

Wrap it Up! *An Investigation of Packaging (Grade 5-7)*

Overview

Students use observation skills to analyze packaging of everyday items through the lens of waste reduction. Main take aways from this lesson include natural resource and environmental conservation through waste and litter reduction. Students will learn to identify the wastes created by packaging, determine what kinds of packaging can be recycled and ways to reduce packaging waste.

As an optional addition, CVSWMD can teach students to make their own zero waste toothpaste and each student will be able to take home their own small container of toothpaste.

Time

60 +/- minutes for lesson and an additional 40 +/- minutes to make toothpaste
(Can be combined into an hour long lesson and activity)

Materials

- Samples of familiar packaging
- MRO recycling poster
- Wrap It Up Worksheet

Background

Packaging has many uses and benefits. Packaging ensures product quality by protecting its contents from spoilage or damage. Package labels identify contents and provide directions for use. Packaging may also help retailers advertise their goods, keep sales records straight and prevent theft. Packaging increases consumer convenience. Serving sized packages of food and beverages help reduce food waste by ensuring freshness of product.

Unfortunately, packaging makes up a large volume of trash since most packaging is meant to be discarded after just one use. Packaging depletes natural resources, adds litter and pollution to the environment and increases the cost of the product. For every dollar spent on a product, ten cents is for packaging. Common packaging that often ends up as litter includes cans, bottles, wrappers, foam containers and plastic bags.

Generally, packaging is considered excessive when it is purely for the convenience of the retailer or consumer, used only for advertisement or is not related to protecting contents from being spoiled or damaged. One way to reduce packaging is to encourage manufacturers to voluntarily decrease packaging and do research into new packaging that is less harmful or wasteful. Another way to reduce packaging is for federal and state governments to create regulations that promote the use of reusable, recyclable and compostable packaging that is less harmful to the environment. These regulations can take the form of container deposits, financial incentives and bans on specific packages.

When we buy something, we also buy the packaging. We can all be wise consumers and avoid purchasing over-packaged items. We can also make sure that packaging does not become litter by placing it in the proper bin, and that packaging is reused or recycled when



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possible. Whenever possible, we can choose only to buy packaging that we know we can recycle or items that are package free.

Pre Activity Questions

1. Have students discuss the purposes for packaging (*protecting the product, marketing, safety*). List ideas on the chalkboard.
2. Have students help you list the disadvantages to over-packaging. What do the students consider to be “over-packaging” (*wastes natural resources; could become litter*) *Note – the interpretation of “over-packaging” can vary from person to person

Activity – Students break up into small groups and examine a piece of packaging

1. Students identify the types of materials used to make the packaging and what natural resources are used to make those materials (*paper is made from trees; plastic packaging is made from oil*)
2. Students identify why they think the manufacturer chose this type of packaging. (*To keep the product safe, to advertise; to keep contents from breaking.*)
3. Students decide whether each item used unnecessary packaging.
4. Students determine whether the packaging can be reused or recycled. Does the packaging contain recycled material? (This information would be printed on the outside package.)
5. Students identify the pros and cons of this packaging and ask students to write two sentences or a paragraph on what they learned about packaging.

Each group will answer these questions together, then present their answers to the class

Discussion Questions

1. What did you learn about packaging today?
2. What surprised you about the way these products are packaged?
3. What can you do to conserve natural resources and lower your amount of waste from packaging?

Extensions

- As a homework assignment, have students track how much packaging they use at home and how much of it is reused, recycled and thrown in the garbage and graph the findings.
- Have students design a package for a product (can choose their own product or teacher can assign) that will protect the product but will not have “excessive” packaging.
- Have students create art projects using packaging materials.



Wrap it Up!
An Investigation of Packaging

Group Members (list names):

1. **What packaging item does your group have?**

2. **Identify the types of materials used to make each type of packaging and what natural resources are used to make those materials**

3. **Why do you think the manufacturer chose each type of packaging?**

4. **Does this item contain unnecessary packaging? If yes, how could this product be repackaged to avoid unnecessary packaging?**

5. **Can this packaging can be recycled? Does packaging contain recycled material?**

6. **Identify at least two pros and cons of each type of packaging**



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