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ABSTRACT

This document contains lesson plans about recycling for teachers in grades K-12. Titles include: (1) "Waste--Where Does It Come From? Where Does It Go?" (2) "Litter Detectives," (3) "Classroom Paper Recycling," (4) "Recycling Survey," (5) "Disposal and Recycling Costs," (6) "Composting Project," (7) "Used Motor Oil Recycling," (8) "Unwrapping Packaging," (9) "Buy Recycled in a Box," (10) "Buy Recycled Sleuth: Where are Those Recycled Products?" and (11) "The Great Buy Recycled Shopping Spree." Each lesson plan contains grade level, objectives, resources and materials needed, and procedures. (MKR)

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RECYCLING LESSON PLANS

PENNSYLVANIA RECYCLING MONTH

WASTE - WHERE DOES IT COME FROM?
WHERE DOES IT GO?

LITTER DETECTIVES

CLASSROOM PAPER RECYCLING

RECYCLING SURVEY

DISPOSAL AND RECYCLING COSTS

COMPOSTING PROJECT

MOTOR OIL RECYCLING

UNWRAPPING PACKAGING

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PA. DEPT. OF ENVIRONMENTAL RESOURCES
BUREAU OF WASTE MANAGEMENT
WASTE REDUCTION AND RECYCLING



COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL RESOURCES

P.O. Box 8472
Harrisburg, PA 17105-8472

717-787-7382

Bureau of Waste Management

Dear Educator:

Thank you for your interest in recycling. This assortment of lesson plans was assembled for distribution to Pennsylvania schools during Recycling Month. The lessons were designed to help instill an awareness of the importance of recycling as a method of waste management.

Recycling offers an opportunity for us to affect the increasing volume of trash that we produce. Through participation in the exercises, students can learn more about society's growing trash problems and the role they can play to help solve them.

It is becoming more common for schools in Pennsylvania to include environmental education as a part of their science studies. You will find that these lessons also involve the subject areas of language arts, math and social studies, creating an integrated approach to recycling activities. Learning more about waste management and recycling will allow students to develop conservation habits that can last a lifetime. Recycling exercises performed in the classroom become valuable practices when repeated in the home.

The lessons may be adapted for most grade levels. I hope you will find the lessons useful for your classroom. I welcome any comments or suggestions you may have that will improve environmental education and recycling opportunities in the Commonwealth. If you need to know where you can recycle, please call the Pennsylvania Recycling Hotline at 1-800-346-4242.

Sincerely,

Carl R. Hursh, Chief
Waste Reduction and Recycling

**WASTE - WHERE DOES IT COME FROM?
WHERE DOES IT GO?
K-12**

- OBJECTIVES:** The students will identify the various waste materials generated in the school. They will describe the sequence of collection and the destination of the materials identified.
- RESOURCES:** Classroom wastebasket, maintenance personnel, area road map, chalkboard.
- PROCEDURE:**
1. Separate the class into three groups.
 2. Have group one examine the contents of the classroom wastebasket. Ask the group to identify the various types of waste materials generated in the classroom. Categorize the waste materials as paper products, glass, metals, plastics, organic wastes, etc. Record the findings on the chalkboard.
 3. The second group should examine the flow of the waste materials after they are collected from the classroom. This may require an interview with maintenance personnel. Are the wastes consolidated with other classroom's wastes? Why? Are the wastes transferred to a large capacity receptacle? Are any wastes burned in a school incinerator? Are any waste materials recycled? If wastes are collected from the school by the municipality or a commercial disposal firm, where are the wastes disposed?
 4. Have the third group determine the types of wastes generated in special subject areas of the school (arts and crafts, gym, home economics, industrial arts, etc.), the school cafeteria, the office, the maintenance area. Are these wastes handled in the same manner as classroom wastes? Determine what other wastes are generated by the school. Where do these wastes go?
 5. Regroup the class. Have a member or members of each group report the group findings, beginning with group one. Create a diagram or a flowchart on the chalkboard to outline the reports of groups two and three, indicating the steps between waste generation and waste disposal.
 6. Ask whether any members of the class live near or have visited a landfill, an incinerator, a recycling center, or a sewage treatment plant. Ask for descriptions and impressions of the facilities. Determine whether any of these facilities are located near the school. You may need to contact your county planning department for the locations. Plot the facility locations and the school location on the road map. Calculate the distances that waste materials must be transported to each facility. List the type of wastes generated by the school which are managed by each facility and the distance of each facility from the school.

7. (Optional) Arrange a class field trip to one or more waste management facility. Create a class record for each facility. Include photos, drawings, essays, and audio or video tape recordings

LITTER DETECTIVES K-12

OBJECTIVES: The students will develop a positive attitude against littering. Students will develop solutions to help reduce littering.

RESOURCES: Chalkboard, litter collection bags, a map of the school building and grounds.

- PROCEDURE:**
1. Ask the class what "littering" is. Ask the class whether any of the members have littered. What was littered? Why? Do the students know of any areas in or around the school where litter can be found?
 2. Divide the class into small groups. Using student suggestions, select a destination for each group to search for litter. The locations can be indoors or outdoors and must be as specific as possible. Identify the locations on the map. The goal of the exercise is to collect and analyze all litter located within the selected area. Allow 15 - 30 minutes for the litter collection.
 3. After the litter collection, have each group examine the collected litter materials. Each group should categorize the litter and determine the most frequent litter components. Record the data on the chalkboard. Have each group relate its experience to the class. Each group should identify its litter search area on the map.
 4. After the group presentations, discuss:
 - Which locations yielded the most litter and why?
 - Can any of the littered items be recycled or used in some other way?
 - By examining the types of litter, can it be determined which age group may be most responsible for the problem?
 - Does the school or community have rules or laws against littering? If so, are the rules or laws enforced? What penalties are involved?
 - How is litter managed at your school?
 - Does the school provide refuse containers near the litter locations?
 - How can the amount of littering be reduced?

5. As a follow-up activity, repeat the exercise after a week or month has passed and compare the findings.

CLASSROOM PAPER RECYCLING 6-12

- OBJECTIVE:** The students will identify recycling as an alternative to disposal of paper. A method for determining the cost-effectiveness of a recycling program will be described.
- RESOURCES:** Bathroom or other scale, calculator, classroom wastebasket, paper grocery bags or cardboard boxes, telephone directory, telephone.
- PROCEDURE:**
1. Ask the class to separate paper items from other classroom disposables for one week, segregating them into a suitable collection container. Label the collection container "Recyclable Paper."
 2. Discuss with the class ways in which the collected paper might be re-used in the classroom. Are there other uses for the paper in the school?
 3. Weigh the paper after one week's collection. Project the weight of paper that might be collected in a month's time, a semester, the school year. Multiply the projected weights by the number of other classrooms in the school. Convert the figures to tons for results greater than 2,000 lbs. Record the projections.
 4. Consult the yellow pages of the telephone directory for the location of a scrap paper market (see "scrap dealers" or "scrap metals"). Contact the scrap paper markets to determine preparation requirements and prices paid for various grades of paper, including mixed ledger (office quality) paper, newsprint, computer paper, corrugated cardboard, mixed wastepaper, and magazines. Determine whether there is a market for the paper collected in the classroom. Inquire whether the scrap paper dealer will provide transportation of the recycled paper.
 5. What is the current value of the paper collected in the classroom? Would separating the paper into two or more market grades improve its value? If transportation is not provided by the scrap paper dealer, what will it cost to transport the paper to market?
 6. Determine whether the recycling effort could be cost-effective on a classroom basis. Compare potential revenues from the sale of the recycled paper to the costs to collect and transport the paper to market. Would it be cost-effective if all the paper discarded in the school could be recycled?
 7. Consider the disposal cost avoided if the paper is recycled rather than disposed. Contact the disposal service that collects the school's waste to determine the cost per ton of collection and disposal. Could the "avoided disposal cost" savings improve the cost-effectiveness of the paper recycling effort? (Each ton recycled is one ton less to be disposed.) Could the school save money by recycling paper?

8. Discuss the findings with the class and the school principal. Publicize the results of the study in the school newspaper.
9. The Pennsylvania Resources Council can provide a comprehensive informational pamphlet to schools interested in developing a recycling program. Write or call for:

"Recycling in Schools"
 Pennsylvania Resources Council
 25 West Third Street
 Media, PA 19063
 215-565-9131

PAPER RECYCLING COST-EFFECTIVENESS

$$\begin{array}{l}
 \text{A. } \left[\frac{\text{weight of paper}}{\quad} \times \frac{\text{scrap price}}{\quad} \right] - \left[\frac{\text{collection cost}}{\quad} + \frac{\text{transportation cost}}{\quad} \right] = \frac{\text{paper value}}{\quad} \\
 \text{B. } \frac{\text{weight of paper}}{\quad} \times \left[\frac{\text{waste collection cost}}{\quad} + \frac{\text{waste disposal cost}}{\quad} \right] = \frac{\text{avoided disposal cost}}{\quad} \\
 \text{C. } \frac{\text{paper value}}{\quad} + \frac{\text{avoided disposal cost}}{\quad} = \frac{\text{paper recycling cost-effectiveness}}{\quad}
 \end{array}$$

(note: units of weight and value must be consistent)

RECYCLING SURVEY K-12

OBJECTIVE: The student will become familiar with popular attitudes toward recycling and the practice of recycling in the community.

RESOURCES: Duplication of survey forms, chalkboard.

INTRO.: Many items present in household waste are recyclable provided that the householder has the initiative to recycle and a convenient outlet exists for the recycled materials. It has been estimated that recycling takes only a few minutes each day. While over 50% of residential waste is recyclable, only about one percent is presently recycled in Pennsylvania.

Some communities collect recyclable materials with regular garbage collection. Some communities rely on householders to transport recyclables to a collection center. Some collection centers pay for certain recyclable materials.

Recycling helps to conserve energy and natural resources, contributes to the economy, and reduces the amount of municipal waste requiring disposal. Recycling also promotes an awareness of the finiteness of our natural resources and offers an environmentally acceptable method of municipal waste management.

- PROCEDURE:**
1. Engage the class in a discussion on the subject of recycling. Survey the class to determine whether any students assist in a family recycling effort, or recycle on their own. Ask for descriptions of how recycling is accomplished and what materials are recycled. Why do they recycle? Is money earned from the effort? Have any students visited a recycling center? Solicit descriptions and impressions.
 2. Suggest to the class that it would be interesting to discover how others feel about recycling. A survey could be conducted which would also determine how many others in the school and community recycle.
 3. Have the class brainstorm a list of questions that they might ask to others about recycling. Suggestions include:
 - Do you know the meaning of the term "recycle"?
 - Do you recycle? Why?
 - Why don't you recycle?
 - Do you think you should recycle?
 - What materials do you recycle?
 - How do you recycle?
 - Where do you recycle?
 - Do you get paid for recycled materials?
 - How much time is devoted to recycling each day or week?
 - Do you think you could recycle more?

Assemble the questions selected into a logical order and an easily presentable format. Allow sufficient space for answers. A single page survey form limited to ten or fewer questions is suggested.

4. Duplicate the survey form and distribute one or several forms to each student. Ask the students to interview students in other classes, or teachers, neighbors, friends, relatives, etc., completing a survey form for each interview. Allow several days or a weekend for the survey.
5. Collect the survey forms. List the questions or numbers of the questions on the chalkboard and compile the results. Develop percentages for each response.
6. Discuss the results with the class. Are certain materials recycled more frequently than others? Why? What is the recycling participation rate? Do any recyclers recycle more than one item? Do non-recyclers suggest common reasons for not recycling? Are the reasons valid? Why do people recycle?

DISPOSAL AND RECYCLING COSTS

6-12

OBJECTIVES: The students will gain an awareness of the costs of waste disposal. The students will demonstrate that disposal costs may be offset by recycling a portion of municipal waste.

RESOURCES: Calculator, chalkboard.

INTRO.: Eleven million Pennsylvanians generate over nine million tons of municipal waste annually. That is the equivalent of nearly five pounds of waste generated per person per day. In some Pennsylvania communities, the cost for disposal of municipal waste exceeds \$40.00 per ton. This does not include the cost for collection and transportation of the waste.

It has been estimated that over 50% of the municipal waste generated is comprised of materials which are recyclable, but only about one percent is presently recycled.

- PROCEDURE:**
1. Ask each member of the class to calculate the amount of municipal waste generated by his family in a week using the factor of five pounds per person per day. Discuss with the class whether the results are realistic. How do some families generate less garbage? (Buying less, buying less packaging, reusing, recycling, composting, etc.).
 2. Have the class calculate the amount of municipal waste a community of 10,000 persons would generate annually. What would be the annual cost to the community for its waste disposal at \$40.00 per ton? Discuss with the class how communities pay for disposal of municipal waste (direct payment for municipal collection and disposal, taxes, utility fee, direct payment to contracting disposal firms).
 3. Assume that 25% of the community waste could be recovered and sold through recycling. Assume that the average market price paid for aluminum, glass, ferrous metal, paper and plastic is \$10.00 per ton. Assume that the cost for collection and transportation of recyclables is equivalent to that of waste.

Ask the class to calculate the amount of the annual community waste disposal cost that could be saved through recycling. Did the class consider that an additional savings would be realized since the amount of waste requiring disposal has been reduced by 25%?

4. Discuss with the class other benefits associated with the recycling of municipal waste (energy and natural resource conservation, environmental benefits of disposal avoidance including conservation of existing landfill space, employment in the recycling industry, etc.).
5. Ask the class members whether a recycling effort in their community could affect disposal costs. Why?

COMPOSTING PROJECT 6-12

- OBJECTIVE:** Creating a compost pile as a classroom project will demonstrate to students that natural materials can be recycled.
- RESOURCES:** A location for the project, organic waste materials, a garden pitchfork, soil, water. (Lime, manure, nitrogenous fertilizer, materials to construct an enclosure, a $\frac{1}{2}$ -inch mesh screen, and a soil thermometer are optional.) Volunteers must be available to construct and maintain the compost pile.
- INTRO.:** Compost is an inexpensive and effective soil conditioner that recycles organic waste materials. Nutrients in plant material are returned to the soil through the breakdown of organic material by the action of microscopic fungi and aerobic bacteria. Organic wastes are decomposed, and the result is a material useful as a natural fertilizer.

In Japan, Europe, and recently in the United States, municipalities have established large-scale solid municipal composting facilities. The volume of organic material composted is diverted from other disposal facilities. Municipalities have found that composting leaves collected in the fall can save disposal fees.

When properly managed, a compost pile will not produce odors or attract pests. The finished product can be ready for use as a garden mulch in as little as six weeks with proper management. Compost has proven valuable for use in land reclamation efforts where erosion or earthmoving activities have disturbed the topsoil.

- PROCEDURE:**
1. Find a suitable outdoor site to locate the compost pile. The pile should be exposed to rainfall, but may work best in a shaded location. Proximity to a water source is suggested.

A good time to start a compost pile is whenever organic materials are available. The fall of the year is quite suitable, since composting can serve as an alternative to the burning or landfilling of leaves. Tree-trimmings, grass clippings, garden refuse, kitchen and lunchroom food wastes, sawdust, manure, wood ashes, hay and straw are among the organic wastes suitable for composting. Meat and dairy products should be avoided.
 2. Develop a plan of operation that outlines the procedures for conducting the composting project. Present the plan to the school principal. Permission and support from administrative and maintenance personnel must be obtained before initiation of the composting project.
 3. An easy to manage compost pile can be enclosed on three sides by utilizing wooden pallets, used concrete block, fencing, snow-fencing, or hay bales. The fourth side should be accessible to permit turning the pile. A 4'x4'x4' enclosure can yield a ton of compost.

A compost pile can be constructed without an enclosure. A shallow pit may be excavated and the organic material simply piled. The excavated soil will be added to the pile.

4. Begin the compost pile with a layer of branches or cornstalks to help promote ventilation and drainage. The compost pile is then built with successive eight-inch layers consisting of a six-inch layer of organic material moistened with water and covered with two inches of soil, lime, manure or nitrogenous fertilizer. Shredding the organic materials will accelerate the decomposition process.

The eight-inch layers are repeated until the pile is four feet high. Each layer should be moistened, but not soaked. Materials in the compost pile should always remain as damp as a squeezed sponge. A depression created at the top center of the pile will collect precipitation. (Layering of materials is not essential to the process.)

5. The compost pile is now ready for decomposition. During this phase the temperature within the pile may reach 175° F. The heat is effective in eliminating most disease organisms, insects, and weed seeds. Diseased or infested materials should not be added to the compost pile.

The pile should be turned over and mixed every few weeks to move outer materials to the center. Less frequent turning will delay decomposition. A steady decrease in the temperature at the center of the pile will signal the end of the fermentation process. When the compost is finished, it will have a dark color and a crumbly soil-like texture.

6. Maintain a record of the composting process. Enter the date of compost pile construction, the organic materials added to the pile, the days the compost pile is turned, the date the compost is ready, how the compost is used and other observations.
7. A soil thermometer can be used to monitor the temperature of the pile. Create a compost pile temperature chart plotting thermometer readings over the term of the project.
8. The finished compost may be sifted through a $\frac{1}{2}$ " mesh screen with rejected particles returned to the compost pile, or the compost may be added directly to garden soil. Applied as a mulch or top dressing around plants shrubs and trees, the compost will provide soil nutrients, retain moisture, and inhibit weed growth. Look for uses for compost around the school grounds. Consider marketing sifted compost as a fund-raising activity.
9. Prepare a report that will describe the composting project. Refer to the project log (Item 6) for key information. Present the report to the school principal. Consider publicizing the project in the school and community newspaper.

USED MOTOR OIL RECYCLING

4-12

OBJECTIVES: The student will gain an awareness that used motor oil is a resource to be recycled rather than discarded. The student will be able to identify locations where used motor oil may be recycled.

RESOURCES: Community map or road map, chalkboard, telephone.

INTRO.: Over 35 million gallons of used motor oil are generated each year in Pennsylvania. Individuals performing oil changes at home generate nearly 65% of the total, or 23 million gallons. Used motor oil can be refined and reused.

If recycled, the oil could save about a half million barrels of crude oil each year, worth nearly \$10 million dollars. Unfortunately, used motor oil is sometimes burned and is often dumped onto the ground, into drains and sewers, into streams, and into landfills. Used motor oil can contain concentrations of toxic heavy metals. Improperly disposed, used motor oil affects the environment, including wildlife, vegetation, surface water and drinking water supplies.

Pennsylvania has initiated a used oil recycling program requiring certain automotive service centers to provide oil recycling service.

- PROCEDURE:**
1. Survey class members to determine whether their family automobile oil is changed at home or at a service station. Record the results on the chalkboard. Compare the results with the reported average of the estimated 65% "do-it-yourselfers" who perform all changes.
 2. Follow-up by asking students whether they know what becomes of the used oil that is replaced during the oil change. Do any families recycle used motor oil? Where is the oil recycled?
 3. Call the Used Oil Recycling Hotline at 1-717-783-6004 for a list of oil recycling outlets in the community, or contact local recycling centers, garages or automotive service centers to inquire whether used motor oil is accepted for recycling. Plot the used motor oil recycling centers on the community map. Identify each student's residence, compare the locations, and estimate the distances between.
 4. Discuss with the class the economic and environmental implications of not recycling used motor oil (refer to the above introduction). Use the chalkboard to list benefits of recycling and environmental consequences of improper disposal.
 5. Follow-up by asking the class why they feel that recycling used motor oil is good for the environment. Ask members of the class to identify the type of containers they might use to recycle used motor oil, and how they would transport it to the recycling center.

UNWRAPPING PACKAGING 4-12

OBJECTIVE: The students will be able to examine product packaging to determine whether packaging is excessive and whether it is recyclable. The students will be able to identify waste reduction techniques.

RESOURCES: Empty food containers, calculator, postal or other scale, chalkboard or handout.

- PROCEDURE:**
1. Ask each student to bring to class a food container from home. Boxes and packages should be empty. Cans, bottles, jars, etc. must be rinsed clean, and labels left intact. Be sure to include lids or caps. (It may be necessary for the instructor to provide examples and extra containers as needed).
 2. Have the class separate into groups according to the container materials the students have provided: aluminum, glass, steel or tin, paper, plastic, multi-material, etc.
 3. Ask each group to examine its container labels and determine the weight of the product. Net weight will identify the weight of the contents only. Gross weight will denote the sum of the weight of container and its contents. (Most weights will be stated as net weight).
 4. Using a scale, have each student determine the weight of his empty container. Each group should complete a chart (on the chalkboard or on a handout) with each student entering the name of his product, the package weight as determined, the weight of the contents, and the gross (total) weight. Consistent units of measure must be used throughout the class (ounces or grams).
 5. Have each group calculate the average percent of packaging for the group's products using the formula:

$$\text{Average Percent of Packaging} = \frac{\text{Total Package Weight (A)}}{\text{Total Gross Weight (C)}} \times 100$$

Display the results for each group on the chalkboard.

6. Discuss with the class the various group results. Which packaging material offers the least percentage of packaging weight and which the most? What advantages do each of the packages offer? Does some packaging seem excessive? Are some products packaged in a variety of materials?
7. What implications can be made regarding the cost of packaging, costs for transporting the products, and waste disposal requirements for packaging?

8. Ask each member of the class to examine his container label for the presence of a recycling symbol. Students locating a recycling symbol on the packaging should be asked to define the term "recyclable". (Recyclable materials are those materials which can be collected and processed for use as a raw material in the manufacture of the same or a similar product.) Which packages can be made from recycled materials? Which packages are identified as recyclable?

Are any of the packages that do not display a recycling symbol recyclable? (Packages made from aluminum, cardboard, glass, steel/tin, paper, and certain plastic packages, including two-liter bottles and milk jugs are recyclable).

Does any one group have more recyclable packages than the others?

9. Ask the class to identify methods of reducing waste from product packaging. (Buying products with less packaging, buying products in bulk quantities, buying products in refillable containers, packaging made from recyclable materials, etc.).

PACKAGING MATERIAL _____

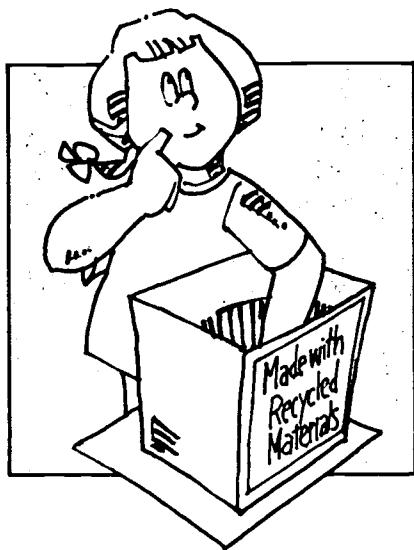
	A	B	C
Product	Package Weight	Net Weight of Contents	Gross Weight of Product
1.			
2.			
3.			
4.			
5.			
6.			
	_____	_____	_____
TOTAL			

(NOTE: $C = A+B$, $B = C-A$, $A = C-B$)



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BUY RECYCLED IN A BOX

Lined writing area for student responses.

OBJECTIVES:

- Students will develop an awareness of what products are made from recycled material and why it is important to buy recycled.
- Students will be able to identify things made from recycled material.
- Students will be able to define the term "recycled."

SKILLS:

Awareness, thinking, reading, observing.

VOCABULARY:

Recycling, "Made with Recycled Material."

MATERIALS:

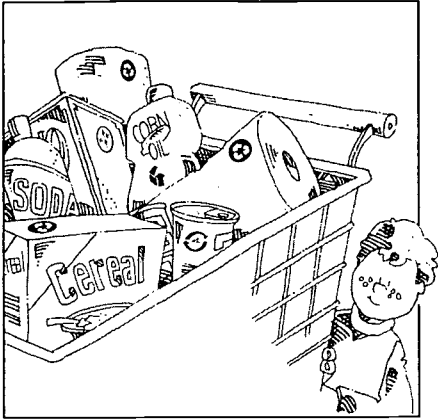
1. Box
2. Samples of things made with recycled materials.
 EXAMPLES: brown paper bag, greeting cards made with recycled paper, back of tablet, aluminum can, steel can, Whisk detergent bottle, paper egg carton, Mardi Gras paper products (towels, napkins, tissues), other "green" paper products labeled "made with recycled."

SUBJECTS COVERED:

Science, language, art, environmental education.

PROCEDURE:

1. Before class, fill a box with items with different products. Label the box "MADE WITH RECYCLED MATERIAL."
2. Display the box in the classroom. Ask the students to define "recycling." Ask them what they think happens to recyclables. List the responses on the board. Ask them if recyclables can be made into new things. What are those new things? List those responses on the board.
3. Have each student pick an item out of the box. Ask them if it is made from recycled material. Ask the students how they know the item is made from recycled material.
4. Examine each product. Read the information on the label out loud. Does the label state the item is made from recycled material? Ask the students what other ways they can tell if a product is made with recycled material.
5. Discuss how buying things made with recycled material helps recycling.



**THE GREAT BUY
RECYCLED SHOPPING
SPREE**

Lined writing area for student notes.

- OBJECTIVES:** • Students will learn to identify things made from recycled material.
- SKILLS:** Observing, decision-making, thinking.
- MATERIALS:** Pencil, worksheet.
- SUBJECTS COVERED:** Home economics.
- PROCEDURE:**
1. Have students go “shopping” at one or more of the following stores: supermarket, discount store, department store, greeting card, specialty, hardware. Using the worksheet have them record what they observed. Ask them to indicate whether the item or the package or both are made from recycled material. Ask the students how they were able to determine if the item or package was made from recycled material. Were they able to determine what percentage of the item was made from recycled material?
 2. Discuss what the students found.
 3. Discuss what impact buying things made from recycled material has on recycling; on waste disposal.
 4. Discuss what the students can do to increase the number of things made from recycled material.
 5. Have the students compare the price of things made from recycled material with things made from raw materials. Ask them if they would buy things made from recycled material if the quality was the same or lower. Why?
 6. Ask the students to examine the packaging the item came in. Is it made from recycled or raw material? Is there a difference in color, quality, durability of the packaging? Which do they prefer, packaging made from recycled material or packaging made from raw material? Why?



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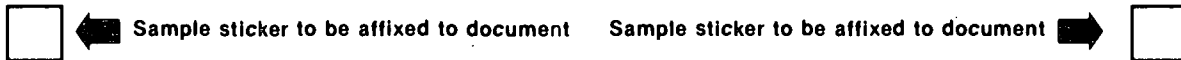
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