



WRAP IT UP

Contact Information

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Grades

3

Objectives

Students will be able to: 1) understand the need for packaging; 2) identify overpackaging; and 3) describe purchasing decisions that reduce packaging wastes.

Method

Students investigate the wrapping of a stick of gum and other products. Students develop a list of ways to reduce packaging waste.

Materials

Packages of gum (the long stick kind), writing materials

Vocabulary

Packaging, waste, MSW, reusable, recyclable

Procedure

1. Divide students into small groups based on the number of sticks in a package of gum. Give one package of gum to each group. Tell students they must follow your instructions carefully before they will be able to chew their piece of gum.
2. Each student in the group should take a piece of gum and carefully unwrap it without tearing any of the wrappings. The group should place all of their wrappings in a pile. Next to their pile of wrappings have them stack their sticks of gum (unchewed). Ask students which pile is bigger? Do they think the wrappings appear to be too much for the product (gum) that was wrapped inside? Instruct students to count the number of wrappings that came with their package of gum. Next, have students determine what materials were used to make the gum wrappers (paper, plastic, and aluminum). Now students can chew their gum--quietly!
3. Gum wrappers are an example of PACKAGING. Packaging is a product's covering, wrapping, or container. Ask students to name a favorite food item from the supermarket. Have them describe its packaging. Can anyone name something they have bought at the supermarket that had absolutely no packaging? Can they think of any non-food item they have bought that did not have any packaging?

4. Ask the class what is done with gum wrappers once the gum has been taken out (the wrappers are thrown out). Gum wrappers and other food packaging become WASTE once the food is used. Packaging of all kinds accounts for approximately half of the MUNICIPAL SOLID WASTE (MSW) stream by volume and 30% by weight. Packaging is made from a wide range of materials including paper, plastic, glass, and aluminum. All of these materials become waste once the product they wrap is unpackaged.
5. Discuss why packaging is necessary. Try to elicit from students the following purposes of packaging:
 - Protects food products from spoilage or contamination.
 - Keeps product clean. Prevents product tampering.
 - Protects fragile products from damage.
 - Provides a place to print information required by law (e.g., food ingredients) or detailed instructions.
 - Prevents theft.
 - Provides convenience.
 - Entices people to buy.
6. Have students bring samples of packaging from home. Have them analyze which part of the package is used for:
 - Protecting the product.
 - Conveying necessary information.
 - Advertising.
 - Convenience.
 - Preventing theft.
 - Other?

Did any of the packaging appear to be more than was needed (i.e., were there examples of overpackaging?)

7. Although packaging does serve a purpose, many products are overpackaged. Since packaging makes up a big part of the waste stream, reducing packaging (eliminating overpackaging) would reduce the amount of waste we have to throw away. As a class, develop a list of recommendations for reducing packaging waste. Use the recommendations below as a guide:
 - Avoid excessively packaged goods (e.g., fruits and vegetables on shrink-wrapped trays; aspirin in a sealed bottle in a box covered by shrink wrap).
 - Buy unpackaged products whenever possible (e.g., stuffed animal loose, not in a box; hammer loose, not in a plastic or cardboard-backed package with a see-through plastic face).
 - Avoid single-serving packs (e.g., chips, puddings, drinks).
 - Buy larger quantity products (e.g., 7 ounce tube of toothpaste vs. 3 ounce tube).
 - Buy concentrates whenever possible.
 - Buy products in bulk.
 - Buy refillable packaging (e.g., glass beverage bottles that are returned, sterilized, and refilled with more product).
 - Buy REUSABLE packaging (e.g., glass jelly jars that can be reused as drinking glasses).
 - Buy RECYCLABLE packaging or packaging made from recycled materials.
 - Avoid packaging made from several different types of materials, they are hard to recycle.

8. Industry is coming up with some new ideas to reduce packaging, such as:
- Making packaging materials thinner and lighter (e.g., aluminum cans have been getting thinner).
 - Producing packaging that is used as the product is used (so-called consumable packaging).
 - Combining products in one package (e.g., detergent and bleach).
 - Selling a starter bottle of a product which is subsequently refilled with tap water mixed with a small packet of the product in concentrated form.

Can students think of other innovative ideas?

Source: Waste In Place, 1990 Keep America Beautiful, Inc.