• **GRAPHS/CHARTS**
  
  o To select data, simply highlight it. You can highlight your labels too, but Excel’s guess of where they go might be incorrect. Instead, you can always add your labels in later.
    
    ▪ To highlight non-consecutive areas, just hold down the Command key while highlighting.
  
  o To find an appropriate graph, select “Charts” in the top toolbar. Bar graphs will be under “Column” and scatterplots will be under “X Y (Scatter)”.

  ```
<table>
<thead>
<tr>
<th>Insert Chart</th>
</tr>
</thead>
<tbody>
<tr>
<td>Click a chart type to insert into the document.</td>
</tr>
<tr>
<td><img src="charttypes.png" alt="Chart Types" /></td>
</tr>
</tbody>
</table>
  ```

  ▪ If you’ve made your graph and the data selected by default is not what you wanted, click on your graph. Different colored boxes will appear around your data, and you can adjust whatever they highlight.
  
  ▪ You can also delete anything you want off of the graph, such as the legend, by clicking on it and hitting the delete key.

  o To add/edit the title and axes labels, look at your toolbox in “Formatting Palette”. Under “Chart Options” you can select what “Titles” you want to label from a drop down menu.

  ```
  ![Formatting Palette](formattingpalette.png) |
  ```

  There are also a lot of other options in the toolbox such as text orientation, colors, effects, sizes, gridlines, etc.
o To edit an axis (e.g. scale, number format, etc.), right-click or control-click on it and select “Format Axis...”. A window will pop up with many options for you to select from.

![Format Axis window]

o To edit your data presentation (the color or size of points, width of bars, adding value labels, etc.), right-click or control click on the actual bars or points and select “Format Data Series...”

![Format Data Series context menu]

o For scatterplots, you can also right-click or control-click on the data points and select “Add Trendline...” in order to insert a least-squares regression
line. A formatting window will pop up, where you can select what type of line you’d like, how much to extrapolate it, and whether or not you’d like to display the equation and/or $R^2$ value.

![Format Trendline](image)

- **HISTOGRAMS**
  - Unfortunately, this is something Excel will not do, so make sure you have StatPlus open!
  - To create your bins, use an area in Excel that has nothing in it and type your values in a column (i.e. 50, 100, 150, 200… or 10, 20, 30, 40…). *Do not include 0!* StatPlus will automatically sort the data into their appropriate bins depending on your desired bin sizes.
  - To make the histogram, go to StatPlus → “Statistics” → “Basic Statistics and Tables” → “Histogram..."
An Options window will pop up. Under “Continuous Variables” hit the button and highlight your main data. Without clicking on anything else, go back to StatPlus. Your data will automatically be inputted. Under “Bin Range” hit the button again and highlight your column of bin intervals. Go back to StatPlus one last time (you can usually leave the last two options blank). Uncheck “Labels in first row” if it is not the case. Click on “Advanced Options” and uncheck both choices (Pareto and Output). Then click on “Preferences” and edit whatever you like. Finally, hit OK. A new Excel page will open up with a summary and graph. You can edit and label the graph the same way as described above. To remove the gaps between bars, right-click or control-click on the bars, select “Format Data Series...”, go under “Options”, and change
the “Gap width” to 0%. You can also add values to the individual bars under “Labels”.