THE GREEN TEAM School Slash Trash Report - Extension Analysis Addenda -

Units of Measurement

- **Number** of bags or containers (volume).
- **Weight (lbs., kg):** Students can measure the weight of the material after subtracting the weight of the container. Scale required.
- **Volume (ft³, gal)**: Students can estimate fullness of a container of known size or use the appropriate formula to calculate volume. Supplies may include measuring tape and formula charts. Verify calculations as needed.

Analysis Options

In addition to analyzing data by creating bar graphs or pie charts, these analysis examples provide connections to the Massachusetts Mathematics Curriculum Framework for Grades 6-12, and can be used to supplement the Questions to Guide Analysis in the <u>Slash Trash Extension</u>.

	ANALYSIS	MATH CURRICULUM STANDARDS
GRADE 6-7	Using weekly data, develop proportions to discuss the relationship between the different waste streams and the total waste produced. Repeat for monthly totals and have students work with a partner or in small groups to compare and contrast data. For an additional challenge, have students extrapolate the data to predict the amount of material recycled or composted when given the total waste produced.	6 RP 1, 7 RP 2
GRADE 8	Compile students' data to create a scatterplot. Plot data with the material recycled or composted on the x-axis and the trash disposed on the y-axis, where each dot represents a different week. Ask the students to describe patterns, such as clustering, outliers, and any linear associations.	8 SP 1, 8 SP 2
GRADES 9-12	Collect all students' weekly totals and create a histogram for each waste stream. Use statistical analysis to describe the data.	HS (S)

Create an Action Plan

Encourage the students to create an action plan that improves or expands upon the success of their month-long project. Inspirational examples of <u>GREEN TEAM student projects</u> include:

- Advocating for the establishment of a single-use plastic bag ban in their town.
- Collaborating with cafeteria staff to establish a share table program at their school.
- Creating informational videos to teach students, staff, and teachers how to properly recycle and compost at school.
- Writing letters to their city mayor in support of recycling and to their local Board of Health in support of food donation.