

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

[http://www.atomiclearning.com/k12/en/movie/40762/play\\_window?type=Tutorial&sid=1670](http://www.atomiclearning.com/k12/en/movie/40762/play_window?type=Tutorial&sid=1670)

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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 relays 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 press the Home key, and then select Lists

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

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A in order to analyze them. To do this, I'll type an open quote than 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 press the Menu key. Then choose Data, and

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then select Fill Down. Now, I'll use the NavPad to highlight the cells through A7, and then I'll press Enter. This will

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enter A seven times. Next, I'll use the down arrow key until I've highlighted cell A8, and then I'll type an open quote

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and then the letter B, and then press the right arrow key to move beyond the end quote. This will represent

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person B, who received a total of six votes. So again, I'll press the Menu key, and then select Data, and then choose

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Fill Down. I'll use the down arrow key to highlight the cells through cell A13, and then I'll press Enter. I'll

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use that down arrow key again to move to cell A14, and then I'll type an open quote, and then the letter C and then

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an end quote is added automatically. Person C received seven votes, so I'll press the Menu key and then choose

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Data, and then Fill Down, I'll move down to cell A24, and then press the Enter key. Now I'll name the column by

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pressing the up arrow key until I've highlighted the title cell, which is the cell at the top of column A. I'll call

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this column Votes by typing "V-O-T-E-S", and then pressing Enter. I'll insert the data and statistics application

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by pressing the Home key, and then choosing Data and Statistics. The screen that you see here is called a Case Plot. It

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allows for exploration of the data by clicking on a point to see the full description of the data, or changing the caption

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to look at grouping by variable. I can click on the axes to assign a variable, or I can click and drag a point to

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allow the software to begin grouping the data based on the caption. As I drag the point, the dots arrange themselves

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into a dot chart. To view this data as a bar graph, I'll press Menu. Then choose Plot Type, and then Bar Charts. Now

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I can more easily graphically compare A, B, and C. If I wanted to compare A, B, or C as a percentage of the whole

[00:03:51.00] instead, I could view this data as a pie chart by pressing Menu, then choosing Plot Type, and then selecting Pie Chart.

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