

Focus on Waste Reduction Activity | Grades K-2

This month, the student focus will be on **waste reduction** and the importance of reducing waste in the hierarchy of Reduce-Reuse-Recycle. In addition to the lesson plan, students will be provided a waste reduction resource that they can put into action and track the effectiveness in their daily school activities.

Let's Reduce Our Disposable Utensil Habit!

One item that can always be found in a school trash bin is disposable utensils. Students that either bring or purchase lunch on-site regularly use these items. What is the environmental impact of using an item for just 15 minutes before disposing? During this month-long activity, students will learn to track and measure their utensil use, take actions to reduce the use of disposable utensils, and learn to quantify and measure the environmental benefits of changing their actions.

Overview

Over the course of one month, students will track the use of disposable utensils on campus. At the end of the month, they will be able to measure improvements in waste reduction and calculate the environmental benefits.

Objectives

1. Set up collection stations to count utensils.
2. Count # of each item and graph
(Lesson for counting by 1's, 10's and 100's) (Worksheet and graph provided)
3. Graph changes in utensil use.



Learning Outcomes

Students will continue to have a positive attitude about waste reduction efforts. Younger students will practice methods for sorting and counting utensils, teachers may incorporate relevant skills such as estimation. Older students will learn and apply concepts such as determining a baseline, establishing percent increase and reduction, and using critical thinking skills to improve processes for collection, measurement and reporting.

DETAILS

Subject:

Math, Science and Environment/Conservation

Grade Levels:

K-2

Time Duration:

One month

Materials & Supplies:

- ✓ Bins/buckets for utensil collection & photo of set-up
- ✓ Reusable utensil sets for each student and teacher
(IMPORTANT: Teachers should distribute these on the Friday ending the first week and send home with parent informational handout)
- ✓ K-2 teacher instructions and worksheets
- ✓ Foodware waste reduction PPT presentation
- ✓ Parent informational handout
- ✓ Thermometer poster for weekly progress tracking



Teacher Lesson Plan Guide | Grades K-2



Activity 1 Collect Utensils

With the oversight of the student cafeteria Trash and Recycling Wizards, or a teacher aide, the students will monitor counting of the disposable cutlery at mealtime. Students will then graph usage at the end of each week. One class per week will be responsible to oversee the utensil tracking activities.

1. Assign one classroom per week (4 weeks rotating) to monitor activities.
2. Set-up a bucket next to each trash/recycling station starting Monday of Week 1.
3. Assign one monitor to each station during mealtime, every day, to ensure that students place all utensils into bucket instead of trash or recycle bins.
4. Count utensils at the end of each meal.
5. Every Friday, add up the total number of utensils disposed.



Activity 2 Count Utensils

This activity should be completed each Friday after all mealtimes are finished, or early Monday, so that data is available for the school to use.

Ideas for counting practice:

- Sort utensils into groups of 5 or 10 and count groups.
 - Demonstrate the relationship between skip counting and adding and subtracting.
 - Demonstrate that $3 + 2$ utensils are the same number as $4 + 1$ utensil.
1. After practicing with counting, have all utensils placed into groups of 10
 2. Students complete attached worksheets



Activity 3 Graph and Share Utensil Counts

Once the students have counted the total number of utensils, the information needs to be shared with all classrooms for tracking purposes. The students should mark the poster chart and place near the cafeteria for all students to see.

1. With teacher help, create the "Units" graphing measurement on the right side of the thermometer. The measurement should be distributed in units of 10. So, if a total of 250 utensils were counted, each unit of measure will be approximately 25.
2. Place a "WEEK 1" arrow on the left side of the thermometer, next to the location of the number of units counted.
3. Students complete attached worksheets

Measuring Our Progress

Grades K-2 Activity 2 – Count Utensils



Week 1 – Measure a baseline

Draw a box below for each group of TEN utensils:



Draw a line below for each extra utensil:



How many boxes
did you draw?



Total number of utensils

How many lines
did you draw?



Measure the Difference

Each week, count the utensils and track the total number. Use a blank piece of paper to do a similar activity as above or do something new. Compare if the amount is more or less than Week 1 and other prior weeks. Track the results here and on the graph.

Total # of Utensils	More or Less than Week 1?	More or Less than Prior Week?
Week 2		
Week 3		
Week 4		



Graphing Our Progress

Grades K-2 Activity 3 – Graph and Share Utensil Counts

Fill out your baseline quantity from your initial count to the left of the baseline box. Write incremental, sequential numbers above and below your baseline number (counting by 1s, 5s, or 10s). For weeks 2-4, color in the box that is closest to the weekly utensil counts from student activity worksheets.

[illegible]