

# Microsoft Excel 2007 Tutorial: Graphing

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**NOTE:** This tutorial only works for Microsoft Excel 2007. Several features may or may not be applicable to Microsoft Excel 2003.

## Overview

Microsoft Excel is a spreadsheet application that allows one to run calculations, to make a graph, as well as a host of other tools. A component of the Office 2007 suite, its latest version is known as Microsoft Excel 2007. One significant change to creating a graph in Excel 2007 is that the Chart Wizard is no longer available, and has been replaced by chart options listed under the *Insert* ribbon.

## How to Make a Pie Graph/Chart

### Step 1:

Enter the data into the spreadsheet in rows, making sure that you do not leave any blank rows or columns. When laying out your spreadsheet, list the names describing the data at the top row and the data itself in the second row below the names. If there is more than one data series (very unusual for a pie graph), put the title for each data series at the top and fill in the data in the rows below. A title is not completely necessary, though.

|   | A                    | B                 |
|---|----------------------|-------------------|
| 1 | <b>Mitotic Stage</b> | <b>Percentage</b> |
| 2 | Interphase           | 79                |
| 3 | Prophase             | 9.4               |
| 4 | Metaphase            | 5.8               |
| 5 | Anaphase             | 2.8               |
| 6 | Telophase            | 3.1               |

If data you type into the cell does not accurately represent what you want it to (e.g. instead of 5-10 as a time interval, Excel automatically changes it to 10-May), use the following instructions:

- 1) Right-click the cell in question, and then click *Format Cell*.
- 2) In the *Format Cell* dialog box, click the *Text* category, and then click *OK* to exit.

### Step 2:

Drag select with the mouse button to highlight the cells containing the data to be included in the line graph. In this case, highlight the block of cells from A1 to B6. If you do not have access to a mouse, you can instead follow the below instructions:

- 1) Click on the top left of the line graph's data.
- 2) Hold the SHIFT key on the keyboard.
- 3) Use the arrow keys on the keyboard to select the data to be included in the line graph.

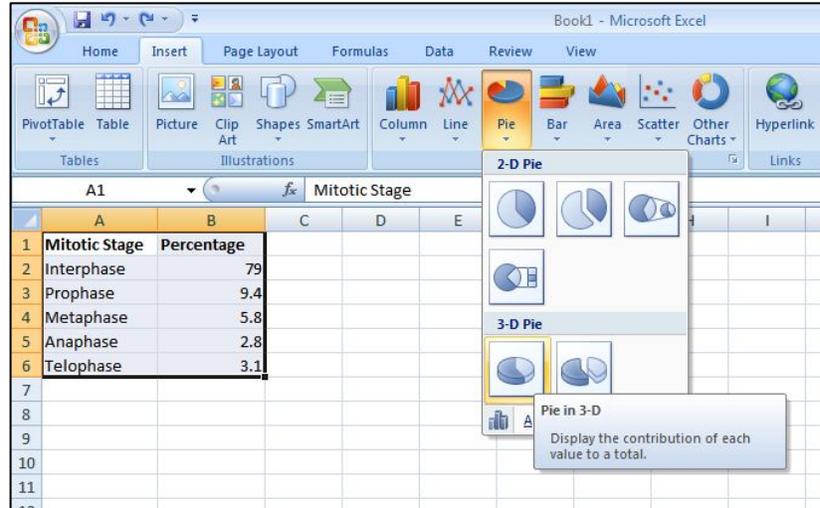
|   | A                    | B                 |
|---|----------------------|-------------------|
| 1 | <b>Mitotic Stage</b> | <b>Percentage</b> |
| 2 | Interphase           | 79                |
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| 4 | Metaphase            | 5.8               |
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| 6 | Telophase            | 3.1               |

### Step 3:

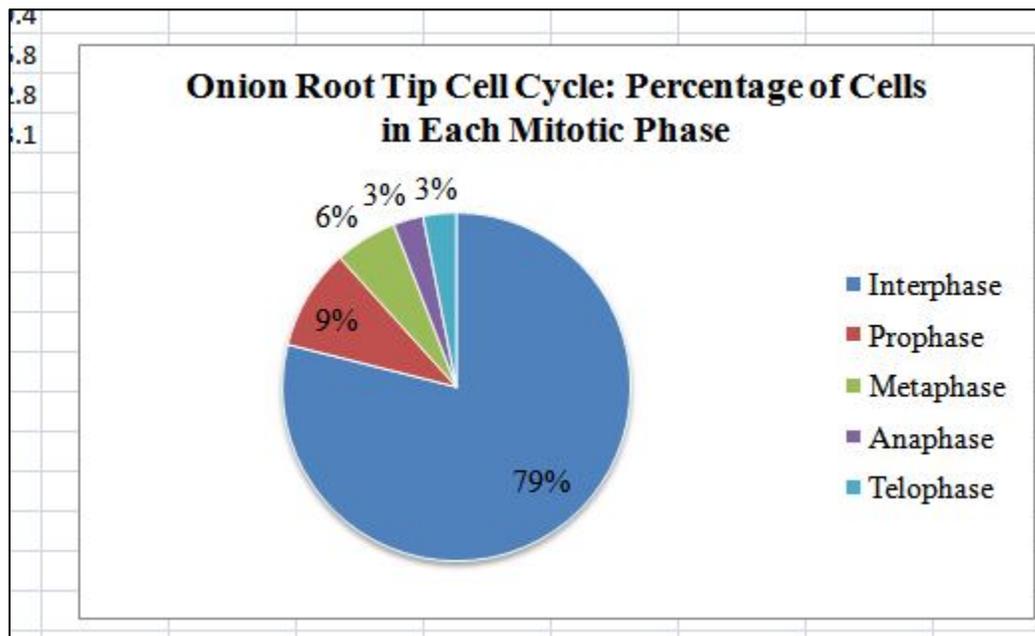
There are two parts to Step 3:

1) Click on the *Insert* ribbon tab and then click *Pie* to open a drop down list of available chart types.

2) Click to select a chart type. If you place the mouse pointer over a chart type without clicking, you can preview of the chart type. Completing this step creates a graph and places it onto the spreadsheet.



Besides some minor formatting differences, the final pie graph should look something like this:



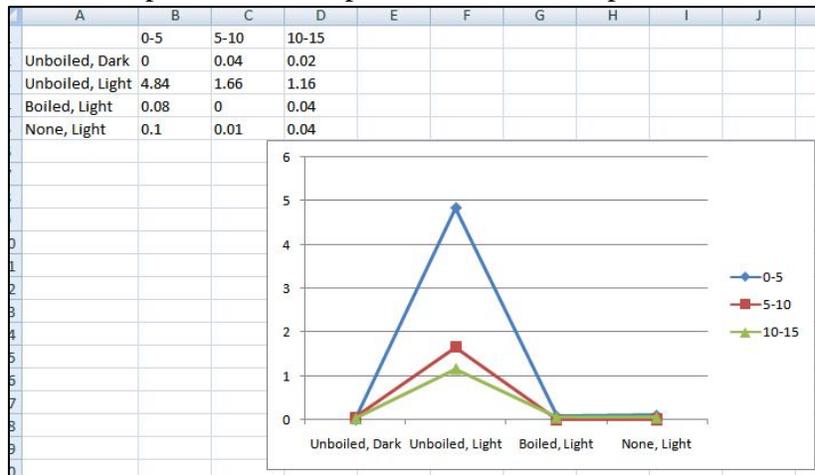
## How to Make a Bar/Column Graph

See steps 1-3 under “How to Make a Pie Graph/Chart,” except choose *Column* in step 3 instead of *Pie*.

## How to Make a Line Graph

**Step 1:**

See steps 1-3 under “How to Make a Pie Graph/Chart,” except choose *Line* in step 3 instead of *Pie*. If, after this step, the graph Excel makes accurately represents what you want to graph, ignore step 2. Consider this image:

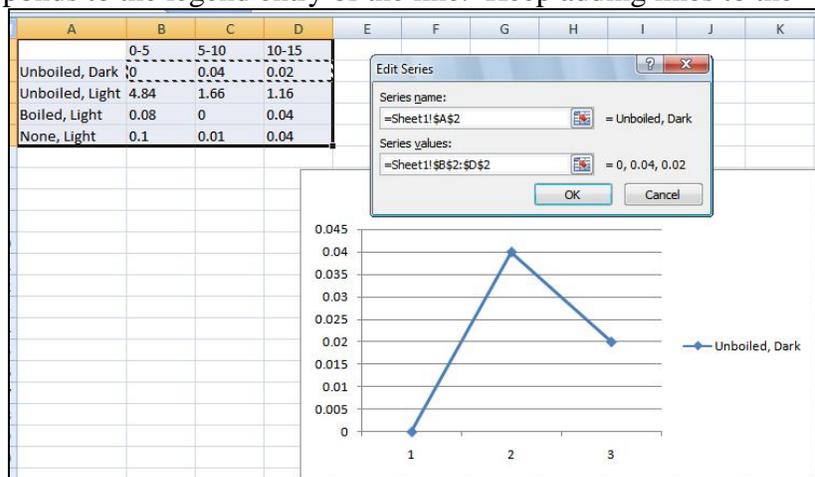
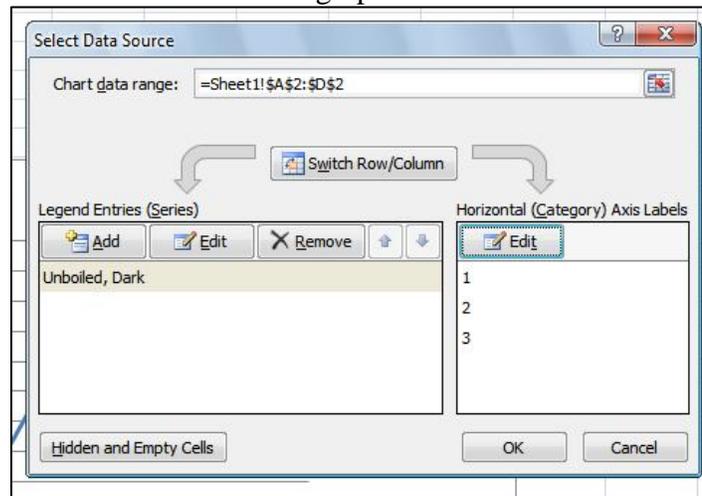


This example shows how Excel can misinterpret your data. Instead of placing the time intervals on the x-axis, it graphed the time intervals and put the titles on the y-axis.

**Step 2 (Optional):**

Re-highlight the cells containing the data to be included in the line graph. Follow the below instructions to “fix” the graph:

- 1) Right-click one of the lines and then click on *Select Data*.
- 2) In the “Select Data Source” dialog box, remove all of the legend entries by clicking the *Remove* button.
- 3) Click *Add* to add a legend entry in the “Select Data Source” dialog box.
- 4) In the *Edit Series* dialog box, click the cell for legend entry of the line selected to make it appear in the “Series Name” section (e.g. Unboiled, Dark). For the “Series values” section, highlight the data (e.g. 0, 0.04, and 0.02) that corresponds to the legend entry of the line. Keep adding lines to the graph by adding more legend entries in the “Select Data Source” dialog box.
- 5) In the “Select Data Source” dialog box, click *Edit* and highlight the data you want to the x-axis (e.g. 0-5) in the “Axis Labels.” Repeat this step to add more labels for the x-axis.



## How to Format a Graph

### Add a graph title:

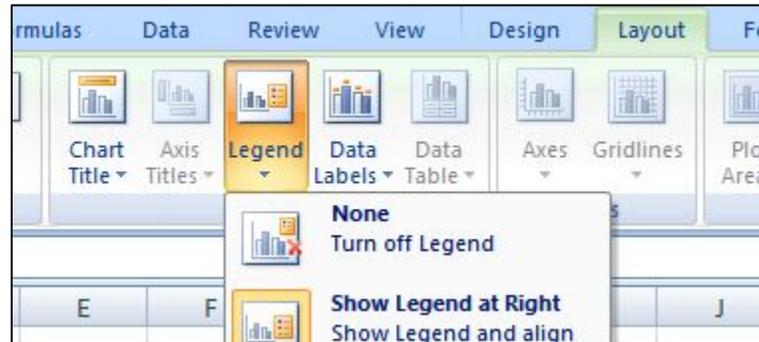
Under the *Layout* ribbon tab, click on the *Chart Title* under the *Labels* section. Next, select a location (typically *Above Chart*) and type in a title.

### Add vertical gridlines:

Under the *Layout* tab, choose *Gridlines*, *Primary Vertical Gridlines*, and *Major Gridlines*.

### Add an x-axis title:

Under the *Layout* ribbon tab, click on the *Axis Titles* under the *Labels* section. Then choose *Primary Horizontal Axis Title* and then *Title Below Axis*. Finally, type in a title.



### Add an y-axis title:

Under the *Layout* ribbon tab, click on the *Axis Titles* under the *Labels* section. Then choose *Primary Vertical Axis Title* and then *Rotated Title*. Finally, type in a title.

### Change the gridline color:

Under the *Layout* tab, choose *Gridlines*, then *Primary Horizontal Gridlines*, and then *More Primary Horizontal Gridlines Options*. This series of commands will bring up the *Format Major Gridlines* dialog box. Choose *Line Color* and then *Solid Line*, and then select the line color. When finished, click *Close*.

### Choose a style:

Click on the pie graph, then the *Design* tab, and then select a style.

### Color the background:

Click on the chart background, then click on the *Shape Fill*, and choose from a series of options. Then, click *Color* and choose a color. Finally, click *Close*.

### Expand a piece of a pie graph:

Click once on the pie graph to highlight it, then on a piece of the graph, and then click and drag the slice out from the pie chart to expand it.

### Remove the legend:

Under the *Layout* ribbon tab, click *Layout*, then *Legend*, then *None*.

## Help and Hints

### To Make Both Office 2007 and Office 2003 Compatible

1. Install the latest Microsoft Office Updates at <http://www.update.microsoft.com>.
2. Download the Microsoft Office Compatibility Pack at <http://www.download.microsoft.com>.

3. Follow the instructions to install .exe file.

**NOTE:** A quick, short-term method for compatibility is to convert an .xlsx file to an .xls one (or vice versa) is to use <http://www.zamzar.com>.

**For More Help...**

1. Do not hesitate to ask for help from other TUNED IN members or use the contact form on the TUNED IN website: <http://www.tunedin.holyghostprep.org> or click on the icon on the desktop.

2. There is a FAQs document on Microsoft Office 2007 for general assistance. Use the link above for the TUNED IN website and download it from the notes page.

3. You can always use Microsoft Office Help by clicking Help, Microsoft Office Excel Help, and then typing in a question.

4. There are always in-depth online courses at:

<http://office.microsoft.com/en-us/training/CR061832731033.aspx>.