

Why Recycle?

Lesson 1
Estimated Time: 40 minutes



Student Objective:

I can explain why recycling is beneficial.

Materials:

- 1 copy of "What Do You Throw Away?" per student
- pencils
- timer
- place to record group list (chart paper, whiteboard, etc.)
- copies of Recycling Mingle Facts cut apart (see copying directions at the top of that page)
- 1 Gist Statement paper per group (or scratch paper)
- optional: 5 lb bag of flour

Introduction: As Fast As You Can

Complete this activity yourself prior to doing the activity with the students. Trying it out will help you to determine what prompts can be given to the kids to spark more ideas for their lists. It will also give you examples to share at the end of the activity.

Hand out a "What Do You Throw Away?" page. These should be folded in half so the students can only see the list portion of the page.

We are going to start today with an activity. I have just given you a piece of paper where you will soon create a list of things that you throw away. They don't need to be things you've just thrown away today, but try to think of things that you or your family members throw away on a pretty regular basis. For example, I might have thrown away a broken TV once, but I throw away an empty yogurt carton almost every day. Be as specific as you can as well. Don't just write that you throw away a box. Write down that you throw away a pasta box.

I am going to set a timer for 2 minutes. List as many items as you can during that time. When the timer goes off, put your pencil down.

Start the timer and tell the kids to begin working. During the course of the two minutes, give students some prompts to help them think of different ideas. Examples might include:

- What do you often throw away in your kitchen?
- What do you often throw away in the lunchroom?
- What do you often throw away in our classroom?

At the end of the two minutes, have students stop their work. Have a space ready to record a class list based on student ideas. You will want to save this list for use during an activity in the next lesson. Have the students share out their ideas recording each idea only once. If you have time, collect all of the original ideas for your class list. Otherwise, stop when you feel the list has enough items to spark a good discussion--the list should have some things that are recyclable and some that are not. Collect the students' lists for use tomorrow.

Discussion: What's the problem?

What do you notice about this list?

Students might notice that it is long--we throw away a lot of different things. They may also notice that a lot of what we throw away is packaging material. They may notice that many people had similar ideas, or they might notice things they hadn't thought of during the activity.

Unfortunately, this is only a small portion of what we throw away as a country. In this classroom, we came up with this list, and I'm sure you could have listed even more if I had given you more time. Now



What Goes in the Bin?

Lesson 2
Estimated Time: 30 minutes

Student Objective:

I can sort items to show what is or is not recyclable.

Materials:

- student copies of “What Do You Throw Away?” from previous lesson
- pen for each student (or pencil if preferred)
- large group class list of “What Do You Throw Away?” from previous lesson
- projector or large screen to show online video (linked within lesson)
- examples of recyclables (or the pictures provided if preferred)
- 2 bins (trash and recycling)
- pictures of recycling labels (included)

Review: Where does our waste go?

Yesterday, you learned a bit about the benefits of recycling. Turn and share with someone near you-- What resources do you remember can be saved by recycling?

(water, electricity, oil, wood/trees, raw materials, etc)

Activity: Pre-Test

Hand out the kids' “What Do You Throw Away?” page from the previous lesson. Have them unfold the papers to see the hidden side.

Not everything that we throw away can be recycled. There are some materials that we don't yet know how to make into a new product, or that cost too much to make into a new product. In the middle

column of your paper, write a “Y” for yes or an “N” for no to show whether or not you think the item you listed can be recycled.

You may want students to complete this task in pen so they are not tempted to go back and change their answers later. Reassure them that it is okay to get these wrong--we are learning about recycling because there is more for us to know. Give the students a couple of minutes to complete the task. Have them keep the papers at their desks. Take a few moments to do this same activity with the class list you made yesterday. There is sure to be some debate on a few of the items, and that is okay. You'll find out the answers soon enough.

Video: Where does my recycling go?

Our predictions have been made and now it is time to find out the truth. We are going to watch a video that not only gives a lot of information about what can or cannot be recycled, but also shows you a bit more about how it happens. You'll see what happens to your recyclables right after they are picked up from school or your home.

You can click on the picture on the following page to go to the Materials Recovery Facility video. You can also search youtube.com for “Dem-Con Materials Recovery, Green Grades Part II”. As you watch, you may want to pause after each material is discussed: fibers, metals, plastics, and glass. Have the kids restate what they just found out could be recycled. This information will be helpful during the next activity.

Materials- Lesson 2

Sort it Out- picture cards

milk carton



yogurt tub



pop bottle



junk mail



newspaper



soup can



Something New

Lesson 3
Estimated Time: 45 minutes



Student Objective:

I can give examples of new products that can be made from recyclables.

Materials:

- chart paper and marker
- projector or large screen to show online videos (linked later in the lesson)
- plastic bottle (or picture)
- aluminum can (or picture)
- cardboard box (or picture)
- glass bottle or jar (or picture)
- paper for student posters
- large paper for class poster sample
- markers, crayons, or colored pencils for student use
- optional: sample poster (included)
- optional: magazines/advertisements
- optional: glue sticks and scissors

Review

Did anybody go home last night and show your family your recycling paper? Did your families learn anything new about what should or shouldn't go in the bin?

Videos: Now what happens?

So far, we know that the material we put in our recycling bins gets picked up and brought to the MRF to be sorted. Today, you will get to see how glass, fibers, plastic, and metal are made into new products.

Begin by holding up the cardboard box (or picture).

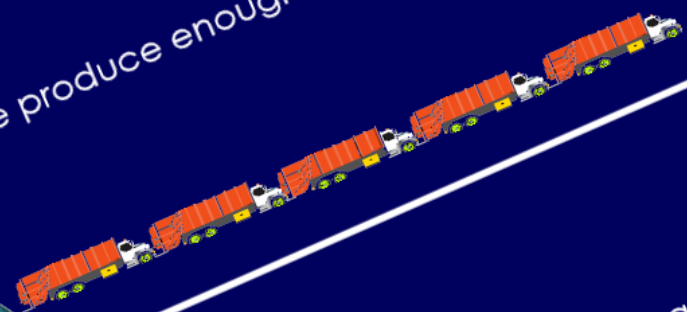
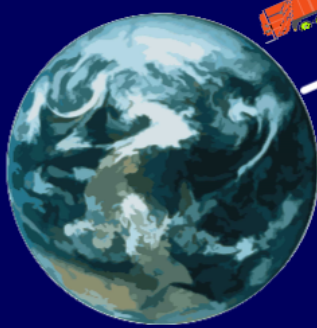
Does anybody have a prediction as to what useful product this cardboard box might become after it has been recycled?

After students give their predictions, show the "fibers" video. You can access the video by clicking on the picture below the "Fiber Video" title. Otherwise, search youtube.com for "Dem-Con Product Life Cycle Feature- Fiber". Repeat for the three remaining materials.

Fast as You Can



In the U.S. we produce enough waste to fill 63,000 garbage trucks every day.



238,900 miles

Lined up end to end over a year, they would stretch halfway to the moon.