

Waste Audit Mural Activity

This is a follow-up activity that you can do with students to help teach the rest of the school about the results of the waste audit. If you do an audit of the recycling, this activity could also be done to illustrate what stuff is being recycled & what percentage of the recyclables is actually contamination.

Materials:

Large printout or butcher paper
Markers
Glue/Paste
Results of your waste audit

Samples of the things found in your waste audit
Scissors
Painters tape or tacks to hang them up
Cooking magazine

Steps:

1. Complete a waste audit and figure out the percentages of what you found in your waste.
 2. **Option A:** If you have access to a plotter, print a large pie graph showing the breakdown of what you found in your audit. For help adapting the PowerPoint version of this, see the instructions below. Otherwise, get two large sheets of butcher paper, approximately 4 feet long. Next draw a large circle, leaving room to title your graph. Create a pie chart based on the percentages of what you found in the garbage (i.e. compostable food, paper, rigid plastics, plastic bags, etc.).
 - a. If you choose to use the PowerPoint version of this poster, double click on the image of the pie chart. An Excel spreadsheet will appear. Click on the tab that says, "Sheet 1" and replace the existing percentages with your own results.
 - b. Repeat this step for the results based on volume.
 3. Gather samples of the materials in each of the categories. Obviously, you don't want to attach real food on the chart so it's recommended that you find a magazine about cooking and cut out images of food for the "compostable food" category.
 4. Talk to the students about the results of the waste audit and show them a printout of the pie chart that is automatically created by the Excel version of the waste audit form.
 5. Explain that they will work in small groups to create a more realistic version of this chart to teach the rest of the school about what is being thrown away.
 6. Pass out markers, scissors, glue, paste & samples of the garbage & recyclables and instruct the kids to first label each slice of the pie chart with the category title and percentage that it represents. Have the students begin attaching the materials & labeling the chart.
- Option B:** Another way to display the information is to show it as a percentage of how much it fills the garbage can (although your school probably uses a dumpster).
- Option C:** Regardless if you use the pie chart, create your own bar chart or use the template of the garbage can, the easiest option for this activity is to have the kids cut out paper images of the materials and to do it as a paper collage instead of using actual garbage & recyclables. These images are available as a download on the Oregon Green Schools website or I can mail them to you.
7. When completed, ask the students to make observations about the



Our school's Green Team recently looked at what we are throwing away. Above is a pie chart showing what we found (by weight). What things could be getting recycled or composted instead of wasted as garbage?

mural. What could have been composted? What could have been recycled? What's the overall percentage of things that could have been composted or recycled versus what is truly garbage? Where should we hang this so that the whole school will see it (i.e. cafeteria, hallway, library, etc.)? Consider having your students take the mural to do mini-classroom presentations to explain the results, perhaps coupled with a brief "yes/no presentation" where the students show examples of various common things found in the audit and ask the students if they could be recycled, composted or if they belong in the garbage.

8. You will probably need to let it dry for a day before hanging it up if you opt to attach actual garbage/recycling.

Tips:

- Another version of this is to have students each do their own mural on an 11" x 17" sheet of paper and then hang them up randomly around the school.
- This project seems to work best with students in groups of 5-6 students so you may want to have materials to make 4-5 different murals, depending on your class size. You could have a "beauty contest" and ask another class or teacher to pick their favorite two (one based on the results of the weight, the other the volume) to be displayed.
- You should plan on 45-60 minutes for this activity.
- This activity might be best for students in grades 3-6.

If you want to plan on gathering the "garbage" ahead of time, here are some materials you can gather and cut ahead of time:

- **Paper:** Office paper, notebook paper, newspaper, butcher paper, magazines, construction paper
- **Metal:** Aluminum cans, tin foil, paper clips
- **Cardboard:** Pieces of cardboard and greyboard
- **Rigid Plastic:** Cleaned yogurt cups, cottage cheese containers, plastic water bottles, plastic clam shells
- **Plastic Bags:** A variety of stretch wrap, bubble wrap, zip-lock bags and plastic bags of different sizes
- **Styrofoam:** Small pieces of Styrofoam, clean cups or shells or lunch trays, peanuts
- **Glass:** Cut out pictures of glass from magazines or break glass in tarp & tape with clear tape so they don't pose a danger.
- **Food:** Cut out pictures of food from cooking magazines
- **Garbage:** Plastic utensils, milk cartons (if your school isn't collecting these), paper towels (clean ones), small broken pencils/crayons, straws, padded envelopes, and any other appropriate materials commonly generated in school that are not recyclable.