

Chemistry 1B
Excel Instructions

*These instructions are not for the 2007 version of Excel.

1. Creating and using Tables
2. Importing a table from Excel into Word.

Note: there are many possible shortcuts in Excel. Many of these shortcuts rely on creating a customized menu bar. These instructions, which are based on Excel 2000 for a PC, are based on the pre-set menu options built into the program and can be used regardless of the way the program has been customized by an individual user.

First, open an Excel spreadsheet, and type in the raw data.
In order to type in the data exactly as written, you need to know how to format numbers and change the font to make superscripts or subscripts.

For Superscripts, subscripts and other font-related items.

Type the formula into the cell. It will look like this: [C₄H₁₀]
To change part of a word or formula, highlight the number 4 only in the white box ABOVE your excel worksheet. There should be an equals sign before the white text box.
Now select Format, then Cells then Font.
Check the Subscript box.
You may change the type of font that you are using here also.

Tell the computer how many decimal places each number should have.

Highlight all of the cells.
Go to the Format menu, choose Cells, then choose the Number tab.
Now select Number from the menu. In the Decimal Places box either type in the number or use the arrows to arrive at the number.
Click ok.

How to align all of the numbers under their heading.

Go to the menu and choose File, then Print Preview.
Do you like the way that the numbers are aligned under the header? Are the columns easy to read?
If not, highlight each column separately (or both together).
Go to Format, then Cells, then Alignment.
Under Horizontal, click on the arrow to the right of the box to see your choices. First select Center, and click Ok.
Return to Format, Print Preview to see the new alignment of the information. You can also try Left or Right justified (aligns everything to one side of the cell or the other).

Outline your table

Time (s)	[C ₄ H ₆]	Time (s)	[C ₄ H ₆]	Time (s)	[C ₄ H ₆]
0	0.0100	0	0.0100	0	0.0100
1000	0.00625	1000	0.00625	1000	0.00625
2800	0.00370	2800	0.00370	2800	0.00370
4400	0.00270	4400	0.00270	4400	0.00270
6200	0.00208	6200	0.00208	6200	0.00208

First highlight the group of cells that you want to format. Then go to Format then Cells then Border.

First select the Line Style. Click on the style you want.

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Then go to the box that represents your cells. Click on the places that you want lines to go. The inner lines are for when you have selected multiple cells. After setting the lines where you want them, click ok.

Writing Formulas in Excel

Now you can change concentration to $\ln[\text{Conc}]$ or $1/\text{Conc}$. by creating a formula and propagating it to affect all of the data.

To create a formula in Excel, start by typing an = sign in the cell.

/ means division

* means multiplication

+ means addition

- means subtraction

When referring to a number in a cell, so that the operation happens to an already entered number, use the format (Cell Letter, Cell Number) with no comma.

For example: $=\ln(B3)$ will take the natural logarithm of the number in Cell B3.

$=1/(B3)$ will take the reciprocal of the number in B3.

$=10*B3$ will multiply the number in cell B3 by 10.

These are very simple formulas, but you can program much more complicated ones into any cell.

To Apply the Formula to a data set.

We have 5 sets of data. You've written the formula for just the first set.

Highlight all of the cells for which you'd like that formula implemented, and include the cell with the formula in it.

Next go to Edit and select Fill then select Down.

This will propagate the formula. You will quickly have a new data set.

Choose the Data Set for a Graph

Highlight the data you want for the X-axis. Your x-axis data MUST be in a column to the left of your y-axis data set. If your x and y data sets are not in adjacent columns, highlight the x-axis data (numbers ONLY do not include the header!) while your mouse button is still held down, hold down the Control (Ctrl) key. Now, keeping the control key down, move your mouse cursor to the other data set. When you've highlighted the second data set, release both mouse and ctrl buttons.

Now go to Chart Wizard and graph your data.

To copy an Excel Table into a Word Document

Open both the Excel document and Word document.

Highlight the tables (or the graphs) in Excel that you wish to copy.

Press the Ctrl key and the letter C. This copies the information.

Click on the Word document and position the cursor at the place where you would like the table or graph to be. (The table must be the correct size to fit into the Word document).

Now press Ctrl key and the letter C. This will paste the information.

Save it.