

Working with Chart Elements

Adding titles, legends, axes, labels, tables, and gridlines to your chart can give it a helpful visual boost. Learning how to use these charting features in Excel 2007 can make your charts more efficient. This document will explain several options on how to add more features to your chart.


NOTE: This document assumes you have already [created](#) your chart.

Adding a Chart Title


Chart titles should provide a concise summary of the information displayed.

1. Click the chart



2. From the *Layout* command tab, in the *Labels* group, click **CHART TITLE**  » select a location for the title

The *Chart Title* text box appears in your chart.

3. In the *Chart Title* text box, type a name for your chart
4. OPTIONAL: To reposition your chart title
 - a. Click the *Chart Title* text box
 - b. Move the cursor to the border of the text box so it displays a four-headed arrow 
 - c. Click and drag the text box to the desired location
 - d. Release the mouse button the chart title is repositioned.

Working with Axes

In charts, axes are the two lines that frame your data. The horizontal line is called the x-axis; the vertical line is called the y-axis. One of them will be a Value axis, which displays numerical values that measure charted categories, and the other will be a Category axis, which displays one or more data series that measured against each other by numerical values. The field created by these intersecting axes contains visual indicators (e.g., bars, columns, dots) that give readers an intuitive understanding of your chart data. Axis labels (automatically assigned by Excel when you [create](#) your chart) connect this visual information with specific data categories, providing the context readers need to make sense of your chart. Since axes and axis labels are such important parts of an effective chart, Excel provides extensive formatting options.

NOTES:


Pie charts do not have axes.

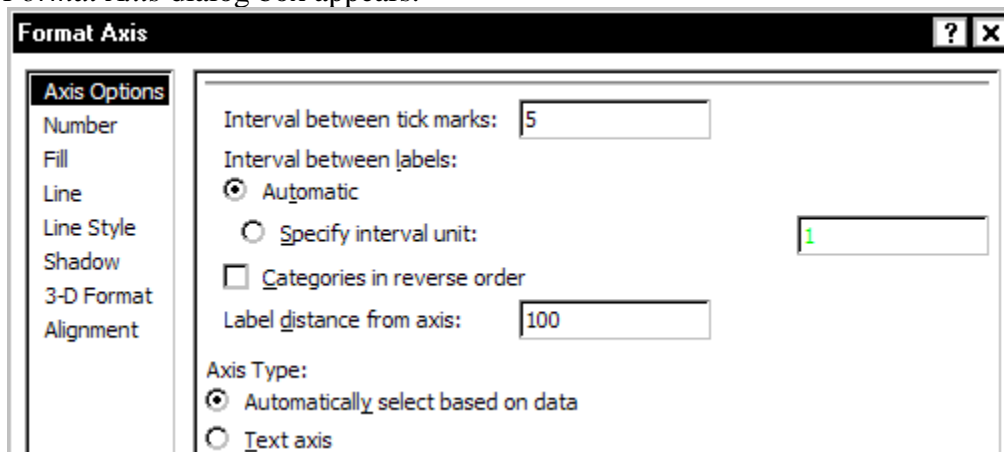
When setting up your chart, it is important to understand how Excel will display your worksheet data (e.g., what information will be assigned to which axis). For basic information on how Excel converts worksheet data into charts, refer to [About Charting](#) and [Creating a Basic Chart](#).

Changing the Interval of the Category Axis

Both horizontal and vertical axes can be the *Category* axis. With the *Category* axis, you can change the interval of units between the tick marks. If your desired axis is the *Value* axis, refer to [Changing the Interval of the Value Axis](#).

NOTE: If your category axis is denoted by words or phrases, the Automatic option will suffice in most cases.


1. Click the chart
2. On the *Format* tab, in the *Current Selection* group, from the *Chart Elements* pull-down list, select (*Category*) *Axis*
3. From the *Current Selection* group, click **FORMAT SELECTION**  the *Format Axis* dialog box appears.

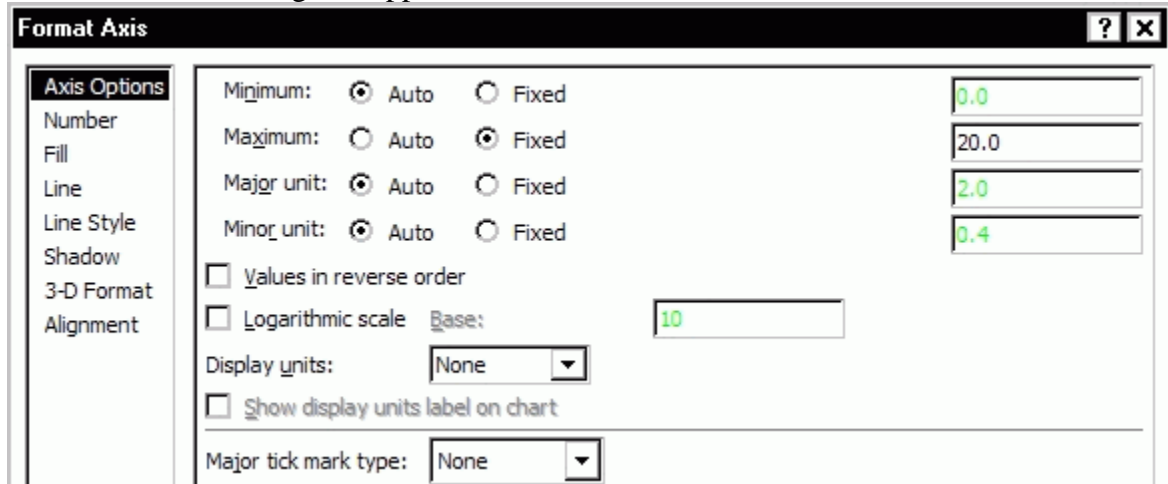


4. From the *Categories* list, select *Axis Options*
5. In the *Interval between tick marks* text box, type the number of units you want between the tick marks of your chart's x-axis
6. Click **CLOSE** the scaling is applied

Changing the Interval of the Value Axis

Both horizontal and vertical axes can be the *Value* axis. With the *Value* axis, you can change the interval of units between the tick marks as well as set a maximum and minimum value for the axis. If your desired axis is the *Category* axis, refer to [Changing the Interval of the Category Axis](#).

1. Click the chart
2. On the *Format* tab, in the *Current Selection* group, from the *Chart Elements* pull-down list, select (*Value*) *Axis*
3. From the *Current Selection* group, click **FORMAT SELECTION**  *Format Selection*
The *Format Axis* dialog box appears



4. To change the minimum value of the y-axis
 - a. For *Minimum*, select **Fixed** the *Minimum* text box becomes accessible.
 - b. In the *Minimum* text box, type the minimum value you want the y-axis to display
5. To change the maximum value of the y-axis
 - a. For *Maximum*, select **Fixed** the *Maximum* text box becomes accessible.
 - b. In the *Maximum* text box, type the maximum value you want the y-axis to display
6. To change the number of units between the y-axis tick marks
 - a. For *Major unit*, select **Fixed** the *Major unit* text box becomes accessible.
 - b. In the *Major unit* text box, type the number of units you want between the y-axis tick marks
7. To change the number of units between the *Major units*
 - a. For *Minor unit*, select **Fixed** the *Major unit* text box becomes accessible.
 - b. In the *Minor unit* text box, type the number of units you want between the *Major units*
8. Click **CLOSE** the adjustments are applied.

Adding an Axis Title


1. Click the chart



Axis

Titles ▾


2. From the *Layout* command tab, in the *Labels* group, click **AXIS TITLES** *Titles* ▾ a pull-down list appears.
3. To create a title for your x-axis, select **Primary Horizontal Axis Title**
OR
To create a title for your y-axis, select **Primary Vertical Axis Title**

4. Click the title location you desire
The *Axis Title* text box appears in the chart.
5. In the *Axis Title* text box, type a name for the axis
6. OPTIONAL: To reposition your axis title
 - a. Click the *Axis Title* text box
 - b. Move the cursor to the border of the text box so it displays a four-headed arrow

 - c. Click and drag the text box to the desired location
 - d. Release the mouse button the axis title is repositioned.

Changing the Display of the Axes

You can alter chart axes in certain ways through the *Layout* command tab. Depending what chart you are using, the *Value* and *Category* axes will be on either the x- or y-axes (e.g., the x-axis on a column chart is the *Category* axis, and the x-axis on a bar chart is the *Value* axis). You can change the order of categories, add or remove axis labels and tick marks, or change the scaling of the *Value* axis.

NOTE: When changing the scaling of the *Value* axis through the *Layout* command tab, you may only do so exponentially. To customize the scaling of axes, refer to [Changing the Interval of the Value Axis](#) and [Changing the Interval of the Category Axis](#).

1. Click the chart
- 

AXES
▼
2. From the *Layout* command tab, in the *Axes* group, click **AXES**
 3. To change the appearance of the x-axis, select ***Primary Horizontal Axis***
OR
To change the appearance of the y-axis, select ***Primary Vertical Axis***
 4. Select the desired option the option is applied.

Adding a Legend

A legend will help readers understand the graphical components of your chart. For example, in a bar chart, the legend tells your readers what each bar of a particular color or pattern represents. Without a legend, readers would see categories on one axis (e.g., specific assignments), numerical values another axis (e.g., number of points received), but they would not know what the bars on the graph represent (e.g., individual students).

HINT: Legends can be placed anywhere within the chart area, but are commonly located at the right of the chart.

NOTES:

If you choose to include a Data Table and have selected the *Show Data Table with Legend Keys* option, adding a legend will display redundant information.


For pie charts, use [data labels](#) rather than a legend.

Legend descriptions should be as concise as possible.

1. Click the chart



Legend

2. From the *Layout* command tab, in the *Labels* group, click **LEGEND** ▾ » select legend style you prefer the legend style is applied to the chart.
3. OPTIONAL: To reposition your legend
 - a. Click the legend
 - b. Move the cursor to the border of the text box so it displays a four-headed arrow

 - c. Click and drag the box to the desired location
 - d. Release the mouse button the legend is repositioned.

Adding Data Labels

Data labels display the exact measurements of the information used to create the chart beside the bars, columns, lines, and points that represent them. They can be especially useful if you have a wide or tall chart. However, on some charts, data labels may interfere with the chart's readability. Be sure to test data labels on your chart before using them on your final chart.

1. Click the chart



Data Labels ▾ »

2. From the *Layout* command tab, in the *Labels* group, click **DATA LABELS** ▾ » select the desired data label location the data label is applied.

Adding a Data Table

A data table shows the raw data that is used to create a graph. Similar to data labels, they can be especially useful when exactness is required to interpret the chart. Data tables take up space on the chart area. Using Data Tables will result in a smaller plot area. You may need to [resize](#) the chart after adding a data table.

1. Click the chart



Data

Table ▾ »

2. From the *Layout* command tab, in the *Labels* group, click **DATA TABLE** » select the desired data table style the data table is added.

NOTE: If you select *Show Data Table with Legend Keys*, [adding a legend](#) will display redundant information.

Adding Gridlines

Gridlines can increase the readability of the chart by helping direct the eye from axis value to the value being charted. This is especially useful if you have a wide or tall chart. You can establish both major and minor gridlines. Generally, major gridlines are sufficient.

NOTE: Gridlines cannot be applied to pie charts.

1. Click your chart



Gridlines



2. From the *Layout* command tab, in the *Axes* group, click **GRIDLINES**
3. To access gridlines for the horizontal axis, select ***Primary Horizontal Gridlines***
OR
To access gridlines for the vertical axis, select ***Primary Vertical Gridlines***
4. Click the desired gridline style the gridline style is applied.

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