## Line Graph

When you have something that is measurable and scalable on the $x$ and $y$-axis. Example - plant height vs. fertilizer amount. Fertilizer amount might go on the $x$-axis and plant height would go on the $y$-axis.


## Bar Graph

When you have something that is measurable on one axis (usually the $y$-axis) and something that is absolute on the other axis (usually the x-axis). Example - M\&M color vs. Number of M\&Ms.

Steps for Creating a Line Graph in Excel

1. Enter your data in the cells in Excel. $\theta \theta \theta$

| 0 | A. | - |
| :---: | :---: | :---: |
| 1 | Amount of Pixie Dust | Length of Spell |
| 3 | 10 | 20 |
| 1 | 20 | 39 |
| 4 | 30 | 20 |
| 5 | 410 | 75 |
| c | 50 | 103 |
| 7 | 60 | 120 |
| 8 | 70 | 150 |
| 9 | 80 | 164 |

2. Highlight the cells that have the data you want to use in your graph. -0日

| Amount of <br> Pixie Dust | Length <br> of Spell |
| :---: | :---: |
| 10 | 20 |
| 20 | 39 |
| 30 | 65 |
| 40 | 75 |
| 50 | 153 |
| 50 | 125 |
| 70 | 155 |
| 111 | 184 |

3. Click on the Chart Wizard button on the standard toolbar.

4. Choose the XY (Scatter) in the chart type section. I recommend choosing the 3rd option "Scatter with data points connected by lines."

Chart Wizard - Step 1 of 4 - Chart Type

| Standard Types Custom Types |
| :---: | :---: |


5. Click "Press and Hold to View Sample." Does it look like you expected?
6. If yes, Click Next 2 times and go to step 7.
7. If no, Click Cancel and check steps 1 through 3.
8. Click the Titles tab, if necessary.

9. Type a Chart Title, a title for your Value (X) axis, and a title for your Value $(Y)$ axis.
10. Click the Gridlines Tab.
11. Click the "Major gridlines" in the "Value (X) axis" section.

Chart Wizard - Step 3 of 4 - Chart Options

| Tilles | Axes | Gridlines | Legend | Dala Latels |
| :--- | :--- | :--- | :--- | :--- |


12. Click the Legend Tab.
13. For a single line graph, uncheck "Show Legend." For a multi-line graph, keep the legend and choose the location for it.
14. Click Next.
15. Click the button for "As new sheet: Chart1."

16. The gray background won't print very well, so remove it by doing the following:
17. Click in one of the gray squares.
18. Then click the properties button on the Chart toolbar.
19. Click the None button in the Area section.


## 20. Click OK.

## Additional Thoughts:

* Want to change other parts of the graph? Click on that part, then click on the properties button.
* Oops! Made a mistake during the Chart Wizard? Click Chart on the main menu, then click options.

