# Creating a Graph in Excel
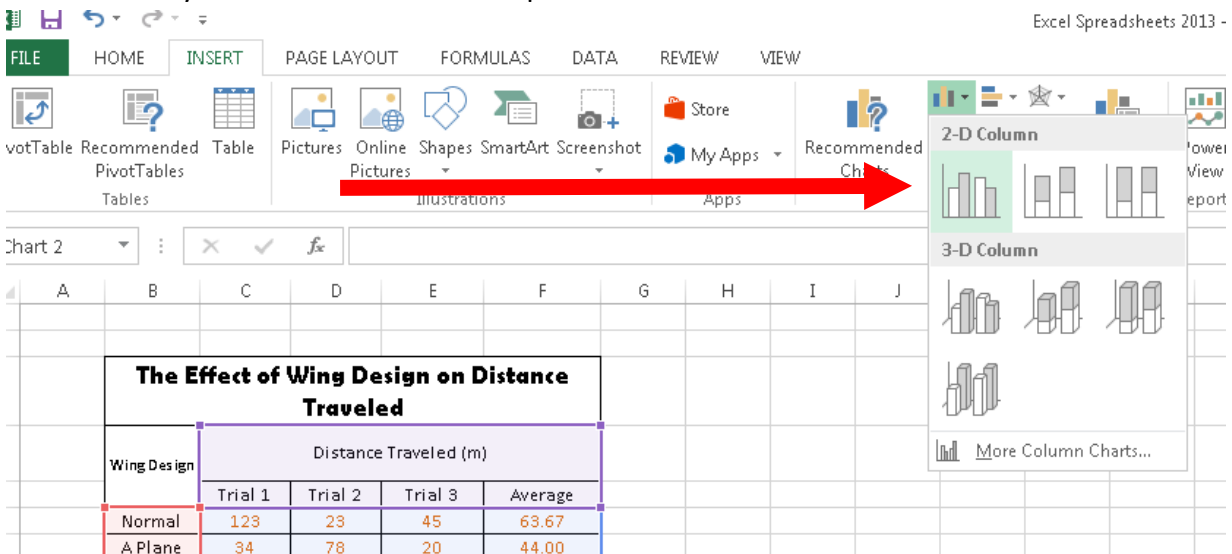
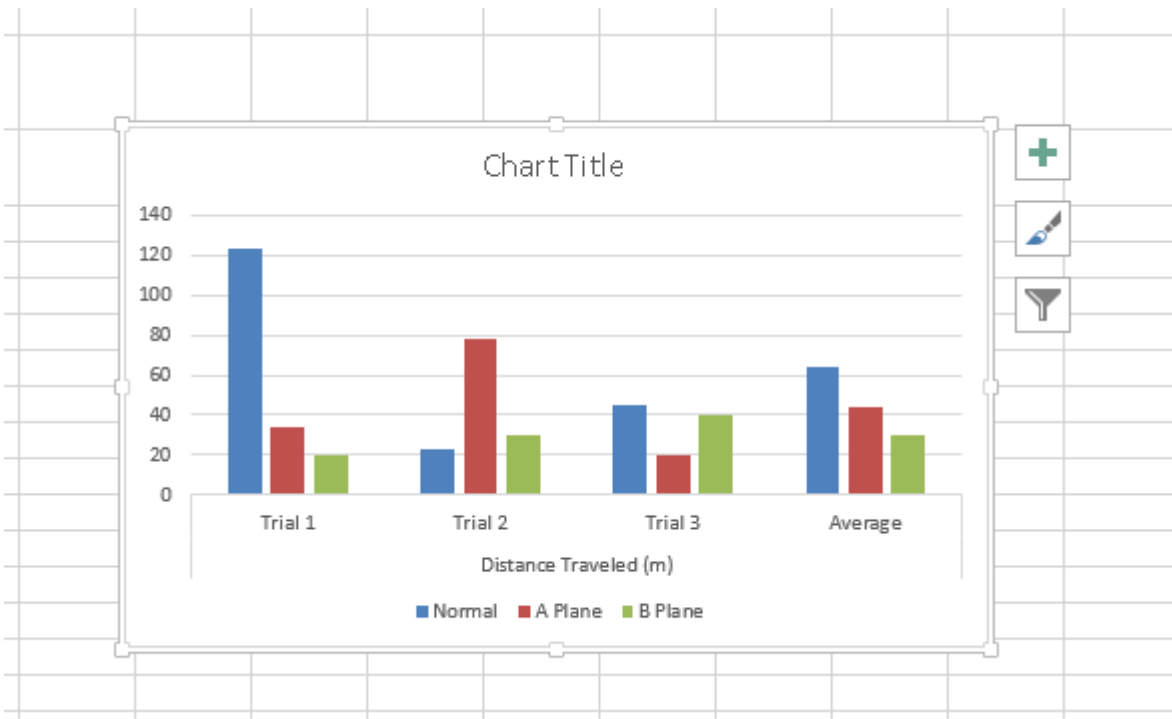1. Click on B4 and highlight the graph (everything BUT the title)



2. Click "Insert" at the top of the excel program and choose "the 2-D Columns." You are going to select the very first 2-D chart in that drop-down menu.

3.  This is what should appear (or something similar to it):



4.  Right click on the BLANK section in your graph. A drop down menu will appear.  Click on "Select Data"
5.  A new box will appear, and the lines will start to dance around the data table.  Click on  "Switch Row/Column" and then "OK" (see below)

6. Now, your independent variables are listed on the X axis of your graph, and the key is with each of the trials! However, the trials listed in the key have WAY too many words in them:
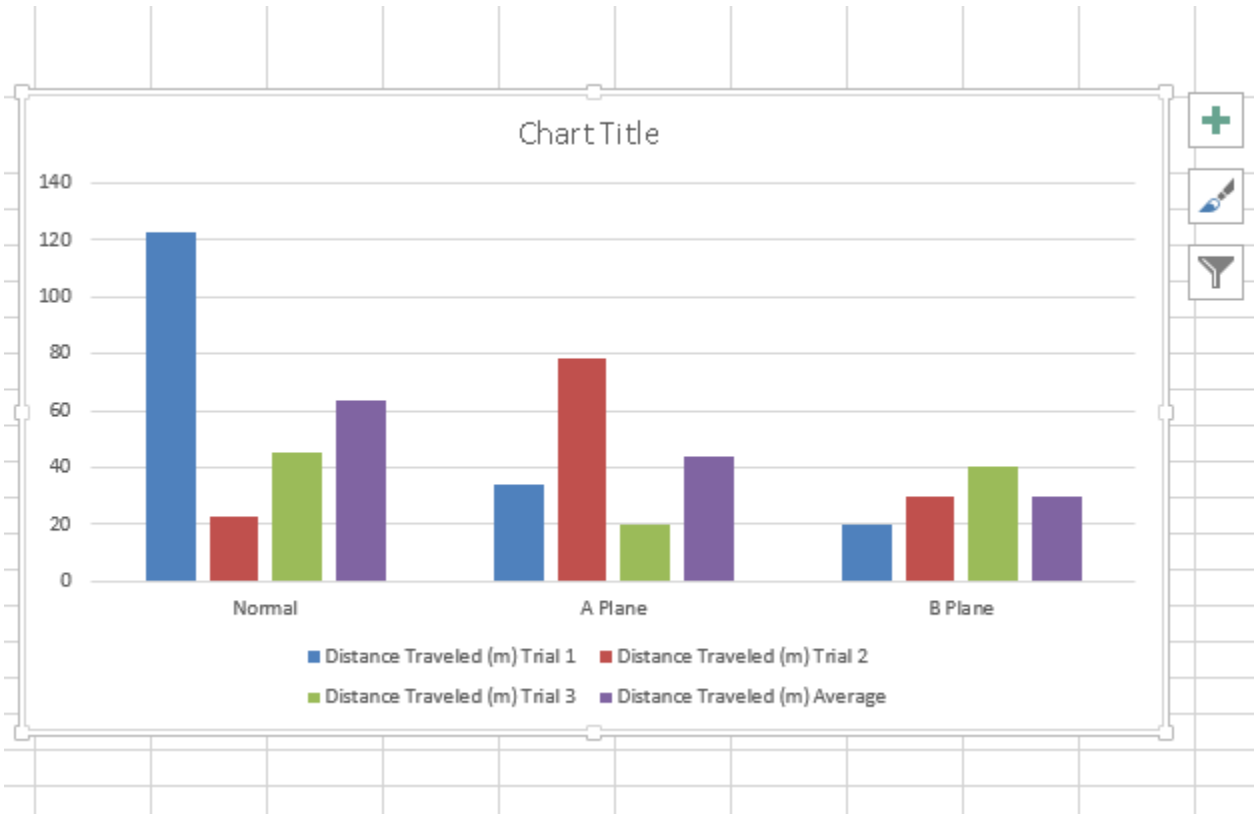


7. We need to change that by RIGHT CLICKING in the blank spot in your chart
8. Click on "select data" from the drop down menu. You should see the same box appear from earlier

9.  You are going to look on the left side of your box where the trials are listed under Legend Entries. Click on the first line so that it turns blue:

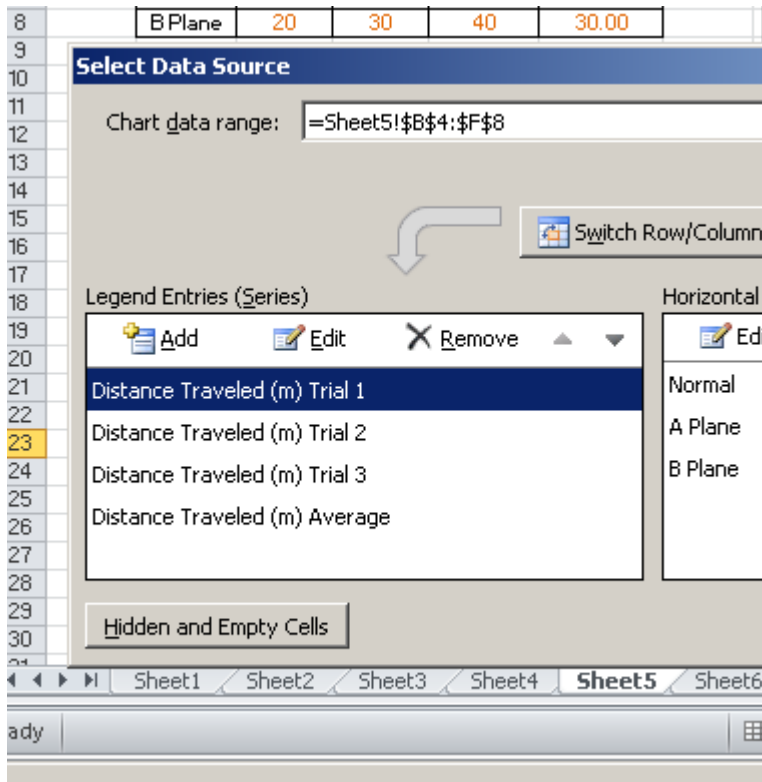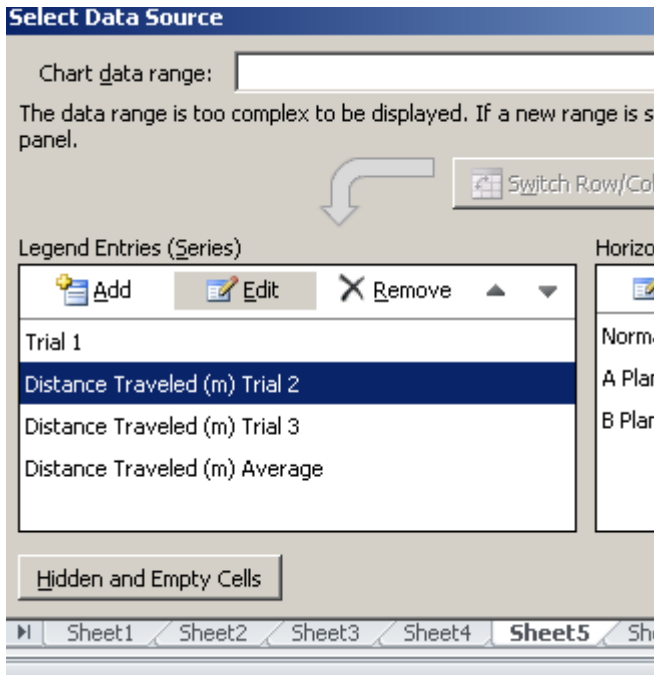| 8 | B Plane | 20 | 30 | 40 | 30.00 |

**Select Data Source**

Chart data range:  =Sheet5!$B$4:$F$8

[icon] Switch Row/Column

Legend Entries (Series)                    Horizontal

[icon] Add      [icon] Edit    ✕ Remove   ▲  ▼    [icon] Edi

| Distance Traveled (m) Trial 1 |
| Distance Traveled (m) Trial 2 |
| Distance Traveled (m) Trial 3 |
| Distance Traveled (m) Average |

Normal
A Plane
B Plane

Hidden and Empty Cells

◄ ◄ ► ►|  Sheet1 / Sheet2 / Sheet3 / Sheet4 / **Sheet5** / Sheet6

ady

10. Click on "EDIT" which is right above.

11. Click on "TRIAL 1" in your table and then click ok

| Wing Design | Distance Traveled (m) | | | |
|---|---|---|---|---|
| | Trial 1 | Trial 2 | Trial 3 | Average |
| Normal | 123 | 23 | 45 | 63.67 |
| A Plane | 34 | 78 | 20 | 44.00 |
| B Plane | 20 | 30 | 40 | 30.00 |

**Edit Series**

Series name:

=Sheet5!$C$5                    [icon]  = Dist

Series values:

=Sheet5!$C$6:$C$8              [icon]  = 123,

OK

12. The chart should re-appear. Click on the second one, then click on "Trial 2" in your table, then "OK".

## Select Data Source

Chart data range:

The data range is too complex to be displayed. If a new range is s
panel.

⌐ Switch Row/Col

**Legend Entries (Series)**

🔃 Add    📝 Edit    ✖ Remove    ▲  ▼

Trial 1

Distance Traveled (m) Trial 2

Distance Traveled (m) Trial 3

Distance Traveled (m) Average

Hidden and Empty Cells

Horizo

Norm
A Plar
B Plar

▶| Sheet1 / Sheet2 / Sheet3 / Sheet4 / **Sheet5** / Sh

| Wing Design | Distance Traveled (m) | | | |
|---|---|---|---|---|
| | Trial 1 | Trial 2 | Trial 3 | Average |
| Normal | 123 | 23 | 45 | 63.67 |
| A Plane | 34 | 78 | 20 | 44.00 |
| B Plane | 20 | 30 | 40 | 30.00 |

## Edit Series

Series name:

=Sheet5!$D$5    ☒    = Dist

Series values:

=Sheet5!$D$6:$D$8    ☒    = 23,

OK
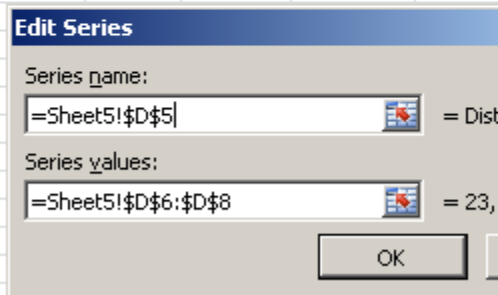
13. Continue until all of your Legend Entries now match each of your trials/averages. Don't forget to hit "OK" once you are finished.

14. Click on the plus sign/cross to the right of your graph.

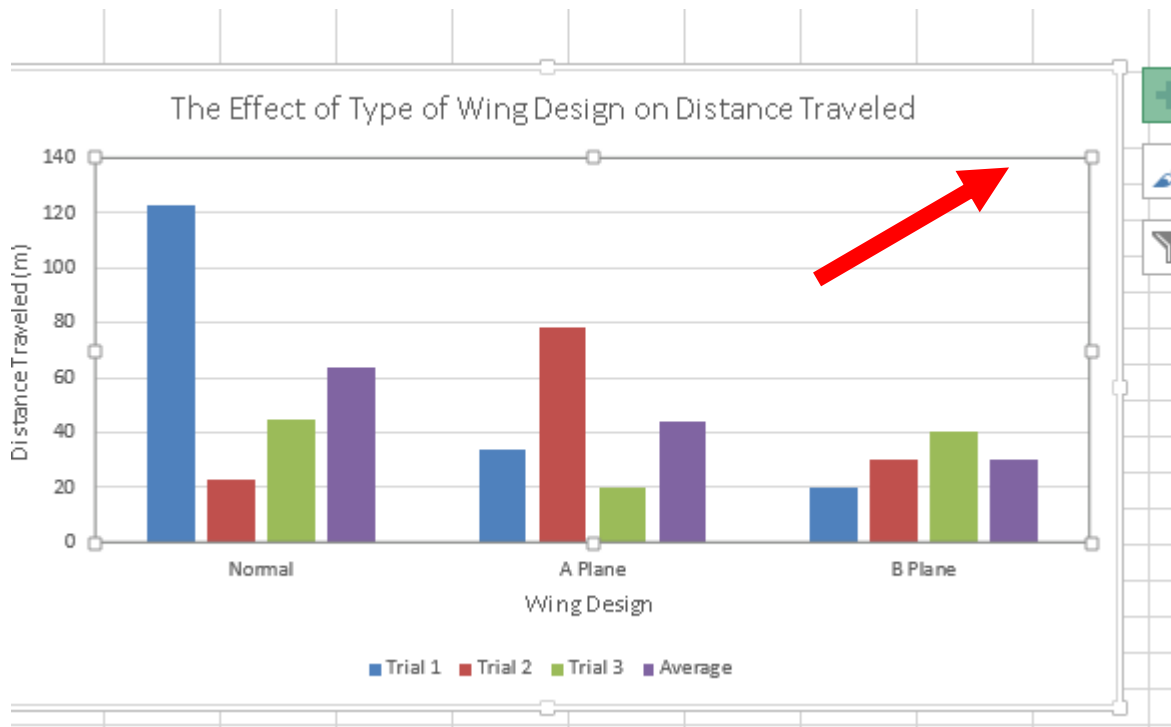15. Click on "Chart Title" and "Axis titles" to enter a title for your graph and label the axis.
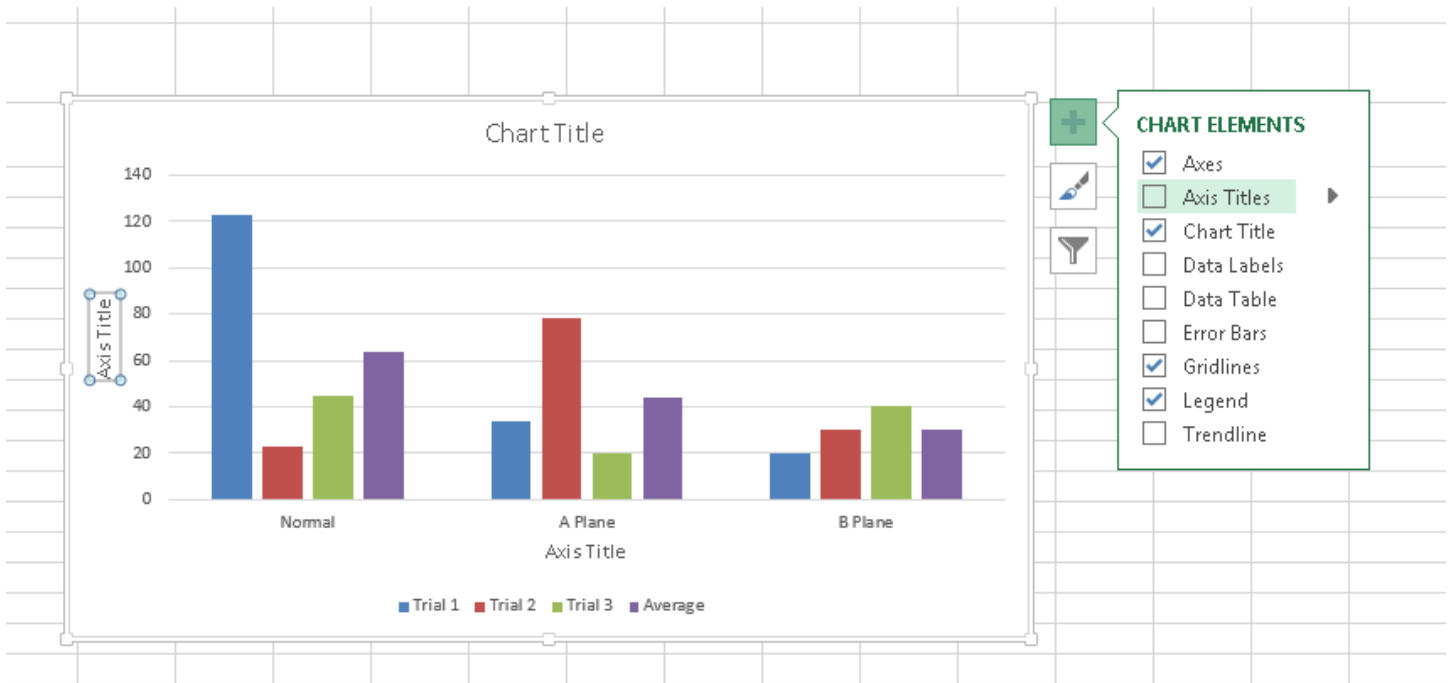
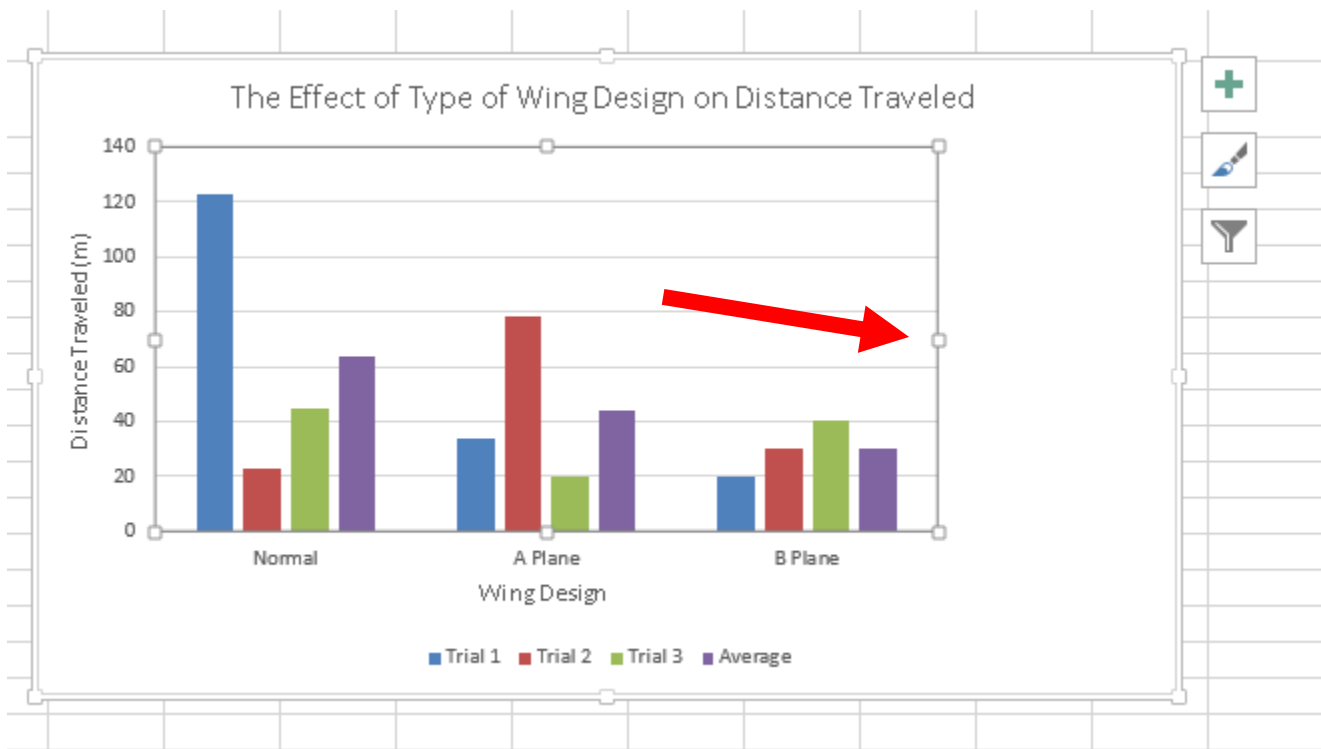16. DO NOT forget to capitalize and include units!!!! ☺
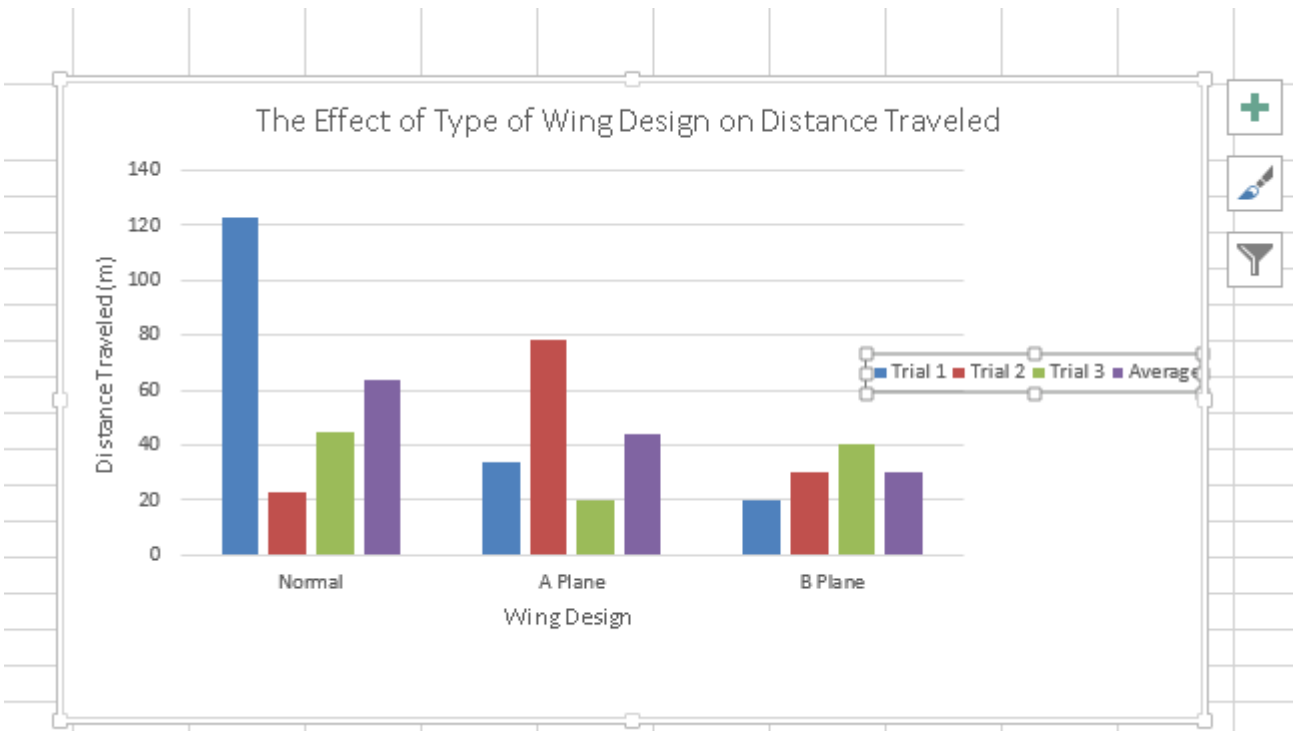17. Your final graph should look similar to this:
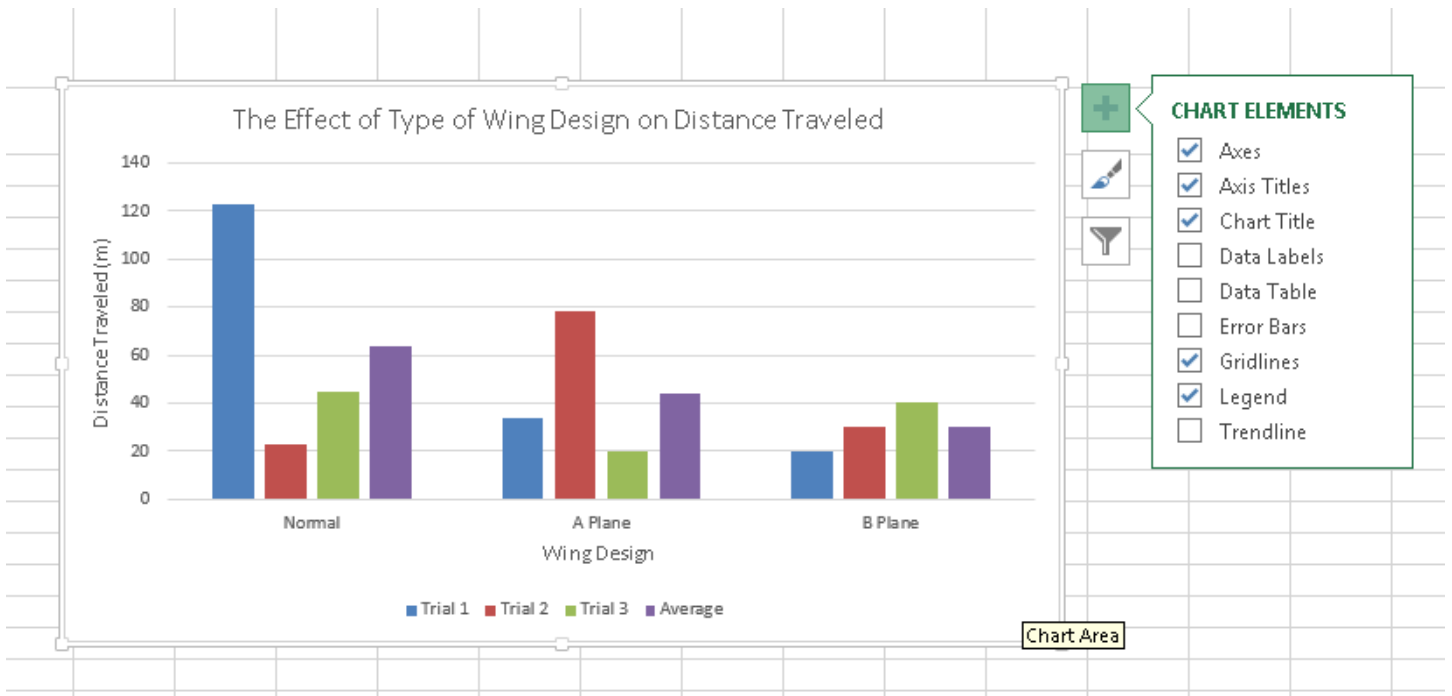


18. To move your key over to the right, click on a blank spot in your graph so that a box appears around the graph:
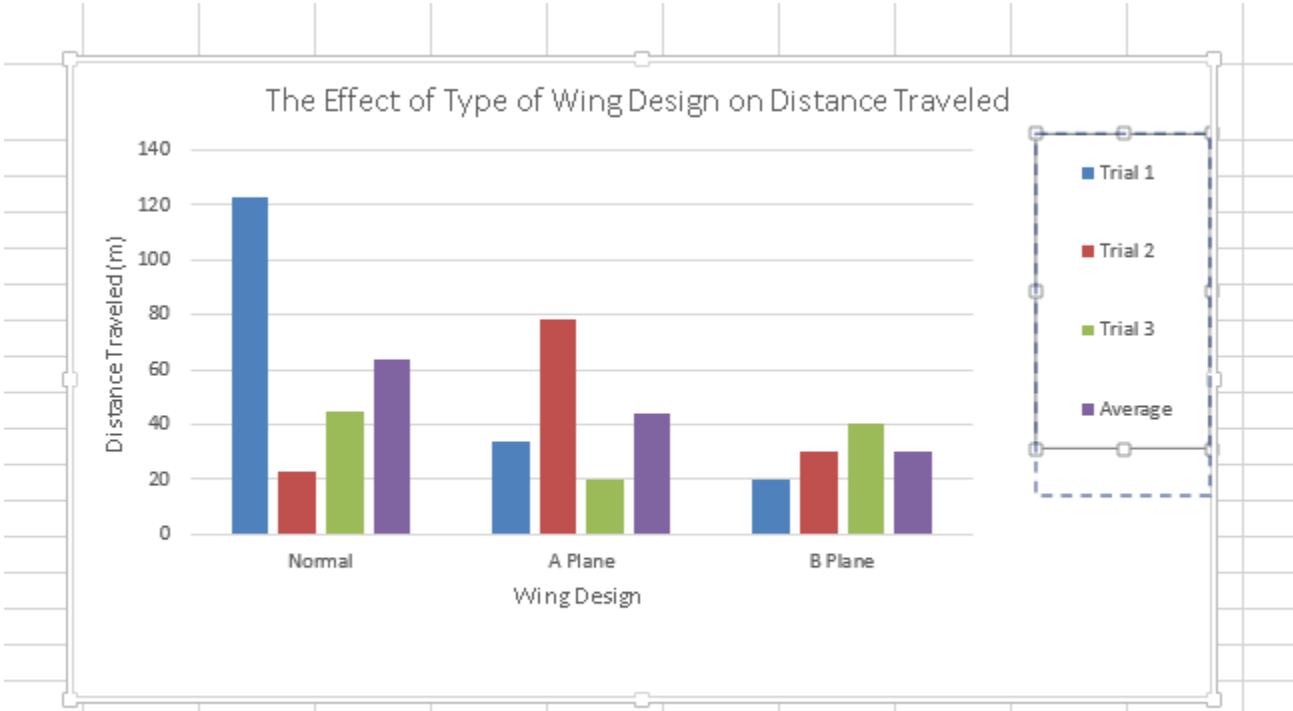
19. Shrink the box so that it is positioned more to the left and that there is space on the right:
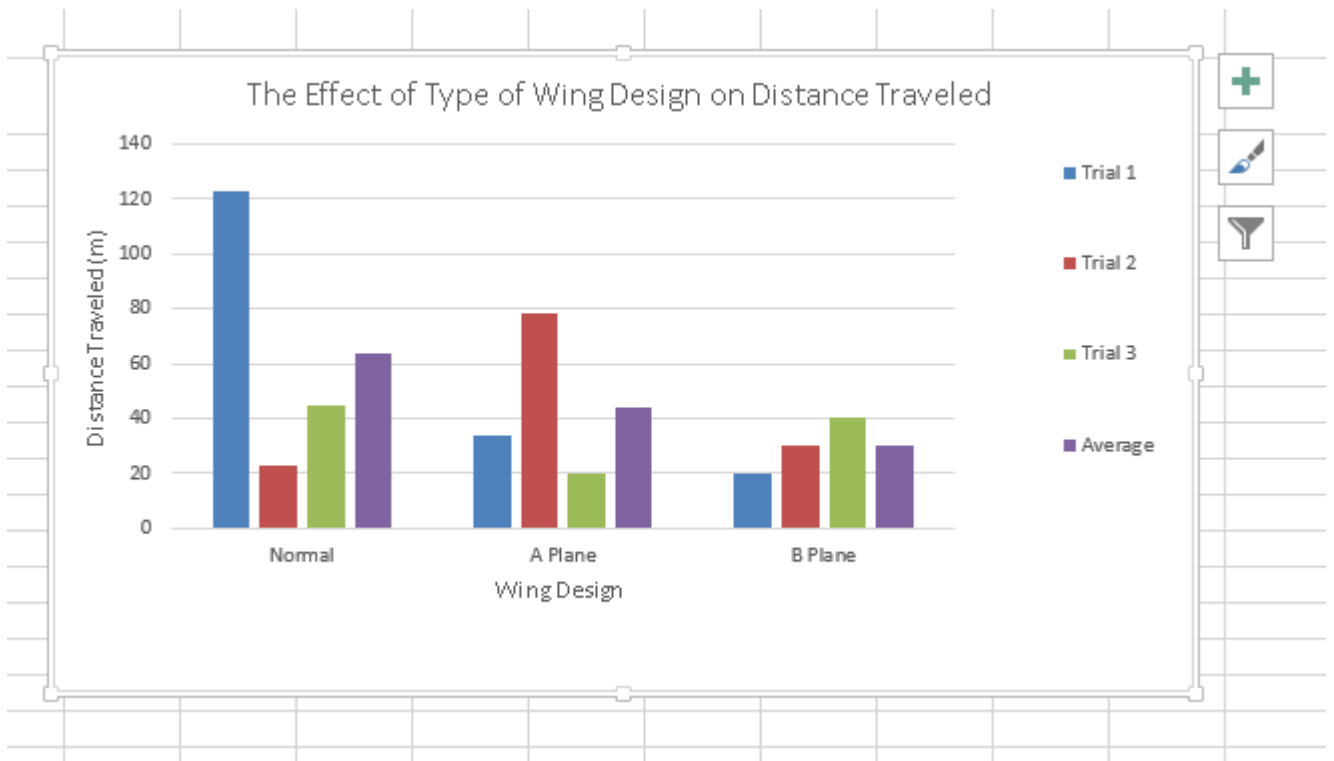


20. Drag the box of the keys to the right in that empty space on your graph:

21. Then play around with the shape of that key box until it is vertical:



22. Click on a blank space in the graph:

The Effect of Type of Wing Design on Distance Traveled

23. Right click on the blank space in your graph.

24. Copy

25. Paste in Microsoft Word.

26. In Word, you can edit the size, colors, etc.