

**DePaul Center for Urban Education
Chicago Math Connections**

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Dwight D. Eisenhower Professional Development program

Topic: Blue Bag Recycling in Chicago

Goal(s): 6,7,8,10

Skills: Estimation / analyzing and graphing data / interpreting data to predict future trends

What's the context?

Blue Bag Recycling

Which data will students use?

Blue Bag Recycling from 1996-2000

What will students learn from this project?

Know how – what will they be able to do better?

Read, interpret, and organize data in a table.

Visually represent data on a line graph.

Know what – what idea(s) will they clarify through the project?

Students will see garbage as an important resource to be used over again.

Use current data to predict future recycling habits.

What's the challenge?

- 1). Choose 5 recycled materials and chart the quantity recycled over a five year period.
- 2). Create a single line graph with the years 1996 through 2000 plotted on the horizontal axis along the bottom of the graph, and the quantity of tons recycled plotted along the vertical axis on the left hand side of the graph.
 - Note: Students will need guidance in numbering the tons recycled along the vertical axis. It may be helpful to round off numbers. For example, if 781.95 tons of aluminum was recycled in 1996, students could round this off to 782 tons – which would be a much easier number to chart on a line graph.
- 3). Students will then need to color code each of the five materials they want to chart. For example, the amount of aluminum recycled could be plotted in red, and the amount of glass recycled could be charted in green etc.
 - When finished, each student or group of student's, will have five different colored lines plotted on a single line graph.

Checkpoint: Students will pair up to check each other's graphs and to discuss and current recycling habits in Chicago and defend predictions for future recycling habits.

