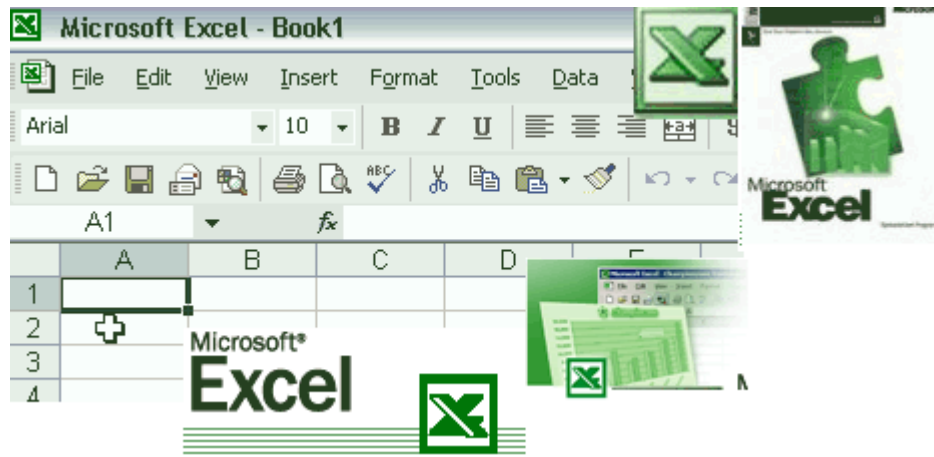


Welcome to Spreadsheets and Word Processors



Presented By:



This guide book, class materials, videos, and images are all available at the Dodge County 4-H Computer Project Web Site

The Address for the site is:

<http://www.uwex.edu/ces/cty/dodge/4h/projpps/computer/computer.html>

Special Thanks to:
Dodge County 4-H
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To begin we will start with some of the very basics. To even use Microsoft Excel you need to know how to run it, save files, open files, know what the toolbars are, and get a general idea of the program.

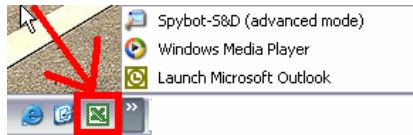
General Overview:

Opening Microsoft Excel:

We will start by opening Microsoft Excel:

To Open Excel either click/double click on the icon on you desktop:

If the Icon is not on your desktop you can see if it is in your Quick Launch Toolbar:



If both of these options fail you can check in your start menu under programs. If you are using a Macintosh system Microsoft Excel will be located in either your Applications folder of somewhere on your Mac Hard Drive.

The Toolbars:

Now you know how to open and run Microsoft Excel lets learn about some of its toolbars. Below are the numerous toolbars in Microsoft Excel and a useful description of each. To open a toolbar you must go to the view menu on the General Microsoft Office Toolbar, go to toolbars and choose the one you wish. At the end of most of the toolbars there is a ▾ this allows the customizing of the toolbar with more or less buttons.



The General Microsoft Office Toolbar. This toolbar allows the user to control all of the pieces of Microsoft Excel.

- The File Menu allows the opening, closing, saving, and printing of the Excel workbook.
- Edit is just what it says, you can undo, redo, cut, copy, paste, and find from this toolbar.
- View controls the look and feel of Excel. Insert allows you to add rows, columns, charts, symbols, text boxes, pictures, and clip are to your work.
- The Format menu is very self explanatory; it allows the formatting of the cells, rows, and columns of Excel.

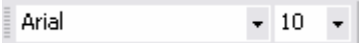



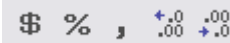
- Tools has the spell checker, formula checker, and the main options menu in it.
- Data allows sorting of data, database functions, and other advanced features of Excel.
- Window allows the controlling of the "windows" in Excel
- Help, Help!, one of the best menus in Microsoft Excel, you can get all the assistance you need, turn on/off the Office Assistant, and many other things.



The Standard Toolbar, this toolbar has a lot of the same functions as the file, edit, and insert menus. The buttons will be described and used later.






This is the Formatting Toolbar, it allows all the functions in the formatting menu and is easier to get at and control.

-  This is the font formatting section of the toolbar. It allows you to change the font of you text and numbers, as well as the size in points. 1point=1pixel.
-  These buttons allow you to bold, italicize, and underline selected text and numbers.
-  These buttons are the justification buttons. These buttons will move the selected text either to the left, center, or right, of the selected cell.
-  This is the merge and center button. It allows the combining of two of more cells; it also will keep and move the data from the first selected cell to the center of the merged cells. Here is an example:
-  These are the special number formatting buttons. The first turns all the numbers in the cell to the currency type of numbers. (I.E. You type 6 and you want it to say 6 Dollars, when selecting the number and clicking the \$ it will turn it to "\$6.00".) The next button is the percentage button; it turns all numbers into their percentage equivalents (I.E. .66 to 66%). The next button puts commas in long sets of numbers, if not pushed the number 1 million would look like 1000000, not 1,000,000. The next two buttons increase and decrease the number of following decimal points.

	A	B	C
1			
2			
3	4-H		
4			

(I.E. you type 5 and you want it to be 5.00, you would select "5" and push the increase decimal button twice.

-  The indent buttons increase and decrease the amount of the indent in a cell.
-  These are the cell border and color buttons. We will show you how these work a little later.
-  This is the font color button. It allows the changing of the color of numbers and text.


These toolbars are the most used, generally, and are all that we will cover. There are many other toolbars that can be used in Microsoft Excel. You are generally encouraged to open up toolbars and see what they can do. If you want more information on the different toolbars you can go to Microsoft Office help and look up toolbars or just ask to Microsoft Assistant about toolbars.

Saving in Microsoft Excel:

To save in Microsoft Excel is the same as in most Microsoft Products. You can go to the file menu and click save as or save, click the save button on the standard toolbar, or push ctrl and "s" at the same time on your keyboard, and release. There is a not so old saying that most people who use computers know is save many and save often. We are using Microsoft Products and if you are using anything other than Windows 2000 and XP your system may crash and you can loose a whole document. With the later versions of excel especially in 2000 and XP your document can be recovered if your computer crashes. Do not count on this though.

Changing the View in Excel:

To change the view in Microsoft Excel there is the zoom function. To use the zoom function you can use the zoom drop down on the standard toolbar


 or go to view, down to zoom and choose how close you would like your view to be.

Difference between Worksheet and Sheet:


The difference between a Worksheet and worksheet is quite simple. If you notice one has the word book in it and one has sheet. Just think of them as they sound, a worksheet is part of a Worksheet. When you save anything in Excel it saves the entire Worksheet.

Worksheets:

Creating and naming a worksheet:

- To create a new worksheet in Excel you need to insert it. To insert a worksheet you must go to the insert menu and click worksheet or right click on one of the worksheet tabs and click insert on the menu that pops up, then click worksheet.
- To name a worksheet right click on one of the sheet tabs  and click rename. Type in the name of the sheet you would like on the tab you right clicked on.

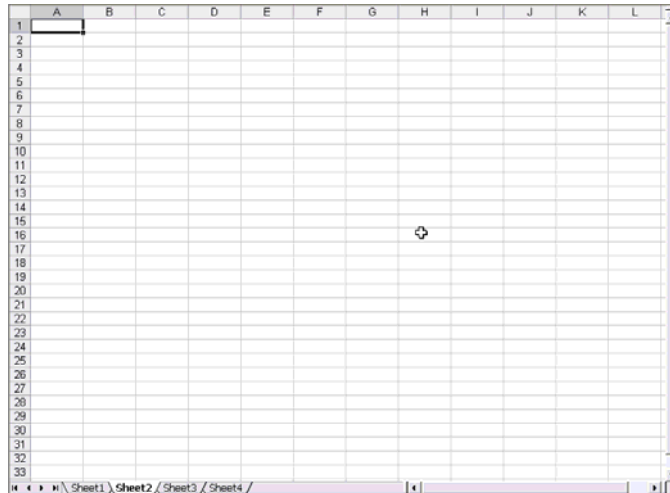
Navigating and Moving Worksheets:

- There are two ways to navigate between sheets in Microsoft Excel you can either scroll and click on the sheet you would like by clicking on its tab. You can also use the sheet navigation buttons . To navigate to the first sheet click the first button on the right. To navigate to the last sheet click on the far right button. To move one back or forward, click on the respective middle buttons.
- To move a worksheet click and drag its tab to where you would like it to go. There is a demonstration video on the web site. The address is listed at the end of this packet.

Spreadsheet Overview:

Columns and Rows:

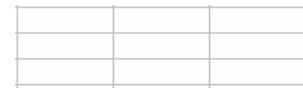
The best thing to remember to remember what a column and row is that a column is vertical and a row horizontal. Below is a picture of worksheet which is also known as a spreadsheet.



If you notice all the columns have a letter on the top of them. The rows also have a number. These lists of rows and columns go on nearly infinitesimally.

Cells:

Cells are the heart of every spreadsheet. They contain all the data and formatting. If you don't understand cells you will not understand spreadsheets or formulas. Cells look like little boxes made up by rows and columns. These rows and columns give each cell a set of coordinates. The columns set the letter in each columns and the row the number.



The general format for cell coordinates is letter than number. The first cell on the top left of the

	A	B	C
1			
2			
3			

sheet is known as A1. The next cell to the right is B1. To find the cell coordinates of any cell you can look at the "name box" in the upper left of the sheet. It looks like this:

Navigating between cells:

To navigate between cells either click on the desired cell or type its coordinates in the name box.

Selecting Rows, Columns, and cells:


- To select a row click on the number of the row. Now the entire row is selected.
- To select a column click on its number.
- To select multiple rows or columns click on the first row or column and hold down ctrl, while ctrl is being held click on the other rows or

columns you wish to select. To select a consecutive group of rows or columns click the first one and hold down shift, while holding click the last one in the group, it will select all the columns or rows between.

- To select a cell either click on it or type its coordinates in the name box.
- To select multiple cells follow the same rules as the rows and columns.

Resizing Columns and Rows:



To resize a column just go to its edges like in the picture: 

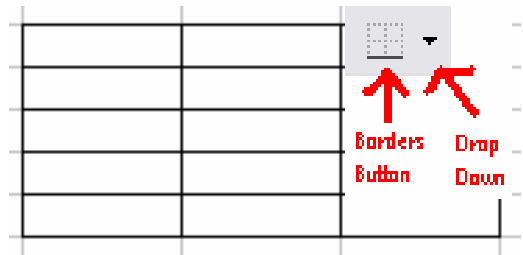
When you see this cursor "" click and drag the edge of the cell to the desired size. To make the column as wide as the widest cell, double click when you get that cursor. If you wish to manually resize a column with numbers right click on the column and click column width. To resize a row go to the number of the row and click on its edge like the following picture. If you would like to set the height manually right click on the row and click row height.




Formatting Cells:

Using Borders:

Now we start getting into some of the heart of Excel. Borders are one of the things that make your spreadsheets look very professional and experienced. To user borders can be difficult but Excel tries to help. We will show this by example. If you want a group of cells to all be boxed in like the illustration at right then you must first select the cells. Then click on the drop down arrow next to the borders button on the formatting toolbar. When the menu drops down click on the . This will make the selected cells have borders on all four sides. If you only want a cell to have a line on the bottom, select the cell, and in the borders drop down menu click . The rest of the borders are self explanatory. Borders do add to each other. If you did the borders to all four sides and the told one of those cells to have a bolded bottom, it will keep the thin lines on the top, left, and right, but bold the bottom.



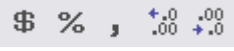
Coloring Cells:

To add color to a cell select the cells you would like colored, and then go to the cell color button. Click the drop down arrow and choose the color. Then hit the button. The cell color button is on the formatting toolbar and looks like this: . It is right next to the borders button.

Adding a Texture or Patterns to a Cell:

To add a texture to a cell, select the cell. Then right click on it. A menu will pop up, and click format cells. A new window will pop up. Go to the patterns tab. Choose a color for the pattern, and then click on the patterns button. A pop up window will open and choose your pattern.

Cell Type/ Format:

Each cell in your spreadsheet has a number format to it. You can change this format many ways. One way is to choose one of the buttons from the format toolbar that looks like this: . The other way is to right click on the cell and click format cells. A new window will appear and click on the Number tab. You can choose any of those categories for the selected cells.

Text:

Typing Text:


To add text to a cell just click on the cell and start typing. It's just like typing anything else except when you want to go back and edit it.

Editing Text:

To edit text either select the cell and double click on the text to change it or select the cell and change it in the formula bar. The formula bar will be introduced later.

Formatting Text:

To format text just select it, to select it, click on its cell and in the formula bar select it. The other way is to double click in the cell and select it. Once the text is selected you can choose its font and size on the formatting

toolbar. To choose its color click on the far right button on the formatting toolbar that looks like . Choose the drop down arrow next to it to choose the color and then hit the button.

Numbers and Numerals:

Adding and Editing Numbers:

To add numbers to a cell follow the same rules as adding text. The same rules apply for editing the numbers.

Rounding:


Microsoft Excel rounds off all extra decimal zeroes. If you typed in 1.00 it would leave 1 in the cell. To make sure the .00 is showing use the decimal place buttons on the formatting bar. You can also set the number of decimal places by right clicking on the cell and clicking format cells. In the window click the Number tab. In the category list click number and set the number of decimal points.

Formatting Numbers:

Formatting numbers is the same as formatting text. You can choose the font, size, and color. You can also give it a style like bold, italic, and underline.

Using the Sum of (X) Button:

Say you have a list of numbers in cells in a spreadsheet. Wouldn't it be nice if there was a button that would just add them all up, or find there average?

There is, the  button. This button has many functions: they are sum, count, average, max, min, and more. To use it select the list of numbers either vertically or horizontally. But when you are selecting the list add another cell to it that is blank. This is where it will put the sum, or count, etc. You can use this to sum or count entire rows by selecting the rows and choosing a blank one at the bottom. The same for columns.

66
52
49
5
2
69
78

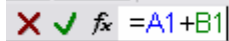
Writing Formulas:

The Formula Bar:



The above image is the formatting bar in Microsoft Excel. In this bar all the data in a cell is written.

To use the formula bar and to write formulas you must remember some of your basic algebra. In algebra you use variables to solve equations. In Excel instead of using variables such as x , y , z , Excel uses cell coordinates. Also, instead of the equal sign being on its usual right side, it is the first thing on the left of the formula. Here is an example of a simple equation.



The X button, if clicked cancels your work. The check mark accepts your work. The Fx button is for advanced functions, which we will not cover.

To add to cells you use the addition sign "+", to subtract "-", multiply "*", to divide "/".

Here is what happens when you write a formula for a cell like the one above:

Before:

	A	B	C
1	6	7	=A1+B1


After:

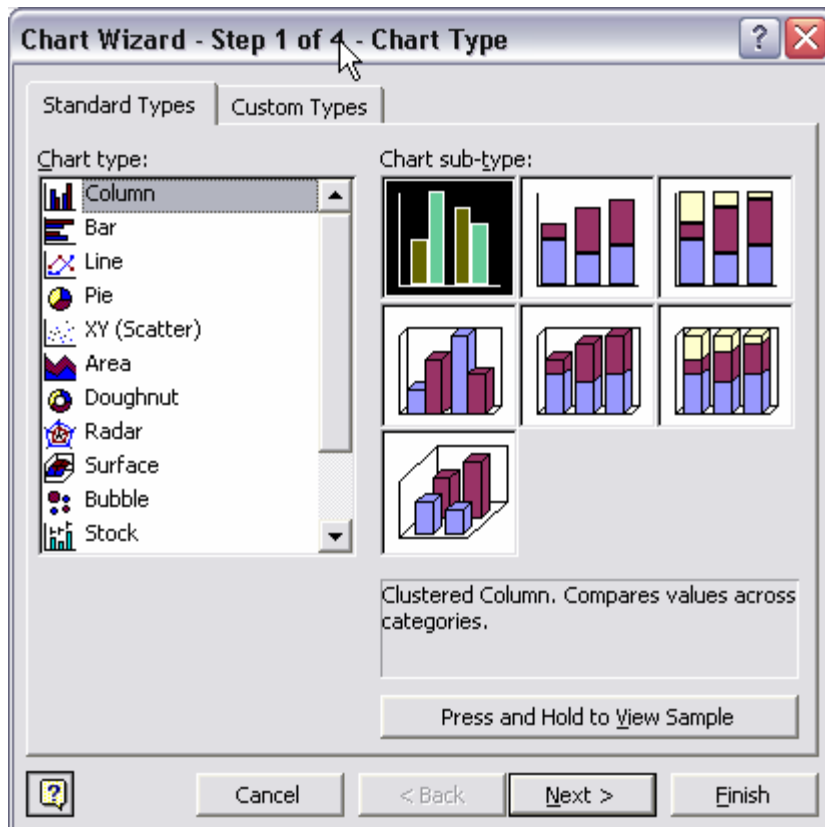
	A	B	C
1	6	7	13

You do not have to only add cells together; you can use constants as well.

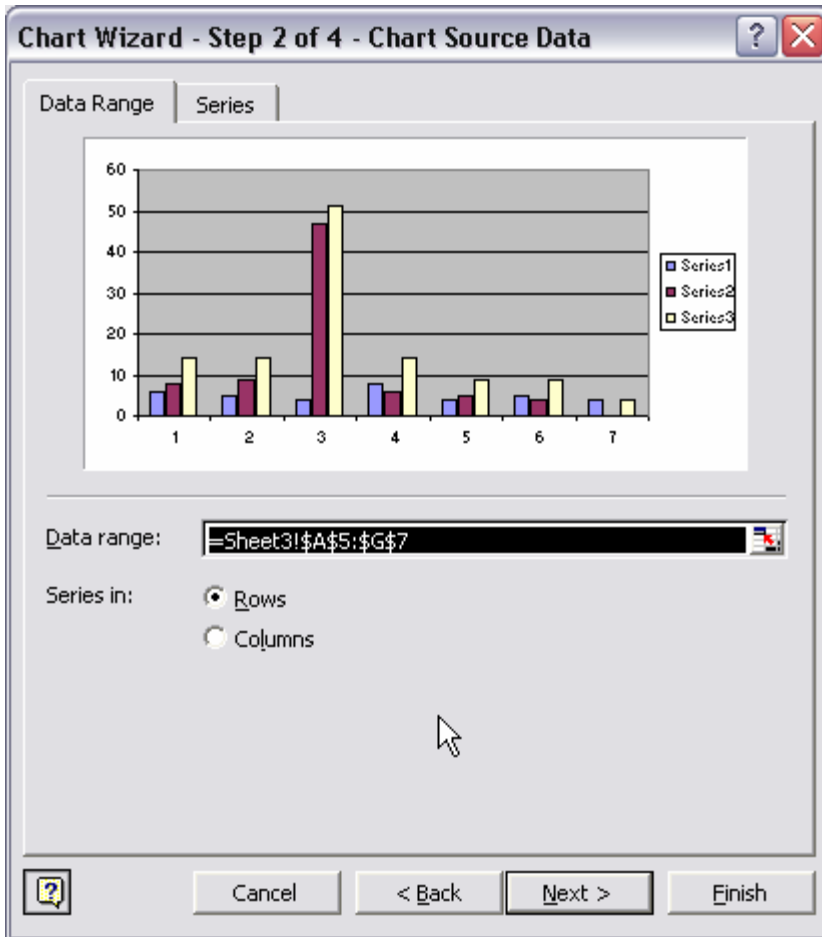
Say you want to add A1 to 16 and display the value in B1. Click in B1 type in the following with out the quotes: "=A1+16".


Making Charts and Graphs: Using the Chart and Graph Wizard:

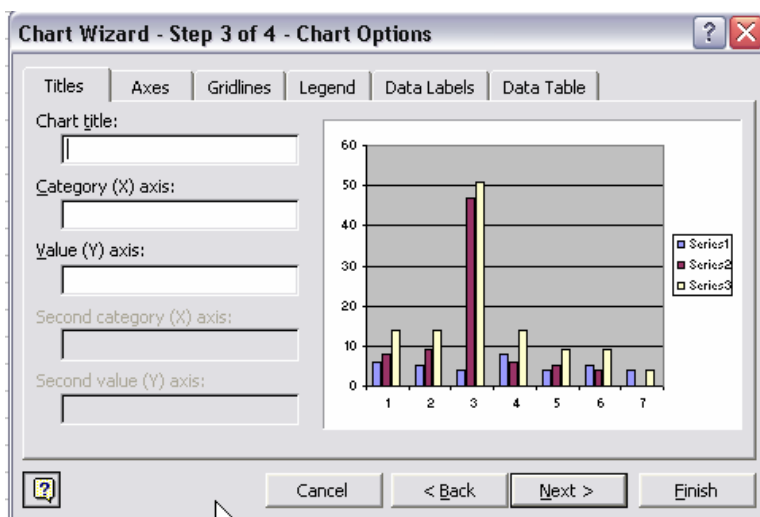
Below is a series of pictures from the Chart and Graph Wizard in Excel. To start the wizard click the  button on the standard toolbar.



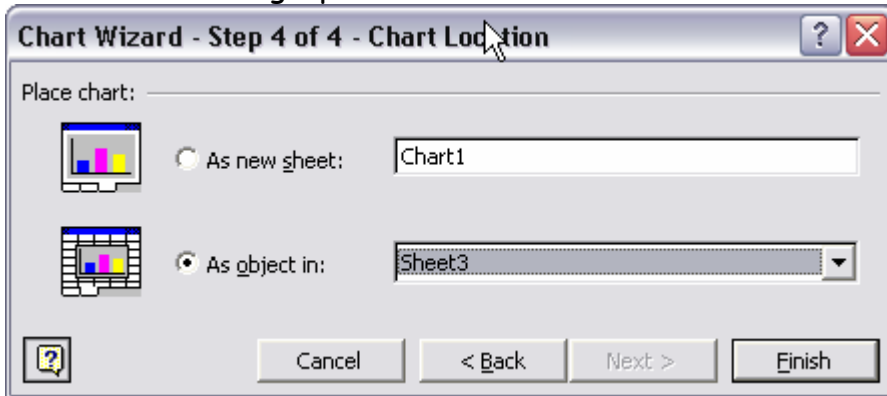
As you can see there are many graphs to choose from. We will choose the column graph for learning purposes. The Office Assistant is very beneficial in this process. To start the Assistant click the Help menu and click on Show the Office Assistant.



This is where you set the area of the data you will be using. To set the area click the  and select the area. Under series you can choose the exact data you wish for the X axis and the different data.



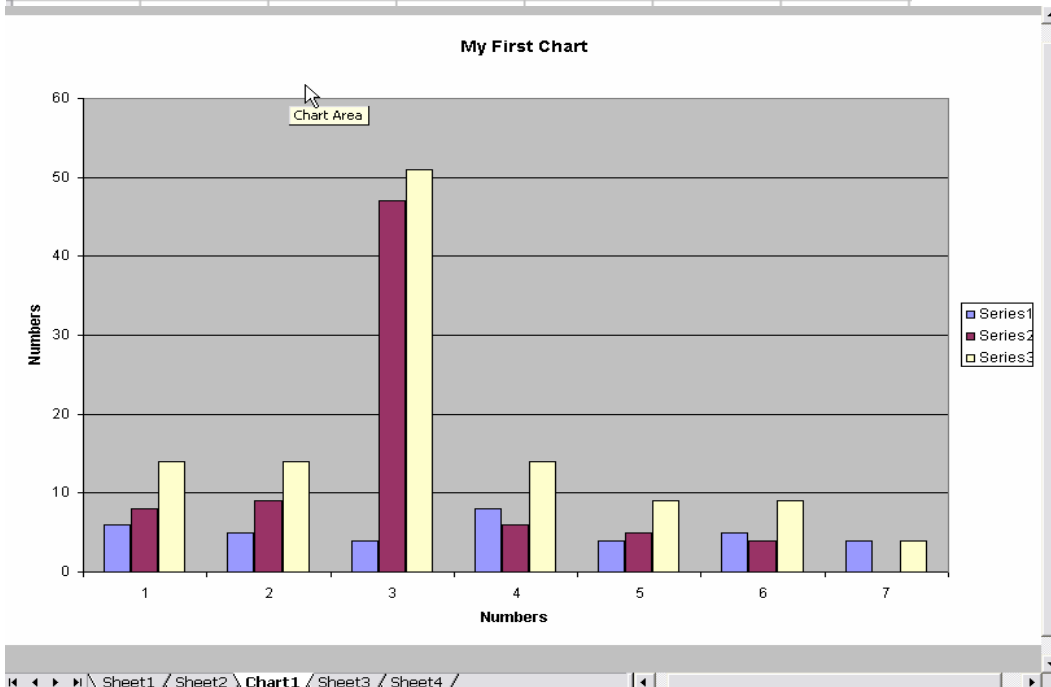
- Now it asks you to choose the Charts Title, and the labels for the X and Y Axis.
- The other tabs in this window control many of the other options of the chart. Some of these options are things like gridlines, labels, and if you want a legend. There is a video on the website about making charts and graphs.



Now you must choose the location of the chart. You can either have it put in your current spreadsheet, or put it in as a sheet in the workbook. We will put it in as a new page in the workbook.

I used this data to make this graph:

6	5	4	8	4	5	4
8	9	47	6	5	4	0
14	14	51	14	9	9	4



Making Graphs and Charts are very easy in Excel. Now we will show how to put things like charts and graphs into other applications such as Microsoft Word, Microsoft PowerPoint.

Transferring Data:

Moving a spreadsheet to Microsoft Word:

Let's say you made the spreadsheet below, and you want to include it in a report about the birth rates in the Midwest. How could you move this data with out making a table in Microsoft Word?

Here's One Way:

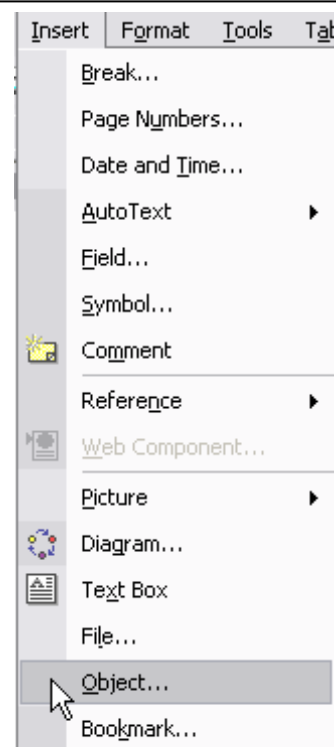
1. Select the data
2. Copy it by either using the button, the edit menu, or by hitting ctrl & C down together briefly.
3. Go to your Word document
4. Place your cursor where you would like the data and paste it by using the button, menu, or ctrl + v.

Here is another:

This will put the active sheets data into Word. Meaning which-ever sheet was active when it was placed in Word will be displayed.

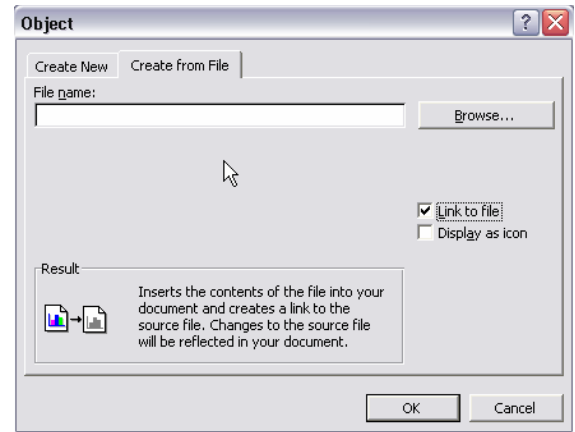
1. Make sure the sheet you want to display is open in Excel and saved
2. Open up word and place your cursor where you would like the data
3. Go to the insert menu
4. Click Object
5. When that window opens click on the Create from File Tab
6. Browse to your Microsoft Excel Workbook and click the insert button

	A	B	C	D
1	Births in Midwest			2001
2	Month	WI	IL	IN
3	Jan	66,258	659,561	65,222
4	Feb	65,897	54,256	36,958
5	Mar	25,942	352,586	21,456
6	Apr	45,623	652,384	39,856
7	May	27,585	25,869	32,145
8	Jun	14,758	357,458	35,845
9	Jul	26,534	62,596	36,985
10	Aug	56,284	25,854	99,999
11	Sep	25,695	654,878	65,463
12	Oct	53,241	654,987	64,654
13	Nov	26,953	147,258	32,165
14	Dec	25,842	369,258	987,763



7. Now click the Link to File Check Box and hit Ok
8. The data should appear in Microsoft Word.

This data can be changed in Excel and it will automatically change in Microsoft Word.



Transferring Info to Microsoft PowerPoint:

To transfer information to Microsoft PowerPoint and many of its other applications follow the same steps as if you were transferring it to Microsoft Word.