



Kent County Department of Public Works

Materials Recovery Facility & South Kent Landfill Tour



Pre- & Post-Visit Activities for the Classroom

Pre-Visit Activities:

Weighing In – Part 1:

Prior to the classroom visit, ask the students to save the waste from their lunch that day. Weigh the waste and write down the total amount of waste generated from the class/grade/school. Students can sort their waste into categories such as containers, wrappers, food waste, plastic, metal, etc. Students can graph the results of their sorting.

The Search is On:

Give an overview of recycling. Ask students to look for labels from cardboard boxes, glass jars, steel cans, plastic containers and aluminum cans. The students are asked to bring in the labels & circle the Mobius (recycling) symbol. They should also note if it is made from recycled materials. In the classroom, the students can sort the items/labels by brand & type of container. Students can make a large mural using the products to teach the school to “Buy Recycled” & close the recycling loop.

Trash Pizza

Students, with the help of their teacher, will construct a “pizza” pie graph of landfill components. The crust can be made with a simple flour/salt/water dough or use a 12-inch cardboard circle. Glue can be mixed with red food coloring until it looks like tomato sauce. Divide the pizza into the following sections:

- Paper & Cardboard: 36%
- Plastics: 11%
- Yard waste: 12%
- Metals: 8%
- Rubber, leather & textiles: 7%
- Food scraps: 11%
- Wood: 6%
- Glass 6%
- Other: 3%

Talk to the students about these categories & examples of each. Students can bring in examples of each category & glue them to the pizza or cut pictures of them out of magazines & glue them to the pizza. Students may wish to label each section. Once the glue has dried (approximately 24 hours) the pizza can be painted with polyurethane or a lacquer to preserve it. The trash pizza can be displayed to the school.

Greening Your Grounds

As a class/grade/school, brainstorm ways you can become ‘green’ and make one or more of the ideas a class/grade/school project. Challenge other grades or even other schools in your district to see who can be ‘greener’. Finish the projects prior to Earth Day (April 22). Some “greening” ideas and contacts are on the “Go Green” page.

Post-Visit Activities:

Weighing In – Part 2:

After the classroom visit, tell students that their homework is to pack a waste-free lunch for the next day (or to make waste-free lunchroom choices if they buy lunch at school). The next day, again ask students to save the waste from their lunch and weigh the waste. Students can graph the results of their sorting. Compare the two totals and discuss the impact that the waste-free lunch will have on the environment.

A Matter of Priorities (Roger Tory Peterson Institute)

We've all heard how important recycling is, and that's true. But, recycling is only part of the answer and not the one with the highest priority at that. By reducing the amount of material we consume, by using fewer goods and services, we automatically decrease our environmental impact in the maximum way possible.

Your students can discuss this as a class or form groups to see what kind of ideas they can think of that will help them Reduce, Reuse, and Recycle personally or with their families. It may take a bit of thinking for the students to come up with three-R activities, but once they begin, they'll have all kinds of ideas. Students need to be cautioned to keep the ideas practical – if the idea isn't practical, it won't be practiced. Students will have a much greater impact if they can encourage their entire family to participate as well so be sure to point this out. To get the students started, begin by asking them to come up with some of the everyday or weekly activities their family engages in and then see what they can do to apply the 3 R's to these.

We've chosen one product, grocery bags, to use as an example and applied each to the three R's, keep in mind you may not be able to apply some products to ALL three R's.
REDUCE: Example – Take your own, cloth grocery bags for groceries rather than take those offered in the store.

REUSE: Example - Instead of getting new grocery bags each time one goes to the store, reuse the bags from previous visits until they wear out.

RECYCLE: Example – Recycle all used grocery bags (many communities can recycle both paper and plastic bags).

Edible Landfill (Solid Waste Agency of Lake County, IL & Recycle America Alliance)

Share a “trashy” snack with your students! Build an edible landfill using a graham cracker crust in a foil pan (the hole dug in the ground for the landfill), smashed tootsie rolls or caramel (for the clay liner), fruit roll-up (for the plastic liner), licorice (for the leachate collection pipes), prepared vanilla pudding with chocolate chips (for the trash layer), crushed Oreos (for the soil covering), and coconut colored with green food coloring (for the grass on top). Place more licorice vertically in the top for the monitoring wells. After the lesson – ENJOY!!

See It In Action:

Schedule a visit to the South Kent Landfill and the Recycling Facility (Kent County DPW, 336-4371) and, if the students live in Grand Rapids, East Grand Rapids, Kentwood, Wyoming, Grandville or Walker, schedule a visit to the Waste-to-Energy facility (owned by Kent County DPW but run by Covanta-Kent 235-3210).

