

## Creating a summary plot (Tutorial D5)

[http://www.atomiclearning.com/k12/en/movie/86419/play\\_window?type=Tutorial&sid=2421](http://www.atomiclearning.com/k12/en/movie/86419/play_window?type=Tutorial&sid=2421)

[00:00:00.00]

You can enter and analyze summary data using Data & Statistics.  
First, let's enter our data into Lists & Spreadsheet by

[00:00:11.00]

going to Insert and then choosing Lists & Spreadsheet to  
create a new page. I'll click in the cell at the top of

[00:00:20.00]

column A to select it, and then I'll type "color" to name  
the data in this column "color," followed by the Enter

[00:00:31.00]

key. Next, I'll click in the cell at the top of column  
B to select it, and type "fre," to stand for "frequency,"

[00:00:42.00]

and then press Enter. We did a survey in class of what  
everyone's favorite color is, out of the choice of red,

[00:00:51.00]

green, blue, or other. Let's enter that data first, by  
clicking in cell A1, and then typing "red," followed by

[00:01:09.00]

the Enter key. Putting the data in quotation marks will  
make sure the software knows it's categorical data. Now

[00:01:18.00]

I'll type "green" and then press Enter. Then "blue" followed  
by Enter. And finally, "other" and then press the Enter key. Next,

[00:01:50.00]

I need to enter in how many times each color was mentioned;  
this is the frequency of each color. Six people in class

[00:01:59.00]

said the color red was their favorite, so I'll click in  
cell B1 and then type "6," followed by Enter. Eight people

[00:02:10.00]

liked green best, so I'll type "8" and then press Enter. Seven people said blue was their favorite color, so I'll type

[00:02:23.00]

"7" and then Enter. Three people like a color other than red, green, or blue best, so I'll type "3" and press Enter. Note

[00:02:36.00]

that, when you're entering frequencies, empty cells are truly considered empty cells with no data, and will not

[00:02:44.00]

be considered as having a value of zero. Now let's look at this data graphically using the Data & Statistics application.

[00:02:54.00]

I'll use the arrow keys to highlight the cell at the top of column A that currently says "color," and then I'll press

[00:03:03.00]

the up arrow key to highlight the whole column. I need to select both columns, though, so next I'll press Shift

[00:03:11.00]

and then the right arrow so both are highlighted. In the Document Tools, I'll click Data>Summary Plot to bring

[00:03:24.00]

up the Summary Plot dialog box. Using the drop-down menu I'll choose "color" for the data list by clicking on it.

[00:03:34.00]

In the Summary List drop-down menu, I'll choose "fre." The Display On field determines where the new Data & Statistics

[00:03:46.00]

application will be inserted. I want a side-by-side view so I can see both the data we entered and the graph, so I'll set it to

[00:03:55.00]

Split Page, and then click OK. Because my Data List is words, and not numbers, I see my data represented as a bar chart.



# TI-Nspire™ Software Script

[00:04:07.00]

If they were numbers, I would see a histogram. Now I can analyze my data graphically using the frequency list and bar chart.

[00:04:20.00]