

Trashy Grant
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I. Project Description

My project is based on a biweekly activity of picking up trash, sorting it by type of material, and then graphing the results. My kindergarteners pick up trash around their designated part of the playground. After we bring the trash in, the students sort their trash (by material type) into labeled containers. Then one, by one, we count the pieces of trash and mark a graph with x's. We discuss "more", "less", "equal", and "none" both at the end of the week and the month.

II. Outline

- Lesson #1 – Tour your selected trash pick up area, point out and walk the boundaries.
- Lesson #2 – Read a book about taking care of planet Earth; and why we should reduce, reuse, recycle.
Label graph with categories of trash that you choose to count.
- Lesson #3 – Pick up trash, bring it into the classroom and sort into bins.
Mark graph according to the number of trash items collected in each bin.
- Lesson #4 – At predetermined times, stop and count the pieces of trash graphed.
Discuss and compare the totals (math).
- Lesson #5 – Share your results with other classrooms.

III. Lessons

#1 In the beginning of the school year, after discovering where everything is on a campus that is new to most of my students, we discuss how we want to keep our part of the playground looking neat.

#2 I read a book about caring for our world, including the concepts of reduce, reuse and recycle. The students give examples of what they can do to help at school and at home. We discuss the variety of types of trash, choose the 6 main categories and label our graph. We discuss how we will sort the trash (into bins) and how we will mark the graph (one square/one "x"/one piece of trash).

#3 The students patrol their part of the playground and look for trash – aiming for one piece per hand. When the entire class has picked up trash we walk in and sit on the rug, in front of our large chart (1" square graph paper). Each student sorts their trash into the plastic bins (recycled) that are labeled with words and a physical example (paper, plastic, wood, glass, metal, Styrofoam, misc).

I suggest that the students use gloves for this activity. I also suggest that students wash their hands after this activity, even if they do wear gloves. If my students found glass, cigarettes or dangerous metal, they would signal to me to come and help them.

After the sorting is done, each student takes turns marking an "x" in a square according to the type of trash they picked up. We have a graph labeled for each month of the school year. We use a different color marker for each new day that we pick up trash.

#4 At the end of the week and then again at the end of the month, we total up the pieces of trash and compare totals. We compare what category had the most trash, the least, ties, and maybe even some “nones”.

#5 Once a trimester, we go to one of the other classrooms and share our graph and ask the other students to please pick up their trash and throw it where it should go – either in the trash or the recycle bins.

For the first week or so, we sorted trash as a whole group, By the end of the second week, most students knew what trash went into what bin.

Sometimes you might need to stop and review the types of trash and characteristics of each type of material.

If the amounts of recyclable trash builds up, you will need to cash them out. Our recycling money went into a library fund.

Materials Used:

- Gloves for the students, cloth is reusable, plastic is disposable
- Sorting bins – we used recycled clear plastic bins, such as trimmed gallon milk jugs or licorice tubs
- Labels – for the bins
- Colored markers for marking the chart
- Poster board size chart paper – marked with 1” squares (for x’s) or you could use lined paper and just mark the trash with tally marks

IV. Notes/Tips for Teachers

1. I did write in some safety tips after Lesson #3, about wearing gloves.
2. I did this project with Kindergarteners, but it can be done with most all grades. The type of graphing lessons that follow the marking of the graph or the totaling of the graph, can vary by grade level.
3. Lessons #1 and #2 can be done together on the same day.
4. Discussions held about caring for the Earth, the topic of recycling trash, the concept of conserving resources are all part of most grade level curriculums of science.

Sorting the trash into materials is also a beneficial area of discussion. Discussing the properties of materials.

Graphing the trash is a BIG part of all grades levels of math standards. The discussions that result from discussing the graphing results is another standard covered with this grant.

Sharing the results is an oral speaking standard that gives students an opportunity to present their thoughts to their peers.

5. The students learned about cleaning up their environment. They felt pride in what they did. They had fun graphing the pieces of trash. The students felt some nervousness speaking in front of other classes, but experienced pride when they completed their presentation. Overall, the students felt pride that they could make a difference in their world, even with their small size.

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