

Analyzing categorical data using a bar or pie chart (Tutorial D4)

http://www.atomiclearning.com/k12/en/movie/40766/play_window?type=Tutorial&sid=1674

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You can view your data using a bar chart. This can be especially helpful when you want to compare data results. In this

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case, I've got some data that relates to the number of votes different people received in class. The first thing I want

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to do is enter this data into the Lists and Spreadsheet application. I'll click Insert, and then select Lists and

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Spreadsheet. The bar chart in TI Nspire analyzes only raw data, so I'll need to place all of my votes in column A

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in order to analyze them. To do this, I'll type an open quote, then the letter A, and notice an end quote is added

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automatically in cell A1. This will present person A. It is important to note that all categorical data must be

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entered within quotes. In this case, person A received seven votes. So I'll click Data, and then select Fill Down. Now,

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I'll use the arrow keys to highlight the cells through A7, and then I'll press Enter. This will enter A seven times.

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Next, I'll press the down arrow key until I've highlighted cell A8, and then I'll type an open quote, then the letter

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B, and then press the right arrow key to move beyond the end quote. This will represent person B, who received a

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total of six votes. So, again, I'll click Data, and then choose Fill Down. I'll use the down arrow key to highlight the

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cells through cell A13, and then I'll press Enter. I'll use that down arrow key again to move to cell A14, and then

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I'll type an open quote, then the letter C, and then an end quote is added automatically. Person C received

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eleven votes. So I'll click Data, and then Fill Down. I'll move down to cell A24, and then press the Enter key. Now,

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I'll name the column by clicking in the title cell, which is the cell at the top of column A. I'll call this column

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Votes by typing V-O-T-E-S, and then pressing Enter. I'll insert the Data and Statistics application by clicking

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Insert, and then choosing Data and Statistics. The screen that you see here is called a Case Plot. It allows for exploration

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of the data by clicking on a point to see the full description of the data, or changing the caption to look at grouping

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by variable. I can click on the axes to assign a variable, or I can click and drag a point to allow the software to

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begin grouping the data based on the caption. As I drag the point, the dots rearrange themselves into a dot chart.

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To view this data as a bar graph, I'll click Plot Type, and then Bar Chart. Now, I can more easily graphically compare

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A, B, and C. If I wanted to compare A, B, or C as a percentage of the whole instead, I could view this data as a pie chart

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by clicking Plot Type, and then selecting Pie Chart.

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