

Pre-Test

1. How can a person's behaviors help or hurt the environment?
2. How do we keep from burying ourselves in all the waste we create?
3. What is the most effective way to reduce waste?
4. What are 3 benefits of waste reduction?
5. What are 4 primary methods of recycling?

6.PCH.3 ANALYZE MEASURES
NECESSARY TO PROTECT
THE ENVIRONMENT.

6.PCH.3.1 DIFFERENTIATE
BETWEEN INDIVIDUAL
BEHAVIORS THAT CAN HARM
OR HELP THE ENVIRONMENT

Review:

- Distribute the crossword puzzle titled Types of Pollution (Appendix 1). Work with a partner to identify the types of pollution in the environment.

Movie (25:00)

- [The Lorax](#)

Focus:

- Oil Spill

Statement of Objective:

- *As you can see from our oil spill, oil is difficult to clean up and can also harm the environment. Today we will describe other individual behaviors that can harm or help the health of the environment.*

Student Notes:

- *One of the things that we all do on a daily basis is generate waste, particularly solid waste.*
- *How do we keep from burying ourselves in all the waste we create?*
- *That is the focus of today's activities.*
- **The answer is in three steps.**
- *Reduce, Reuse and Recycle.*

Reduce, Reuse, Recycle

Guided Note-taking



Reduce and Reuse

The most effective way to reduce waste is to _____ . By reducing and reusing, consumers and industry can save _____ and reduce waste management costs. Unfortunately, the amount of waste generated in the United States has been _____. Between 1960 and 2010 the amount of waste each person creates _____ from 2.7 to 4.4 pounds per day. This results in about _____ of waste generated in the US in 2010.

Three benefits of reduction of waste are _____ , _____ , and _____ .

Recycle

Step 1. Collection and Processing

Collecting recyclables varies from community to community, but there are four primary methods:

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-
-
-

Recyclables are sent to a materials recovery facility to be sorted and prepared into a material that can then be made

_____ .

Step 2. Manufacturing

Once _____ , the recyclables are ready to undergo the second part of the recycling loop. More and more of today's products are being manufactured with _____

_____ . Common household items that contain recycled materials include newspapers and paper towels; aluminum, plastic, and glass soft drink containers; steel cans; and plastic laundry detergent bottles. Recycled materials also are used in innovative applications such as recovered glass in roadway asphalt (_____) or recovered plastic in carpeting, park benches, and pedestrian bridges.

- *The most effective way to reduce waste is to **not create it in the first place.***
- *By reducing and reusing, consumers and industry can save **natural resources** and reduce waste management costs.*
- *Unfortunately, the amount of waste generated in the United States has been **increasing.***
- *Between 1960 and 2010 the amount of waste each person creates **increased** from 2.7 to 4.4 pounds per day.*
- *This results in about **250 million tons** of waste generated in the US in 2010.*

3 benefits of reduction of waste are...

- Saves natural resources
- Reduces toxicity of waste (Waste is less poisonous)
- Reduces cost

Benefits of Reduction

- *Saves natural resources (Natural resources: Resources supplied by nature such as land, minerals, water, etc.)*
- *Reduces toxicity of waste (Waste is less poisonous)*
 - *Using less hazardous alternatives for certain items (e.g., cleaning products and pesticides), sharing products that contain hazardous chemicals instead of throwing out leftovers, reading label directions carefully, and using the smallest amount necessary are ways to reduce waste toxicity*

○ *Reduces cost*

- *Communities: Some communities have a “pay as you throw” program — citizens pay for the items they throw away; if they throw away less, they pay less.*
- *Businesses: Business that use less packing use fewer natural resources, create less material to be thrown away.*
- *Consumers: Buy products in bulk, buy products with less packaging, and buy products that are reusable.*

Article

- Recycle

Recycle

- *Recycling is a series of activities that includes collecting recyclable materials that would otherwise be considered waste, sorting and processing these into raw materials such as fibers, and manufacturing raw materials into new products.*

Step 1. Collection and Processing

- *Collecting recyclables varies from community to community, but there are four primary methods:*
 - *curbside,*
 - *drop-off centers,*
 - *buy-back centers,*
 - *and deposit/refund programs.*
- *Recyclables are sent to a materials recovery facility to be sorted and prepared into a material that can then be made into other products.*
- *How are recyclables collected in your community?*

Step 2. Manufacturing

- Once *cleaned and separated*, the recyclables are ready to undergo the second part of the recycling loop.
- More and more of today's products are being manufactured with *total or partial recycled content*.
- Common household items that contain recycled materials include newspapers and paper towels; aluminum, plastic, and glass soft drink containers; steel cans; and plastic laundry detergent bottles.
- Recycled materials also are used in innovative applications such as recovered glass in roadway asphalt (*glassphalt*) or recovered plastic in carpeting, park benches, and pedestrian bridges.

Step 3. Purchasing Recycled Products

- *Purchasing recycled products completes the recycling loop.*
- *By "**buying recycled**," businesses and individual consumers, each play an important role in making the recycling process a success.*

Recycling Facts & Figures

- Recently, recycling and composting activities prevented about **64 million tons** of material from ending up in landfills and incinerators.
- Today, this country recycles **28 percent** of its waste.
- That is almost double what it was 15 years ago.
- While recycling has grown in general, recycling of specific materials has grown even more drastically: **42 percent** of all paper, **40 percent** of all plastic soft drink bottles, **55 percent** of all aluminum beer and soft drink cans, **57 percent** of all steel packaging, and **52 percent** of all major appliances are now recycled.

Post-Test (Exit Ticket)

1. How can a person's behaviors help or hurt the environment?
2. How do we keep from burying ourselves in all the waste we create?
3. What is the most effective way to reduce waste?
4. What are 3 benefits of waste reduction?
5. What are 4 primary methods of recycling?

Closure:

- *Your lists show that you are very environmentally conscious as well as very creative. In our activities today we have been able to describe individual behaviors which can help or harm the health of the environment.*