



Relations and graphs

Grade Level: 2

Objective By the end of the lesson, children should understand the concepts of greater than, less than and equal to. As well, they will practice making and using a graph to measure quantities.

Teaching method and activities

1. Divide the class into small groups of four or five (8 or 10 if the class is large) students each. Have the students draw lines on a large sheet of paper to form a grid. Each square of the grid should be large enough to contain a letter or a character and there should be at least 15 squares across and 15 squares down. Each student can draw his/her own grid, but only one grid per group is needed for this exercise. Perhaps the others could be saved and used for another lesson.
2. Each group member should print his or her own name as well as the name of a friend on the paper, with one letter in each box. There should be a total of 8 to ten names on the single piece of grid paper.
3. Have the students refer to the names on the grid paper to answer these questions: Who has the longest name? Who has the shortest name? Can you find someone with a name the same length as yours? Can you find someone whose name has one more (or one less) letter than your name?
4. On the board, organize the names into some type of graph. Plot the names on the graph by length. Ask students questions such as: Which name length is most popular? [fill in name] was not here today. Where should his/her name go on our graph? Can you think of anyone with a shorter name than [fill in name]?

Time 30-40 minutes

Materials Paper, pencils, straightedge (ruler or edge of a book) From: Mack, Nancy. Bosnia Project: Elementary Mathematics Module: Patterns, Relationships, & Number Sense. University of Pittsburgh.

SUGGESTIONS/MODIFICATIONS

- One model can be made on the board if there is not enough paper.
- You may use the children's height as a model of a bar graph by having a few children stand and showing the differences in their heights, as the rest of the children draw the children's height into a graph.
- To make the lesson more complicated you can compare first names, last names, and nicknames.

Source Mack, Nancy. Bosnia Project: Elementary Mathematics Module: Patterns, Relationships, & Number Sense. University of Pittsburgh.

