# Chemistry 108 Microsoft Excel 2013

Figure 1: Open a blank workbook

• When the page opens, click on the *blank workbook* selection as indicated below.





Figure 2: A brief introduction to graphing with Excel 2013

• <u>View:</u> Workbook Views, Show, Zoom, Window, Macros

• Depending on your task, your necessities will be laid out as follows:

<u>File</u>: Info, New, Open, Save, Save As, Print, Share, Export, Close, Account, Options

Home: Clipboard, Font, Alignment, Number, Styles, Cells, Editing

Insert: Tables, Illustrations, Apps, Charts, Reports, Sparklines, Filters, Links, Text, Symbols

Page Layouts: Themes, Page Setup, Scale to Fit, Sheet Options, Arrange

**Formulas:** Function Library, Defined Names, Formula Auditing, Calculation

**Data:** Get External Data, Connections, Sort & Filter, Data Tools, Outline

**<u>Review:</u>** Proofing, Language, Comments, Changes

<u>View:</u> Workbook Views, Show, Zoom, Window, Macros

Quickbooks: Update Report, Quickbooks

Team: Work Items, Tree, Reports, Help



Figure 2

• When generating a scatter plot, Excel will plot the data in column A on the x-axis and the data in column B on the y-axis. In cell A1, label the column and then start entering data in cell A2. In cell B1, label the column and

	]               	1 2 ile Hon F H Spelling Research Thesaurus Proofing	Franslate Language	s exam fi Forn E M New omment Comm	07 graph : A Rev. A R C C C C C C C C C C C C C C C C C C C	skill View W Changes	<u>۔</u> ۵ (۲		e <sup>β</sup>	23
-		A9	-	0	$f_x$					~
	4		А	В		С		D		F
1		Concentra	ation (mol/L)	Absor	bance					- Fil
2	2	0	0.00	0.000						
3	3	2	2.00	0.1	38					
4	ŀ	4	.00	0.2	69					
5	5	6	6.00	0.3	90					
6	5									
7	7									-
N	IA     →     →     I       IA     →     →     I									
R	Ready 🔲 🛄 100% 🖂 🕂 🕂									

Figure 3

Figure 4: Formatting Cells for Significant Figures:

To set the cells to the correct number of significant figures, right click on the letter of the column that you want to change your sig-figs. Scroll down and click on the <u>format cells</u> option. Then, select the <u>number</u> option. Change the significant figures by changing the number of decimal places. Upon completion, click <u>ok</u>.

🚺 🔒 🐬 🖑 🕫	Bookl - Excel ? 📧 —
FILE HOME INSE	RT PAGE LAYOUT FORMULAS DATA REVIEW VIEW Aiken, Willie Rut
B1     :       A     B       1	Format Cells          Number       Alignment       Font       Border       Fill       Protection         Category:       General       Sample       Currency       Currency       Decimal places:       2       2         Date       Use 1000 Separator (,)       Percentage       Fraction       1234.10       1234.10       1234.10         Free to get to me       Use to me       Sample       1234.10       1234.10       1234.10
9	Number is used for general display of numbers. Currency and Accounting offer specialized
15 16 17 Sheet1 READY	formatting for monetary value. OK Cancel

Figure 4

### Figure 5: Preparing to Graph Data

To graph data, put your x-coordinates in the <u>left-hand column</u> and your y-coordinates in the <u>right hand column</u> as if you were typing a coordinate pair (x, y). After filling in your data, highlight the data that you want to appear in the graph by selecting the upper left hand corner of the first cell to be graphed. Left click and drag right and down until all cells to be graphed are highlighted. Release the left mouse button.

(	🗶 Microsoft Excel - skills exam f07 graph skill 4 [Co 🗖 🖻 💌							
		A2 -	( <i>f</i> x	0	*			
		А	В	С	D 🚍			
	1	Concentration (mol/L)	Absorbance					
	2	0.00	0.000					
	3	2.00	0.138					
	4	4.00	0.269					
	5	6.00	0.390					
	6				•			
	H   H Sheet1 Sheet2 Sheet3   III IIII F							
	Average: 1.60 Count: 8 Sum: 12.80 🌐 🗉 🖽 100% 🛒							



#### Figure 6a and 6b: Selecting graph

Click on the <u>insert</u> tab in the ribbon section and view the chart options. Click on the <u>scatter</u> icon under the chart section. Then, scroll down and click on more <u>scatter charts</u>. Under the <u>all charts</u> tab, select <u>scatter with markers only</u>. Then click on <u>ok</u>.

					Scatter		Scatter with markers only
INSERT 1.00 2.00 3.00 4.00 5.00	PAGE LAYO	OUT FC	DRMULAS DATA	REVIEW	VIEW PivotChart	Power View s	Insert Charts     Recommended Charts     Image: Recommended Charts     Im
		Figu	ire ba				OK Cancel

Figure 6b

Figure 7a and 7b: Adding axis titles, legend, trendline, and an equation

• If chart is <u>not</u> activated, click on it. Then, click on the plus sign beside chart. Under the <u>chart</u> <u>elements</u>, select <u>axis titles</u> and <u>legend</u>. Go to the bottom and click on the arrow beside the trendline option. Scroll down and select <u>more options</u>.



• Under trendline options, select *linear* and *display equation on chart*. Close the format trendline box.



Figure 7b

### Figure 8: Changing titles

• Click on title and type in chart title. Repeat the process for the "x" axis title at the bottom of the chart and for the "y" axis title along the side.



## Figure 9a and 9b: Printing Your Graph



• Activate the chart if necessary. Then select the *file* tab and the *print* tab.

Figure 9a

• Make sure that "Print Selected Chart" is indicated under <u>settings</u>. Click on <u>print</u> button.



Figure 9b