



RECYCLE RELAY

Recommended activity for the Recycling Center or a lesson after the Landfill Tour

- I. Objectives
 - a. Students will learn how to properly sort items for recycling.
 - b. Students will learn alternative disposal of waste.
 - c. Students will learn how consumer choices affect the amount of waste sent to the landfill.

- II. Materials
 - a. Plastic Grocery Sacks filled with 5 lbs of mixed trash.
(One bag per 2 students) (Trash should be semi-clean and labeled with a colored sticker to later identify mis-placed trash.)
 - b. Gloves (one per student)
 - c. Whistle or noise maker to signal relay start and stop
 - d. 9 collection buckets, each labeled with #1 plastics, newspaper, and so forth
 - e. Colored stickers (one color per team)

- III. Introduction
 - a. Show students two similar products from the grocery store, one having excess packaging and the other minimal.
 - b. Ask the students to decide if we were to purchase one of the two items, which would be a better choice for the environment and why.
(The item with less packaging creates less waste for the landfill.)
Why do we care about how much trash goes to the landfill?
 - c. Show a 5 lb. bag of trash and explain to the students that each person in the United States produces about 5 lbs. of trash EACH DAY!
Our landfill was created to hold our trash in Lubbock for many years to come.
We are filling it at a rate so fast that the landfill may not last as long as expected. After that are we going to just start another landfill?
Our landfills are a temporary solution to our world wide trash problem. If we are creating this much trash here in Lubbock where we have about 200,000 people, imagine cities with more people and how much trash they create.
Some states have already used all their space for landfills. Many states like New York and New Jersey for example now pay other states to take their trash.
Since we have so much land in Texas, are we going to become a giant waste disposal for other states?
What is the solution?
 - d. Direct the students to conclude that the solution is to create less waste from the start.
Having less trash starts with a choice made by each one of us.
Choosing to buy products that are made with less packaging is the first step.
We should choose products that are made of materials that we can recycle—like #1 and #2 plastics.
Choose products that are made from materials that have been recycled to support the recycling industry and to help save natural resources.

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IV. Content/Procedure

a. What is Recycling?

In simple terms, recycling is creating something new out of something old.

Cities collect recyclable materials and then sell those materials to industries which use the plastic or metal or other material to create new products for us to buy. Buying products that are made of materials that were recycled, reuses old material that would have been trash—and even more, it saves our natural resources like oil which is used to make plastic.

b. What materials can be recycled?

Lots of things can be recycled.

In Lubbock, we can recycle #1 and #2 plastics. If you look at the bottom of your plastic bottles you will find a small triangle with arrows. Inside that triangle is a number which indicates what type of plastic the bottle is. Plastics can be any number 1-5. However the most commonly recycled are #1 and #2.

Buying #1 or #2 plastics is a better choice than any other type as they can most often be recycled.

We can also recycle newspapers and light colored or computer paper.

Recycling paper is important since it takes about 17 trees (trees that took many years to grow) to make a ton of paper

No matter the color, we can recycle glass. The great thing about glass is that we can recycle it over and over forever! It never wears out.

Aluminum cans would take 500 years to break down on their own. By recycling cans, we not only keep them out of the landfill where they will stay for 500 years, but we erase the need to use new aluminum to create more cans.

Tin cans are a very important material to recycle. Tin cans are actually 99% steel. The amount of steel that Americans throw away each year to create all the new cars made in America in one year.

We can also recycle cardboard. If recycled, we can use this to make cereal boxes, paper towels, and paper.

c. Where do I take the items to be recycled?

In Lubbock there are many collection centers for your recycled materials. Located at United Market Street and United on 82nd and Frankford, Lowe's Supermarket at 26th and Boston, are recycling drop-off sites. In Addition to the drop-off sites, there are also three "Citizen Collection Centers" located at 1613 84th, 2002 Elmwood Avenue and 208 Municipal Drive. These three centers take all recycled materials accepted in Lubbock as well as used motor oil and anti-freeze, bulky items and appliances and brush and tree limbs.

d. What is composting?

Composting is nature's way of recycling. Leftover food items and kitchen scraps, as well as yard waste such as grass clippings and small branches can be composted. Organisms in the soil break down these materials to eventually create humus, a very rich quality of soil that can work as a natural fertilizer. To create compost pile at home is quite easy. A layer of dry materials (grass clippings, shredded newspapers) followed by a layer of wet materials (food scraps) and then a layer of soil repeated until the desired size, finishing with a layer of dry, creates an effective compost pile. This layering along with periodic turning promotes a quick breaking down of materials back into rich soil.

e. Leftovers go to the landfill.

The majority of the items we send to the landfill via dumpsters are items that can actually be recycled or composted.

On average 40% of our trash that we send to the landfill could actually have been recycled. If we all recycled, imagine how little trash we would create, and how slowly our landfills would become full!

V. Activity—Recycle Relay

- a. Divide students into teams of 3 or 4 with each team designated with a certain colored sticker.
- b. Set up collection buckets at 10 ft. intervals parallel to the students at about 30 ft. Label the buckets with the following group names: #1 Plastics, #2 Plastics, Newspaper, Light Colored/Computer Paper, Glass, Aluminum Cans, Tin Cans, Cardboard, Compost, and Landfill
- c. Give each team a 5 lb. bag of trash and a pair of gloves for each student.
- d. Instruct the students to begin at the sound of the whistle. The first student must choose one item of trash, deliver it quickly to the proper bucket and then return to the team to signal the next student's turn.
- e. After an allotted time (about 5-7 minutes) signal for the relay to stop.
- f. Take note of which team sorted the most trash, subtracting each item that was improperly sorted. This can be traced through the colored stickers.
- g. The winning team has sorted the most trash with the least mistakes!
(Don't forget mistakes include not removing labels and lids!)

VI. Conclusion

- a. Summarize

Not only does recycling help to save our natural resources, but recycling saves energy and saves space in the landfill. Recycling is a great choice for the environment and it all starts with you. You make the decision when you have a piece of trash in your hand. What choice do you want to make? Make the choice that is best for the environment, the best for all of us.

- b. Mention all the good things that come from recycling—coats for needy kids, cool art projects...other countries that recycle.

VII. Lesson Assessment

- a. How have the students' behavior and attitude towards trash, towards recycling changed?
A great idea for teachers is to place recycling bins in the classroom without announcing any instructions. After a week or so, notice if students are recycling. Teachers can have students lead a discussion on the benefits of recycling in the classroom, or even introduce recycling to other classes.

