DePaul Center for Urban Education

Chicago Math Connections

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Topic: Water Use in Chicago
Goal(s):6,8,10
Skills: Organizing, interpreting and graphing data. Calculating Proportion

What's the context?
Analyzing water use in Chicago.

Which data will students use?
Chicago Water usage facts

What will students learn from this project?

Know how – what will they be able to do better?
Organize, analyze and interpret data in a circle and bar graph.
Calculate proportions and averages

Know what – what idea(s) will they clarify through the project?
Compare and contrast data in order to understand patterns and predict future activities.

What's the challenge?
1). Choose five different activities from the data sheet that require using water at home and organize this data on a bar graph.
2). Create a circle graph to compare how individual activities, such as brushing teeth, compare with the total amount of water used by the five activities you have chosen.

- it will be necessary for students to figure out average amounts used for some activities, for example, if between 2 and 7 gallons of water are used to flush a toilet an average amount used would be 4.5 gallons.

Checkpoint: Students can check each other's calculations and compare graphs. Working together as a pair/group, students can create the same graphs for five different industrial activities. Students can work together to make inferences about the most significant ways to cut down on water usage at home and in industry.