

Creating a scatter plot (Tutorial C2)

http://www.atomiclearning.com/k12/en/movie/86412/play_window?type=Tutorial&sid=2421

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To create a scatter plot using data entered in a list, I'll first insert the Lists & Spreadsheet application into a

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new page by clicking Insert, and choosing Lists & Spreadsheet. Next, enter your list of coordinates. To do this, I'll

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click on the white space just to the right of the letter A at the top of column A. I'll type "x" "c" "o" "o" "r"

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"d" and then press Enter. This defines any values I enter into column A as a list linked directly to the variable

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called "xcoord," which includes the x-coordinate values. Note that if you just watched the previous movie and entered

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the data along with that tutorial, the data auto-populates in your new Lists & Spreadsheet column. Now, I'll name

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column B "ycoord" using this same technique, first by clicking the white space to the right of the letter B, and then

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typing "y" "c" "o" "o" "r" "d," followed by the Enter key. I have a series of coordinates to enter. I'll enter the

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x coordinates in column A and the y coordinates in column B. Remember that you can pause this movie at any time while

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you enter the data. Let's start with the x-coordinates, pressing "Enter" after you type each number. I'll manually

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enter in 0.5, 1.5, 2, 6, 8, 15, 19, and 45 into column A. Next, I'll go up to the cell B1 and enter "0". The y-

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coordinates increase by 10 every time. To save myself from typing, I'll express each coordinate as a function of the

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coordinate preceding it. To do this, in cell B2 I'll type and then type "b1," followed by "+10". The full cell formula

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now reads "=b1+10". Now, I'll click Data in the Document Tools, or right-click and select the Fill command. Now,

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I'll just use the down arrow key to highlight the cells through cell B8 and then press "Enter." Notice that the

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values have been populated all the way through 70. I'll insert a new page with the Graphs application in it by

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clicking "Insert" and then choosing "Graphs." Next, I'll switch the graph mode to Scatter Plot by clicking on Graph

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Entry/Edit in the Document Tools, and then choosing "Scatter Plot." Now I'll highlight the x entry line if it's not

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already highlighted by pressing the Tab key. Next, I'll press the Var button in the toolbar and click to choose

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xcoord" which is what I named column A in my Lists & Spreadsheet application. I'll highlight the y entry line by pressing

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Tab to highlight it, and then I'll press the Var button. Next, I'll click "ycoord", which is what I named column



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B in my Lists & Spreadsheet application, and then press Enter or Return on the keyboard. Immediately, I can see

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some points have been plotted on my graph. Because of the graph's current scale, however, I'm unable to see all of

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them. To quickly readjust my graph scale to include all of my coordinates, I'll right-click on the graph and choose

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Window/Zoom, Zoom-Data. Now I can see all of my points in this work area.

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