
BLUE TARP WASTE AUDIT

MATERIALS NEEDED

1. Tarp - we recommend using at least 5' x 7'
2. Previous day's waste (keep all bags separate and labeled by class, time of day, etc)
3. Gloves (non-latex) and/or tongs for sorting through trash items
4. Pre-weighed bins/bags for compost, recycling, and actual trash (bonus: collect unopened/uneaten food separately from compost to highlight need for food rescue strategies in the classroom)

ACTIVITY SEQUENCE

To tackle our problem with waste in the classroom, we need to do a better job understanding where it all comes from. The next time you fill a trash bag, don't place it out for disposal just yet! Complete an "audit" of your school's garbage using our [Waste Audit Form](#) and the materials listed above. In a waste audit, the contents of the trash bin are dumped onto a large tarp and separated into four categories by what should have been:

Reused or Donated _____ this could also apply to unopened food	Recycled _____ based on ecomaine's Do/Don'ts, pictured below
Composted (Backyard or Commercial) _____ if it grows, it goes! Use this area for organics you can compost locally	Landfilled _____ this is the actual trash, if we divert the rest

For reporting, weigh the total amount in your trash before separating contents into the four categories, then get some gloves and tongs and get sorting! After the pile has been completely sorted through, weigh each individual pile to get a full picture of how much waste you could be saving from the landfill. We recommend doing these audits seasonally and using this information to compare with your waste year after year.

TIPS TO TRY: To keep recycling clean, you can also audit your recycling! Using the same technique, weigh the material at the start (don't forget to subtract the weight of the bin), and then dump the recycling onto a tarp and sort into two categories: recycling (checking our Recycling Do/Don't list below) and contamination.

DISCUSSION QUESTIONS

1. What items are thrown away the most? Is there another option we might use at school to avoid throwing these items away?
For example, could students skip the straw or only be given utensils upon request?
2. How could the students consider the Food Waste Hierarchy and use their uneaten food to feed hungry people or animals? *Hint: look at any unopened chip bags, milk cartons, etc... could the students place these on a Share Table at school to give these items away to others?*
3. How could this activity be done at home, and would the results be similar or different?
4. What was the heaviest material in the trash, and how might that impact the school? *Often, schools and towns pay for trash disposal by weight or by how often a container is emptied. If they removed compost from the trash, how might that help the school save money?*
5. What happens to our trash? *Talk to ecomaine about where your trash and recycling go! Once items are thrown into the garbage, ecomaine's Waste-to-Energy facility burns the trash to make electricity, but should these items be burned or could they be turned into soil or new items instead?*

After completing this activity, ask your students what actions they might do differently to make less trash in the future. For questions or to invite ecomaine to your classrooms to facilitate (indoors or outside), please reach out via email at info@ecomaine.org

THANK YOU FOR HELPING KEEP ITEMS OUT OF MAINE'S LANDFILLS!

COMMON CORE & NEXT GENERATION SCIENCE STANDARDS

Science

- K-ESS3-3.** Communicate solutions that will reduce the impact of humans on the land, water, air, and/or other living things in the local environment.*
Examples of human impact on the land could include cutting trees to produce paper and using resources to produce bottles. Examples of solutions could include reusing paper and recycling cans and bottles.
- 5-LS2-1.** Develop a model to describe the movement of matter among plants, animals, decomposers, and the environment.
Emphasis is on the idea that matter that is not food (air, water, decomposed materials in soil) is changed by plants into matter that is food. Examples of systems could include organisms, ecosystems, and the Earth.
- 5-ESS3-1.** Obtain and combine information about ways individual communities use science ideas to protect the Earth's resources and environment.
- 3-5-ETS1-2.** Generate and compare multiple possible solutions to a problem based on how well each is likely to meet the criteria and constraints of the problem.

Math

- K.MD.A.2** Directly compare two objects with a measurable attribute in common, to see which object has "more of"/"less of" the attribute, and describe the difference. *For example, directly compare the heights of two children and describe one child as taller/shorter.*
- 1.MD.C.4** Organize, represent, and interpret data with up to three categories; ask and answer questions about the total number of data points, how many in each category, and how many more or less are in one category than in another.
- 3.MD.A.2** Measure and estimate liquid volumes and masses of objects using standard units of grams (g), kilograms (kg), and liters (l). Add, subtract, multiply, or divide to solve one-step word problems involving masses or volumes that are given in the same units, e.g., by using drawings (such as a beaker with a measurement scale) to represent the problem.

Literacy

- RL.K.2** With prompting and support, retell familiar stories, including key details.
- RL.1.2** Retell stories, including key details, and demonstrate understanding of their central message or lesson.