

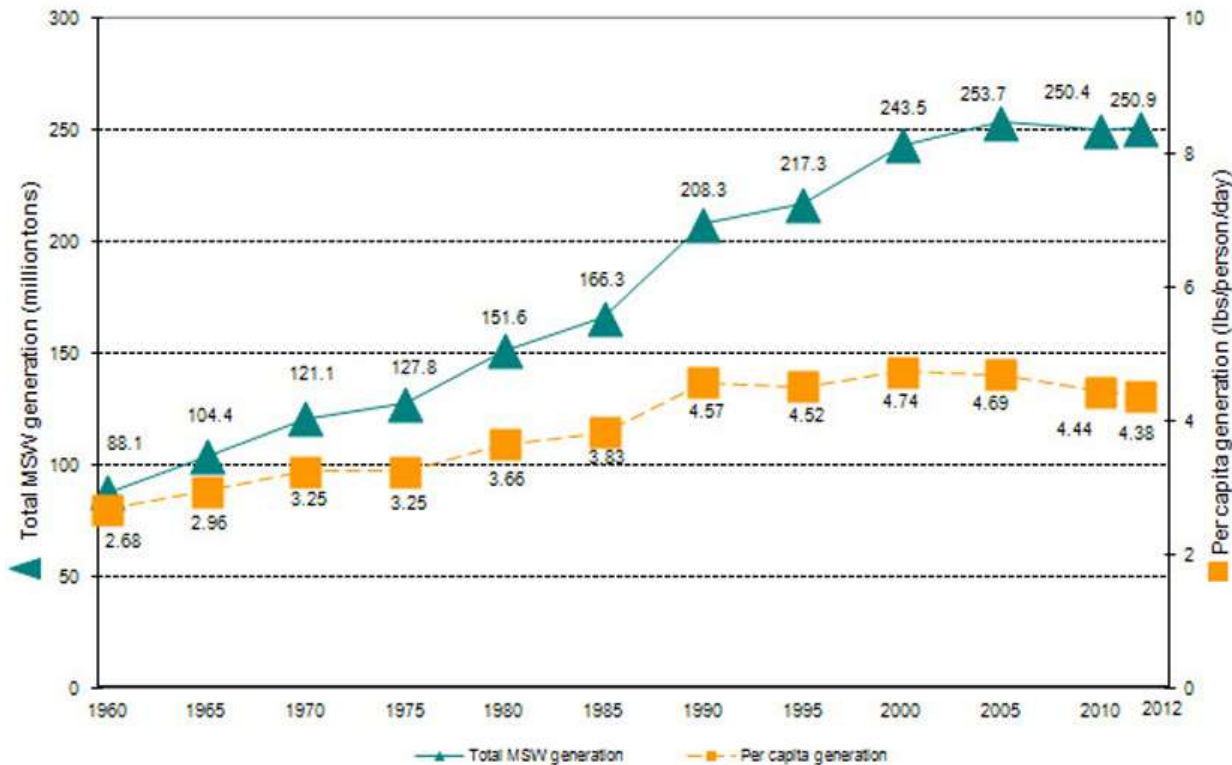


Educating the Next Generation

A lot of trash

- In 2012, Americans generated about 251 million tons of trash
- 87 million tons was recycled or composted

Figure 1. MSW Generation Rates, 1960 to 2012



Source: U.S. EPA

Who's creating all this?

Baby Boomers, 76 million people, 1946-1964



- Rock 'n' Roll music generation
- Buy it now and use credit
- The first TV generation
- Tend to be more positive about authority, hierarchal structure

Who's creating all this?

Generation X, 51 million people, 1965-1979



- Very individualistic
- Want to save the neighborhood, not the world
- Desire a chance to learn, explore, and make a contribution
- School problems were about drugs

Who's creating all this?

Millennials or Generation Y, 70-75 million people, 1980-1995



- First to grow up in digital environment
- Prefer to work in teams
- Told over and over again they are special, and want the world to treat them that way
- Do not live to work , prefer more relaxed work environment

Back to this...the pile of trash



Out of site-out of mind



The chance at Generation Z and beyond (1996 and beyond)

- <http://www.census.gov/popclock/>





- Green Grades Educational Program

Outreach to local schools, communities, clubs, and individuals. Giving kids the opportunity to see how their waste is handled and helping them realize they have a role in it all.


Curriculum

K-4 & 5-8


"Understanding the Recycling Process"


Dem-Con Green Grades Curriculum for Grades K-4 Lesson One Class Time: 1 hour

Objective: Students will gain a better understanding of the recycling process and become aware of their own recycling habits.


 **Materials Needed**

- Each student will need to bring in at least three items from home that he or she believes could be recycled
- Student recycling survey (attached)
- Projector or screen for Green Grades video
- Four of five garbage bags
- Extra everyday recyclable materials




 **Motivate**

Have students fill out the recycling survey and discuss their answers. Afterwards, view the Dem-Con Green Grades video at <https://www.youtube.com/watch?v=S1ft6wm1WcvE> to find out where trash goes once it's picked up from the curb!

 **Activity: You are the machine!**


Divide the class into four or five small groups. Have each small group compile their three items into one bag per group. Each group will then rotate their bags to the right, obtaining a new group's bag. Distribute the contents of the bag and sort the materials into the following categories:

Material	Possible Products
Paper	Newspaper
Glass	Soda Pop Bottle
Metal	Steel Food Cans
Plastic	Milk Jugs
Carton	Juice Cartons
Non-recyclable/unsure	Styrofoam


 **Conclusion**

Ask students how they classified their items into the categories above. Inform them that their actions are replicating those of the machines in our Materials Recovery Facility.

Next, have students describe how sorting and recycling materials helps the environment. What did they learn about waste management that they did not know before?

 **Homework**

How else can you recycle and reuse these items? Have each student select a recycled item and turn it into something new! For example, decorate a steel metal can into a new pencil holder. And make sure to recycle the items you don't use!



Teacher's Guide

Basic Information on Recycling:

Recycling is defined by Google as "converting (waste) into reusable material". Recycling can not only save the Earth's natural resources, but can also be used to create new materials in one's community. Be sure to discuss the outcome of recycling materials. For instance, newspapers can be recycled to make new newspapers! Here is a link for additional information on the benefits of recycling: <http://www2.epa.gov/recycle/recycling-basics>

Informational Sheets for Reference

The student survey worksheet is attached and the responses are open for discussion. Possible answers include the information provided above.

The "What Can I Recycle" PDFs provide information on items that can and cannot be recycled. This is a great tool to use when suggesting items for students to bring in for the activity as well as help when sorting their recycled materials.


Additional Links

When concluding the activity, use one of these websites to show students where the nearest recycling facility is for their sorted materials!

<http://recyclerfinder.com/>
<http://www.recyclingcenters.org/>

For more facts about recycling, visit <http://recyclingfacts.org/>

Sources:
https://www.google.com/?gws_rd=ssl#q=recycling
<http://www2.epa.gov/recycle/recycling-basics#definition>



Educational Room

Interactive map of MRF that utilizes augmented reality



End Markets Room

Sort-It Out Station



Facility Stations

Landfill, C & D MRF, Shingle Processing, Leachate tank, MSW Transfer



The waste conundrum



They Love to Learn & They are the Best Teachers





- Public Tours offered the 3rd Wednesday of each month.
- Large groups by special request
- Logistics
 - Policies, safety, coordination
- Scheduling a tour



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