

The Plastic Challenge

Plastic Challenge Template: A Student Project Guideline

Project Scope: The Plastic Challenge gives students the opportunity to make a positive environmental impact while developing STEM and critical thinking skill sets.

Step 1: Each student audits his/her plastic consumption over the course of a week.

Step 2: Each student consciously reduces her/his total plastic consumption over the course of a second week and continues to monitor their total plastic intake for that week.

The following is a set of instructions of what the Plastic Challenge entails broken down by week. Additionally, optional exercises are included to further enhance these efforts.

Week 1: Audit

1. Students collect all of the plastic waste they generate over the course of the week. These include plastic bags (shopping, sandwich, Zip Locks, etc.), containers, bottles, wrappers, packaging, and any other single-use plastic items that are used (cups, forks, etc.). Students should store items at home in plastic shopping bags (ie: Jewel, Mariano's, etc.), which will also be used as a measure of volume.

Live normally the first week. The purpose of this is to offer a baseline of each student's "plastic footprint" by which to gauge subsequent reduction efforts. Think of week 1 as a scientific experiment involving pure observation **with no behavioral changes**: nothing more.

2. Students take a photo of their "trash stash" at the end of week 1 (7 days) and add up all of the items they've collected. Next, students log these numbers into the Google Form (linked can be found in this email) and answer a few questions about their plastic consumption and observations.

Week 1 Guidelines

1. **What qualifies as yours?** Anything that benefits you. So if a jug of milk is consumed by a household (including the students) then that qualifies. However, if the student/participant does not drink milk, then it does not.
2. **Guilt is not encouraged.** Nor are comparisons with other students who might be perceived as doing "better" or "worse." The purpose of this exercise is purely for educational purposes.

3. **Again: Live normally the first week.** The purpose of this is to offer a baseline of the student's/participant's "plastic footprint" by which to gauge subsequent reduction efforts. Think of this part as a scientific experiment.

Week 2: Reduce

1. (Optional) Start the week with a discussion of the questions answered in the Google doc for week 1. What are the greatest challenges students are facing? What are the greatest opportunities for improvement? What items are the most common? What items are the most popular? What items can be reduced or eliminated to minimize plastic consumption?

2. Students will again collect all of the plastic waste they generate over the course of the week, including plastic bags (shopping, sandwich, Zip Locks, etc.), containers, bottles, wrappers, packaging, and any other disposable plastic items that are used. As in the previous week, students should store items at home in plastic shopping bags (ie: Jewel, Mariano's, etc.), which will be used as a measure of volume.

This time the goal is to reduce as many items as possible. Here students take a stand to become a better environmental citizen and steward of the planet.

3. While lowering the use of any and all single use plastic items is encouraged, *students should identify a specific item* (i.e. plastic bottles) *they're trying to reduce* during the week's reduction campaign. During this week, they are asked to bring in one of those items (i.e a rinsed and clean plastic bottle) from their week 1 trash stash to contribute to a sculpture that will be made at Westmoor.

4. Students take a photo of their "trash stash" at the end of week 2, add up all of the items they've collected, and measure how many plastic shopping bags full of plastic they have. Next, students log these numbers into the week 2 Google Form.

Week 2 Guidelines

1. In discussing Week 1's questions/results, pay particular attention to how students can be most empowered in this process and how they might overcome particular challenges they are facing.
2. Consider a token item students can carry with them to remember the importance of what they are doing.