


Graphing and Charting

Graphs are an important part of Excel. You can embed a graph in a worksheet next to your spreadsheet or on a separate chart sheet. In both cases, of course, the graph is linked to the relevant data in the spreadsheet. If the spreadsheet data changes, the graph is updated immediately.

Create an Embedded Chart

1. First create a spreadsheet with some data for charting.
2. Select the range of cells you would like to have charted, including the row and column headings.
3. Click **ChartWizard**  OR press [F11].
4. Follow the instructions for the *Chart Wizard*.

Change Chart Types

1. To change the chart type of the entire chart, click the chart. To change the chart type of a data series, click the data series.
2. Go to **Chart**→**Chart Type**.
3. On the Standard Types or Custom Types tab, click the chart type you want.

Updating a Chart

As you add new information to your spreadsheet, the chart does not automatically expand to include the new columns or rows. If your chart is on the same worksheet as your spreadsheet, you can easily add the new data to your chart.

1. Simply highlight the new data, including the label.
2. Click and hold the thick black border around the selection and drag this data on to your chart and drop it. The chart expands to include your new data.

If the chart is on a Chart sheet, you can copy and paste the information to the chart.

1. First, select the additional data in the spreadsheet and copy.
2. Then, select the chart sheet and paste. The chart will update with the new information.

To erase or get rid of data series you no longer want to be a part of your chart, select the data series and press [Delete].

Move and Size Chart Items

As you click on the different items on a chart, you'll see that you select them and resizing handles (little black dots on the corners) appear. Some items you can resize by simply dragging the handles with your mouse cursor. You can change the placement of the chart's legend by right-clicking it and select **Format Legend**. Click the Placement tab and choose the location of the legend.

After creating a bar chart, you can alter the chart if you're not happy with the values it shows. While this may sound a bit like cheating, Excel will allow you to do it, so it's worth knowing how.

1. Create a simple bar chart.
2. Click twice (but don't double-click) one of the bars to select only that bar.
3. Point the mouse at the middle handle at the top of the bar.
4. Drag the handle up or down until it's where you want it to be.

Note: It's important to keep in mind that you're not only changing the look of the chart. The data on which the chart is based will also change to reflect the new height of the bar.

Add Data Labels

Labels can be added to any chart data series. Right-click the data series and select **Format Data Series**. On the Data Labels tab, you can choose what information you want the label to contain. The label will appear on top or beside the data series. You can now select the data series label to change the font or size or move the label to a better location on the data series.

Format the Chart

You can apply colors, borders, and fill effects to data markers, the chart area, the plot area, and other chart items by right-clicking the item to change and select **Format...** From here, you can also specify the range of values displayed on the value axis and change the interval between values along the axis. You can also specify whether an axis has tick marks.

You can format numbers in a chart as you would numbers on a worksheet. To apply the most common number formats, click the axis or data label that has the number you want to format, and then apply currency, percent, or comma style formatting by clicking the buttons on the Formatting toolbar.

You can format text in a chart as you would any other text. Click the text or item, and then change the font, size, and color by clicking the buttons on the Formatting toolbar.

Print a Chart

Sometimes, you may have embedded chart objects that you'd like printed separately from your Excel data. To do so, simply select the chart object and click the **Print** button. Excel prints the chart on its own page and scales it to use the full printable area of the page.