

Math Lesson One

Compiling Home Water Use Questionnaires

This lesson requires students to integrate the information they explored in science and language arts lessons with skills acquired in math class. By helping students to use math in applied settings, this lesson promotes the use of problem solving.

Objectives:

- Students will put raw number results into an appropriate graph.
- NEVADA MATHEMATICS STANDARD: 2

Time: One or two class periods

Materials:

- Results from home (science activity two) or business (language arts lesson one) water use questionnaires
- Examples of various types of graphs, with explanations of graph characteristics
- Access to computer lab and database or drawing software

Procedures:

1. Using graphs from everyday sources such as the USA Today newspaper, ask students to analyze the graphs, paying particular attention to why that type of graph was chosen to represent that data.
2. Individually, students will use their home or business water use questionnaire results to choose one set of data to put into a graph. Students can choose from a pie graph, bar graph, line graph or scatter plot graph.
3. Students will create a rough draft of their graph, with a paragraph explanation of why they chose that form of graph and a paragraph explanation of what the graph shows about water use in that particular home or business. Have students work in pairs or groups to help review each other's graphs and edit paragraphs.
4. Students will use a graphing program to create their graphs and paragraphs. (Programs like Excel and ClarisWorks have graphing components.)
5. Students will share their graphs and explanations with other class members through oral presentations.

EXTENSION ACTIVITY: Students will present their findings, using both narrative and graphical information, in the form of a technology presentation, using a slide show software program (PowerPoint or ClarisWorks).