Beyond the Basics of Spreadsheets

Microsoft Excel

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Workshop Outline for Beyond the Basics of Spreadsheets
Microsoft Excel

Beyond the Basics of Creating Spreadsheets
Learn how to use comments, create conditional formatting, work with IF statements, link workbooks, insert headers & footers, sort lists, do more with charts, and create mailing lists.

Objectives
- Learn how to use comments
- Create conditional formatting
- Work with IF statements
- Learn how to link workbooks
- Work with headers & footers
- Use a chart as a graphic example
- Sort and filter information
- Create a mailing list or labels

Working with Comments

Comments allow you to make insert notes to yourself or other on-line users regarding instructions or comments regarding the cell or currently displayed information. This can be used to remind yourself how you came up with a budget number (works great when you only create budgets once per year and can't remember where you got a number).

OPEN *EXPENSE REIMBURSEMENT – COMMENTS*
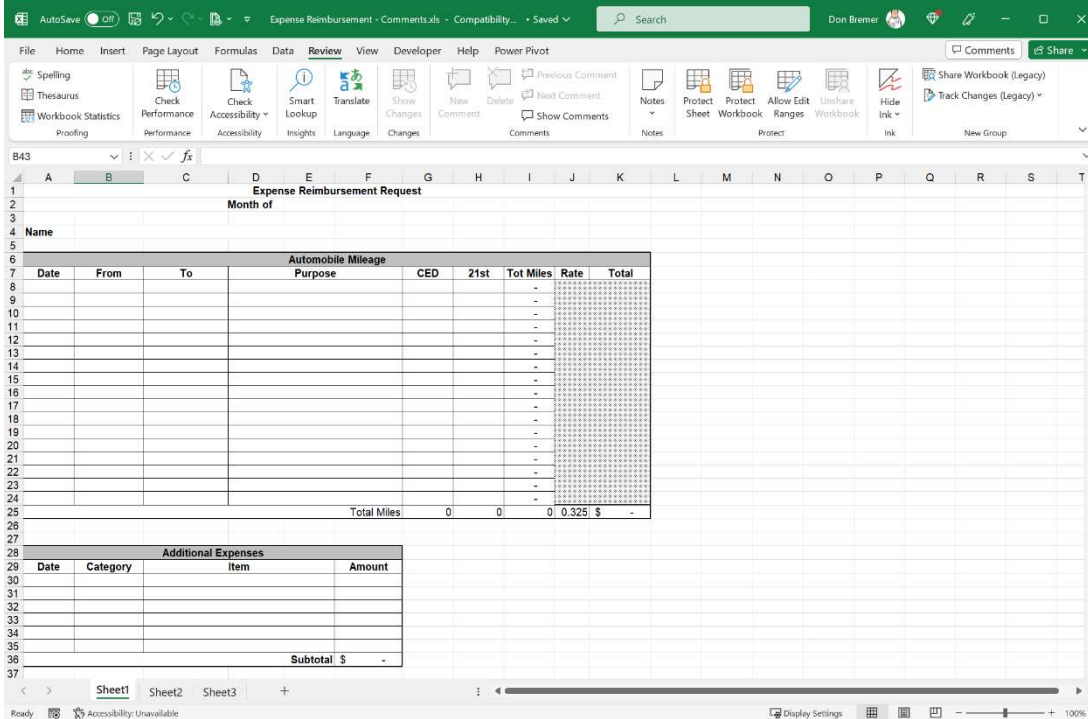
To create a Comment:

♦ Select Cell you want the comment to appear in
♦ Click on the "Review" Tab on the Ribbon
♦ Select "New Comment".
♦ The comment will begin with your "User Name" (from Office Button > Excel Options > Popular)
♦ Type in your comment
♦ Click out of comment when finished
♦ Comment is indicated by a red triangle in the upper right-hand corner of the cell

To view the comment:
♦ Hover the selection tool over the cell that contains the comment-Comment appears

Or to view all comments:
♦ Click on the "Show All Comments" Button on the "Review" tab of the Ribbon
♦ Use the buttons in the Comments section of the Review tab to edit, move through comments, hide all, or delete comments

To turn off viewing all comments:
♦ Click on "Show All Comments" button on the Review Tab of the Ribbon to view all the comments or turn off viewing the comments.

To edit a comment:
♦ Select the cell that contains the comment
♦ Click on the "Review" Tab select "Edit Comment"

Conditional Formatting

Conditional formatting will allow you to create formatting that will automatically change depending upon the information that appears in a cell. This is useful to provide you with a visual reflection of when a number exceeds or falls below a given amount.

 OPEN *EXPENSE REIMBURSEMENT – CONDITIONAL FORMATTING*

To create conditional formatting:
♦ Select the cell or range of cells that you want the formatting to appear in. (Column G)
♦ Click on the "Home" Tab, Select Conditional Formatting in the Styles section.
♦ A gallery appears on the many different types of Conditional Formatting that are available. Look through the options of Data Bars, Color Scales, and Icon Sets.
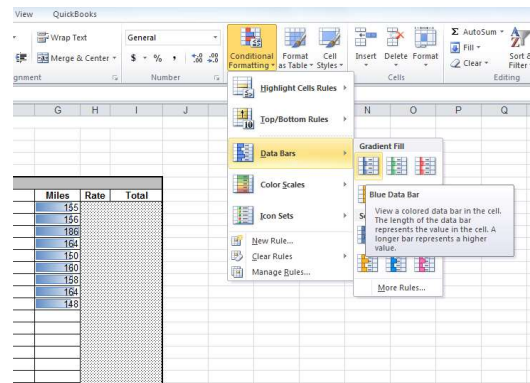

Change or adjust the rules of the Conditional:
♦ Click the Conditional Formatting button and go to the "Manage Rules…" Menu Item
♦ Use the Edit Rule… button to change how the format behaves (color or style)
♦ Click on OK – Click on OK again.

Add in additional Conditions

What if we want the highest mileage to be red and the lowest mileage to be green. We can add additional rules.
- ♦ Click the Conditional Formatting button and go to the "Manage Rules…" Menu Item
- ♦ Click on New Rule…
- ♦ Select "Format only top or bottom ranked values"
- ♦ Change the 10 to a 1 and select the Format… button
- ♦ Change the Font style to Bold and the Fill to Red
- ♦ Do the same thing for the Bottom 1 making it Bold and Green. The Rules manager should look like below.
- ♦ The "Stop if True" says no additional formatting will occur to the cells that already match this condition.
- ♦ The Order from Top to Bottom is how the rules are applied. If they are not in the correct order, use the blue button at the top to adjust the rules placement.

To delete conditional formatting:
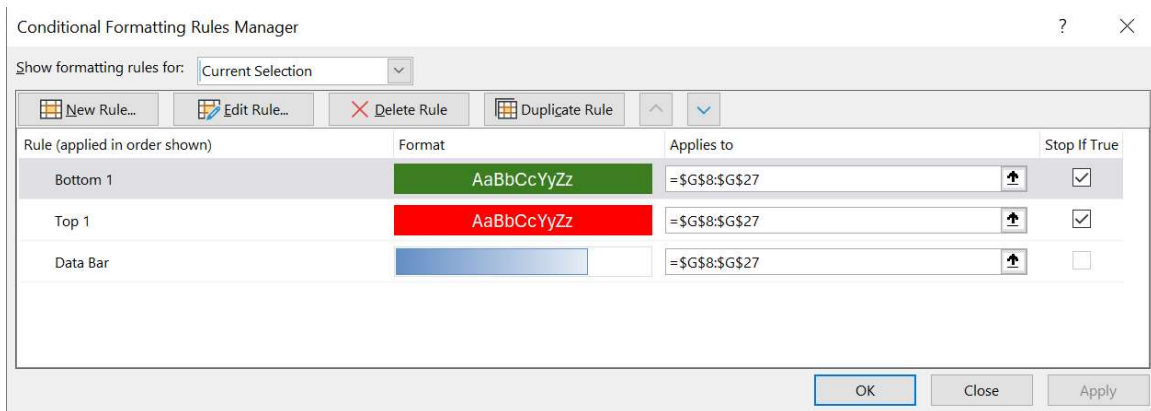
- ♦ Select the rule to be deleted in the Conditional Formatting Rules Manager
- ♦ Select "Delete Rule"

- 🔧 Time Saving Tip to Remember:
  - 🔧 Entering Simple formulas:
    - 🔧 Using one operator:
      Select a cell and Type =8+4, Click on the Checkmark on the formula bar or hit the Enter Key the result is 12
    - 🔧 Using two operators:
      Select a cell and Type =4+2*3, hit Enter, the result is 10
    - 🔧 Key factor: Order of Operator Precedence - multiple and division are completed before adding and subtracting in a formula, unless you use parentheses to override the precedence.
      Select a cell and Type =(4+2)*3, hit Enter, the result is 18

If Statements

IF return a value if one condition is TRUE and returns another value if the condition is FALSE. The IF function is one of the most commonly used logical functions and can be embedded within itself to perform up to seven logical tests. IF statements can be used to track grades, calculate shipping costs, etc.

OPEN THE FILE "IF EXAMPLES"

To create a single IF Function:

♦ Select the cell you want the statement to appear in
♦ Choose the *fx* from the Formula Bar
♦ Choose "Select a function", "IF" from the right hand side of "Most Recently Used" "Function category"
♦ Click on OK
♦ Move the IF box so you can see the section of the spreadsheet you are working on
♦ In logical test text box, select cell you want to test (click on the actual cell in the spreadsheet
♦ In this example, type in a ="PASS"
♦ Tab or click in "Value if true" text box, type in that value
♦ Tab or click in "Value if false text box, type in that value

PASS/FAIL	PASS/FAIL	RESULT
JOHN	PASS	ADE 6")
BILL	PASS	
PATRICK	FAIL	
ANDY	FAIL	
CHRIS	PASS	

=IF(C3="PASS","GRADE 7","GRADE 6")

(Return A Result If Then

	Logical_test	C3="PASS"	= TRUE
	Value_if_true	"GRADE 7"	= "GRADE 7"
	Value_if_false	"GRADE 6"	= "GRADE 6"

= "GRADE 7"

Returns one value if a condition you specify evaluates to TRUE and another value if it evaluates to FALSE.
  Value_if_false is the value that is returned if Logical_test is FALSE. If omitted, FALSE is returned.

Formula result =GRADE 7   OK   Cancel

PROJECT	DATE	COST	CU
RIDGE CREEK	1/15/00	$ 92,000	$
RIDGE CREEK	1/22/00	$ 87,000	
RIDGE CREEK	1/29/00	$ 75,000	
RIDGE CREEK	2/5/00	$ 72,000	
RIDGE CREEK	2/12/00	$ -	

F

	B	C	D
2	PASS/FAIL	PASS/FAIL	RESULT
3	JOHN	PASS	GRADE 7
4	BILL	PASS	GRADE 7
5	PATRICK	FAIL	GRADE 6
6	ANDY	FAIL	GRADE 6
7	CHRIS	PASS	GRADE 7

=IF(C3="PASS","GRADE 7","GRADE 6")

To create a single IF Function where there's a number in the cell:

IF	▾ ⊙ X ✓ *fx*	=IF(D15=0,0,D15+E14)

Function Arguments ? X

IF

Logical_test	D15=0	= FALSE
Value_if_true	0	= 0
Value_if_false	D15+E14	= 72000

= 72000

Checks whether a condition is met, and returns one value if TRUE, and another value if FALSE.

Value_if_false is the value that is returned if Logical_test is FALSE. If omitted, FALSE is returned.

Formula result = $ 72,000

Help on this function   OK   Cancel

13	RIDGE CREEK	1/22/2000	$ 87,000		
14	RIDGE CREEK	1/29/2000	$ 75,000		
15	RIDGE CREEK	2/5/2000	$ 72,000	=0,0,D15+E14)	=IF(D15=0,0,D15+E14)
16	RIDGE CREEK	2/12/2000	$ -		
17	RIDGE CREEK	2/19/2000	$ -		
18	RIDGE CREEK	2/26/2000	$ -		
19					

F   (Return A Result If There's A Number In The Cell)

	A	B	C	D	
	PROJECT	DATE	COST	CUMULATIVE COST	
	RIDGE CREEK	1/15/00	$ 92,000	$ 92,000	=IF(D12=0,0,D12)
	RIDGE CREEK	1/22/00	$ 87,000	$ 179,000	=IF(D13=0,0,D13+E12)
	RIDGE CREEK	1/29/00	$ 75,000	$ 254,000	
	RIDGE CREEK	2/5/00	$ 72,000	$ 326,000	=IF(D15=0,0,D15+E14)
	RIDGE CREEK	2/12/00	$ -	$ -	
	RIDGE CREEK	2/19/00	$ -	$ -	
	RIDGE CREEK	2/26/00	$ -	$ -	

<u>To create a nested IF statement:</u>

When your curser is in the first "Value if false" text box, click on the IF from the dropdown menu on the formula bar and continue entering if statements until all embedded statements are entered.
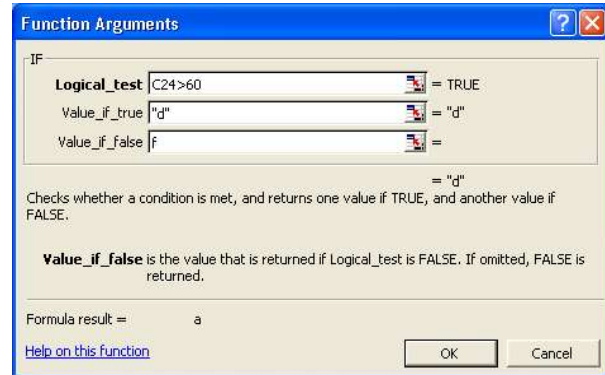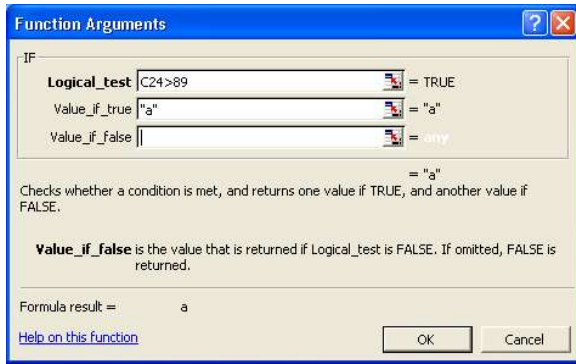
NESTED IF   *(Automate Grades)*

	B	C	D	
23	NAME	AVG. SCORE	GRADE	
24	John	92	A	=IF(C24>88,"A",IF(C24>79,"B",IF(C24>69,"C",IF(C24>59,"D","F"))))
25	Andy	87	B	**Grade Key:**
26	Sandy	75	C	A = 89-100
27	Bill	72	C	B = 80-88
28	Al	65	D	C = 70-79
29	Albert	61	D	D = 69-60
30	Mitch	58	F	F = 59-below

Linked Workbooks

This is used when there is more than one workbook involved and the information needs to be linking into another spreadsheet. For example, if 3 different departments have budget information and you need to create a budget from all 3.

>OPEN>*LINKING – SUMMARY, LINKING – DEPT A, LINKING – DEPT B, LINKING – DEPT C*

- ◆ Open all of the workbooks that need to be linked (make sure only those 4 are open)
- ◆ Click on the "View" Tab.
- ◆ Select the "Arrange All" button in the Window Section.
- ◆ Select Tiled
- ◆ Click on OK
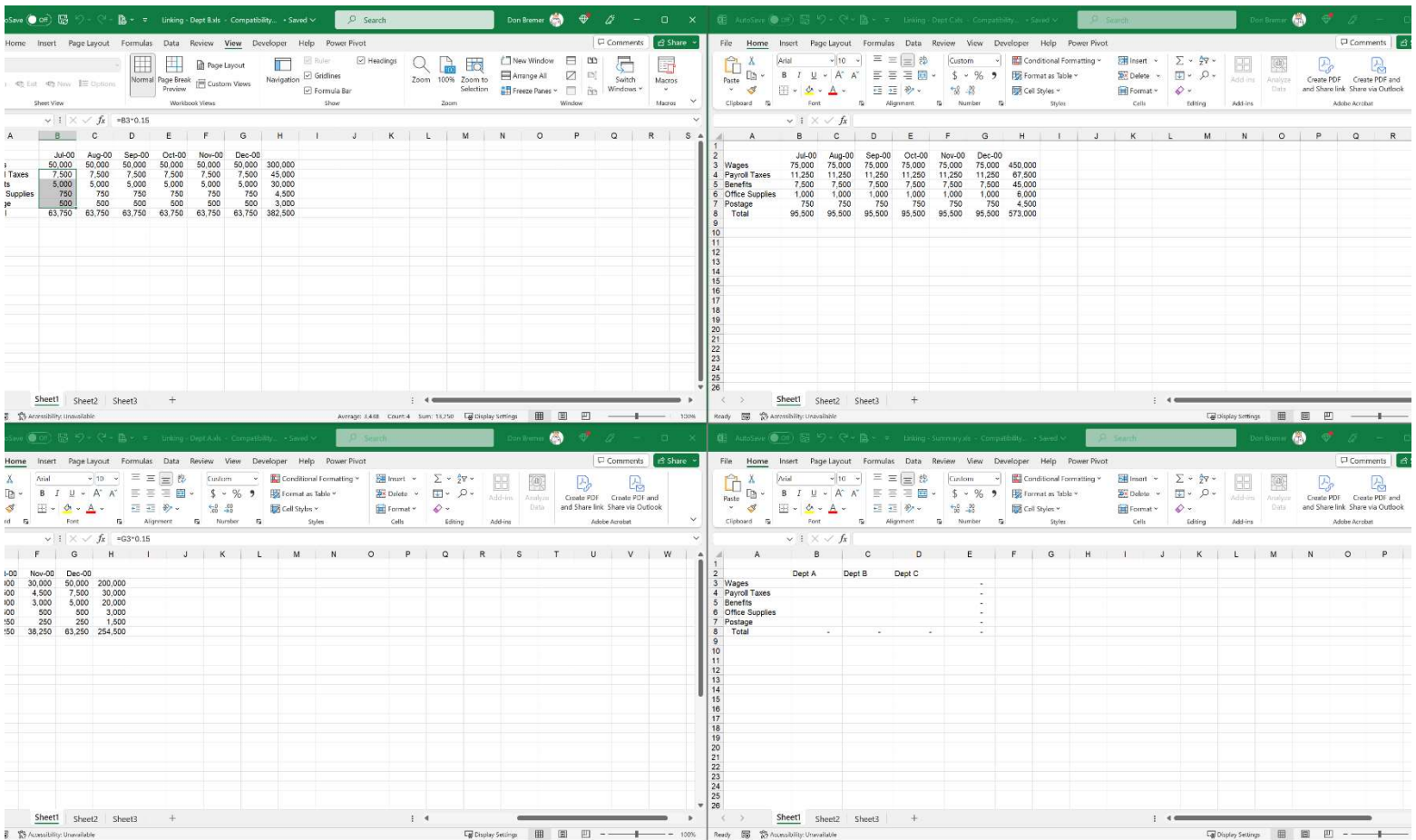
♦ Creating the link
- o Select the range of cells from Dept. A that represent the totals for Wages thru Postage.
- o Copy the cells
- o Click in the Summary Worksheet and click in B3
- o Click on the "Paste" Dropdown on the Home Tab and select "Paste Link"
- o Repeat for Dept's B and C

Dept A	Dept B	Dept C	Totals
200,000	300,000	450,000	950,000
30,000	45,000	67,500	142,500
20,000	30,000	45,000	95,000
3,000	4,500	6,000	13,500
1,500	3,000	4,500	9,000
254,500	382,500	573,000	1,210,000
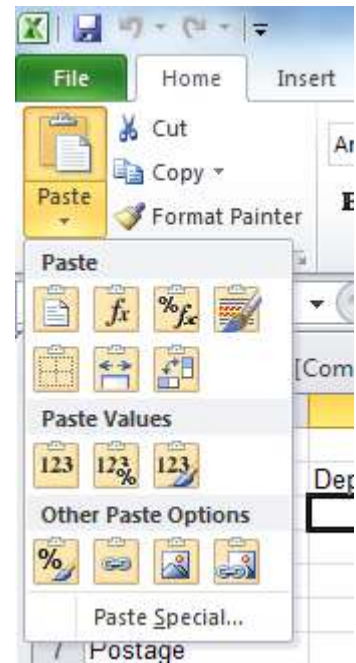
Working with Headers & Footers

You can add Headers and Footers to Workbooks or to different Sheets within a Workbook.

♦ Click on the "Page Layout" tab on the ribbon
♦ Select on the Fly-out button in Sheet Options
♦ Choose predefined Headers and Footers from the dropdown menus
♦ Create your own Headers and Footers from the "Custom Header" or "Custom Footer "buttons
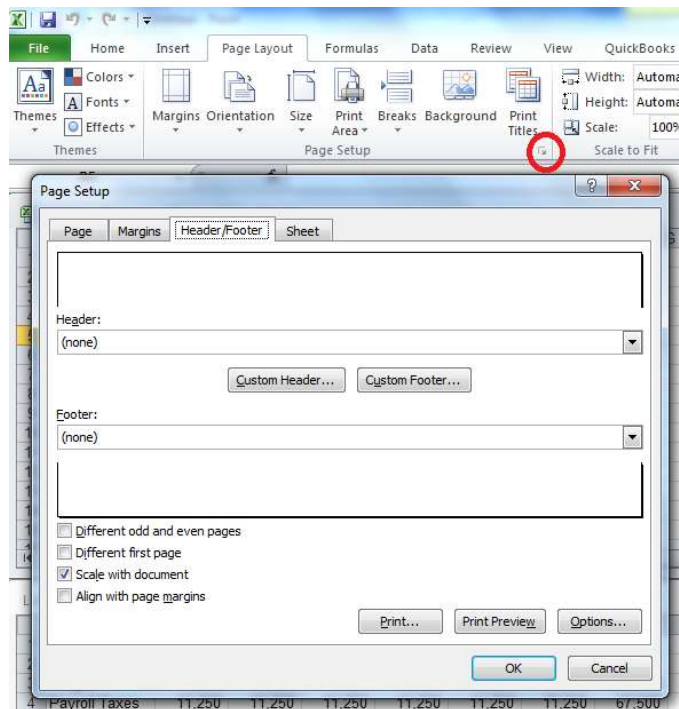
Charts

>OPEN>*MORE CHARTS*

Changing existing charts:

The following changes can be made to Y Axis, for example:
- ♦ Patterns
- ♦ Scale
- ♦ Font
- ♦ Number
- ♦ Alignment

Double click on the area that needs to be changed, and from the dialog box, select option.

Change the design easily using the Gallery in the Chart Tools

Sorting Lists

You can sort and filter information in Excel by creating a table. There are a few rules to follow. Make sure you have a Blank row at the end of the table. DO NOT leave a blank row after the column headings and before the data. DO leave a blank row after all the records and before any totals. Each column must have a field name (label at the top of the data indicating the contents of that column) and it must be unique.

>**OPEN**>*SORTING LISTS*

To sort in a list by one item:
♦ Click into a cell in the table in the column you first want to sort on
♦ On the Home Tab of the Ribbon, in the Editing Section, click on "Sort & Filter"

To sort in a list by multiple items:
♦ Click into a cell in the table you want to sort
♦ Click on the dropdown on the "Sort & Filter" icon and select "Custom Sort"
♦ In the drop down, select on the column to sort on and order
♦ Click on "Add Level" to sort on additional columns.
♦ Click on OK
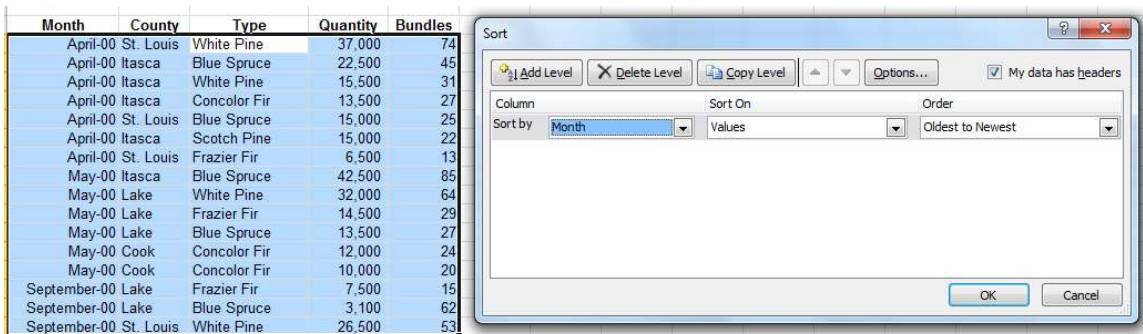
To filter contents:
♦ Select any cell in the table
♦ Click on the dropdown on the "Sort & Filter" icon and select "Filter"
♦ Click on any dropdown arrow for the field you want to use to filter and choose a filter from the criteria dropdown list.
♦ To see all records again, reset all filter criteria to "all"

Creating a Mailing List or Labels

You can use this procedure to create form letters, mailing labels, and other merged documents by merging a list of data with a Word document. You must create the list before you perform this procedure in Word. The list must include column labels and contain no blank rows.

In the Microsoft Word program, use the Letters and Mailings command from the Tools menu or use the Other Task Pane option to locate Mail Merge. Follow the steps in the Wizard.
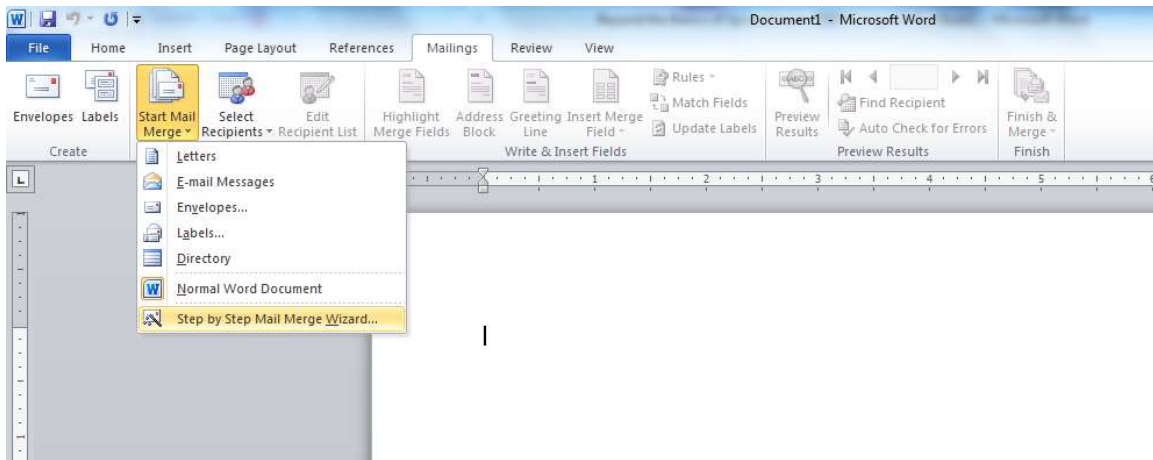
Step One: What do you want to do?
- Letter
- E-mail
- Envelope
- Label
- Directory

Step Two: Select Document
- Current
- Template
- Existing Document

OPEN Document *Merge Letter*

August 21, 2012

Dear

Congratulations, you have been selected as this year's winner. You will receive a free 10 day trip to the Bahamas. This trip includes airfare from Duluth, four star hotel accommodations, a chauffeured limousine and all meals and $10,000 spending money.

Sincerely,

Ima Rich, President, Winning Travel

Step Three: Select Recipients (Browse to locate file Mailing list for Excel)

Fname	Lname	Address	City	State	Zip
Peter	Smith	55 West Melrose Place	Superior	WI	54880
Cathy	Burns	9843 Waverly Lane	Duluth	MN	55804
Tammy	Frest	34 North Oak	Duluth	MN	55811
Sam	Anderson	123 Main Street	Superior	WI	54880
Dana	Johnson	34 North 8th Street	Duluth	MN	55804
Paula	Wilson	135 Tower Avenue	Superior	WI	55480
Howard	Snyder	456 Central Entrance	Duluth	MN	55811
Karl	Jablonski	2020 East Superior Street	Duluth	MN	55812
Rene	Phillips	545 E. 5th Street	Duluth	MN	55805
Fran	Wilson	11 E. Superior Street	Duluth	MN	55802

Step Four: Write your Letter
- Address Block
- Greeting Line
- Electronic Postage
- Bar Code
- More Items

Step Five: Preview your Letter

Step Six: Complete Merge

Excel Shortcuts

Activity	Shortcut Keys
Alternate between displaying cell values and displaying cell formulas	CTRL+` (single left quotation mark)
Calculate all sheets in all open workbooks	F9
Calculate the active worksheet	SHIFT+F9
Copy	CTRL+C
Create a chart that uses the current range	F11 or ALT+F1
Display the **Format Cells** dialog box	CTRL+1
Display the **Go To** dialog box	F5
Fill the selected cell range with the current entry	CTRL+ENTER
Insert the current time	CTRL+:
Insert today's date	CTRL+;
Move to the beginning of the worksheet	CTRL+HOME
Move to the last cell on the worksheet, which is the cell at the intersection of the rightmost used column and the bottommost used row (in the lower-right corner), or the cell opposite the home cell, which is typically A1	CTRL+END
Open	CTRL+O
Paste	CTRL+V
Paste a function into a formula	SHIFT+F3
Print	CTRL+P
Save	CTRL+S
Select all (when you are not entering or editing a formula)	CTRL+A
Select the current column	CTRL+SPACEBAR
Select the current row	SHIFT+SPACEBAR
Undo	CTRL+Z
When you enter a formula, display the **Formula Palette** after you type a function name	CTRL+A

Notes: