MAKING HISTOGRAMS

A histogram looks like a bar graph but it uses numerical instead of categorical data. The numerical data are grouped in intervals, called bins, that are ordered along the horizontal axis or x-axis. First, you have to decide on a bin width. In the case of the jump data, let's use the same bin width as we did in the stem-and-leaf plot. The width of the bin will be ones. The frequency (the number of times a value occurs) in each interval is indicated by the height of the columns. The columns in a histogram should be right next to each other without any space between them. A gap between columns indicates that there are no data items with those values.

1.) Take the final draft of the stem-and-leaf plot, (the one with the leaves organized in numerically) and turn it on its' side.

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</table>
2.) The stem-and-leaf plot is the rough draft of the histogram. The x-axis will be the jump height in inches. The y-axis will be the frequency of the jump heights in each interval. Use the grid paper and begin to make the histogram.
3.) Look at the first two data points on the stem-and-leaf plot. They are 5.9 inches and 5.9 inches. 5.9 is between 5 inches and 6 inches. So a bar of a frequency of 2 goes between 5 and 6 on the x-axis.

4.) Look at the next data point on the stem-and-leaf plot. It is 6.3 inches. 6.3 is between 6 inches and 7 inches. So a bar of a frequency of 1 goes between 6 and 7 on the x-axis.
5.) Look at the next 5 data points on the stem-and-leaf plot. They are 7.3 inches and four 7.7 inches. 7.3 and 7.7 are between 7 inches and 8 inches. So a bar of a frequency of 5 goes between 7 and 8 on the x-axis.
6.) Continue making the histogram for the remainder of the Jump data.

7.) Put a title on the histogram.