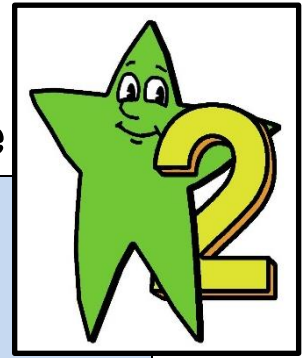


Waste-Free Lunch 1: Classroom Challenge



eco-cycle

Snapshot

This classroom challenge can significantly cut the volume of lunchtime trash and will provide strategies that empower students to reduce food waste and disposable packaging.

<https://bit.ly/eco-cycle-zero-waste-schools-guide>

Objective: Students will learn new ways to reduce lunchtime waste.

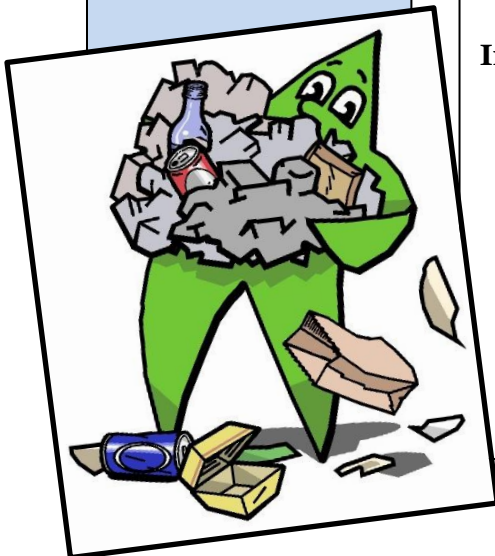
Age Groups: 3rd-6th grade

Setting: Classroom and cafeteria

Project Duration: Two weeks

Materials:

- Bathroom scale
- Garbage bags
- Chart paper
- Examples of single-use, disposable packaging (chip bags, zip top baggies, juice pouches, etc.)



Why This Project Matters:

The average child produces a significant amount of lunchtime waste over the course of a school year in the form of uneaten food and disposable food packaging. The volume (and cost) adds up quickly for schools because they are responsible for disposing of lunchtime waste for hundreds of students daily. A typical student lunch might include single-use plastic bags, disposable utensils, non-recyclable drink pouches, or single-serving items that come in their own disposable package. Without a doubt, lunch is the main trash-making time of the school day.

Project Summary:

This classroom challenge is designed to bring attention to the amount of lunchtime trash produced by the class and the materials that make up that trash. Students will examine typical single-use packages, think about why they are popular, and brainstorm less wasteful replacements. They will be able to witness their progress by weighing their lunch trash before, during, and after the challenge.



Implementation:

1. Inform students that they will be starting a lunchtime trash challenge and will need to collect some data before beginning the project. For one full week prior to starting the challenge, assign one or two students to collect the class's trash at the end of lunchtime each day. This should include trash items from both home-packed and school-made lunches. (Students must finish their drinks or pour them out before putting containers into the trash bag.)

2. On each day of data collection, have the trash-collecting students bring the lunch trash back to the classroom to be weighed. One easy technique is to have a student hold the bag while standing on a bathroom scale and record the total weight. Then subtract the student's weight from the total recorded weight to get the trash weight. On graph paper, record and chart the weight of the class's lunch trash each day for five days and share with students. In addition, examine the types of items that are in the trash with the class. Save some of the items until you have a variety of examples to facilitate the discussion below.
3. After the final weight has been recorded, have a discussion with the class about the types of trash items that were collected. These might include uneaten food, plastic wrappers, plastic baggies, napkins, drink containers, straws, paper lunch bags, etc. Show examples of the single-use packages. Ask students to discuss the advantages and disadvantages of these items. For example:
 - Advantages: convenient, contains food so it can be stored and transported, keeps food clean and fresh
 - Disadvantages: creates more waste, uses natural resources to produce, costly
4. Ask students to think about lunch packaging alternatives that would keep food clean, fresh, and transportable without resulting in as much waste. For example: reusable containers, recyclable containers, reusable lunch bags/boxes, recyclable aluminum foil, reusable water bottles, etc. Ask students which natural resources they think are saved by using recyclable and reusable packaging instead of disposable packaging. Ask about other environmental benefits that might result from using these alternatives (fewer landfills, less litter, etc.).
5. Challenge students to reduce their lunchtime trash. If they bring a lunch from home, ask them how they might pack each food item so there is no trash left over (pack only reusable or recyclable containers). Other ways to reduce waste include taking uneaten food home, using cloth napkins, bringing drinks in reusable bottles, etc. If they buy school lunch, ask them how they might reduce the trash from their hot lunch (eat all their food, take only items they know they will eat, use only one napkin, recycle milk cartons, etc.).
6. On each day of the challenge week, weigh the lunch trash just as before. Record and chart the weights on graph paper, then share with students.

Extensions:

- Have students create a presentation about their Waste-Free Lunch Challenge to share with and inspire other classes to implement a challenge of their own. This may include samples from a typical school lunch (disposable packaging) and a waste-free lunch (reusable and recyclable packaging).
 - Continue to weigh lunch trash once a week after the challenge to encourage the continuation of new waste-reduction behaviors.
- (Continued next page.)



7. If the daily weights during the challenge are lower (or higher) than those prior, have the class discuss what they think is (or isn't) working. If the daily weights are similar/no change, ask the class what changes they have tried and brainstorm more waste-reducing ideas.
8. At the end of the challenge week, calculate the average of that week's weights and compare it to the average weight before the challenge. Ask students how many of them will continue trying to pack waste-free lunches. Encourage them to commit to the rest of the school year (or beyond)!
9. If funds or donations are available, reward a successful Waste-Free Lunch Challenge with a prize drawing for reusable lunch bags, water bottles, or sandwich wraps. Or, to acknowledge everyone's efforts, reward the class with extra recess time, a special game, or a waste-free treat for each student.

Assessment:

Use the lunch trash weights before, during, and after the challenge to assess the project's success.

Related Activities:

- Waste-Free Lunch 2: School Contest – Chapter 2
- Waste-Free Lunch 3: Durables in the Cafeteria – Chapter 2
- Take a Bite Out of Food Waste – Chapter 4
- Making Cloth Napkins – Chapter 13

Extensions:
(continued)

- This chapter assumes that the school has a recycling program. See Chapter 18 if your school does not recycle and would like to get started. Starting a school composting program is another way to significantly reduce lunch trash. See Chapters 23, 24, and 25 for three different ways to compost at school.

