

Lesson 1: How Much Food are YOU Wasting?

Common Core Standards:

Next Generation Science Standards:

NGSS.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.

Target audience:

Grades 2-7

Objectives:

- Illustrate the problem of food waste in the United States.
- Inspire students to make conscious efforts to reduce their food waste.
- Use the mini food waste audit activity to demonstrate to students how they are contributing to the problem

Key Words:

Sustainable eating, conserving, food, healthy, environment, waste

Resources:

Introduction to Food Waste PowerPoint

Food waste audit activity

Food waste audit datasheet

Food waste fact sheet for instructor reference

Food items (1 per student; carrot sticks, apple slices, crackers, etc)

Basket, bucket, etc to act as “trash can”

Scale

Tray

Activities:

Introduction – Before lunch

Introduce to students the concept of food waste. Use the [Introduction to Food Waste Powerpoint](#).

Refer to presenter notes that can be found in the slideshow. Following the powerpoint, conduct the following short activity to demonstrate the magnitude of 40% food waste.

(This activity is more suitable for younger age groups and is recommended for students from grades 2-4)

Bring in one food item per student. Label 40% of these items. An example of how you can do this is by placing a tiny sticker on 40% of the apples. Pass out the items to the students. Ask the students to inspect their item and instruct those that found the label to “discard” their item into the basket.

Reiterate to the students that this is the proportion of food that is wasted in the United States.

Have students hypothesize what the pile of thrown away food would look like if they were to multiply the amount of food being thrown away in this activity to food thrown away by the population of the United States (the US population is about 325,000,000 people).

Extension Activity for more advanced students:

For more advanced student, you may ask the students to do a web search to research the population of your city, California, and the United States. They can then conduct the calculations to examine food waste amounts at different population levels.

Class activity – Mini Food Waste Audit

Methods:

1. Set up a weighing station that is easily accessible for students after their lunch break
2. Ask students to weigh their leftover food that they otherwise would throw away
3. Have students fill out datasheet with the amount of waste (in lbs) that they are creating
4. As a class, add up the total waste (in lbs) from all students
5. Perform simple calculations to demonstrate to students how much food they are wasting annually if they were to waste the same amount of food each meal.

(Class food waste ___lbs) x (3 meals/day) x (365 days) = Amount of food waste per class per year

Advanced students can be asked to formulate the equation and calculation on their own.

Discussion/Reflection

Discuss the activity and debrief with the students on the results of the audit.

- ❖ How many people do you think can be fed by the amount of food we wasted as a class?
- ❖ What can we do to reduce the amount we throw away?
- ❖ What are assumptions that are involved in the calculation of annual food waste?
- ❖ How can grocery stores and other distributors reduce their food waste?
- ❖ What are the benefits of reducing food waste?
- ❖ Where do you think all our food waste goes?
- ❖ What can our school cafeteria do better to help students reduce waste?

Future Activities/Homework:

- ❖ Challenge students to make conscious choices in reducing food waste at home. [You can ask students to conduct a food waste audit at their home.]
- ❖ Start an initiative in the class to make your classroom a zero-food-waste classroom. Have students come up with plans and ideas of how this can be done.

The USDA and EPA holds a [U.S. Food Waste Challenge](#). All schools K-12 are eligible to enter. This is an option to help drive your students and school community towards a food-waste-free environment.