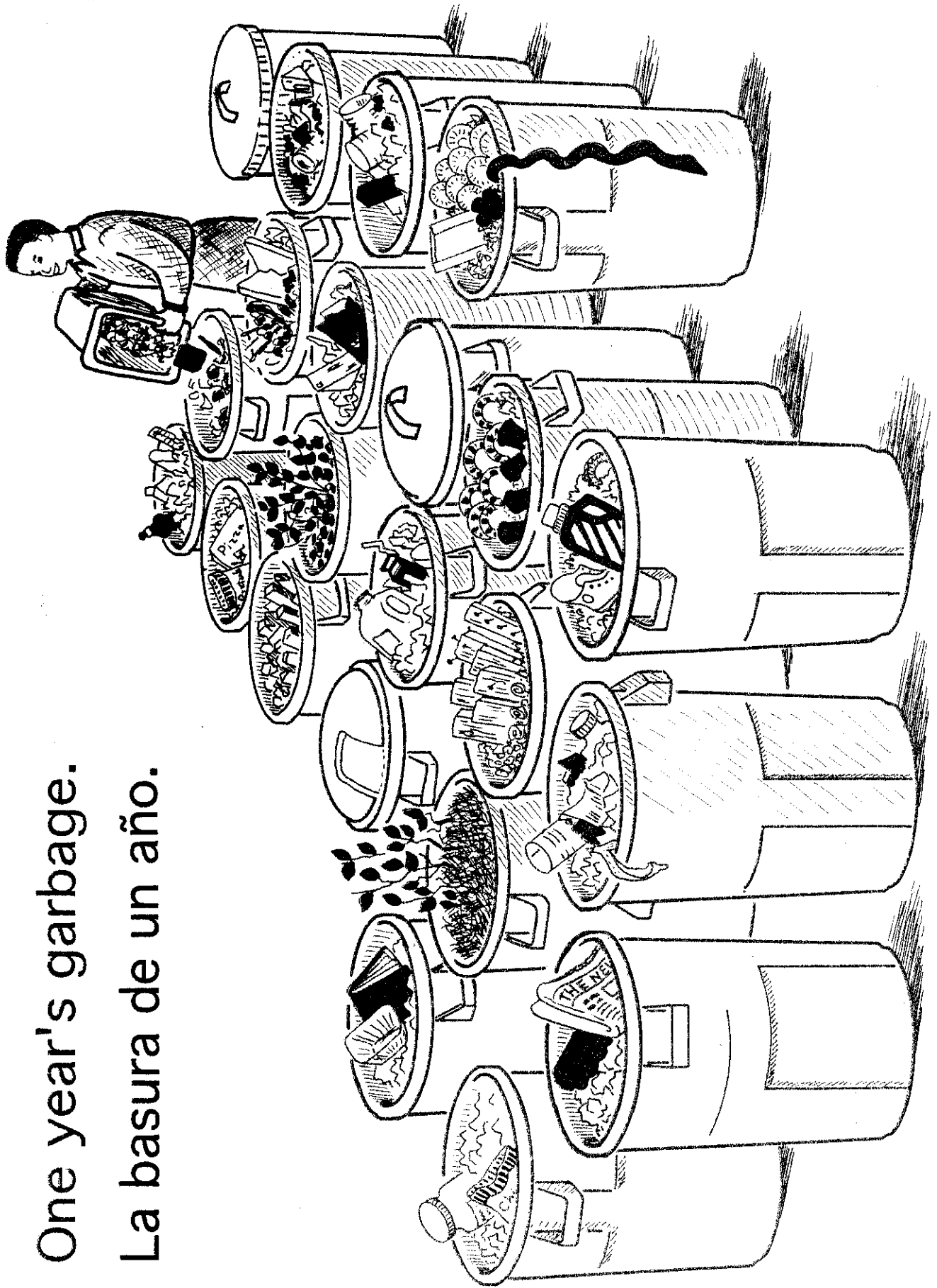
Think
Reuse!

Think
Reuse!

Reuse

There is no single solution to the problem of solid waste management. Communities must look at disposal alternatives that combine source reduction, recycling, reuse, incineration, and landfilling in an effort to solve the solid waste problem. Reuse is a critical component in a community solid waste management system. Many products can be reused instead of thrown out. For example, the use of non-disposables such as reusable dinner and serviceware is a significant source reduction measure. Returnable bottles can be used over and over again as manufacturers refill them and plastic soda containers also can be used to carry water or reused for classroom composting, terrarium or bird feeder projects.

One year's garbage.
La basura de un año.



Flipcard 1

One Year's Garbage

On average, a person throws away 4 pounds of trash everyday. This is about 1,460 pounds -- or 42 garbage bags -- of trash a year -- per person! People in New York State throw away 18 million tons of garbage every year. The largest proportion of trash is paper and paperboard (37% by weight), followed by yard waste (18%), plastics and metals (8% each), food and glass (7% each), and wood (6%); the remaining 8% is other materials (for example, tires, appliances, car parts).

What is in the trash?
¿Qué hay en la basura?



Flipcard 2

What is in the Trash?

About 1/3rd of trash is compostable: food waste, grass clippings, leaves, small branches, textiles, paper, and so on.

Another 1/3rd of trash is packaging: cans, bottles, different kinds of plastic, different types of paper (cardboard, waxed paper), foils, and so on.

Another 1/3 of the trash is used up durable goods: broken appliances, cars and car parts, tires, and so on.

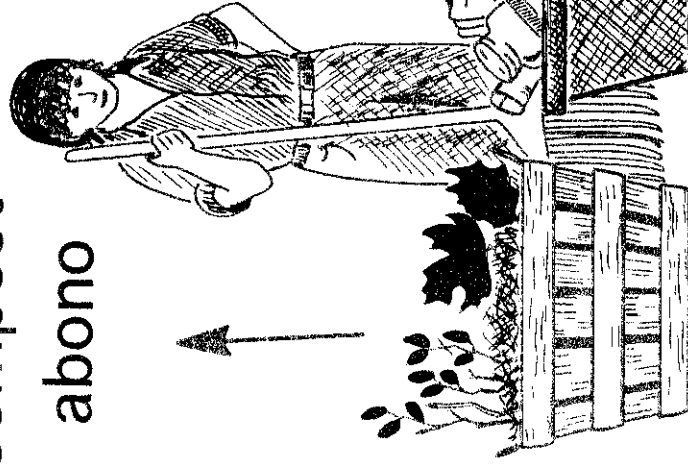
Where does trash go?

¿Adónde va la basura?

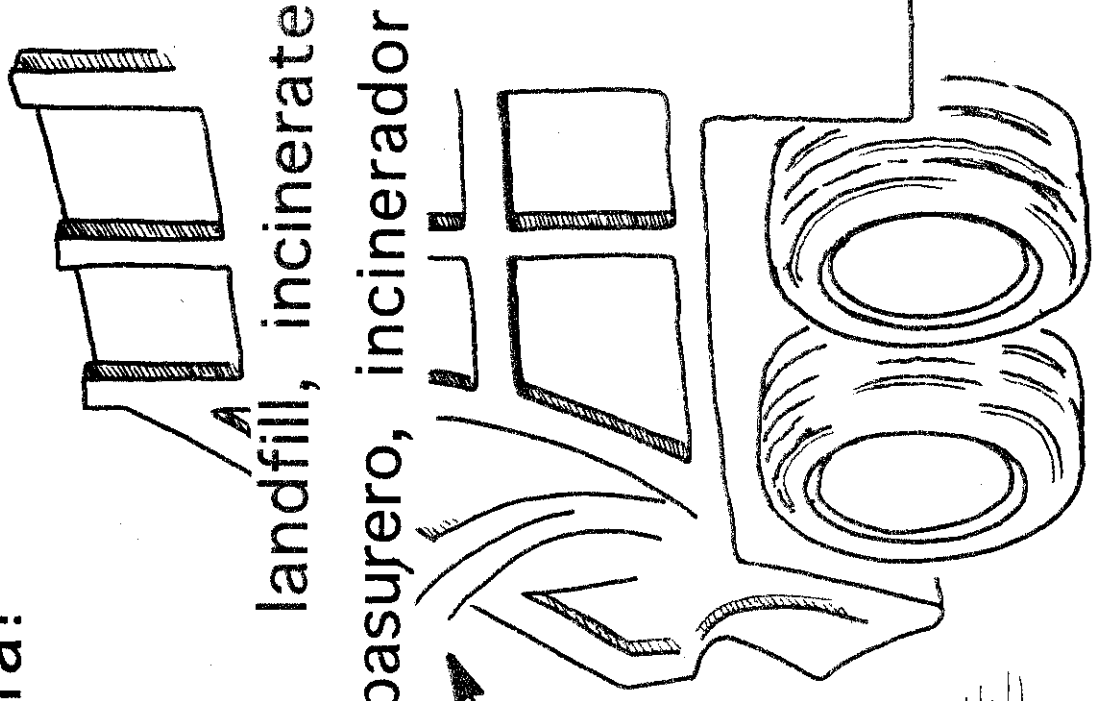
recycle
recipiente de
reciclaje

compost

abono



landfill, incinerate
basurero, incinerador



Flipcard 3

Where Does Trash Go?

Today, in the early 1990's, most of our garbage in the U.S. goes to landfills. Landfills are areas where trash is buried between layers of earth.

Another way to get rid of trash is incineration. An incinerator is like a furnace that burns garbage. Heat from the burning garbage can be used to produce steam. The steam can then be used to produce electricity.

Some trash can be composted, to make soil for potting plants, working into flower and vegetable gardens, and fertilizing lawns and gardens.

Some trash can be recycled. Most communities in New York State have recycling centers which accept paper, glass, some kinds of plastics, and some metal cans.

There may be trash in the streets and empty lots of our neighborhoods. While the amount of trash left in the neighborhood street is small compared to the trash taken to the landfills and incinerators, garbage makes the neighborhood a messy, unclean and unhealthy environment for us and our children to live in.

Flipcard 4

(Where Does Trash Go?)

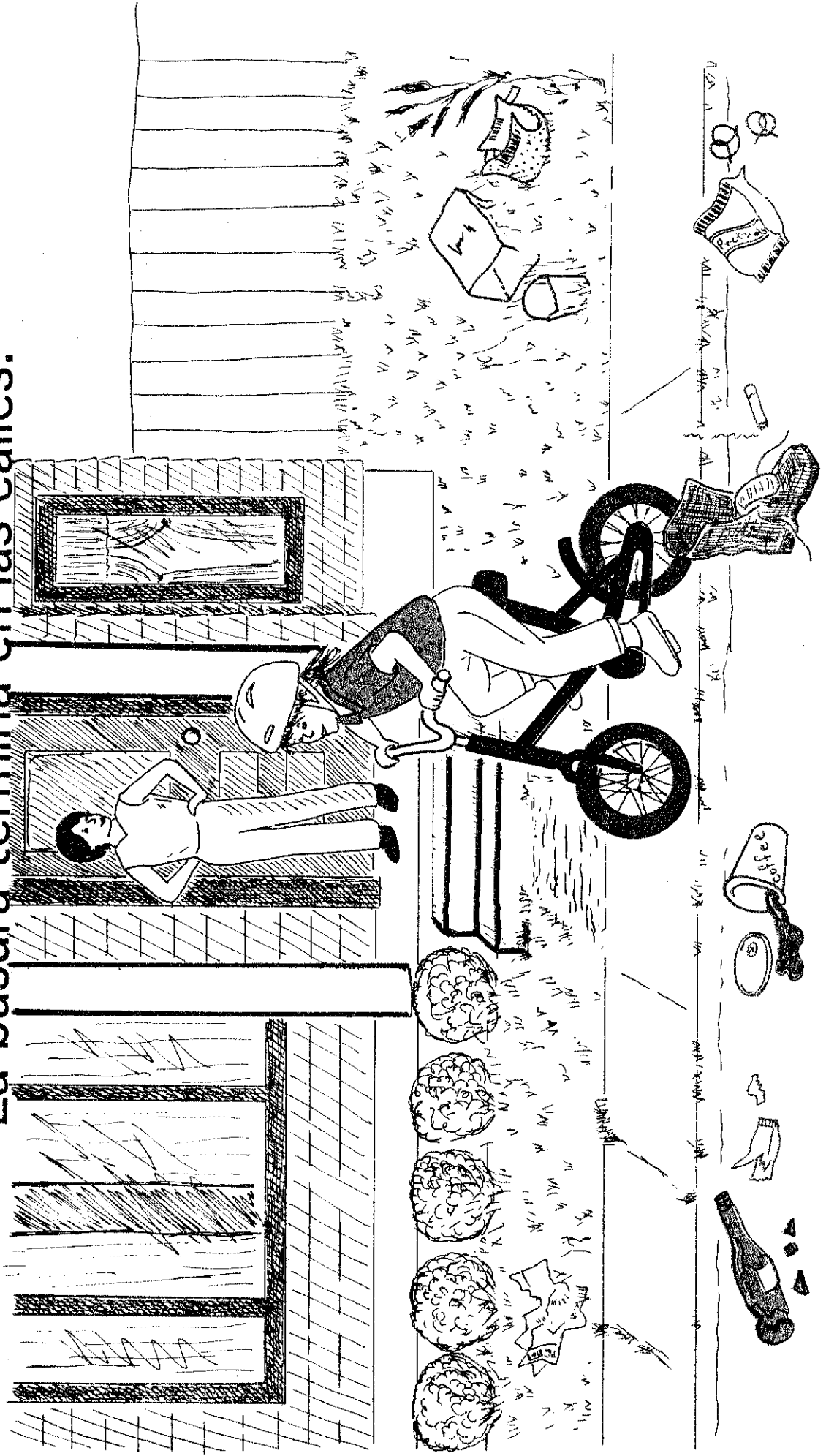
Today, about 1/3rd of our trash is composted in home compost piles or municipal composting programs.

Another 1/3rd is recycled into new products and packaging.

The last 1/3rd is taken to landfills or incinerators.

Trash goes into the neighborhood streets.

La basura termina en las calles.



Flipcard 5

Trash Goes into the Neighborhood Streets

There may be trash in the streets and empty lots of our neighborhoods. While the amount of trash left in the neighborhood street is small compared to the trash taken to the landfills and incinerators, garbage makes the neighborhood a messy, unclean and unhealthy environment for us and our children to live in.

Saving energy, water and resources saves money.
Al ahorrar energía, agua y recursos ahorra dinero.



Flipcard 6

Saving Energy, Water, and Resources Saves Money

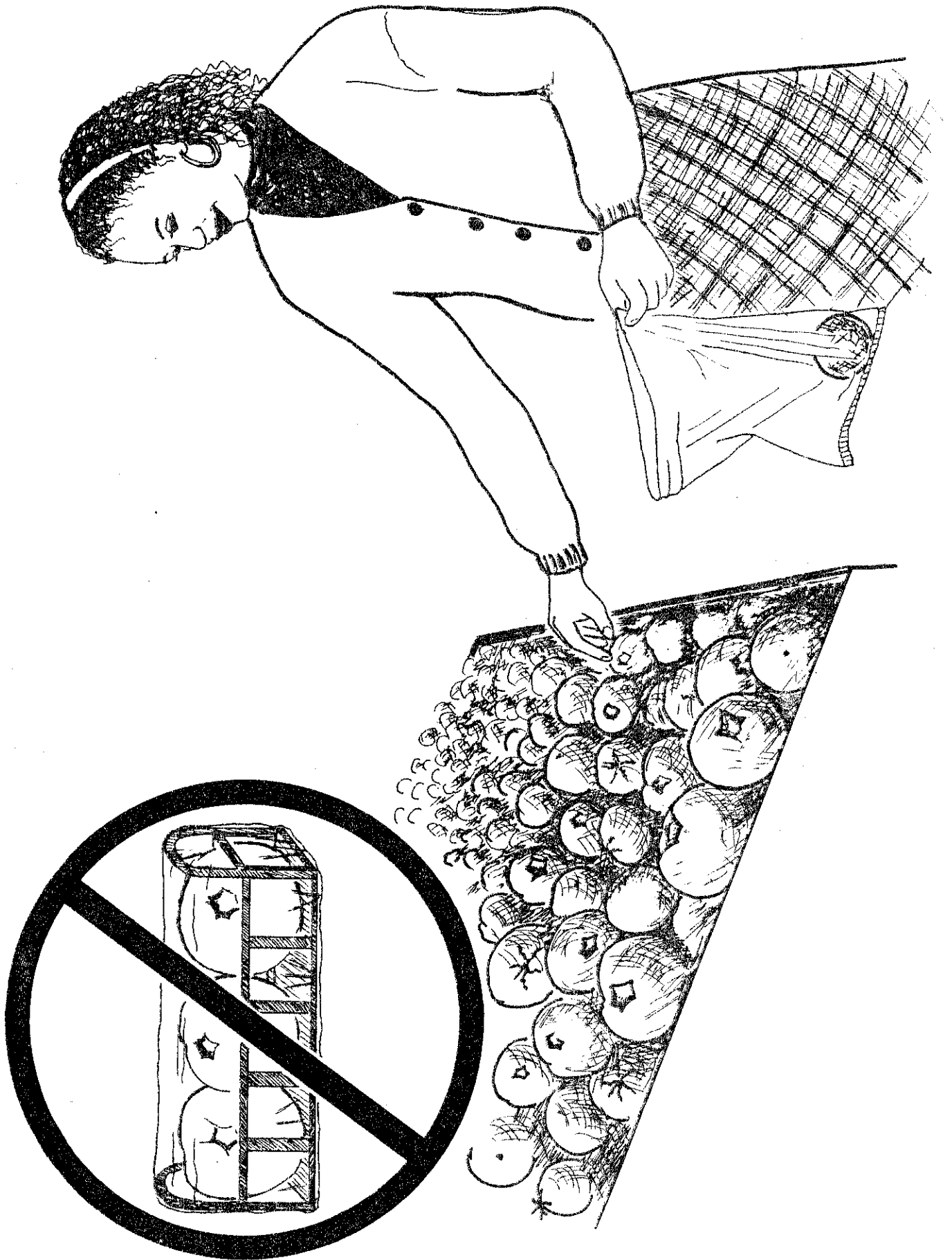
The type of lights we use affects energy use and waste. Long life light bulbs and compact florescent bulbs can save energy costs, but they may cost more to buy. You save money on replacements and on your electric bill.

You can save energy by turning off appliances when not in use. For example, if no one is watching the television or listening to the radio/stereo turn it off. When no one is in a room turn off the lights. All of these little things add up to a lot of power being saved.

Keep the thermostat settings low. Setting the thermostat at 65 degrees instead of 70 degrees can reduce heating use by as much as 15%. The thermostat on the hot water heater can also be turned down to 120 degrees. Insulate your home. Your local utility can do an energy audit to give you ideas on how to save on energy costs. If a home is properly insulated, it could save 50% in energy costs.

To save water, put a dam in your toilet tank. If you flush the national average of eight times a day, a dam would save 2,920 gallons of water a year. Use a low-flow shower head to save as much as \$100 a year on your hot water bill.

If you have a choice, walk or ride a bike instead of driving. If it is impossible to walk or ride a bike, car pool or use city transit. When you are going out, try to get everything you need in one trip instead of two or three trips. Plan ahead. If you must drive, remember a car that gets 40 miles to the gallon, compared to one that gets 28, saves 12 miles to a gallon of fuel, saving you money. Less fuel needs to be refined, saving energy, pollution, and natural resources.



Flipcard 7

(Fresh Fruits & Vegetables Use No Packaging)

The best way to reduce the amount of trash a household makes is not to bring it home. If you don't buy it in the first place, you won't have to worry about how to get rid of it. Look first for items with no packaging. Fruits and vegetables come loose for you to choose what you want. Containers and extra outside wrapping is not needed.

If packaging is necessary, find the product with the least amount of packaging. Minimal packaging means using the smallest amount of material. This may mean buying products in different forms.

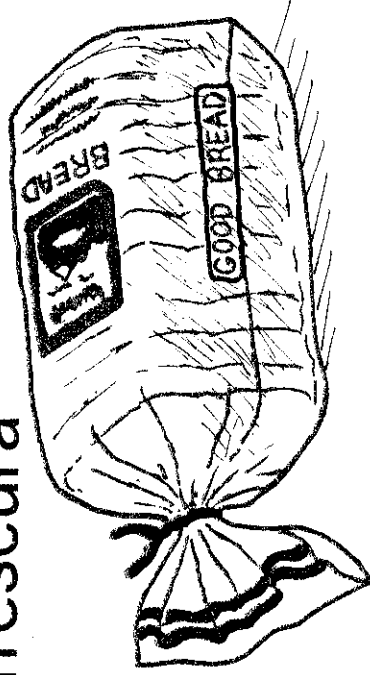
First, look for products with lighter packaging materials. Many packages are being made lighter. In the 1970's, 26 aluminum cans weighed one pound. Now it takes 30 cans to make a pound, with each can weighing less.

Second, look for products with a fewer layers of packaging.

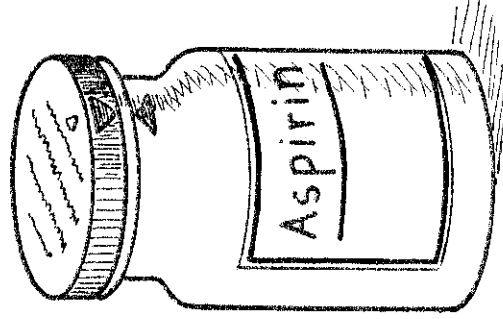
Last, packaging waste can be reduced by looking for the largest amount of product in a given size package or by looking for the smallest package size for a given amount of product.

Packaging is useful for:
El empackado es útil para:

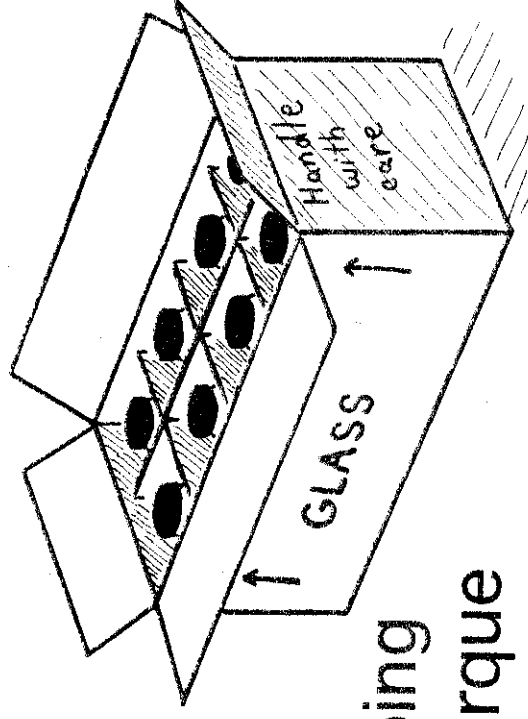
freshness
frescura



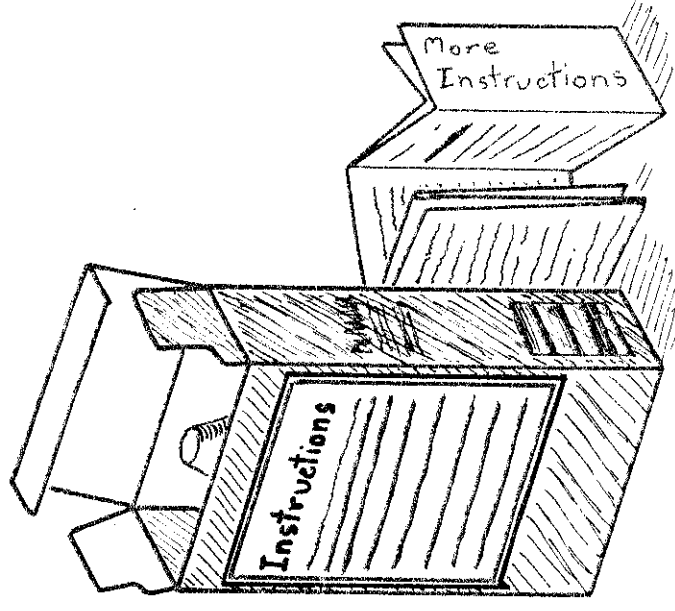
safety
seguridad



shipping
embarque



instructions
instrucciones



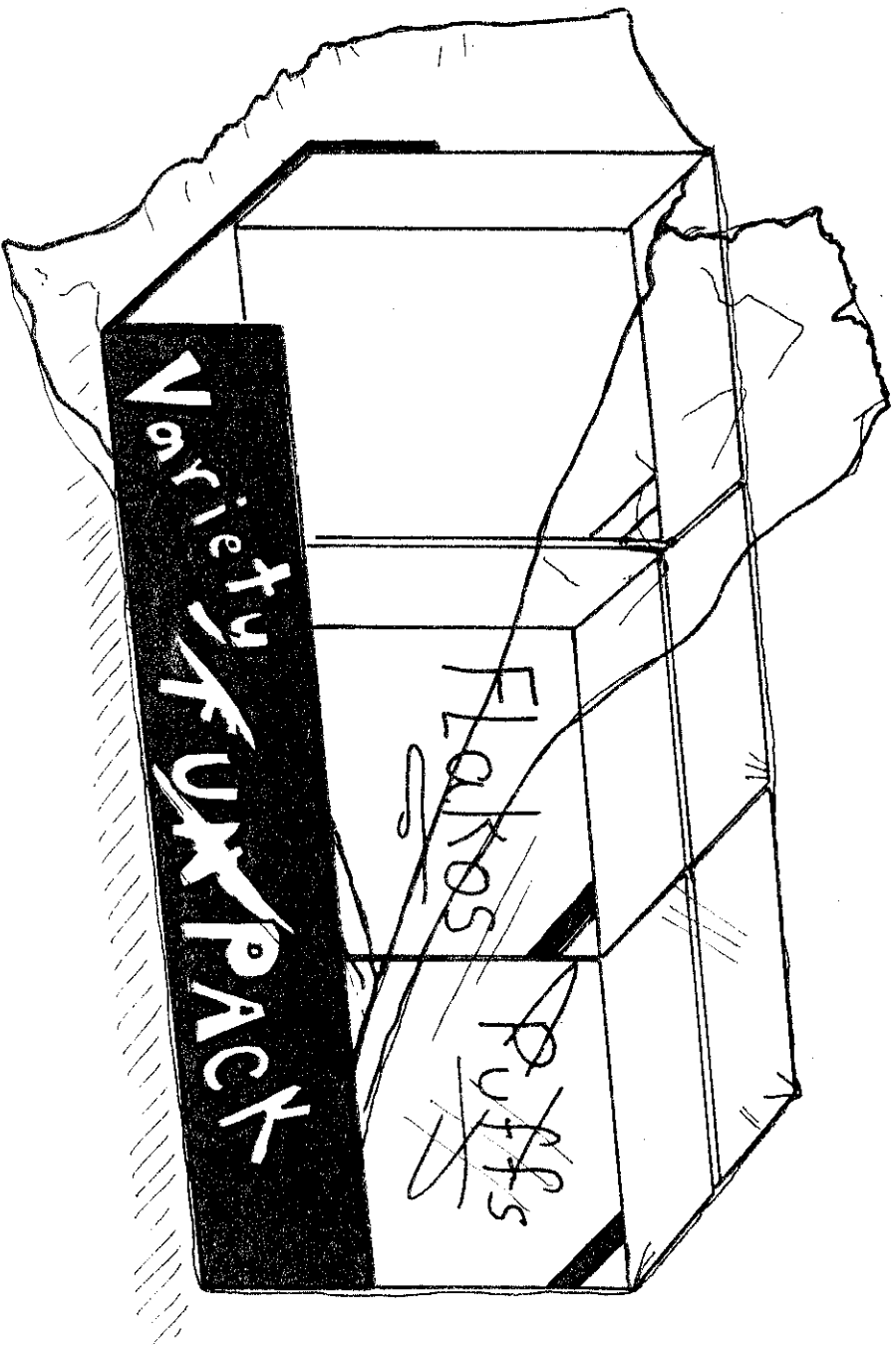
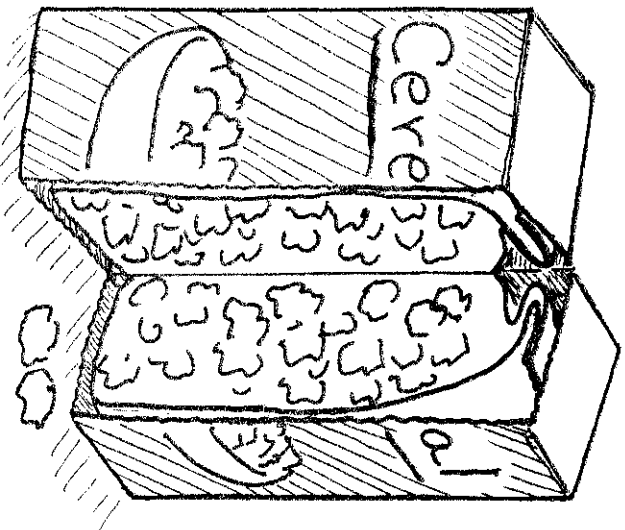
Flipcard 8

Packaging is Useful for....

Packaging has many uses:

- holds the product (imagine cereal without a box!)
- easy transportation of the product
- convenient storage
- consumer safety
- freshness
- instructions for using the product

Too much packaging is wasteful.
Demasiado empaque es desperdicio.



Flipcard 9

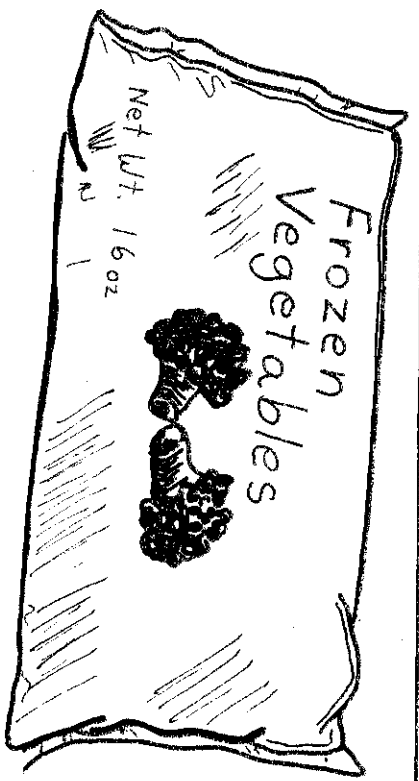
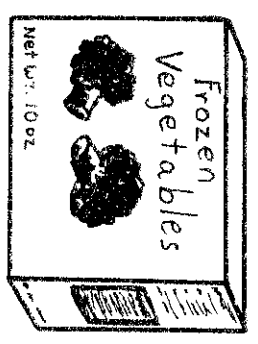
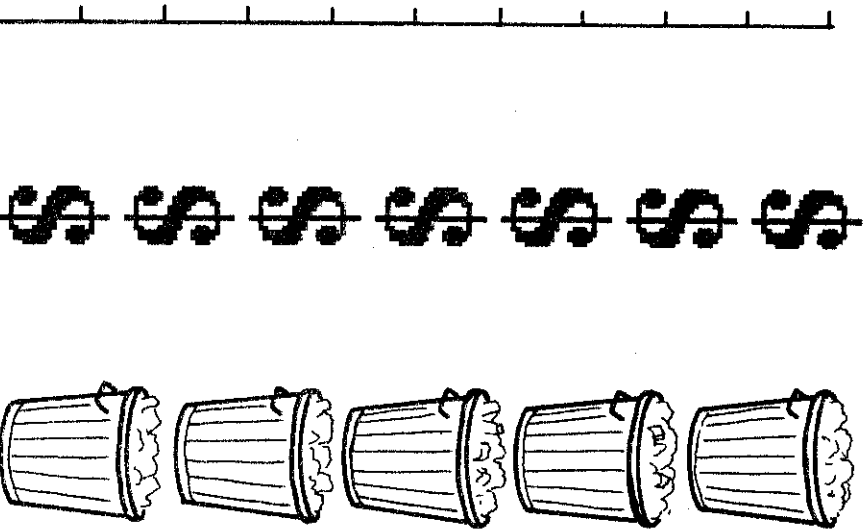
Too Much Packaging is Wasteful

In addition to the main packaging, there may be a second and even a third layer of packaging. For example, most cereal is packaged in a waxed or plastic liner (primary), and then in a box (secondary). And to ship the cereal to the store, the boxes are packed in a corrugated cardboard carton (third layer). As consumers, we can't do much about the packaging used in shipping, but we can choose products based on their primary and secondary packages.

Packaging is used as a selling tool. Often that type of packaging requires larger shelf space. More room on the shelf makes the product stand out from competing brands. Packaging can also hide the poor quality of a product.

Extra packaging costs more money to manufacture. This cost is included in the price you pay. On average, packaging costs about ten cents out of every dollar you pay for products. When shopping you should be aware that you are buying the packaging **and** the product.

per
serving
cada
porción



Flipcard 10

(Savings for Frozen Vegetables)

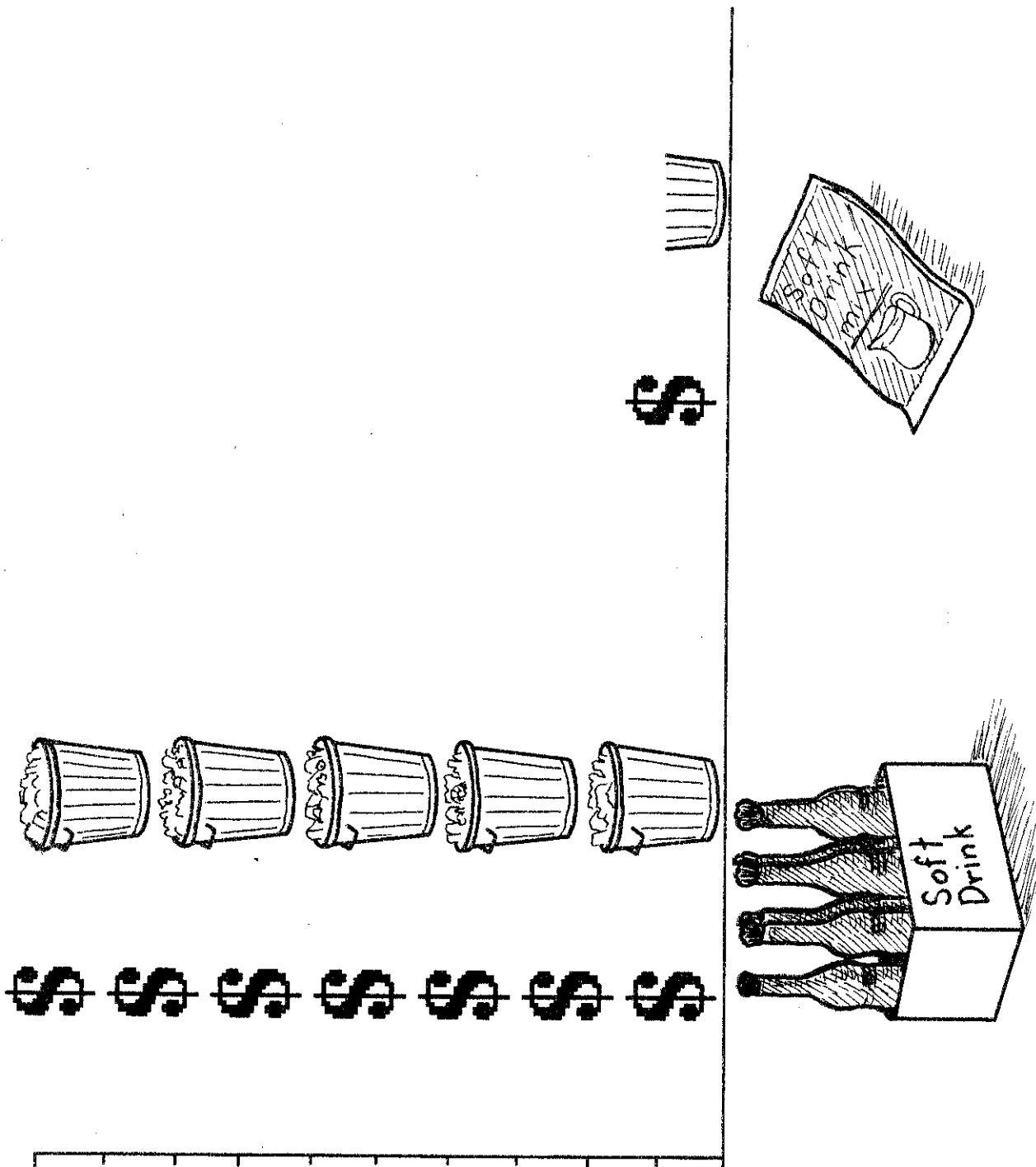
Buying products in bulk, large quantity or refillables saves on trash if the product does not spoil easily and you will use up the product before it spoils. If an item spoils before use, you have to throw away the spoiled product and the additional packaging. Therefore, you need to plan. Make a menu and a list of what you need before shopping, then stick to the list. This will help to cut down on buying products that will spoil before use. Don't over buy!

Reducing trash can also save money. You can save money by buying larger sizes (versus single serving sizes), buying recyclable packages (versus disposables), and buying minimal packaging.

Also, if your community has a fee system that charges you for the amount of trash you throw out, you can save money by reducing the amount of trash you put out on the curb or take to the landfill. The less trash you put out, the less you have to pay.

per
serving

cada
porción



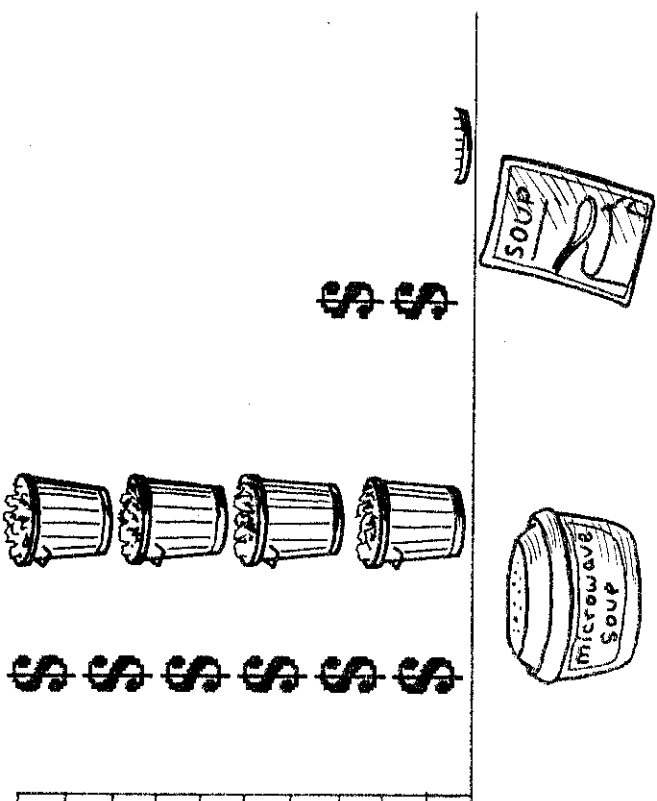
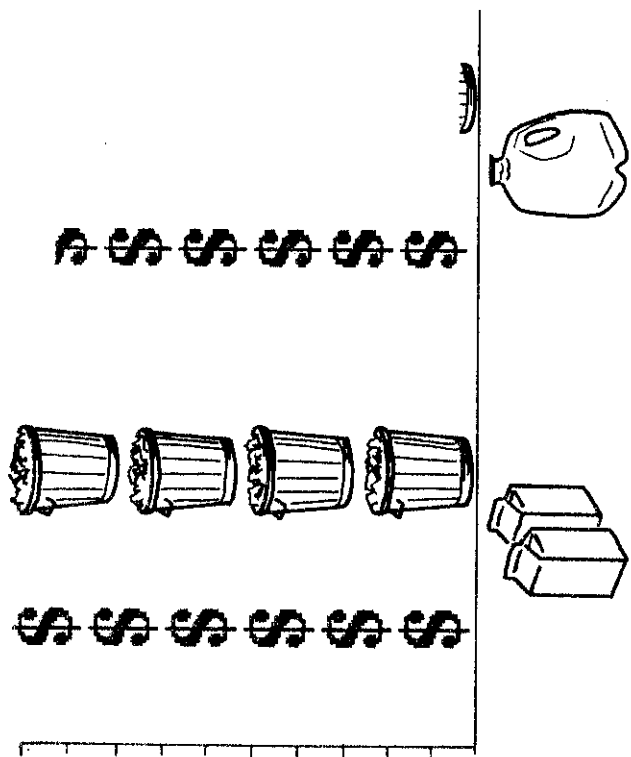
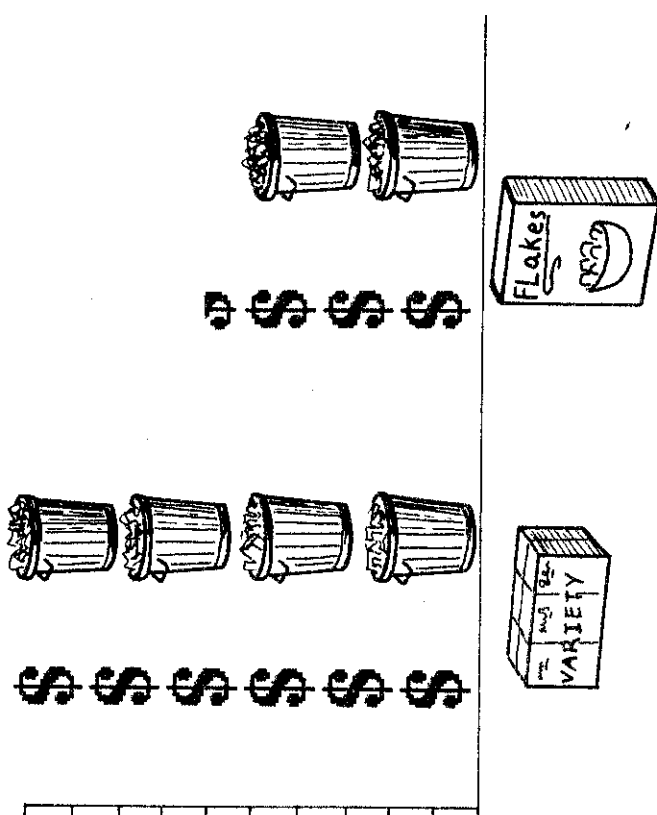
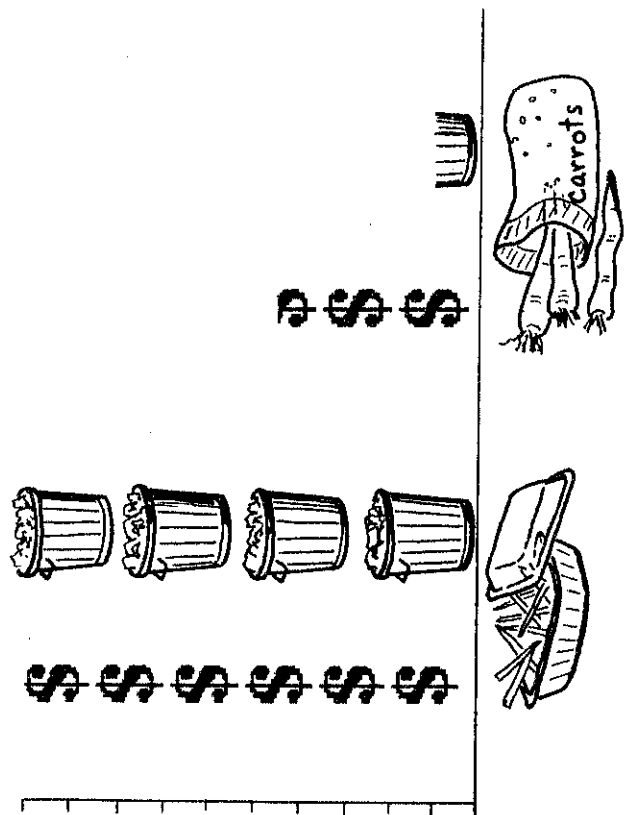
Flipcard 11

(Savings for Soft Drinks)

Buying products in bulk, large quantity or refillables saves on trash if the product does not spoil easily and you will use up the product before it spoils. If an item spoils before use, you have to throw away the spoiled product and the additional packaging. Therefore, you need to plan. Make a menu and a list of what you need before shopping, then stick to the list. This will help to cut down on buying products that will spoil before use. Don't over buy!

Reducing trash can also save money. You can save money by buying larger sizes (versus single serving sizes), buying recyclable packages (versus disposables), and buying minimal packaging.

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Flipcard 12

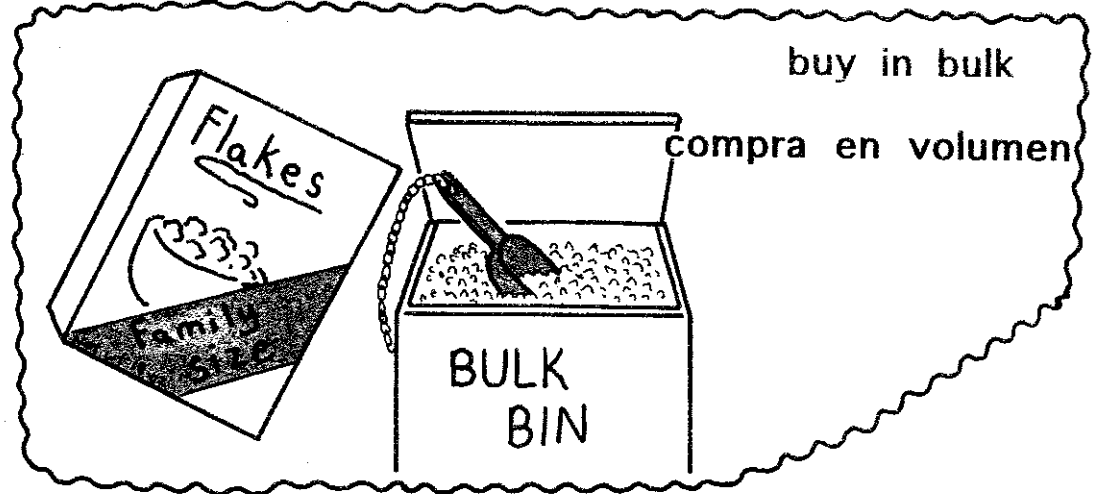
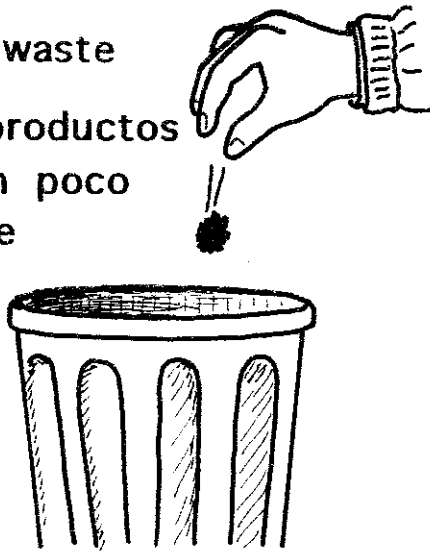
(Savings for Milk, Carrots, Soup, Cereal)

Buying products in bulk, large quantity or refillables saves on trash if the product does not spoil easily and you will use up the product before it spoils. If an item spoils before use, you have to throw away the spoiled product and the additional packaging. Therefore, you need to plan. Make a menu and a list of what you need before shopping, then stick to the list. This will help to cut down on buying products that will spoil before use. Don't over buy!

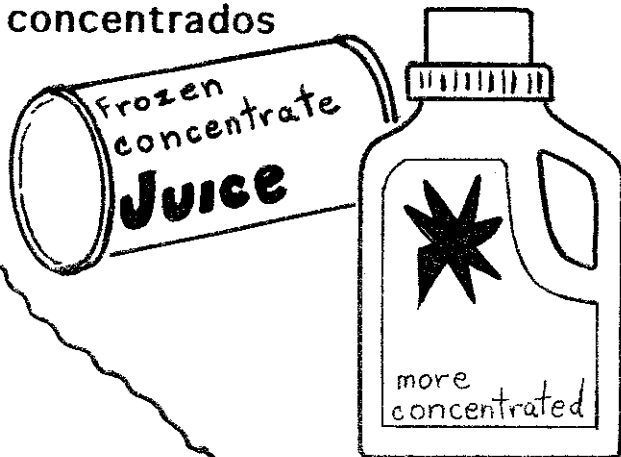
Reducing trash can also save money. You can save money by buying larger sizes (versus single serving sizes), buying recyclable packages (versus disposables), and buying minimal packaging.

Also, if your community has a fee system that charges you for the amount of trash you throw out, you can save money by reducing the amount of trash you put out on the curb or take to the landfill. The less trash you put out, the less you have to pay.

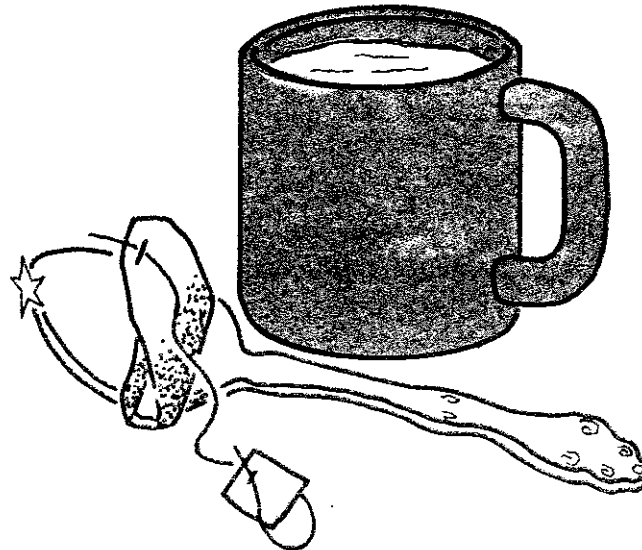
buy least waste
compra los productos
que tienen poco
envase



buy concentrates
compra productos
concentrados



buy durables
compra productos duraderos



buy less hazardous
products
compra más productos
ambientales



Flipcard 13

Buy Less Waste, Buy in Bulk, Buy Durables, Buy Concentrates, Buy Less Hazardous Products

Nearly 2/3's of household waste comes from packaging. When shopping, try to buy products with the least packaging.

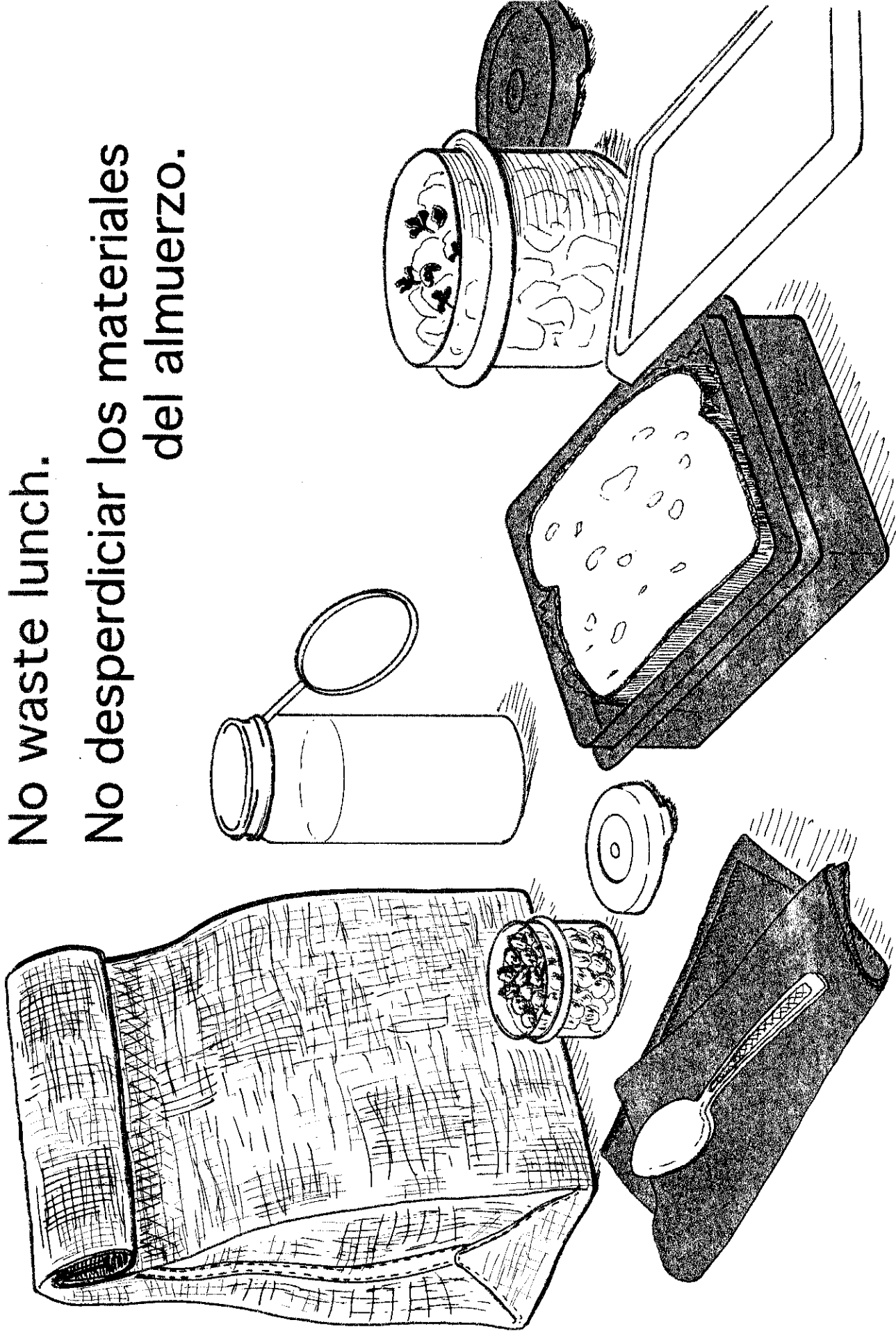
Buying food in bulk or in larger quantities usually means less packaging waste. But buy only what you need--don't overbuy!

Single use items, like paper plates and cups, can create a lot of waste and may be more costly in the long run than durables, like plastic or ceramic plates.

Why buy water at the store and bring it home? That's what you're doing every time you buy a "ready to use" juice or fabric softener. Think about buying concentrates and adding the water yourself at home.

Read labels and buy the least hazardous product you can. Look for products that need no warning label. Products labeled "warning" or "caution" are less harmful than those labeled "danger" or "poison." Read and follow label directions. The label will tell you how to use and store the product. It will also tell you how to dispose of the empty container.

No waste lunch.
No desperdiciar los materiales
del almuerzo.



Flipcard 14

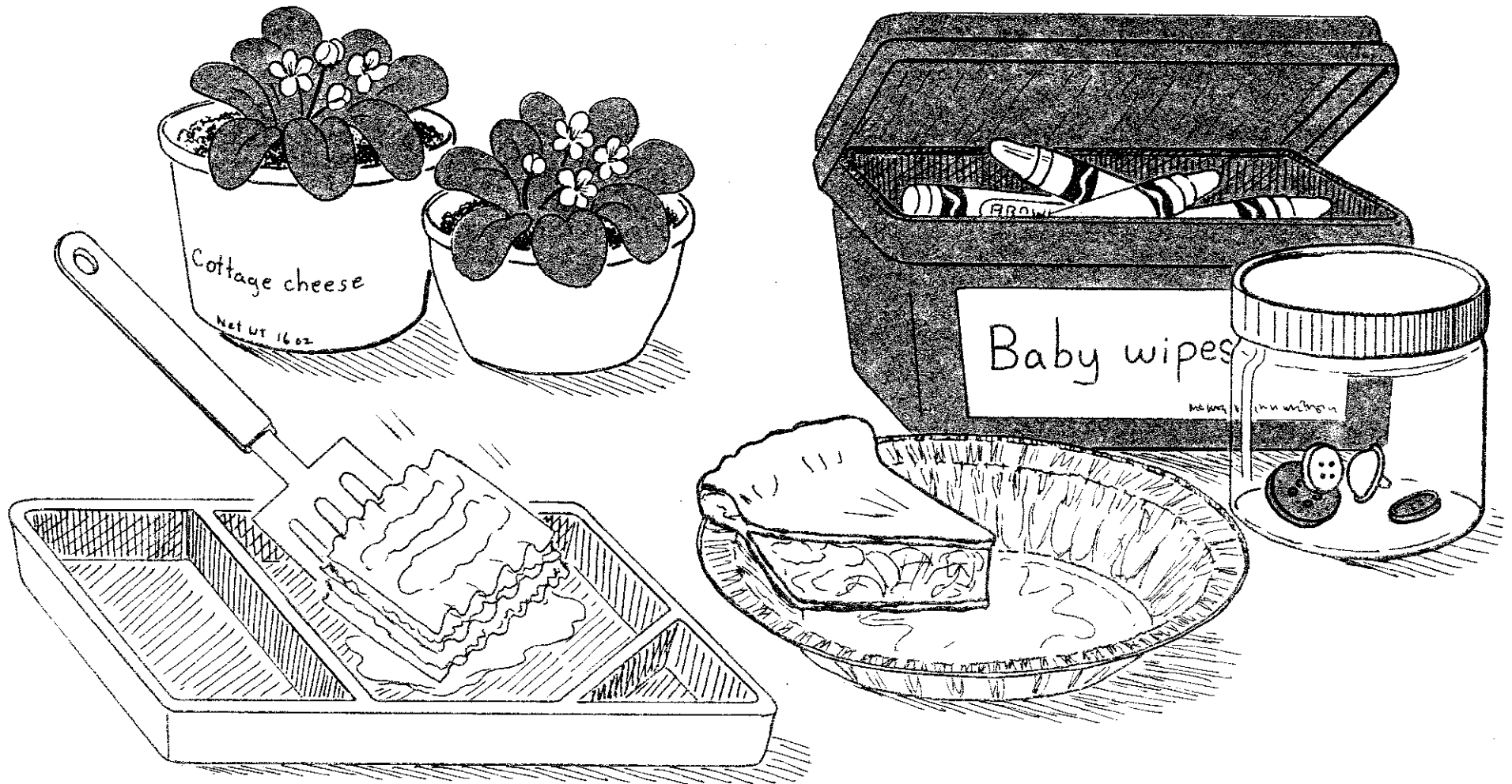
No Waste Lunch

If you carry your lunch (or even your breakfast or dinner!), pack a "no waste" lunch using reusable containers:

- a cloth lunch bag or a lunch box (washable!)
- plastic bottle for juice or drinks (re-use a soda or juice bottle!)
- sandwich keeper (made out of a margarine tub!)
- container for chips or salads (made from margarine tubs!)
- a cloth napkin (washable!)

Reuse products or packages to reduce trash.

Use nuevamente los productos o paquetes para reducir la basura.



Flipcard 15

Reuse Products or Packages to Reduce Trash

The best way to reduce waste is to reduce the amount of trash you buy. Another way is to reuse things for the same or different purposes. This reduces the amount of trash going to landfills, incinerators and neighborhood streets.

Newspaper can be used as wrapping paper, or party hats (the funnies are the best).

Other used paper can be used as paper for kids to draw, paint, and color.

Magazines and books can be given to retirement homes, doctor's offices, hospitals.

Washed styrofoam trays from meat packages can be used under house plants to catch the excess water.

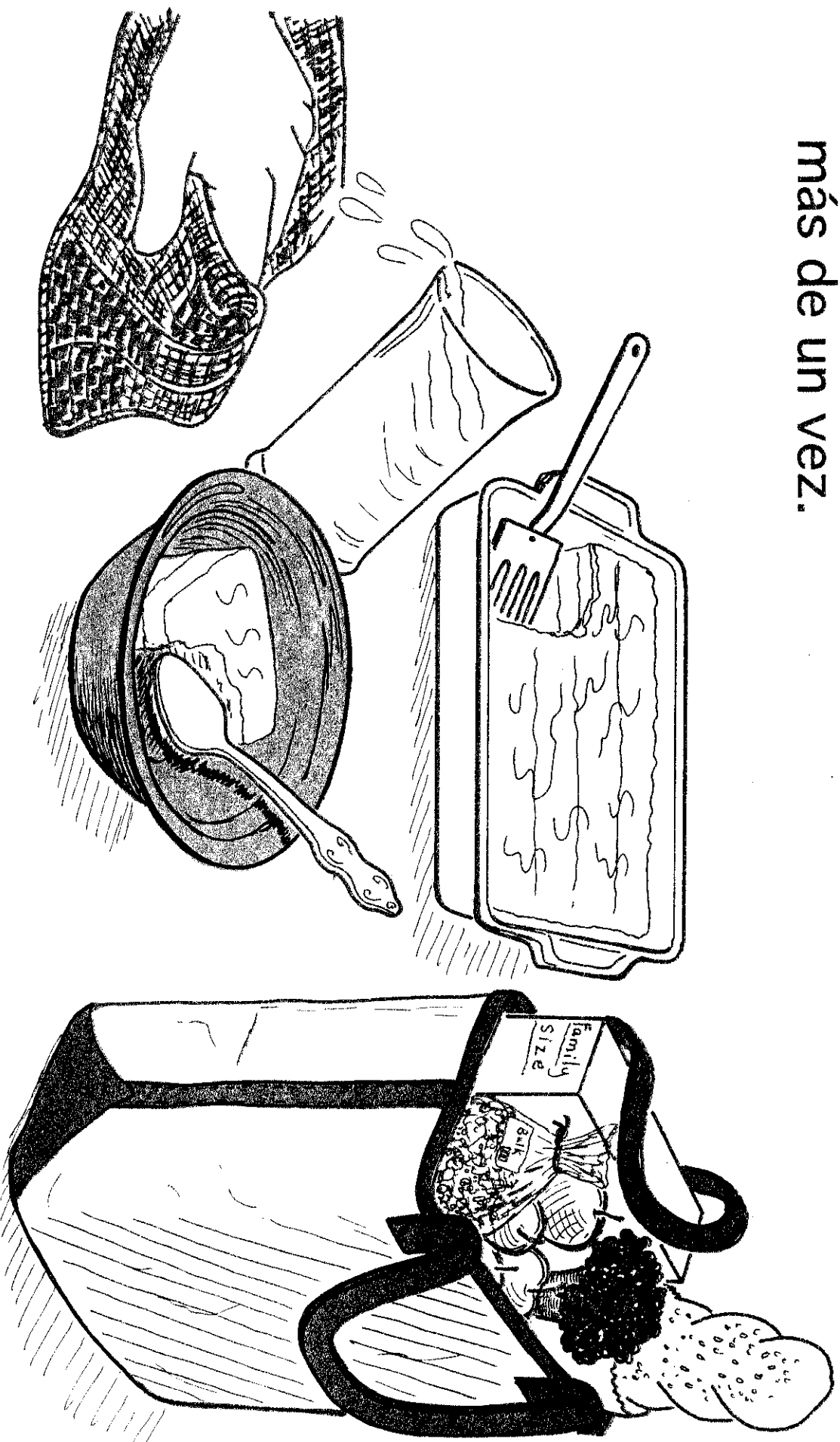
Plastic containers (margarine, cottage cheese) can be used to store leftovers.

Glass jars can be used as a pitcher for juice from concentrate, ice tea, lemonade, etc.

Coffee cans can be used as a canister set - decorate with paper.

Old clothes can be used as aprons or smocks for painting (kids & adults).

Durable products can be used over and over again.
Es posible utilizar los productos duraderos
más de un vez.



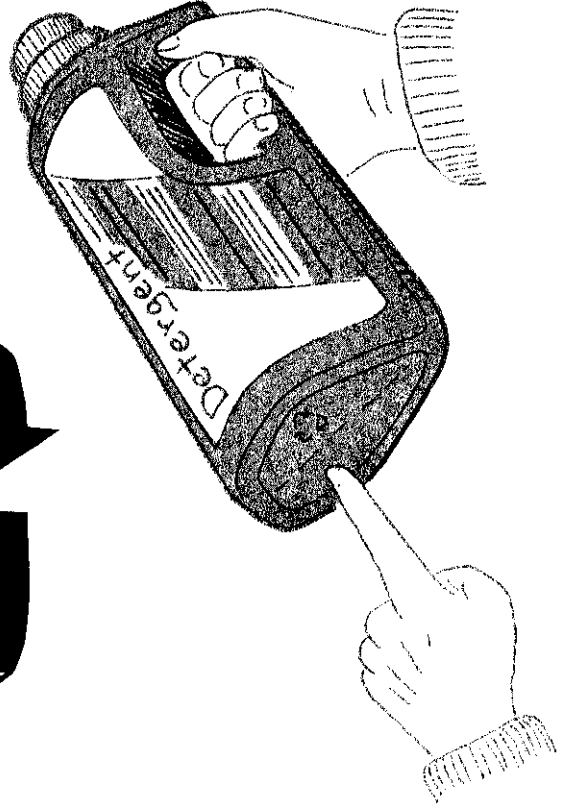
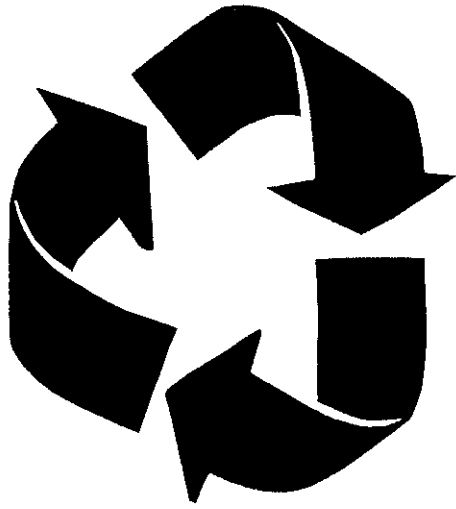
Flipcard 16

Durable Products Can Be Used Over and Over Again

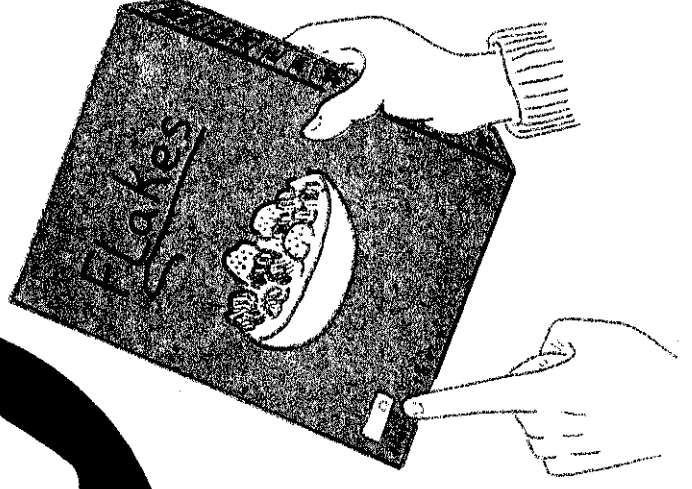
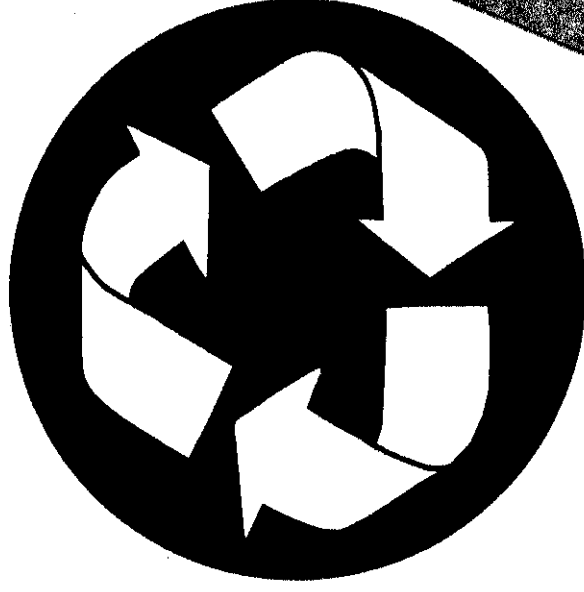
Durable products last longer or can be used over and over again. **Disposable** products and packages are thrown away immediately or after several uses. There are many durable products to use in place of disposable products. When we use durable products, we decrease the amount of trash produced.

Think about the durable products in your home: dishes, glasses, cups, knives, forks, spoons, towels, cleaning rags, long-lasting appliances, long-lasting clothes, durable toys.

Recyclable
Reciclable



Recycled
Reciclado



Flipcard 17

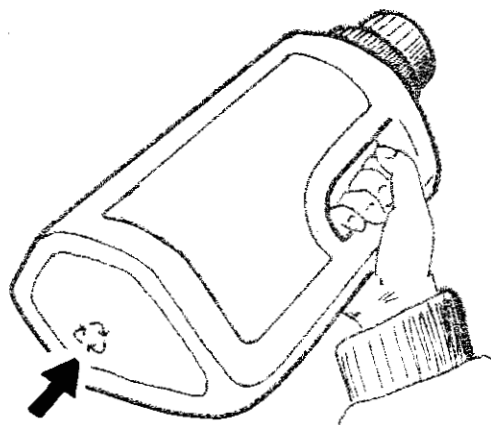
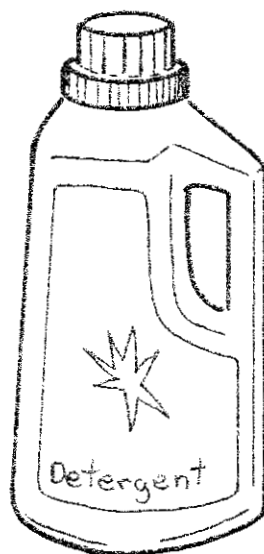
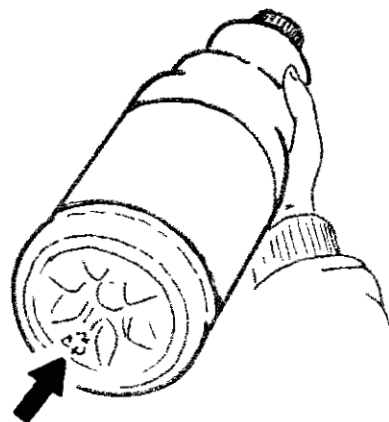
Recyclable, Recycled

The terms **recycled** and **recyclable** can mean different things in different communities. **Recyclable** usually means the product or packaging material can be processed and used to produce a new product or package. A **recycled** product or package is made from scrap or used materials.

Because recycling rules vary from place to place, not every product that claims to be recyclable can be recycled in every community. A consumer must know what items can be recycled in his or her area.

Recyclable products help the environment only if they are taken to a recycling station or picked up as recyclables at the curb. A recyclable item that is thrown in the trash goes to the landfill, incinerator or on the neighborhood streets. When this happens, natural resources and the energy used to make the product and its package are lost forever.

Most recycling centers take #1 and #2 plastic.
La mayoría de los centros de reciclaje aceptan los
plásticos #1 y # 2.



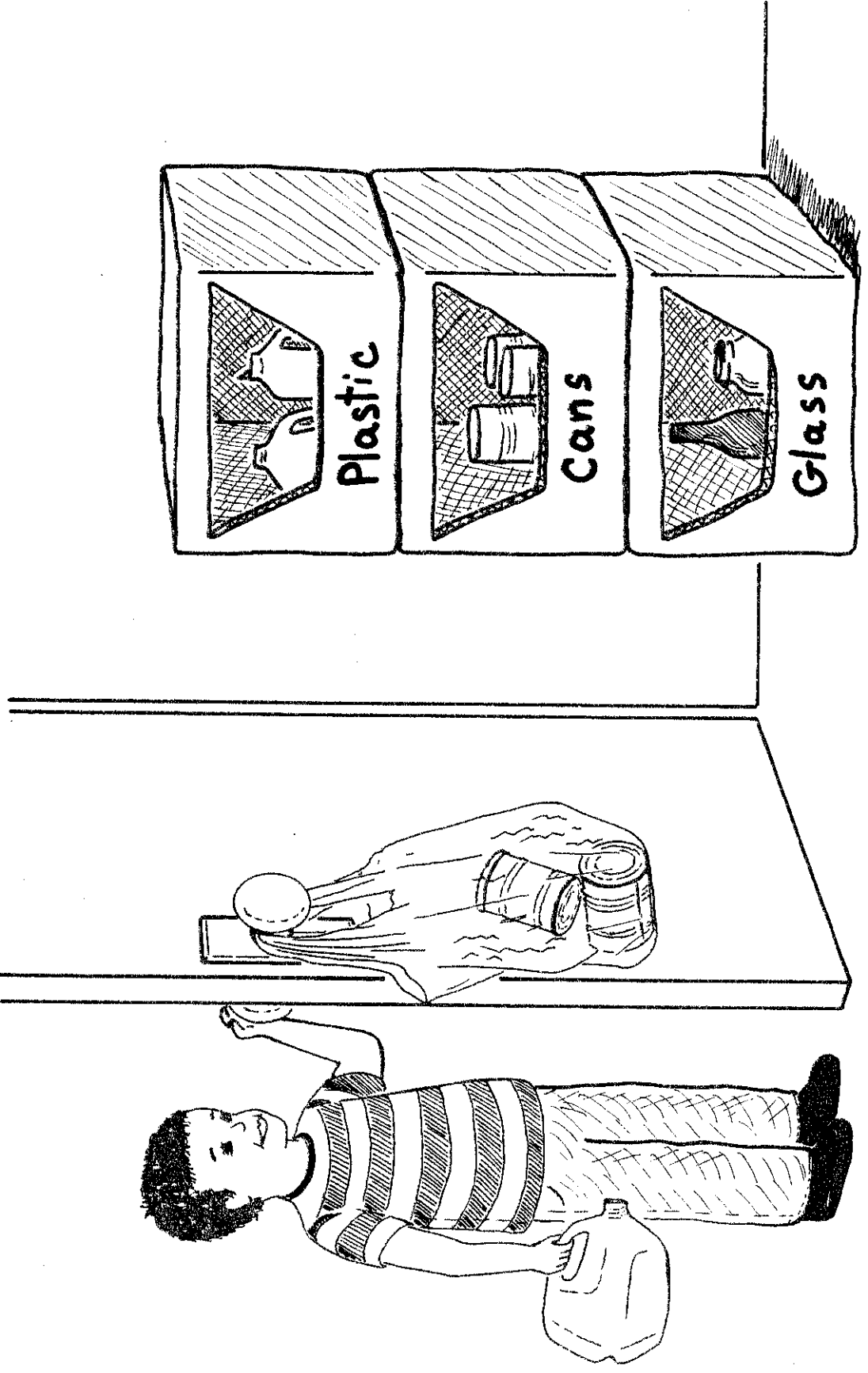
Flipcard 18

Most Recycling Centers Take #1 and #2 Plastic

Only certain items are recyclable. Plastics are a good example. In most places, two types of plastics are being recycled. They are PETE (#1) and HDPE (#2). PETE is used for clear plastic soft drink and juice bottles. HDPE is the opaque plastic used for plastic milk jugs, detergent, shampoo bottles and the like.

It pays to keep up with current recycling policies in your community. As our ability to process different plastics changes, more plastics (#3, #4, #5, #6, and #7) may become recyclable.

Storing recyclables.
Guardando los reciclables.



Flipcard 19

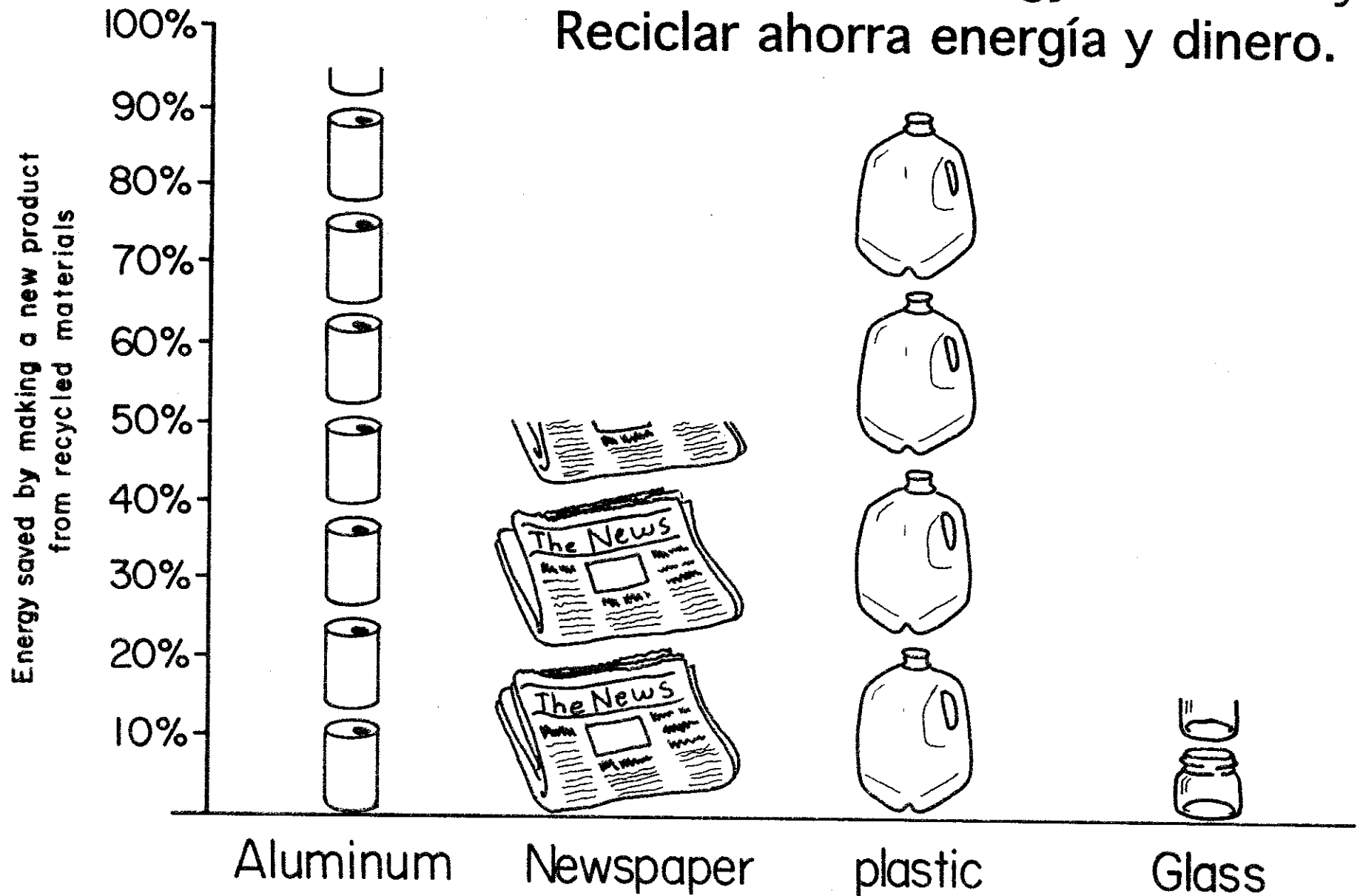
Storing Recyclables

Many times people want to recycle but feel they do not have enough room. The best way to make yourself recycle is to set up a system and make it a habit. Have a recycling bag or bin in a convenient location--in the kitchen, on the porch, a bag on the door handle--try out different things to find the one or two that work best for your family.

Sort and wash before you put it in the bin. No one wants to go back through the garbage and sort and wash before taking the garbage out.

If recyclables do not have to be sorted, use one small garbage can for garbage and one for recyclables.

Recycling saves energy and money.
Reciclar ahorra energía y dinero.



Flipcard 20

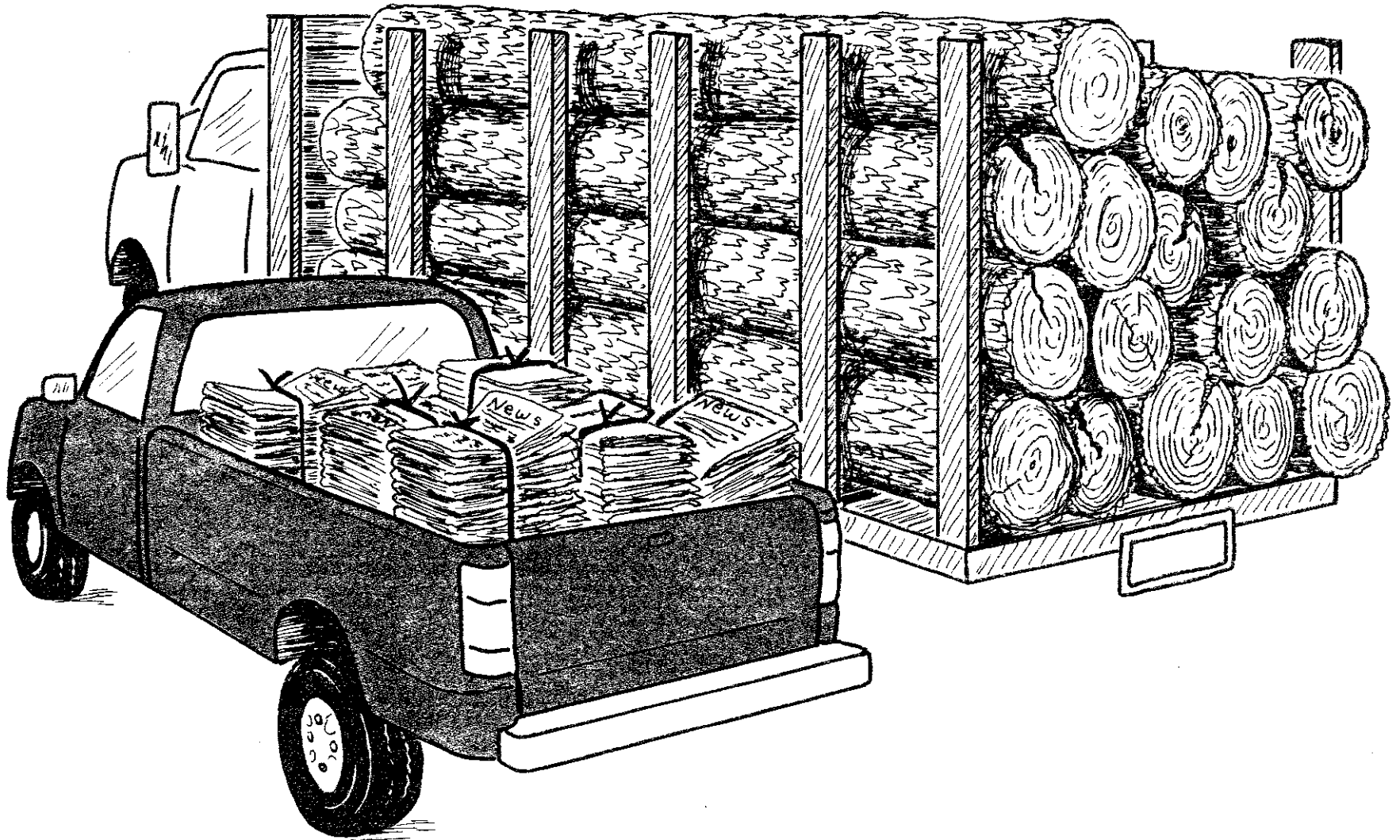
Recycling Saves Energy and Money

Another reason to recycle is that recycling may save energy. Less energy is used to reprocess recycled materials than is used getting raw materials that must be mined and manufactured. In fact:

- recycling aluminum saves 85-90% of energy it takes to make another can from ore
- recycling newsprint and cardboard saves 50-75% of the energy it takes to produce new newsprint and cardboard from trees
- recycling plastic saves 85-90% of the energy it takes to make new plastic materials from petroleum
- recycling glass saves 8-14% of energy

It takes some energy to collect, sort, and ship recyclables to a reprocessing plant. Depending on the materials and the distances, the energy savings from recycling may not be as high as the percentages given above. But recycling does save natural resources and landfill space.

1 ton of recycled newspaper saves 17 trees.
1 tonelada de periódicos reciclados salva 17 árboles.



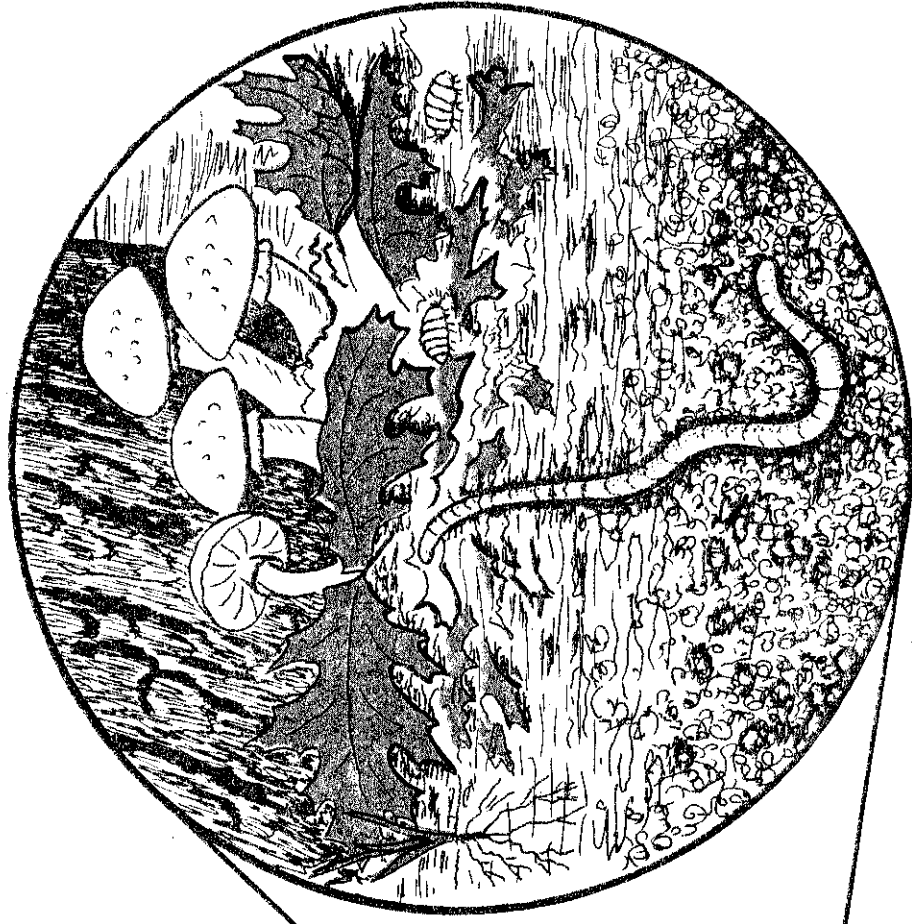
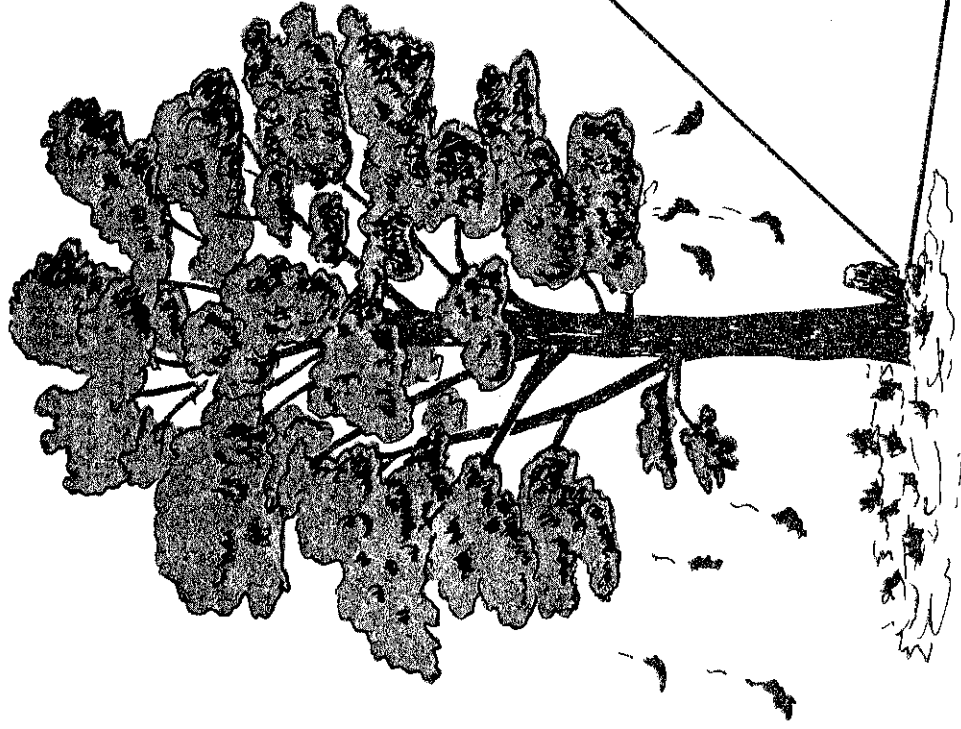
Flipcard 21

1 Ton of Recycled Newspapers Saves 17 Trees

Many people ask, "Why should I recycle? The United States has many natural resources." That may be true today. But if the natural resources are overused and mismanaged there will be less left for future generations. For example:

- 40 million tons of recyclable paper is thrown away in the United States each year.
- 68,860 trees must be cut down to provide enough paper for one day's edition of the New York Times.
- One ton of recycled paper saves 17 trees from being cut down.
- If we recycle the aluminum Americans throw away every three months, we could rebuild the entire United States airline fleet.

Composting occurs in nature everywhere.
Descomposición ocurre en la naturaleza.



Flipcard 22

Composting Occurs in Nature Everywhere

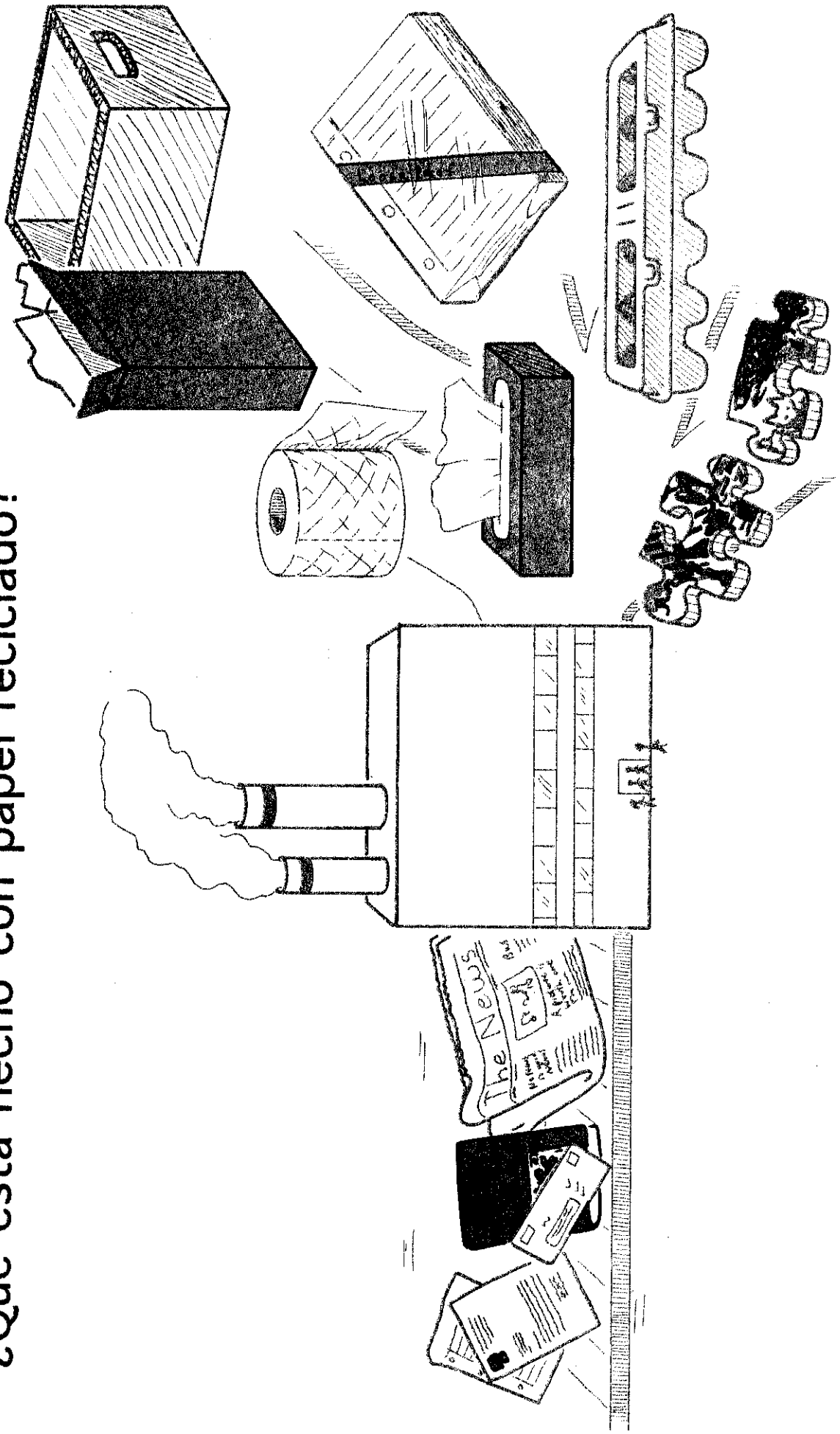
Composting is another way to recycle. *Composting* changes organic wastes into a dark, rich soil-like material. *Organic waste* is material that comes from living or once living things. Composting happens naturally almost everywhere in the world. For example, when a leaf falls from a tree and remains for a long time on the ground it eventually disappears. The leaf has decomposed. It has turned into compost. When finished, a dark, rich soil remains. It may be used in gardens, flower pots, flower gardens, and lawns.

Food and yard waste make up 20-30% of our trash. Food waste is any leftover fruit or vegetable scraps, such as potato peels, orange peels, and apple cores. Yard waste includes grass clippings, fallen leaves, weeds, small twigs and branches. Garden waste, like weeds, over-ripe vegetables, wilted or bug eaten greens and old flowers could also be included.

The first step in reducing food waste means careful buying and proper storage of food products. By preventing spoilage, the amount of food thrown away is less.

The second step in reducing the amount of food and yard waste taken to the landfill is composting. A composting pile contains yard, garden and/or food waste (not meat or grease). The materials in a compost pile are broken down by microorganisms (you can only see them by using a microscope) and other helpful insects and worms. You should not put meat or grease in your compost pile.

What is made with recycled paper?
¿Qué está hecho con papel reciclado?



Flipcard 23

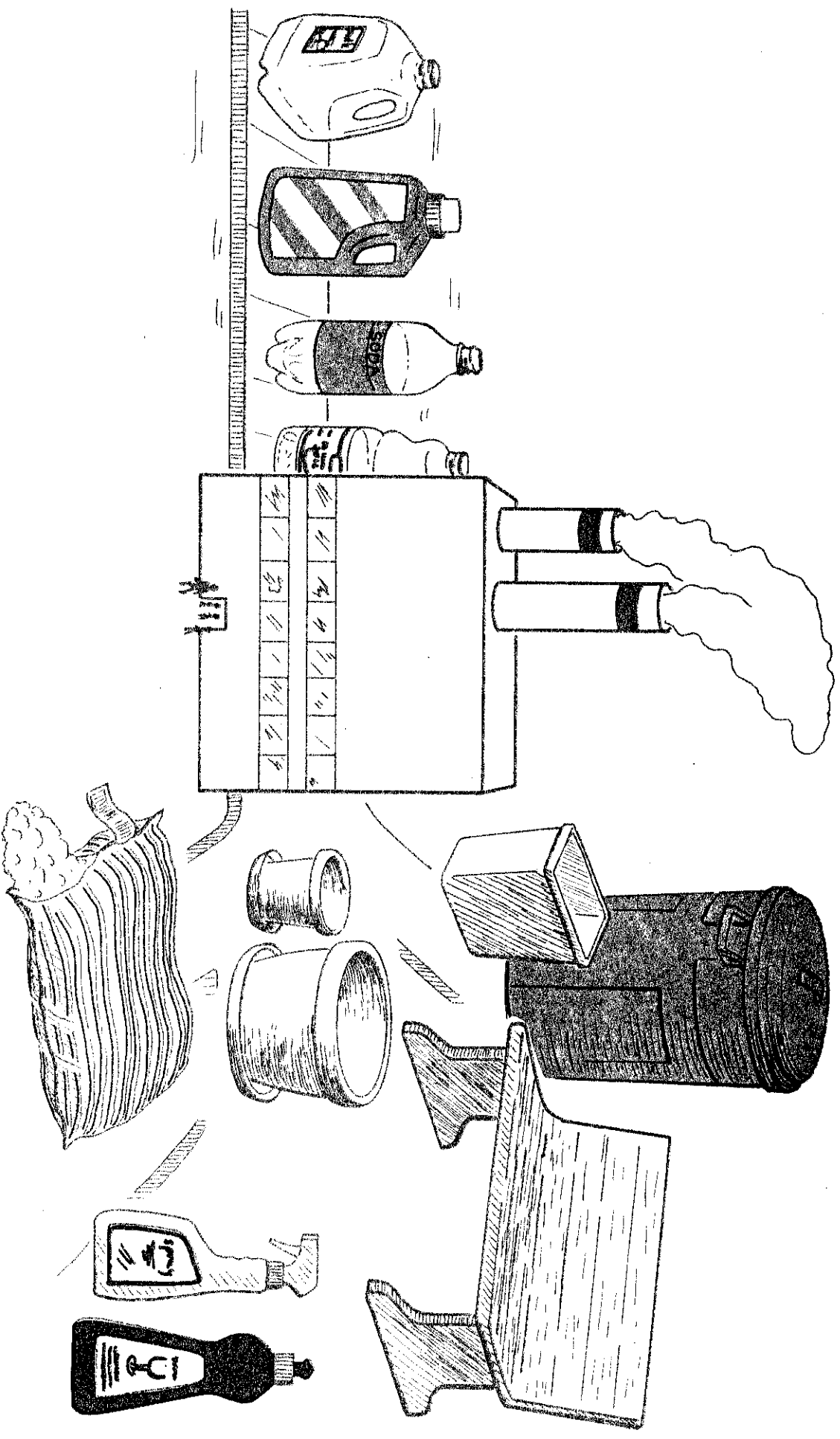
What Is Made with Recycled Paper?

Recycled paper is used for making game boards, record jackets, egg cartons, grocery store food boxes, book covers, gift boxes, jigsaw puzzles, game and show tickets and cereal boxes.

Forty million tons of paper that could be recycled is thrown away in the United States each year. This includes newspaper as well as office paper, note paper, envelopes, magazines, and phone books.

Making paper from trees causes 95% more air pollution than making paper from recycled materials. Remember - look for the gray interior when looking for recycled paper products.

What is made with recycled plastic?
¿Qué está hecho con plásticos reciclados?



Flipcard 24

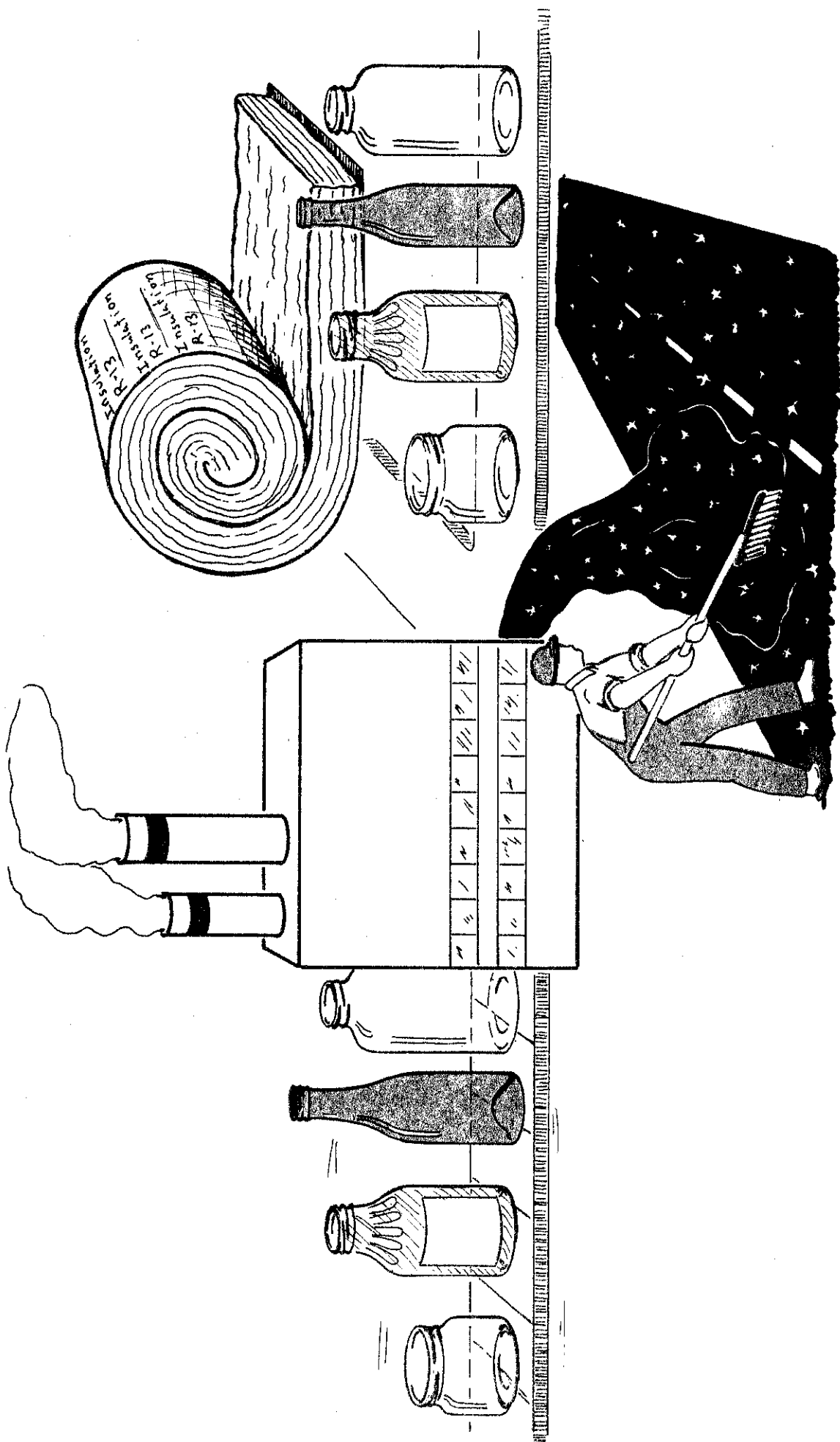
What Is Made with Recycled Plastic?

Recycled plastic is used for carpets, fiberfill in pillows, ski-jackets, cushions, sleeping bags, paint brushes, appliance handles and cases, textiles and fibers, non-food containers (such as shampoo and detergent bottles), plastic building material, sinks, boat hulls and flower pots. One company even makes shoes out of recycled plastic!

Plastics that can be recycled are #1 (PETE) and #2 (HDPE). It pays to keep up with current recycling policies in your community. As our ability to process different plastics changes, more plastics (#3, #4, #5, #6, and #7) may become recyclable.

Plastic is not always used to make the same product--that is, plastic bottles are not always made into other plastic bottles-they may be made into carpeting instead!

What is made with recycled glass?
¿Qué está hecho con vidrio reciclado?



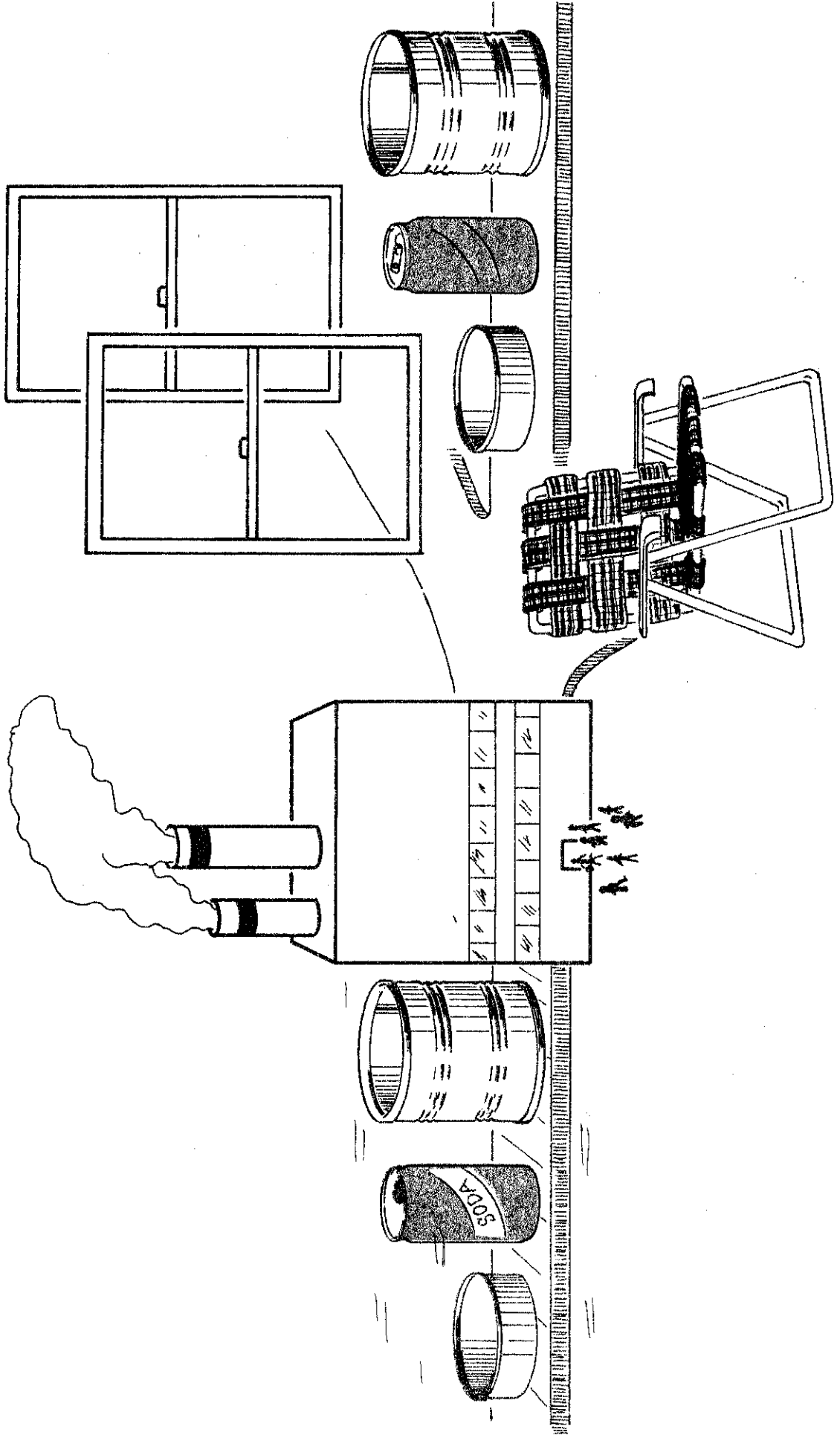
Flipcard 25

What Is Made with Recycled Glass?

Recycled glass is used for new bottles, asphalt, brick, tile, reflective paint for highway signs and fiberglass insulation.

Glass bottles and jars can be recycled. Plate glass (glass for windows), glass light bulbs, and other types of glass are usually not recycled. Some communities collect only colorless glass, while others collect colored (green and brown) glass as well.

What is made with recycled metals?
¿Qué está hecho con metales reciclados?



Flipcard 26

What Is Made with Recycled Metals?

Recycled metal and aluminum are used for cans, lawn chairs, window frames, printing plates, car parts, pots and airplanes.

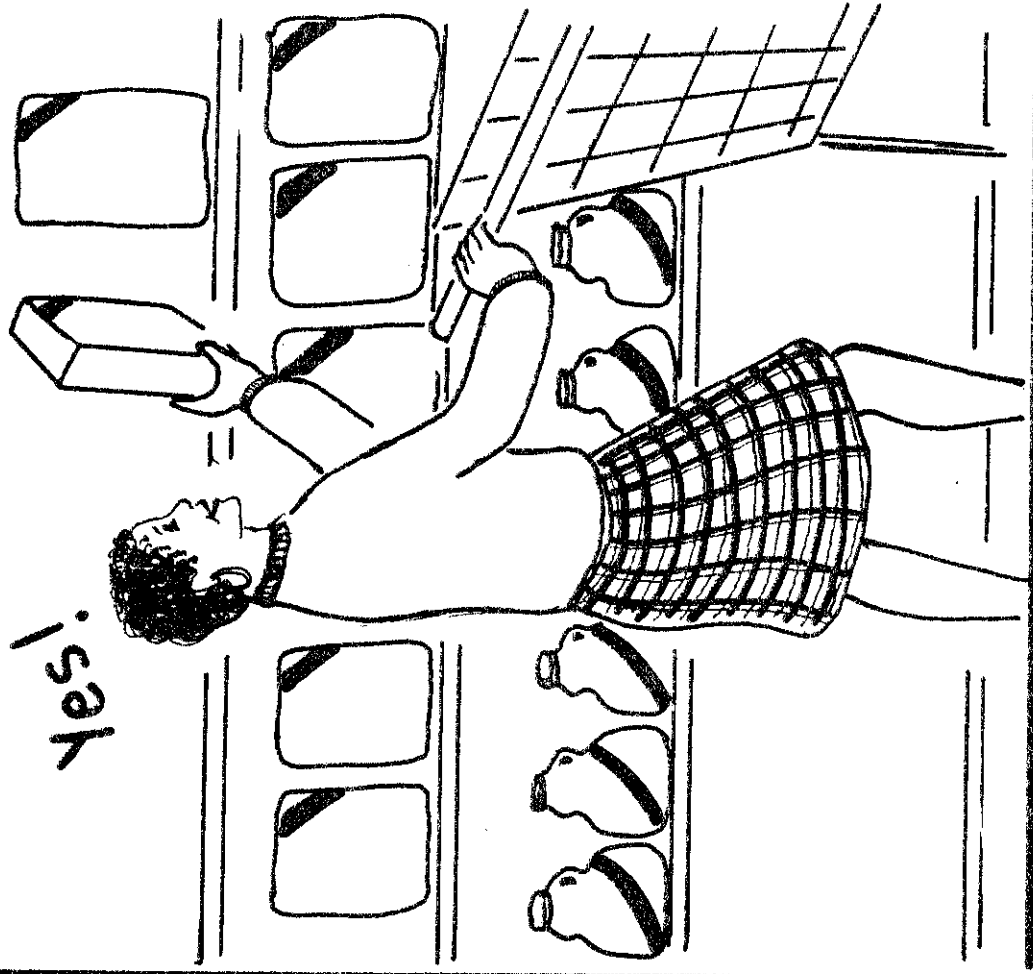
Metals that can be recycled include cans, aluminum foil and foil pans.

If we recycle the aluminum trash Americans throw away every three months, we could rebuild the entire United States airline fleet.

Vote with your dollars.

Vota con sus dolares.

yes!



NO



Flipcard 27

Vote with Your Dollars

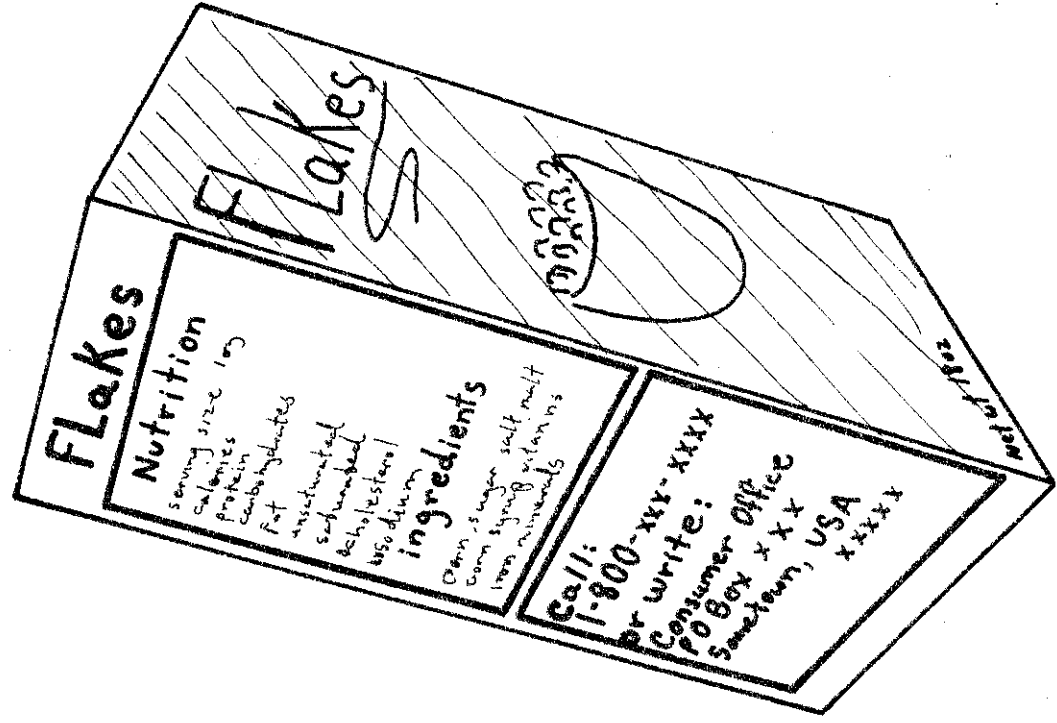
Can consumers decide which products will be sold in a store and how they will be packaged? At first, the answer seems to be, "No!" But consumers have a great influence over what is sold and how it is marketed.

When a consumer buys a product, he or she is not purchasing just the product. The consumer is also buying the marketing of that product. Product marketing consists of several things: how the product is packaged, promoted, advertised, and displayed.

The manufacturer responds to consumer demands. If a product does not sell, it does not continue to exist. Under that system, the consumer has power. If consumers do not buy a product, the product will be changed to meet the needs and wants of the consumer or production is stopped.

When a consumer buys or rejects a product, he or she is casting a vote for or against a product and all the marketing involved.

You can call the 1-800 number or write the company.
Puede llamar el numero 1-800 o escriba a la compañía.



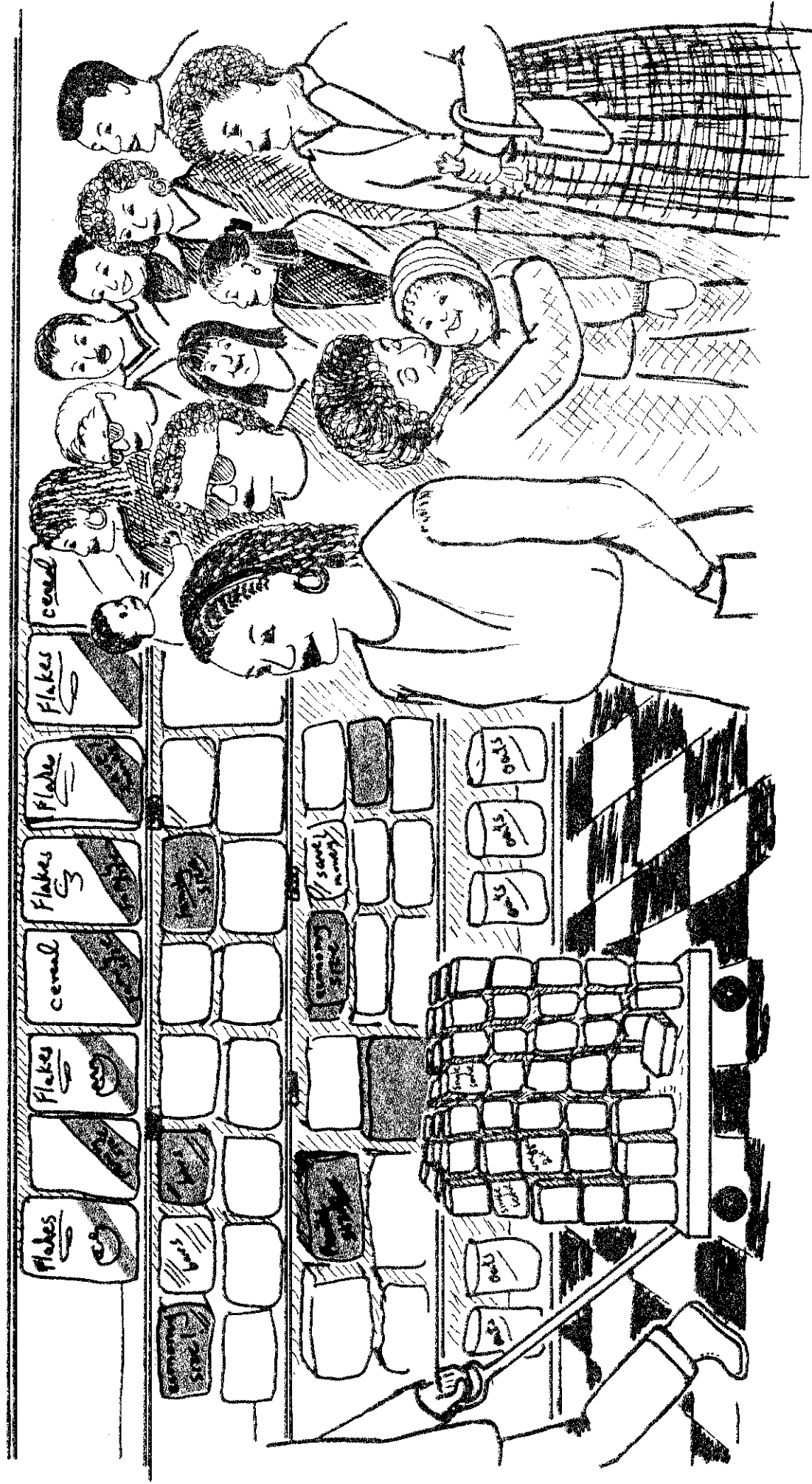
Flipcard 28

You Can Call the 1-800 Number or Write the Company

One way to respond to products and packages you don't like is to write or call the manufacturer of the product or package. The manufacturer's address is written on the package, and an 800-number is often listed.

When you call or write, give examples of the product. Explain why you do not like it. Tell the manufacturer, what kind of product or package you would like to buy. Ask the manufacturer if there is a reason why the product is packaged the way it is. Some expected reasons may be for freshness, handling or consumer safety. Offer your suggestions for how the problem could be solved.

You can make a change.
Usted puede hacer un cambio.

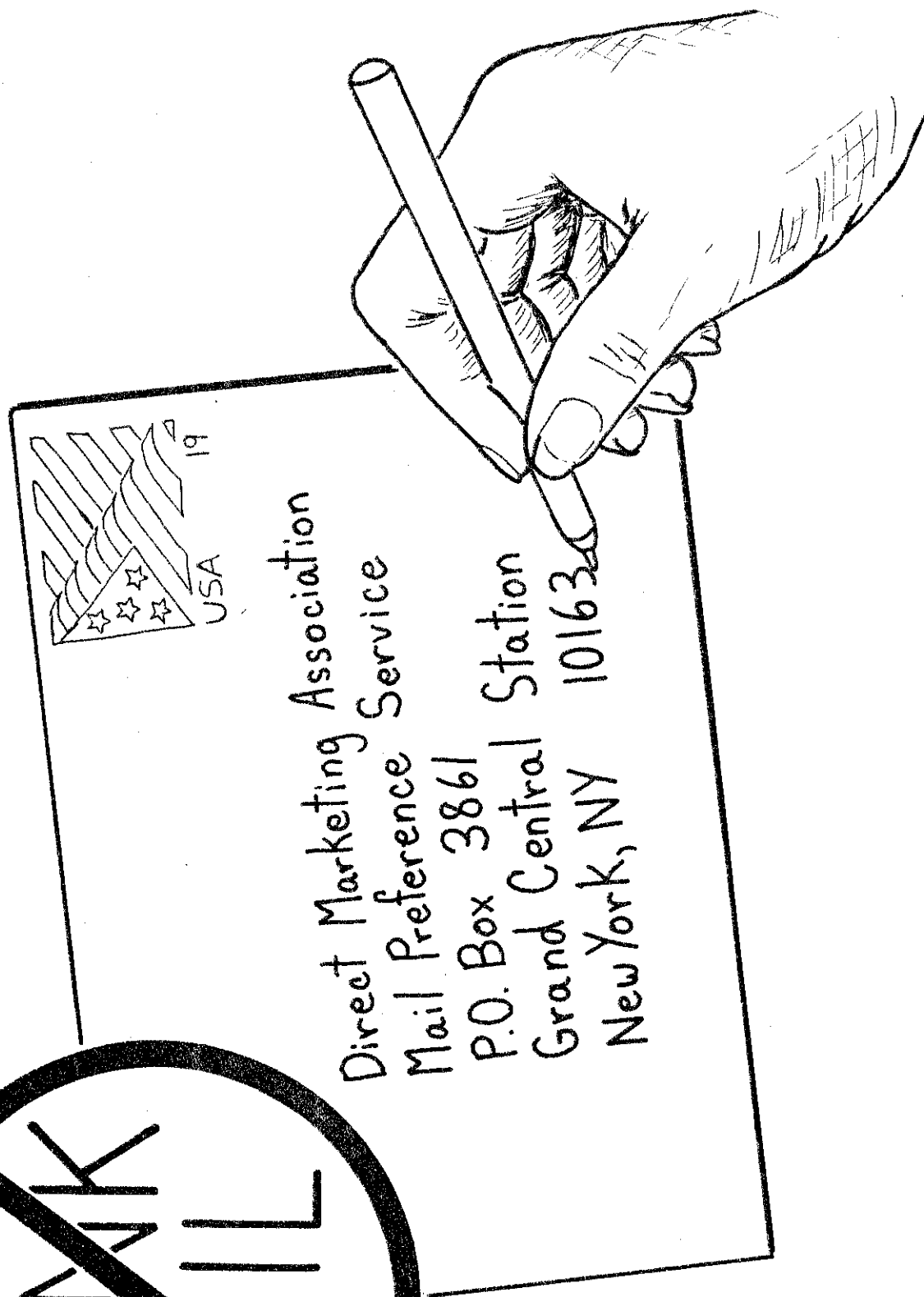
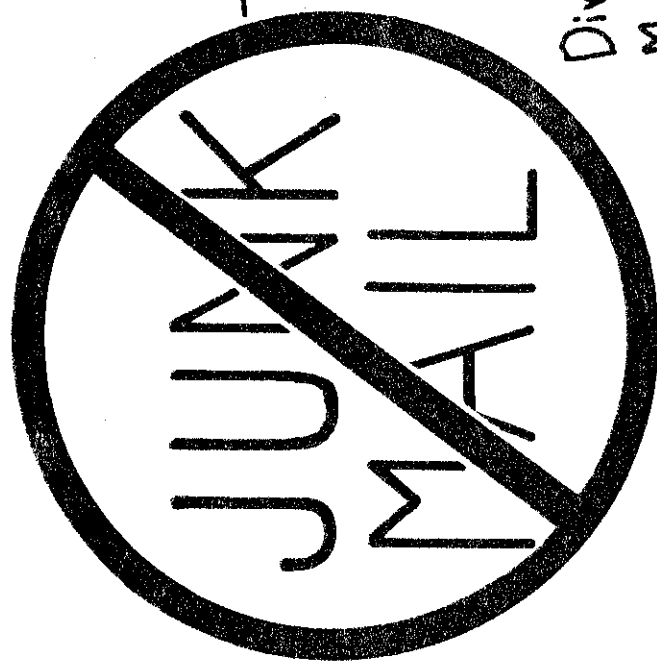


Flipcard 29

You Can Make A Change

Unlike our democratic voting system, consumers do not have to be the majority (51%) of the votes to make a change in product packaging. Only 10-12% of consumers need to stop buying a product to send a message to the manufacturer. If a product is not selling, the manufacturer or store manager will begin to ask why. If you shop at a supermarket where 1,000 people shop - only 100 people have to stop purchasing a product to make changes happen.

Besides voting with your dollars, there are other ways to change the packaging or products available. One way is to tell the manufacturer or store manager what you do or do not want. Tell the manager what types of products you cannot find in the store. Be sure to give examples and explain why you want these products. Ask the manager to consider these products the next time he or she buys products for the store.



Direct Marketing Association
Mail Preference Service
P.O. Box 3861
Grand Central Station
New York, NY 10163

Flipcard 30

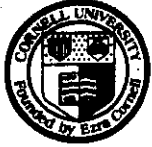
(Junk Mail)

Excessive paper waste also comes from junk mail. Americans receive almost two million tons of junk mail every year, using the paper from 100 million trees. You can cut back on the junk mail you receive by writing:

Mail Preference Service
P.O. Box 3861
New York NY 10163-3861

Ask them to remove your name from any lists they have.

To stop the junk mail you are already receive, write to the individual company. Ask them to remove your name from their mailing list.



**Cornell
Cooperative
Extension**

**Department of
Consumer Economics
and Housing**

Cornell University
116 Martha Van Rensselaer Hall
Ithaca, NY 14853-4401
607-255-2577
FAX 607-255-0799

November, 1994

To Purchasers of **Get the Goods, Not the Garbage**

Fr Jeanne M. Hogarth *JMH*
Project Director

Re Error on Flipcard #4

Thanks to the diligence of one of the people who purchased **Get the Goods**, we became aware of an error on the text of Flipcard #4. We have enclosed correct text which should be attached to the **BACK** of Flipcard #4.

We hope you are enjoying -- or will enjoy -- using **Get the Goods**. We've gotten a lot of positive feedback -- please let us know about your experiences!

Helping You Put Knowledge to Work

Cornell Cooperative Extension provides equal program and employment opportunities. NYS College of agriculture and Life Sciences, NYS College of Human Ecology, and NYS College of Veterinary Medicine at Cornell University, Cooperative Extension associations, county governing bodies, and U.S. Department of Agriculture, cooperating.

Corrections Get the Goods, Not the Garbage

The address for the Direct Marketing Association's Mail Preference Service has changed since we went to press with the flipcards. Please **replace** the addresses on the **front** and **back** of flipcard #30 with the labels provided. Use the larger, green ink label for the front of the flipcard and the smaller black ink label for the back of the flipcard.

Mail Preference Service
P.O. Box 9008
Farmingdale, NY 11735

P.O. Box 9008
Farmingdale
New York 11735

70-5085-10-Z004 70-5085-30-Z002

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VITAMIN A & D



CORNELL
UNIVERSITY

10 FL OZ (295 ml)

PUSH UP **HERE** S P O U T **HERE** PUSH UP
 TO OPEN

PASTEURIZED HOMOGENIZED LOWFAT MILK
2% MILKFAT VITAMIN A&D
NUTRITION INFORMATION PER SERVING

SERVING SIZE	ONE CUP	CARBOHYDRATE	11 GRAMS
SERVINGS PER CONTAINER	125	FAT	5 GRAMS
CALORIES	125	PROTEIN	11.5 MG
PROTEIN	8 GRAMS		

% OF U.S. RECOMMENDED DAILY ALLOWANCES (U.S. RDA)

PROTEIN	20	CHOLINE	30
VITAMIN A	10	NIACIN	20
VITAMIN C	5	VITAMIN D	20

CONTAINS LESS THAN 1% OF THE U.S. RDA OF THESE NUTRIENTS

INGREDIENTS: LOWFAT MILK, VITAMIN A PALMITATE AND VITAMIN D3

PRODUCED AND PROCESSED AT

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STOCKING HALL, CORNELL UNIVERSITY, ITHACA, NY 14853

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10 FL OZ (295 ml)

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10 FL OZ (295 ml)

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Department of Food Science
Stocking Hall
Ithaca, New York 14853

ONE QUART
(946 ml)

HOMOGENIZED
LOWFAT MILK

2% MILKFAT
VITAMIN A & D

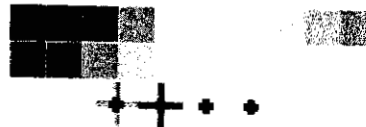


HOMOGENIZED
LOWFAT MILK

2% MILKFAT
VITAMIN A & D



ONE QUART
(946 ml)



PUSH UP **HERE** S P O U T **HERE** PUSH UP
 TO OPEN

**PASTEURIZED
 HOMOGENIZED
 LOWFAT
 MILK
 2% MILKFAT
 VITAMIN A & D**

NUTRITION INFORMATION

PER SERVING

SERVING SIZE	ONE CUP
SERVINGS PER CONTAINER	4
CALORIES	120
PROTEIN	8 GRAMS
CARBOHYDRATE	11 GRAMS
FAT	5 GRAMS
SODIUM	125 MG

**% OF US RECOMMENDED DAILY
 ALLOWANCES (US RDA)**

PROTEIN	20	VITAMIN D	25
VITAMIN A	10	VITAMIN B ₁₂	4
VITAMIN C	4	VITAMIN B ₆	15
THIAMINE	8	PHOSPHORUS	20
RIBOFLAVIN	25	MAGNESIUM	8
NIACIN	*	ZINC	4
CALCIUM	30	PANTOTHENIC ACID	8
IRON	*		

*CONTAINS LESS THAN 2% OF THE
 US RDA OF THESE NUTRIENTS.

INGREDIENTS: LOWFAT MILK, VITAMIN A
 PALMITATE AND VITAMIN D₃

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 ITHACA, N.Y. 14853
 PLANT NO. 36-8832

**ONE QUART
 (946 ml)**

**HOMOGENIZED
 LOWFAT MILK**

**2% MILKFAT
 VITAMIN A & D**



**HOMOGENIZED
 LOWFAT MILK**

**2% MILKFAT
 VITAMIN A & D**



**ONE QUART
 (946 ml)**