



## Digging Up The Facts

Grade Level: 4

**Subjects:**

Social Studies 2.3, 5.3,  
8.2  
Math 6.1, 6.2  
Communication Skills 2.2,  
4.2

**Time:**

one week

**Setting:**

classroom  
cafeteria

**Materials:**

large scale butcher paper

**Skills:**

gathering data, graphing,  
analyzing, comparing,  
drawing conclusions

**Vocabulary:**

solid waste  
recyclables

**Sources:**

Watauga County Recycling  
Curriculum Committee

Watauga County  
Department of Sanitation

**Summary:** The students will graph the amount of solid waste produced in their county or city each year for the last 3 years and the amount of material recycled over the same time period. Students will also weigh the school cafeteria waste each day for a week. The results will be graphed.

**Objective:** Students will become aware of the amount of waste produced in their own community.

**Background:** Example - Watauga County, NC

	Tons of Solid Waste	Tons per Person	Tons Recycled	Percentage
1990-91	32,307	1,749	2,384	7.38
1991-92	32,882	1,779	2,755	8.38
1992-93	35,208	1,906	2,393	6.70

Call your local Solid Waste Management department for local data, the Solid Waste Section (919) 733-0692, or the Division of Pollution Prevention and Environment Assistance at (800) 763-0136.

**Leading Question:** How much solid waste does your county or city produce in a year and how much does the school cafeteria produce in a week?

**Procedure:**

1. Ask the class how much solid waste has been produced in their county or city in the last 3 years. Ask how much has been recycled in that same time period. Have the class brainstorm ways to find out and then allow them to follow through on the best suggestion.
2. Also, go with class to the school cafeteria to weigh the day's waste. Continue this process each day for a week. Develop a class graph to display the data.
3. Allow the class to develop a graph for the county or city's solid waste and recycling data. Discuss trends and develop hypotheses about the future.
4. Brainstorm ways to cut down the amount of cafeteria waste.

**What Now?**

1. Have the class design a poster for classrooms in the school and the cafeteria encouraging students to reduce the amount of food they throw away in the cafeteria.
2. Write a class Letter to the Editor to make the public aware of your findings and to encourage conservation, reuse, and recycling.