

LESSON: Collect & Count**GRADE: K****OBJECTIVES:****Counting & Cardinality-
Compare numbers**

- **K.CC.C.6** Identify whether the number of objects in one group is greater than, less than, or equal to the number of objects in another group, e.g., by using matching and counting strategies.

MATERIALS & RESOURCES:

- One grocery bag for each student and the teacher in the class (preferably reusable. A grocer might donate reusable grocery bags)
- Chart for recording daily counts (see example at the end of the lesson plan)

PRESENTATION:

Talk to students about how scientists and mathematicians make guesses and then gather information to find out whether they guessed right or not. Tell them that the class is going to make some guesses about what the class throws away. After making guesses and writing them down, the class will spend a week gathering information to see if the guesses are right.

DIRECTIONS:

1. Give a grocery bag to each student. Tell them to keep it by their desk, and put all their trash into it for a week. Explain that the class is going to use each person's trash bag to find out what kind of trash is thrown away.
2. Ask the students what categories or groups they think their trash will fall into. You may need to get them started by talking about paper, crayon ends, broken rubber bands...Put the categories on the chalk board in a chart, like the example at the end of this lesson plan.
3. Teacher and students put all of their trash into the bags throughout each day. At the end of the first day, everyone goes through their trash to see if all of the pieces fall into one of the categories they decided on earlier. If they don't, add a category or group that will hold that item and others like it that accumulate during the week.
4. Then sort the trash into groups, count the items in each group, and add tallies to the chart on the chalkboard.

5. At the end of each day, have students sort their trash into categories, count the number of pieces in each category, and add the running sum.
6. At the end of the week, discuss what kind of trash the class discarded. Did they guess right?
7. Now that they know what they collected, what do they think of it? Discuss whether there are options for other ways to dispose of any of the categories of trash. Talk about things they would like to have their class change.

TIME:

1 week

PROCESSING THROUGH THE SIX PILLARS:

WHAT HAPPENED?

- Were your guesses correct?
- Were there categories you had to add?
- What category had the most trash? Which had the least?
- Was there a day with more trash than other days?

SO WHAT?

- How did you feel about collecting and sorting trash this week?
- How does sorting trash show Responsibility?
- How does sorting trash show Respect?

NOW WHAT?

- Does your school recycle trash? Is trash divided into recycle groups at your school?
- Is there something we could be done differently with trash at school? What could be done differently? Who can do it?
- Is there something you can do differently with trash at home? What can you do? Who can do it?