

CORE ACTIVITIES

GARBAGE ACTIVITY WORKSHEETS



1. SURVEY. Bring a box of cereal, a cassette or CD, a package of toothpaste and two other items to school with their original packaging still intact. Using the Note-Taking Grid below, examine the packaging of each product.

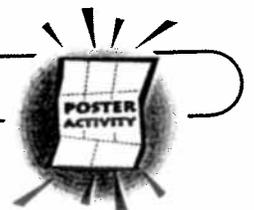
NOTE-TAKING GRID

| ITEM | SIZE OR AMOUNT | VISUAL APPEAL (1-10) | PACKAGING DESCRIPTION | | | |
|------------------|----------------|----------------------|-----------------------|----------|------------|----------|
| | | | Layers | Function | Necessary? | Disposal |
| Breakfast Cereal | | | | | | |
| CD | | | | | | |
| Toothpaste | | | | | | |
| Any Item | | | | | | |
| Any Item | | | | | | |

For the "Disposal" Column: Use an **X** if the item is not disposed of easily, a ☹️ if the item is incinerated or landfilled and a ♻️ if the item can be re-used or recycled.

As a group compare your notes and discuss your findings. Try to reach a consensus on which is the most overpackaged item and which is the most efficiently packaged product in each category, and be able to explain why. Record your decision.

* An example of an overpackaged product can be found on the **GARBAGE POSTER**.



2. DATA GATHERING.

With one partner, choose an item from your Note-Taking Grid and bring it with you to class. Using the Data Gathering sheets below, analyze the item's packaging.

- a) Check the package to see if it contains recycled materials. Record this in Part I.
- b) Remove the contents from the package.
- c) Weigh the package and find its mass. Record this figure in Part I.
- d) Dissect the package one layer at a time. Count the number of distinct layers, the number of different materials, and discuss the possible function of each layer. Record this information in Part I.

DATA GATHERING SHEET (PART I)

| | |
|---------------------------|-----------------------------|
| Name of Product _____ | |
| Recycled Materials _____ | |
| Mass of Package _____ | |
| Mass of Contents _____ | |
| Number of Layers _____ | |
| DESCRIPTION OF EACH LAYER | REASON FOR HAVING THE LAYER |
| 1. _____ | _____ |
| 2. _____ | _____ |
| 3. _____ | _____ |
| 4. _____ | _____ |
| 5. _____ | _____ |

- a) Classify the materials of the package into the following categories: plastic, paper, wood, metals, other. Record these on the Data Gathering Sheet, (Part II).
- b) Find the mass for each category of material. Calculate each category as a percentage of the total mass of the package, then as a percentage of the mass of the package and contents combined. Record this information in Data Gathering Sheet, (Part II).

DATA GATHERING SHEET (PART I)

| MATERIAL | MASS | % OF PACKAGE MASS | % OF TOTAL MASS |
|--------------|------|-------------------|-----------------|
| Plastic | | | |
| Metal | | | |
| Paper | | | |
| Wood | | | |
| Other | | | |
| TOTAL | | | |

3. DISCUSSION QUESTIONS.

Discuss the following questions and record your answers.

- a) Does the product you analyzed have unnecessary packaging? _____

- b) Identify the components of the package that can be recycled, reused and composted and those that can not. _____

- c) What do you think are the main reasons the manufacturer chose to package the item the way they did? _____

- d) What words or pictures on the package does the manufacturer use to get people to buy the product? What do you think these words or pictures mean? _____

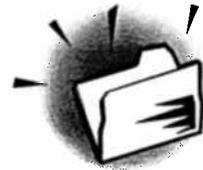
4. DESIGN A NEW PACKAGE.

Design a new package for the item you chose. The package must be environmentally friendly and less wasteful than the original. It must also meet other packaging needs such as protecting the product, and ease of shipping. Refer to the **GARBAGE POSTER** for more information on the functions of a package.



5. Make a list of suggestions under the following headings for ways in which you can reduce your Garbage Footprint: General, Food, Household Hazardous, Paper, and Plastic.

Record them and place them in your portfolio.

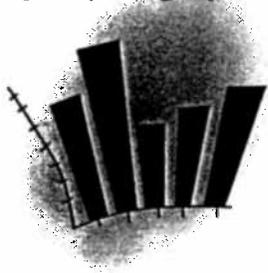


GRAPHING DATA ACTIVITIES

ORGANIZING GARBAGE DATA ACTIVITY

CLASS GARBAGE DATA FROM DATA ORGANIZER

Represent the items the class threw away using the class garbage data on a bar chart. Remember to label your axes and give your graph a title.



ANALYZING YOUR GRAPH

GARBAGE OUR CLASS THREW AWAY

WHAT OUR CLASS... THREW AWAY / RECYCLED / REUSED

| | | | |
|---------|--|--|--|
| Plastic | | | |
| Glass | | | |
| Metal | | | |
| Paper | | | |
| Wood | | | |
| Food | | | |
| Other | | | |

1. Of the garbage your class throws away which type had the most pieces? What percentage of the total pieces of garbage thrown away was this? What percent of the total pieces of garbage produced was this? _____

2. If you took all the garbage your class threw away and put it into a garbage can, what category would take up the most space? Why do you think so? What would weigh the most? Is it the same category? _____

3. Go to the Garbage poster. Describe what a typical Canadian throws away. - 

4. Look at the garbage data for your class. Examine ways that you could have reduced your Garbage Footprint. _____

5. Go to the Garbage poster. Which country produces the most kilograms of garbage per person per day? Why do you think this is? 

