



Excel Basics

Know Enough About Excel to be Dangerous
Presented By: Terence Peak

Topics

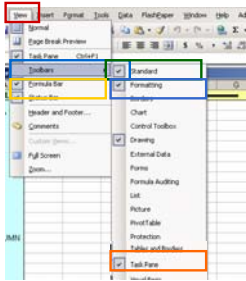
- ▶ Toolbars and Taskbars
- ▶ Managing Spreadsheets
- ▶ Formatting Spreadsheets
- ▶ Formulas
- ▶ Charts
- ▶ Excel Options





Toolbars and Taskbars

Viewing Toolbars and the Task Pane



- ▲ Click View
- ▲ Click Toolbars
- ▲ Click the Standard Checkbox
- ▲ Repeat and Check Formatting Checkbox
- ▲ Repeat and Check Task Pane Checkbox
- ▲ Drag mouse to Formula Bar and Click on it

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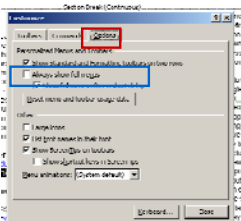
Toolbars



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Full Menus



- ▲ Click Tools
- ▲ Click Customize
- ▲ Click the Options Tab
- ▲ Click Show Full Menus

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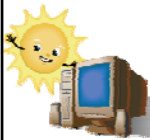


Let's get Started

- ▲ Find "summerss" on the Desktop
- ▲ *Double-click* to open the Spreadsheet

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Managing a Spreadsheet

Parts, Definitions & Management Tools

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Parts of a spreadsheet

- ▲ **Columns:** Represented by letters; (A, B, C, D...etc). The column letter is at the top of the spreadsheet
- ▲ **Rows:** Numbered (1,2,3,4..etc). The number is on the left side of the spreadsheet.
- ▲ **Cell:** The intersection of a row and a column.
- ▲ **Worksheet:** One Page of a spreadsheet.
- ▲ **Workbook:** A series of related spreadsheets.

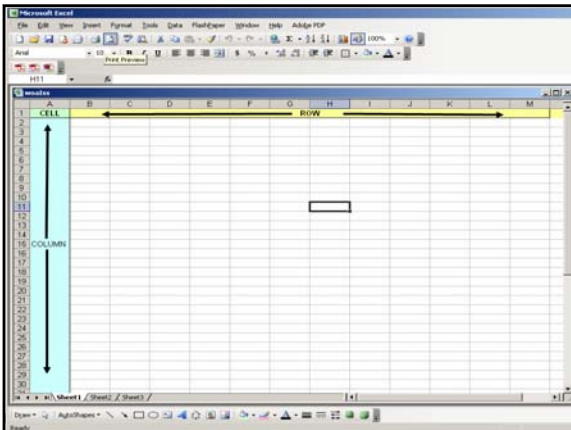
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Parts of a spreadsheet

- ▲ Cell: The intersection of a row and a column
- ▲ Cell Address: The combination of letters and number that identifies a cell (A1, B3 etc)
- ▲ Cell Notation: Method of writing cell formulas, cell addresses, not cell contents are used when writing mathematical formulas for cells





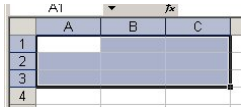
Selecting or Highlighting a Single Cell



- ▲ Open Sheet 2
- ▲ Click Mouse on Cell A1
The Cell has a black outline when selected.
- ▲ Note that Row 1 and Column A are highlighted
- ▲ So, A1 is highlighted



Selecting or Highlighting a Multiple Cells

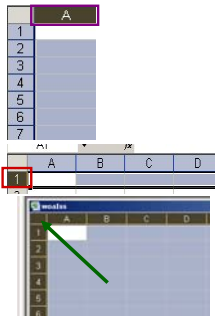


- ▲ *Select Cell A1*
- ▲ *Click and Drag* mouse up, down, left and right to select rows, columns, and cells
- ▲ *Select cell C1*
- ▲ Hold down SHIFT and Right ARROW Keys or SHIFT and Left ARROW Keys at the same time to select **Rows**
- ▲ Hold down SHIFT and Up ARROW Keys or SHIFT and Down ARROW at the same time to select **columns**



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Selecting the Entire Column, Row, or Spreadsheet

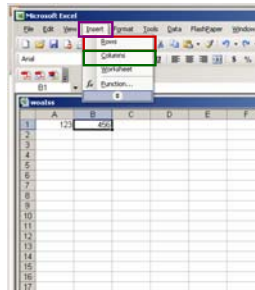


- ▲ *Click on the top of Column A* to select the column.
- ▲ *Click on Row 1* to select the row.
- ▲ *Click the upper-left corner* to select the entire spreadsheet



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Inserting Rows and Columns

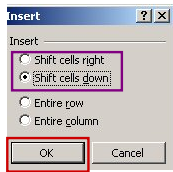


- ▲ *Type 123* in cell A1
- ▲ *Type 456* in cell B1
- ▲ *Select Column B*
- ▲ *Click Insert*
- ▲ *Click Columns*, this will insert a Column
- ▲ *Type 456* in cell A2.
- ▲ *Select Row 2.*
- ▲ *Click Insert*
- ▲ *Click on Rows*, this will insert a Row



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Inserting Cells

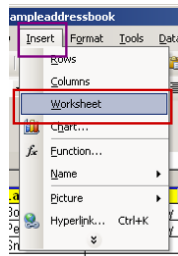


- ▲ Type 123 in cell A1
- ▲ Type 456 in cell A2
- ▲ Select Cell A1
- ▲ Click Insert
- ▲ Click on Cells.
- ▲ Choose **Shift cells down**
- ▲ Click **OK**

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Inserting Worksheets

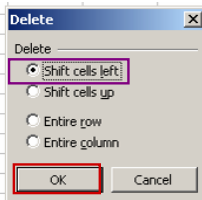


- ▲ To add an additional page, (worksheet) to a Workbook
- ▲ Click **Insert**
- ▲ Click **Worksheet** this will insert an additional worksheet

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Deleting Cells, Rows, Columns, and Worksheets

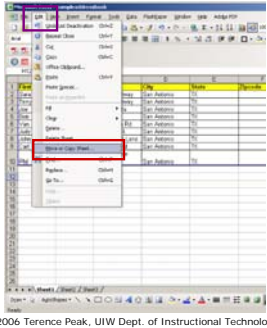


- ▲ Select **Column B**
- ▲ Click **Edit**
- ▲ Click on **Delete**
- ▲ Choose **Shift Cells Left**
- ▲ Click **OK**
- ▲ Use the same function to delete Rows, Columns, and Worksheets

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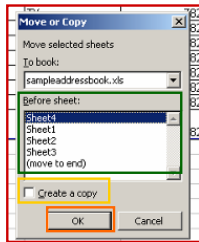
Copying Worksheets



- ▲ Unlike Microsoft Word, it is not possible to highlight and copy text and formatting in Excel. However, copying formatting is relatively easy.
- ▲ Copying worksheets allows for a worksheet *and all of the formatting within a worksheet* to be copied
- ▲ Open Sheet 6
- ▲ Click **Edit**
- ▲ Click **Move or Copy Sheet**

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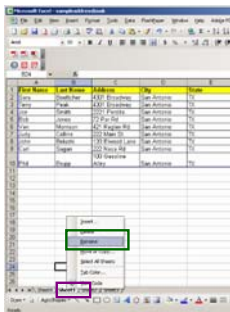
Copying Worksheets



- ▲ On the **Move or Copy** menu
- ▲ Select **Create a Copy**
- ▲ Choose where the sheet will be copied or moved
- ▲ Click **OK**

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Rename Worksheets



- ▲ **Right-Click** on the **Sheet 6** at the bottom of the workbook
- ▲ Click **rename**
- ▲ Type "address"

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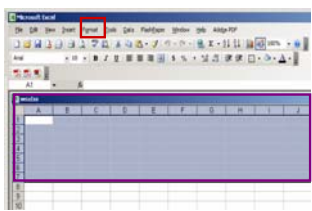


Formatting a Spreadsheet

Getting Cells Ready for Data

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Formatting Cells for Numeric Functions

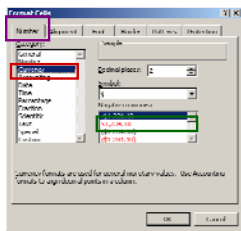


- ▲ Open the spreadsheet "summerss"
- ▲ Click on "Sheet 2"
- ▲ Select **A1-J7**
- ▲ Click on **Format** in the Menu Bar.

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Formatting Cells for Numeric Functions

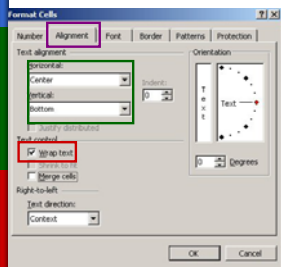


- ▲ Click on **Cells**
- ▲ Click on the **Number Tab**
- ▲ Choose **Currency**
- ▲ Choose the option to show **Negative numbers in red**

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Formatting Cells for Text

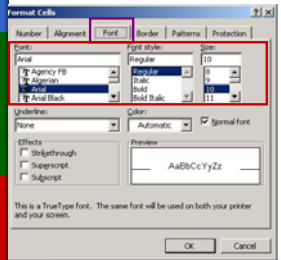


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- ▲ Click the **Alignment Tab**.
- ▲ Click the check box for **Wrap text** to engage text wrapping to allow multiple lines of text to stay within a cell
- ▲ Click on the **Horizontal or Vertical drop down arrows** to center and align text horizontally or vertically within cells



Formatting Font

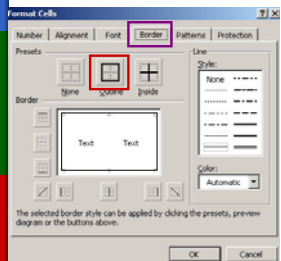


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- ▲ Click on **Font Tab**.
- ▲ **Change Font, Font Style, & Size to Arial 12 Bold.**
- ▲ Using this feature you can set the font for an entire spreadsheet, or a few cells



Formatting Borders



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- ▲ When you open a worksheet, notice the pale gray lines bordering the cells. These are called grid lines. They are not visible when printed unless they are outlined with a border
- ▲ Click on the **Border Tab**
- ▲ Choose **Outline** border style



Formatting Cell Shading



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- ▲ Worksheets have a white background. In order to create a colored background, *click* on the **Patterns Tab**
- ▲ Choose a **color** to use for a cell shading. Pastel colors work best
- ▲ *Click* **OK**



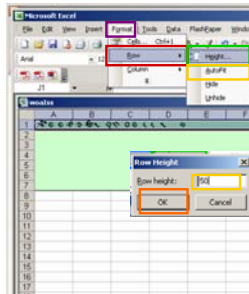
Formatting Rows & Columns

- ▲ Rows and columns have a standard height and width. In order to change the width and height for larger text, or multiple character cell text, rows and columns must be formatted.



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Formatting Rows & Columns



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- ▲ *Click* on **Format**
- ▲ *Select* **Row**
- ▲ *Click* on **Height**
- ▲ *Change* the Row height to **50**
- ▲ *Click* **OK**
- ▲ As with rows, *choose* **Format**, then **Column**, then **Width** to format column width



Auto Fit

- ▲ There is a formatting choice called **AutoFit**
- ▲ This function will make columns wide and tall enough for text to fit, no matter how much text is in the cell. However, this function is not needed when using Text Wrap, as we did when we formatted the cells.



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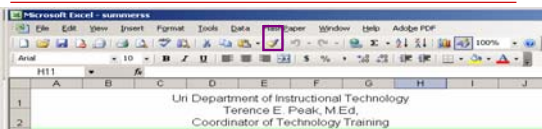
Merge and Center

- ▲ Merge and Center allows for several rows or columns of cells to be combined to create a single cell
- ▲ This function is useful for creating a worksheet heading.
- ▲ This option will not effect the size of other cells in a spreadsheet
- ▲ If the heading



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Merge and Center



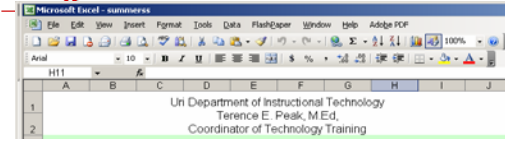
- ▲ Click on Sheet 3
- ▲ Insert 2 rows
- ▲ Select cells A1 through J2,
- ▲ Click on the Merge and Center icon.
- ▲ Type

"UIW Department of Instructional Technology
Terence E. Peak, M.Ed,
Coordinator of Technology Training "



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Merge and Center



- ▲ Notice that the text is three lines long. If you press the **Enter Key** after each line, the cursor will be moved to an empty cell
- ▲ Instead, hold down the **ALT + Enter** keys *at the same time*. This will create a line break and allow multiple lines of text



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Formulas

Math-Excel Style

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Formulas

Components of formulas	
=	This tells Excel that you are writing a formula
+	Addition
-	Subtraction
*	Multiplication
/	Division
^	Exponents
()	Parentheses
	Parentheses
	Exponents
	Order of operations: Multiplication or Division
	Addition or subtraction
Number	On the right side of the keyboard. Always use with Excel
Keyboard	
Spacing	Do not use spaces in formulas

- ▲ These are the basic rules of formulas
- ▲ Formula are written in this manner:
=cell address + cell address
- ▲ Note that you add the cells, *not the cell content*
- ▲ Note that *spaces are not used in formulas!*



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Formulas

▲ Open "Formulas"

▲ Addition

▲ Select Cell A3

▲ Type =A1+A2

▲ Enter

▲ Subtraction

▲ Select Cell B3

▲ Type =B1-B2

▲ Enter

▲ Multiplication

▲ Select Cell C3

▲ Type =C1*C2

▲ Enter

▲ Division

▲ Select Cell D3

▲ Type =D1/ D2

▲ Enter



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Formulas

▲ Sum Multiple cells

▲ Select Cell E1

▲ Type =SUM(E1:E4).

Enter

▲ Auto Sum

▲ Select Cells F1 through f7.

Click The Σ on the Standard Toolbar

▲ Averaging

▲ Select Cells G1 through G10.

Click on the Drop Down Menu Selector *next to the Σ* on the Standard Toolbar

▲ Choose Average



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Formulas

▲ Open "Formulas"

▲ Select Cell A8

▲ Type =A1+A2

▲ Press ENTER

▲ Note: when writing formulas, use the numeric keypad

▲ Multiplying, dividing and subtracting are similar, but change the notation



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Formulas

Adding Multiple Cells

- ▲ Select Cell B8
- ▲ Type =B1+B2+B3+B4
- ▲ Press ENTER

Sum Function

- ▲ Select Cell C8
- ▲ Type =SUM(C1:C6)
- ▲ Press ENTER



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Formulas

The Point and Click method of adding cells

- ▲ Select Cell E8
- ▲ Type an =
- ▲ Click Cell E1
- ▲ Type +
- ▲ Click Cell F2
- ▲ Type +
- ▲ Click Cell E3
- ▲ Type +
- ▲ Press ENTER

Auto Sum and Average

- ▲ Select Cells F1 through F7
- ▲ Click Selector next to the Auto Sum Icon Σ on the Drop Down Menu
- ▲ Choose SUM
- ▲ Select Cells G1-G6
- ▲ Click Selector next to the Auto Sum Icon Σ on the Drop Down Menu
- ▲ Choose Average



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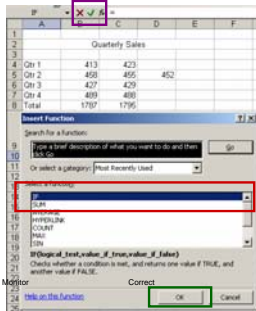
Fun with If/Then Statements



Getting the brain to work and have fun at the same time

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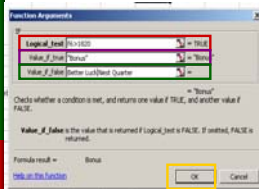
If/Then statements



- ▲ If/then statements state that when an event occurs in one cell, it will trigger an event in another cell
- ▲ Useful in forecasting and testing
- ▲ Open "TrendFinal"
- ▲ Select cell B9
- ▲ Click on the Insert Function Icon
- ▲ Choose If
- ▲ Click OK

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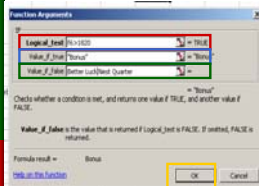
If/Then statements



- ▲ Type " $B8 > 1800$ " in the Logical_Test window
- ▲ Type "Bonus" in the Value_if_True window
- ▲ Type "Better Luck Next Quarter" in the Value_if_False window
- ▲ Click OK
- ▲ What will happen is that any number greater than 1800 will trigger a response "Bonus", and a number less than 1800 will generate the response "Better Luck Next Quarter"

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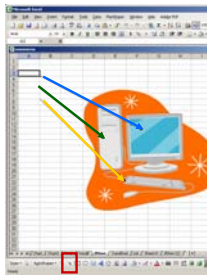
If/Then statements



- ▲ Select cell C9
- ▲ Click on the "Insert Function" Icon
- ▲ Choose If
- ▲ Type " $C8 > 1800$ " in the Logical_Test window
- ▲ Type "Bonus" in the Value_if_True window
- ▲ Type "Better Luck Next Quarter" in the Value_if_False window
- ▲ Click OK
- ▲ Repeat process for D9 and E9
- ▲ Trend B1-E7

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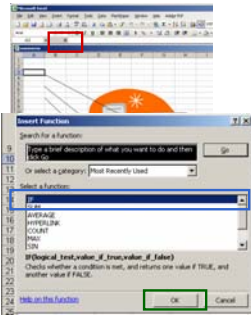
Now, the FUN part!



- ▲ Open "IfThen"
- ▲ Click View
- ▲ Click Toolbars
- ▲ Click Drawing
- ▲ Click on the **Arrow**
- ▲ Draw an arrow from cell **A3 to the Monitor**
- ▲ Draw a second from **A5 to the Tower**
- ▲ Draw a third from **A7 to the Keyboard**

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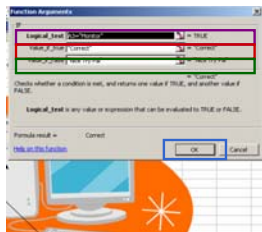
Now, the FUN part!



- ▲ Select cell **B3**
- ▲ Click on the **Insert Function** Icon
- ▲ Choose **If**
- ▲ Click **Ok**

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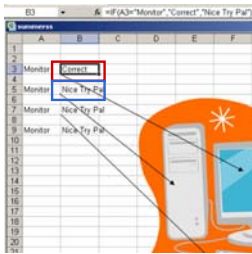
Now, the FUN part!



- ▲ Type "**A3=Monitor**" in the Logical_Test window
- ▲ Type "**Correct**" in the Value_if_True window
- ▲ Type "**Nice Try, Pal**" in the Value_if_False window
- ▲ Click **OK**

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Copy and Paste Formulas

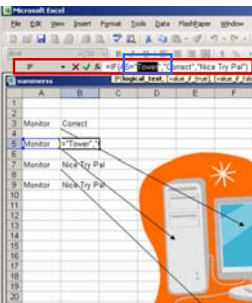


- ▲ Select Cell B3
- ▲ Copy the contents (formula)
- ▲ Select Cell B5
- ▲ Paste the formula

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Copy and Paste Formulas

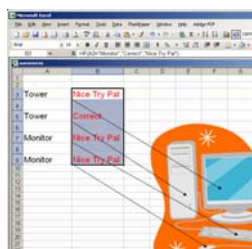


- ▲ Select "Monitor" in the Formula Bar
- ▲ Re-type "Tower" over "Monitor"
- ▲ Save
- ▲ Type "Tower" into cell A5
- ▲ Hit the RETURN key

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Now, the FUN part!



- ▲ Select Cells A3-B9
- ▲ Change the font size to 16
- ▲ Change the column width to 20 (Notice that the image moves, the arrows lengthen)
- ▲ Select cells B3-B9
- ▲ Change the font color to Red

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Chart Wizard

Easy as 1-2-3!

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The Chart Wizard

	A	B	C	D	E
1	MEM Color	Qty			
2	Red	22			
3	Yellow	12			
4	Blue	33			
5	Green	29			
6	Orange	16			
7	Brown	45			
8					
9					
10					
11					
12					
13					
14					

- ▲ The Chart Wizard creates charts from data on worksheets
- ▲ Click on the page "Chart"
- ▲ Select cells A1-B7

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The Chart Wizard Step 1

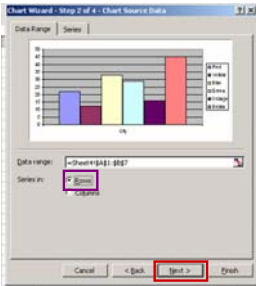


- ▲ Click on the **Chart Wizard Icon**
- ▲ Choose the **highlighted chart**
- ▲ Click **Next**

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The Chart Wizard Step 2



- ▲ Data Range will present the chart data by rows or columns
- ▲ Click **Rows** to see the chart display by row
- ▲ Click **Next**

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The Chart Wizard Step 3



- ▲ Title the chart **"M&M's"**
- ▲ The X - axis is already named because the title of cell B1 was highlighted along with the numerical data on the worksheet
- ▲ The Y - axis does not need to be named
- ▲ Click **Next**

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The Chart Wizard Step 4

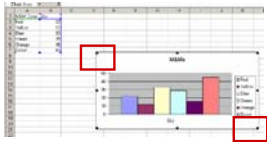


- ▲ This step distributes the chart, either as an object within the worksheet, or as a separate page within the workbook
- ▲ Choose **As object in**
- ▲ Click **Finish**

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The Finished Chart

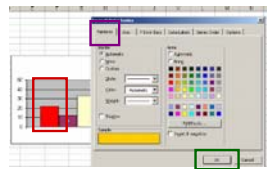


- ▲ The chart is complete
- ▲ Note the **toggles** around the chart.
- ▲ When the toggles are showing the chart can be resized or copied and pasted to another format, such as PowerPoint

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Editing Chart Colors

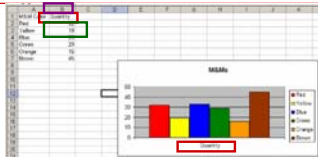


- ▲ Click on the **Patterns** tab
- ▲ **Double-Click** on one of the **bars** on the chart
- ▲ **Change** the color to color of the related M&M by clicking on that color
- ▲ Click **Ok**
- ▲ Repeat the process for each bar

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Editing Charts Through the Spreadsheet

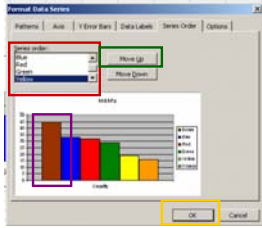


- ▲ Click on cell **B1**
- ▲ **Change Qty to Quantity**
- ▲ **Push** the Enter Key
- ▲ Note the chart changes as well
- ▲ Repeat the process to change the quantity of yellow M&M's to **19**

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Editing Chart Order



- ▲ Double-Click on the **brown bar** on the chart
- ▲ Click on the **Series Order** tab
- ▲ Click the **Move Up** button so that the brown bar moves to the beginning of the chart
- ▲ Click **Ok**
- ▲ Repeat the process for each bar so that the chart is in descending order



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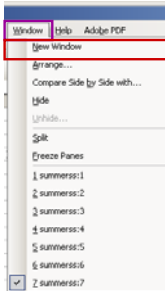


Options

Getting the Most out of Excel

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View Multiple Workbooks

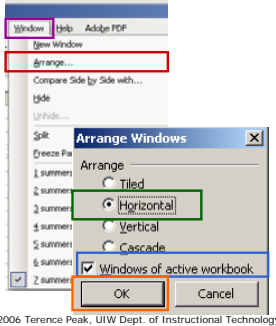


- ▲ Open the sheet "addresses"
- ▲ Click **Window**
- ▲ Click **New Window**
- ▲ Open the sheet "Chart2"
- ▲ Click **Window**
- ▲ Click **New Window**
- ▲ Repeat for each sheet that you want to open



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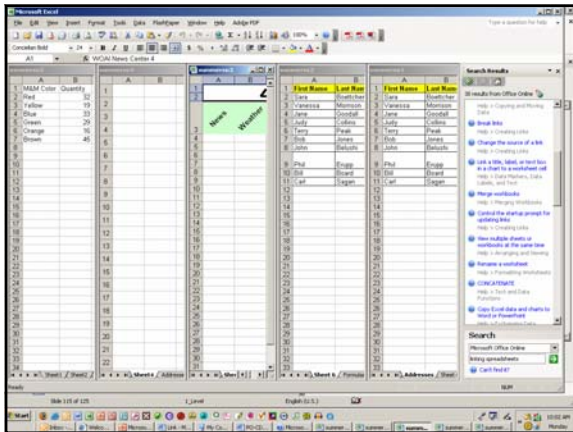
View Multiple Workbooks



- ▲ Click **Window**
- ▲ Click **Arrange**.
- ▲ Click **Horizontal**
- ▲ To view sheets in only the active workbook, **select the Windows of active workbook check box**
- ▲ Click **OK**



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Has Your Head Exploded yet?

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