

Excel 2008 for Mac: Charting

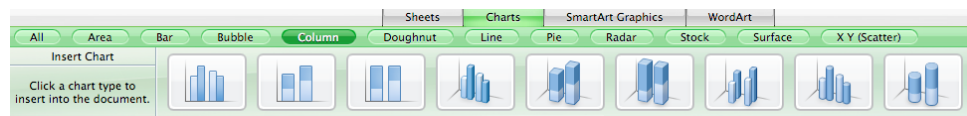
Learning guide

Creating a Chart

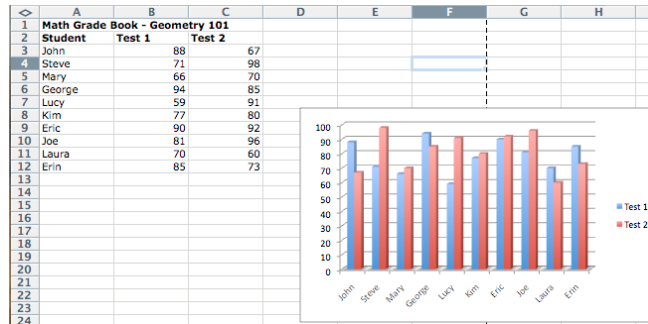
- Select the data you wish to be charted, including any column headings.

	A	B	C	D
1	Math Grade Book - Geometry 101			
2	Student	Test 1	Test 2	
3	John	88	67	
4	Steve	71	98	
5	Mary	66	70	
6	George	94	85	
7	Lucy	59	91	
8	Kim	77	80	
9	Eric	90	92	
10	Joe	81	96	
11	Laura	70	60	
12	Erin	85	73	
13				
14				
15				

- Click on **Charts** in the **Elements Gallery** to pick the type of chart you'd like to use.



- The first row is a list of buttons describing the **Chart Type**. Determine which chart type fits your data and click the appropriate button.
- The second row lays out the subtypes of each chart type. Choose the appropriate subtype by clicking on its thumbnail and Excel will create this chart in the current spreadsheet.



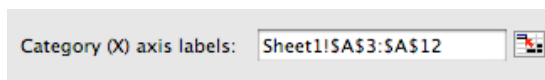
Correcting data fields

If Excel has not captured the correct range of cells:

- While holding down the **Control** button, click anywhere in the chart and click on **Select Data**.

- Select the correct cell range for your chart.
- Type the **Enter** key on your keyboard.
 - If you wish to use the rows of data as columns and vice versa, click the **Switch Row/Column** button
- Confirm that Excel has identified and named your data series correctly. Each **series name** is drawn from the column or row header you selected from your worksheet.
- To correct the name of your data series:
 - Click on the **Collapse** button located to the right of the box labeled **Name**.

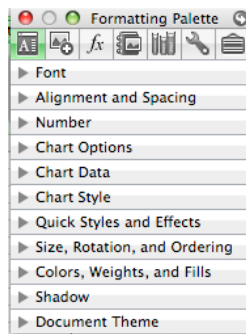
- Select the cell containing the series name.
- Press the **Enter** key on your keyboard.
- To correct the contents of a data series:
 - Click on the **Collapse** button located to the right of the box labeled **Y values**
 - Select the cells containing your series data.
 - Type the **Enter** key on your keyboard.
- To add category labels for the data within each series:
 - Click on the **Collapse** button located to the right of the box labeled **Category (X) axis labels**.



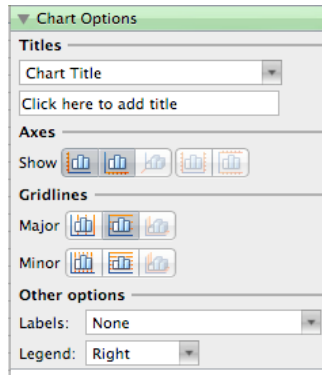
- Select the cells containing the category labels (often the column at the far left of your worksheet).
- Type the **Enter** key on your keyboard. When your data series are correct, click on the **OK** button.



Adding a title to your chart

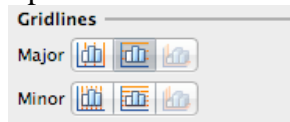
To add a title and perform other formatting on your chart, we need to use the **Formatting Palette**. Go to **View** and under the submenu **Toolbox** click on **Formatting Palette**. Click on the chart to bring up the following menu:



- To add a title to your chart, click on **Chart Options** and type in your title in the textbox “Click here to add title”. The title will update as you type.



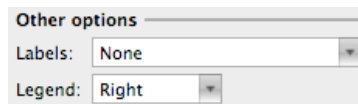
- To add titles for the horizontal and vertical axes, click the drop-down box entitled “Chart Title” to select the appropriate axis and type in your title
- By default, both the x- and y-axes will be showing. To hide an axis, click  to turn the vertical axis on/off and click  to turn the horizontal axis on/off.
- To control which gridlines are showing on your chart, click the appropriate buttons in the **Gridlines** section



Tip: In most cases, your chart will look best if you display only the major gridlines for the Y axis.

Other options

Excel also gives you the option of displaying values at each data point of your chart.

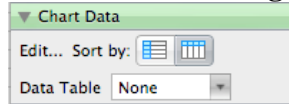


- To show labels at each data point of your chart, click on the drop-down box next to **Labels:** and select the appropriate label
- To position the legend, click on the drop-down box next to **Legend:** and select the desired position (“None” will remove the Legend altogether)

Displaying your data in a table below the chart.

Data tables will display the selected data from your worksheet below your chart so that readers can correlate your data with its visual representation. To display the data table:

- From the **Formatting Palette**, click on **Chart Data**

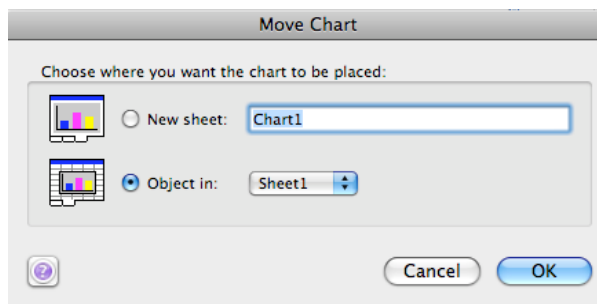


- From the drop-down box, click on “Data Table” (or “Data Table with Legend Keys”) to insert a data table beneath the chart
 - The two buttons next to **Edit...Sort by:** display the rows as columns and vice versa.

Moving your new chart

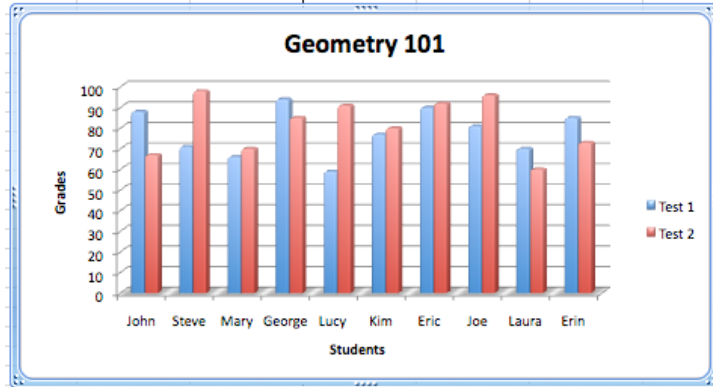
Excel automatically places your chart in the current sheet. If you wish to copy your chart to a new sheet:

- While holding down the **Control** button, click on your chart and select **Move Chart...**
- In the box labeled “Move Chart”, click on the radio button to the left of **New sheet:** and click **OK.**
- If you wish to move your chart to an already created spreadsheet, click the radio button to the left of **Object in:**, select the destination spreadsheet from the drop-down box, and click **OK.**



Reading a chart

Excel makes it easy to learn more about a chart. Whenever you place your cursor over a chart element, Excel will temporarily display information about that element in a yellow box. You can use this technique to discover the value of a data point, learn more about a data series, or easily identify a chart element.



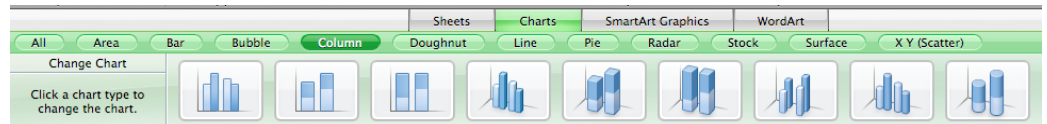
Making basic changes to your chart

Once you have created a chart, Excel makes it easy to make basic changes using the **Elements Gallery** and **Formatting Palette**.

Changing the chart type

After reviewing your chart, you may decide that a different chart type may be more appropriate for your data.

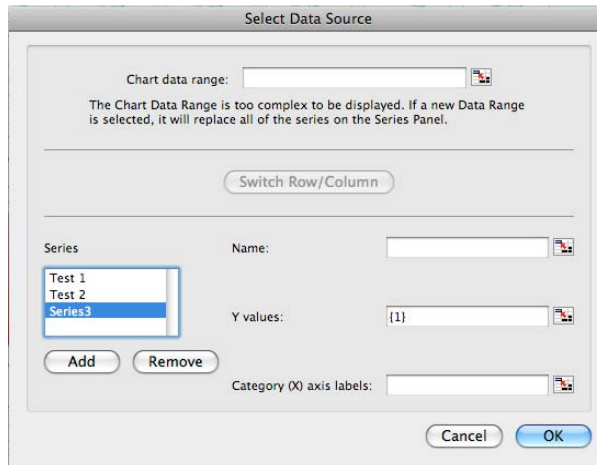
- Select your chart by clicking on the white area around it.
- From the **Elements Gallery**, click on **Charts**
 - The side panel of the gallery should say “Change Chart”



- From the gallery that appears, select the chart type you wish to apply to your data from the first row of buttons. Select the chart subtype from the second row and Excel will convert your chart to the new type you selected.

Adding a data series

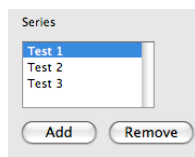
- While holding down the **Control** button, click on the white area of your chart and click **Select Data...**
- The **Select Data Source** window will appear.
- Click on the button labeled **Add**. A generic Series will be entered and should be highlighted.



- Our data range needs to be updated now. At the top, click on the **Collapse** button next to the textbox of **Chart data range:** to select the new data range.
- Type the **Enter** key to return to the **Select Data Source** window.
- The chart should update automatically with your new series. If there any problems, follow the directions in “Correcting data series”

Removing a data series

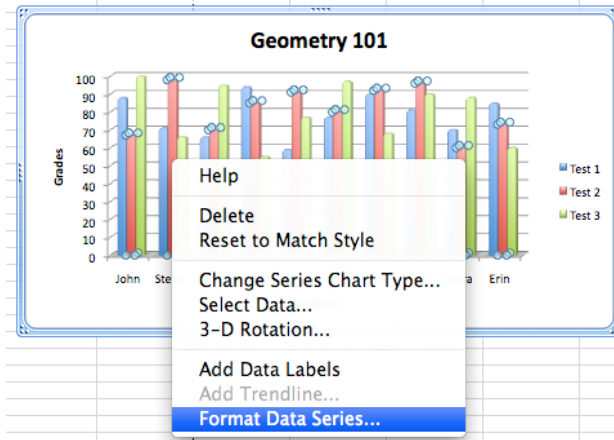
- While holding down the **Control** button, click on the white area of your chart and click **Select Data...**
- From the **Select Data Source** window, click on the series that you wish to remove from your chart under the heading **Series**.
- Click on the button labeled **Remove**.



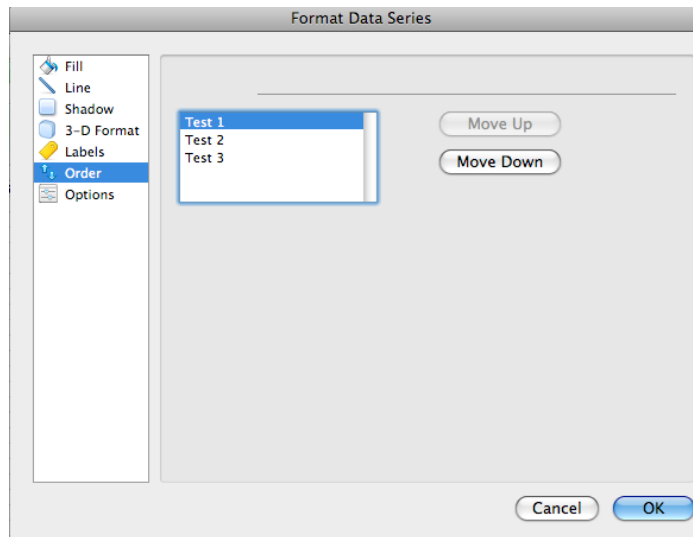
Changing series order

You can make your data more or less prominent on your chart by changing the order in which the data series appear.

- Select a data series by clicking anywhere on the series. Excel will indicate that you have selected the series by highlighting each data point.
- Click anywhere on your data series while typing the **Control** key on your keyboard.
- From the menu that appears, select **Format Data Series**.



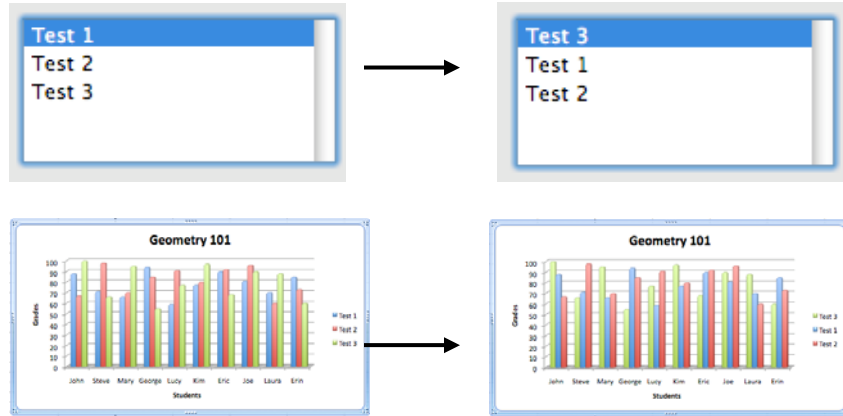
- Click on the tab labeled **Order**.



- Click on the desired data series and use the buttons to the right to move up or down as needed.

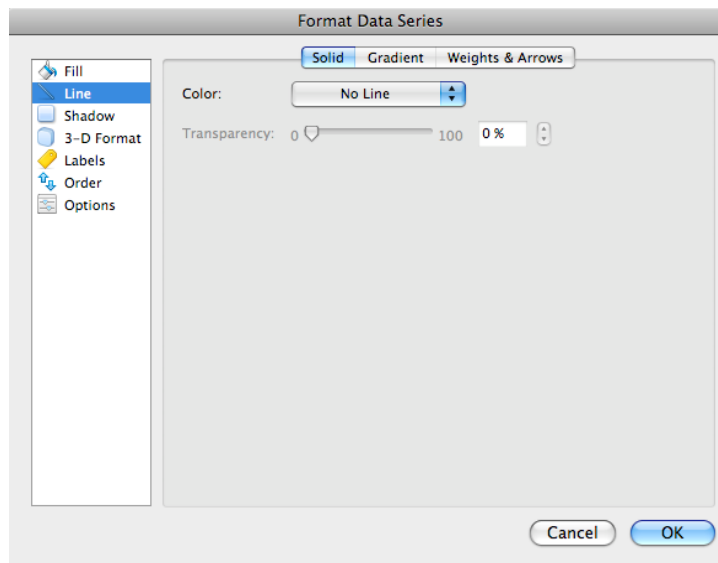
Tip: Moving a series higher in the list will move each data point into a more visible position on your chart. Different chart types will respond differently to changes in the series order.

In the column chart below, the **Test 3** series has been moved from the bottom of the Series order list to the top. The position of each **Test 3** column (in green), therefore, moves from the far right to the far left in each group of columns.



Formatting a data series

- Click anywhere in your series while typing the **Control** key on your keyboard.
- From the menu that appears, select **Format Data Series**
- The **Format Data Series** window will appear.



Changing the color and border of series in a chart

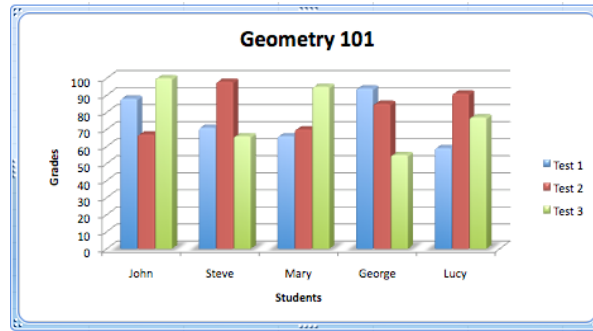
- To change the fill color:
 - Click on the image in the vertical panel labeled **Fill**.
 - From the menu that appears, click on the square that displays the color you wish to apply.
- To change the line color
 - Click on the image in the vertical panel labeled **Line**.
 - From the menu that appears, change the column's border color by clicking on the square that displays the color you wish to apply.
- To change the border
 - Click on the horizontal tab **Weights and Arrows**
 - From the down-facing arrow next to the box labeled **Style**, select the width that you wish to apply.
 - Select a dashed border by clicking on the up and down-facing arrows next to the box labeled **Dashed** and select the format that you wish to apply.
- Click on the button labeled **OK** to apply your formatting.

***Tip:** Different chart types have different formatting options, although many of the techniques for changing the appearance of a data series are similar.*

Chart Types

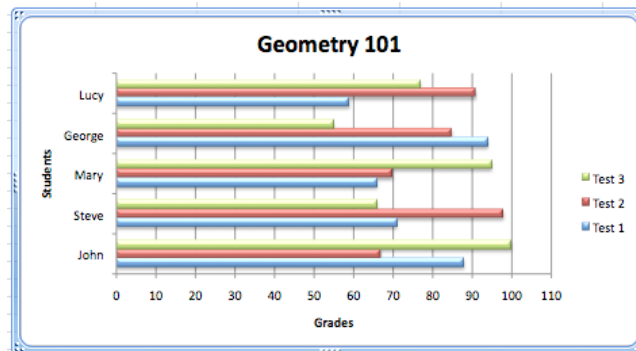
Column

Column charts show variation over a period of time or illustrate comparisons between items. The subtypes *stacked* and *100-percent stacked* column charts show relationships to a whole.



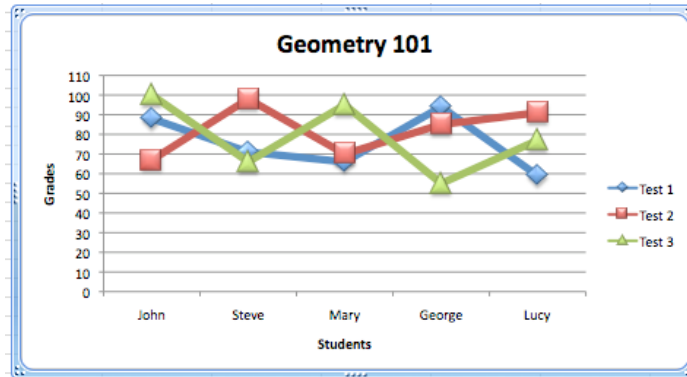
Bar

Bar charts show individual figures at a specific time or illustrate comparisons between items. The subtypes *stacked* and *100-percent stacked* bar charts show relationships to a whole. This type of organization places more emphasis on comparisons and less emphasis on time.



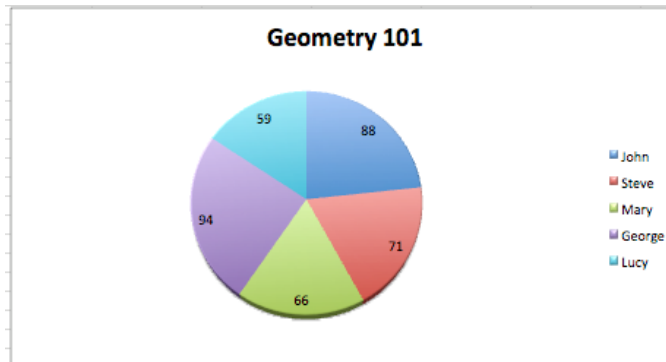
Line

Line charts show trends or changes in data over a period of time at even intervals. Line charts emphasize time flow and the rate of change, rather than the amount of change or magnitude of values.



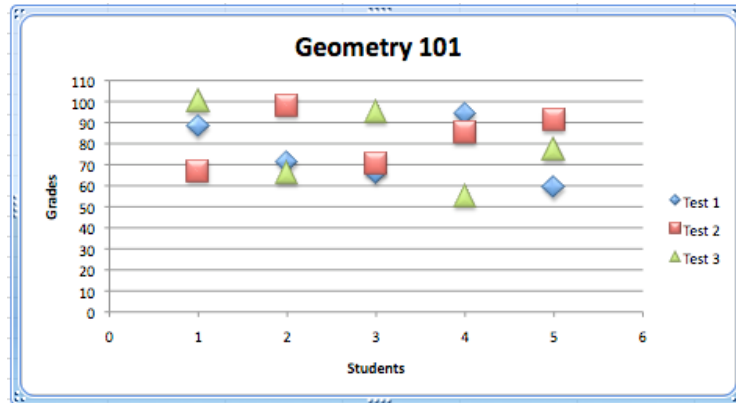
Pie

Pie charts show relationship or proportions of the parts to the whole. A pie chart contains only a single data series. If you select only one data series, use the doughnut chart type.



Scatter

An (x,y) scatter chart shows the relationship between the numeric values in several chart data series or plots two groups of numbers as one series of (x,y) coordinates. This type of chart is most commonly used for scientific data. When creating an (x,y) chart, the data must be arranged in the spreadsheet. The x values are in one row or column, followed by one or more corresponding y values in adjacent rows or columns.



Area

Area charts show the relative importance of values over a period of time. Although area charts are similar to line charts, area charts emphasize the amount of change or magnitude of values, rather than time and the rate of change.

