

## Creating variable bin widths in a histogram (Tutorial D6)

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

[00:00:00.00]

The rectangles in a histogram represent the frequency, or number, of observations that fall within the range each

[00:00:07.00]

rectangle covers. By default, bin widths are equal, but you can vary the bin width for a histogram from the default

[00:00:15.00]

using histogram properties. You will need to create a list that will define the classes for the histogram in the Lists

[00:00:23.00]

Spreadsheet application. In this example, the list in column A, "age," is the list that defines my histogram, a list

[00:00:32.00]

of participants in a neighborhood survey, and the list in column B, "bounds," defines the classes, which I've

[00:00:41.00]

grouped for kids under 10, then in bins of 5 until age 40, and then every age over 40. Insert the Data & Statistics

[00:00:51.00]

application. I'll roll over the x-axis, click, and select my list from column A, "age." I'll click the Document

[00:01:02.00]

Tools menu, then Plot Type, Histogram. Now to switch to variable bin widths, click Document Tools and select Plot

[00:01:15.00]

Properties, Histogram Properties, Bin Settings, Variable Bin Width. The Variable Bin Width Settings dialog box will

[00:01:27.00]

appear and you can select the name of the list that you created to define the classes. Now I'll click OK. Note

# TI-Nspire™ Software Script

[00:01:36.00]

that the final number in your bin boundaries is not inclusive.  
You must make sure that all data points belong to a class.

[00:01:44.00]

To see the range over the top of a bin, roll over it and  
click to show it.

[00:01:50.00]