



Reducing Waste Classroom Activity: Teacher's Guide

Grade Level: K-8

Curriculum Connections: Fine Arts, Language Arts, Science

Class Time: 45 to 60 minutes

Objectives:

1. Students will learn about different forms of solid waste and what can be recycled at school and home.
2. Students will be able to identify where their waste goes when it is thrown away or recycled.
3. Students will explore different ways they can reduce their solid waste in school and at home.
4. Students will help educate others about reducing waste through the creation of posters to put around their school.

Materials:

1. Computer paper, oak tag or poster board for creation of posters
2. Colored pencils, crayons, or markers for creation of posters

Initial Classroom Discussion (to provide background information):

Vocabulary (in bold): garbage, landfill, decomposing, reduce, reuse, recycle, compost, electronic waste, microscopic organisms

1. Ask students to define "**garbage**."
 - a. Garbage is anything that is unwanted and discarded
2. Now ask students where garbage goes when it is thrown away.
 - a. It is taken to a dumpster and then picked up by a truck that goes to a **landfill**, which is very far away in upstate NY, because Long Island does not have any landfills
 - b. When garbage is taken to a landfill by a truck pollution is produced
 - c. Pollution is also produced by the **decomposing** (breaking down) of the trash in the landfill
3. Ask students what are some alternatives to trash?
 - a. The 3 Rs and a C- **reduce, reuse, recycle** and **compost**
4. What is waste Reduction?
 - a. This means preventing garbage from being made in the first place
 - b. Some ways of reducing waste are:
 - i. Using a reusable shopping bag instead of plastic bags when shopping
 - ii. Packing lunch in reusable containers and bringing metal utensils instead of plastic ones
5. What does it mean to Reuse?
 - a. This means to use an object over and over again

- b. Examples are:
 - i. Using an already used toothbrush to clean around the house
 - ii. Donating old items to those in need
 - iii. Using reusable food containers and water bottles instead of disposable ones
6. What is recycling?
- a. Recycling is taking a used material and turning it into something new
 - b. Ask students what they can recycle in school and at home? The Town of North Hempstead recycles plastics, metal cans, glass bottles, aluminum foil, clean paper like newspaper, magazines, phonebooks, mail, cardboard
 - c. The Town also accepts **electronic waste** like old TVs, computers, DVRs, and video game consoles at their STOP programs
 - d. In the recycling process aluminum cans can be remade into new aluminum cans and plastic bottles can be made into new plastic products like a new carpet or a fleece jacket
7. What is composting?
- a. Composting is the process of turning food waste like vegetable and fruit scraps as well as yard waste like leaves, grass clippings, wood chips and pine cones into fertilizer for soil
 - b. Compost is formed when **microscopic organisms** (very small living things) break down the waste
 - c. Compost has nutrients that plants need to grow and can be added to a garden or lawn
8. Ask students to discuss any of the 3 Rs or C they practice at home or at school and what the benefits are
- a. Recycling uses less energy and raw materials than creating items from trees (paper), oil (plastic), mined metal (aluminum)
 - b. Recycling reduces the space taken up in the landfill and the truck transport to the landfill, which reduces pollution
 - c. Reducing and reusing materials decreases the amount of waste transported by trucks to either a landfill or recycling center
 - d. For many materials the cost is less to recycle than create new materials

Student Activity:

1. DESIGN POSTERS TO SPREAD THE WORD ABOUT REDUCING GARBAGE
 - Ask students in small groups or individually to design a poster to put around your school that will educate staff, teachers and students on the 3Rs and C
 - Students can choose to focus on one action (reduce, reuse, recycle or compost) or can make a poster with all of them
 - Students should be encouraged to draw pictures and write out specific examples of actions that can be taken to prevent garbage from being thrown away
 - They can use whatever materials you have on hand like computer paper or for a larger impact, poster board or oak tag
 - Urge students to be creative and use any of the information that was discussed during the lesson or they can research more information online or in books
 - Students can use a computer to print their posters or they can make them using crayons, colored pencils or markers

Please contact 311 or email sustain@northhempsteadny.gov if you have any questions or comments about this lesson plan!