



WICHITA STATE
UNIVERSITY



EXCEL 2016: TIPS AND TRICKS

Academic Resources Conference

August 15, 2018

WSU Microsoft Office Training

For a full listing of training sessions on Microsoft Office products, visit [myTraining](#) in myWSU.

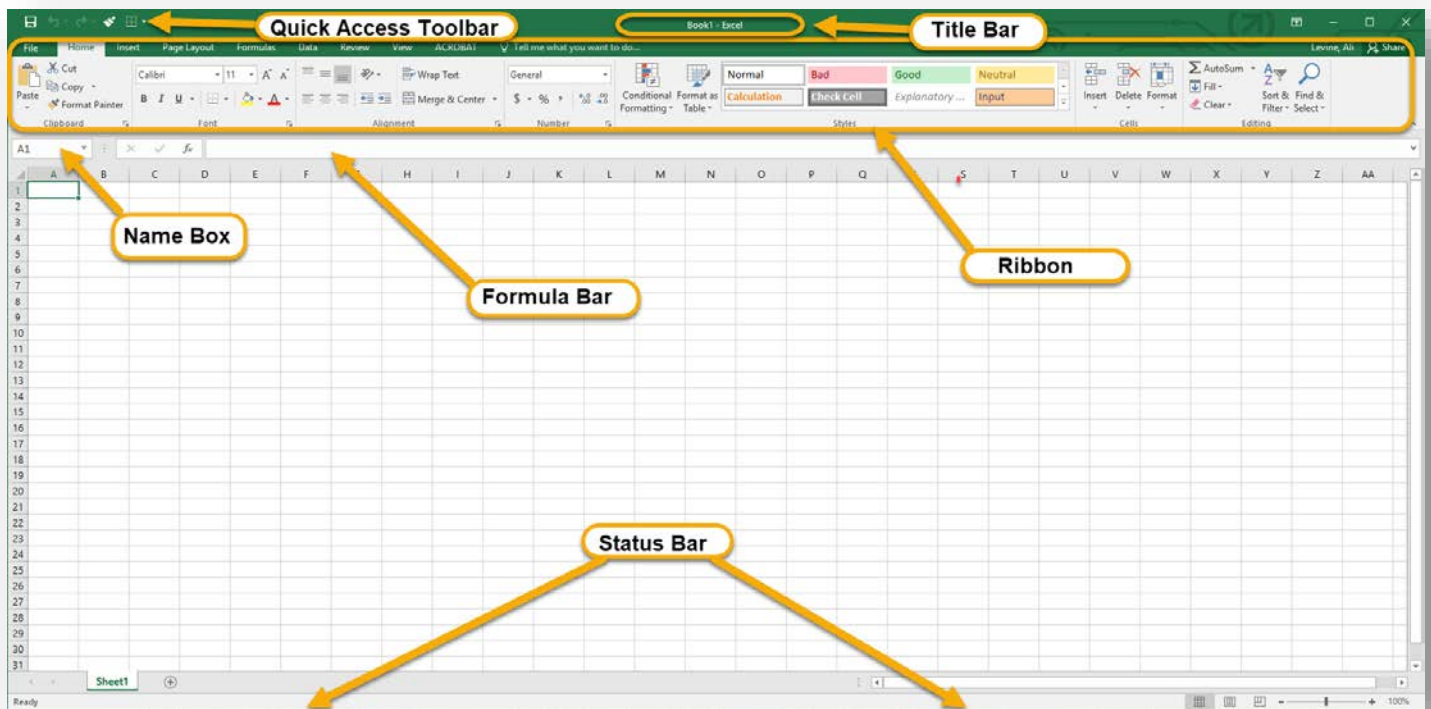


myTraining For Employees: Instructor Led, Online & Materials

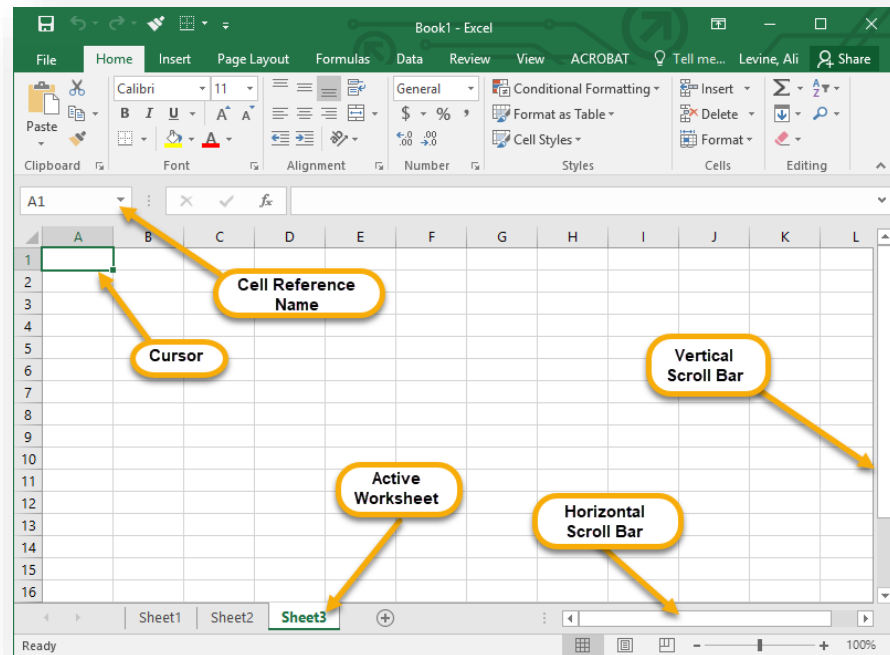
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EXCEL NAVIGATION



- **Title Bar** contains the name of the active application. When the workbook window is maximized, the workbook title appears in the Excel title bar; otherwise, the title appears in a separate title bar within the workbook window.
- **Ribbon** is a panel that houses the command buttons and icons, organized into a set of tabs.
- **Quick Access Toolbar** is a toolbar that provides easy access to frequently used commands in the application. It can be customized to fit individual needs.
- **Name Box** displays the cell reference of the active cell. It also displays the name of the current function when using the formula palette.
- **Formula Bar** displays the contents of the active cell.
- **Status Bar** displays details about filtered data and which view is displayed. (Normal, Page Layout, Page Break Preview)
- **Workbook Window** is the area of the Excel window that contains worksheets.



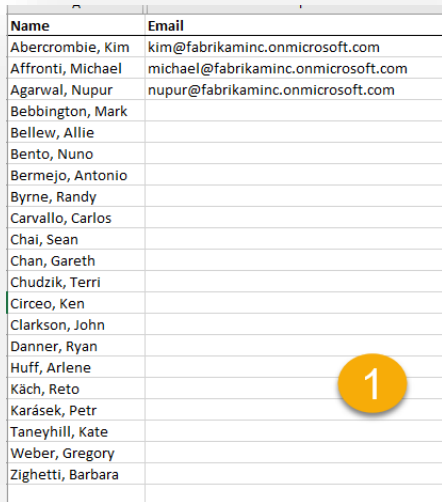
- **Cursor** is the thick, rectangular box that indicates the location of the active cell. There will always be an active cell.
- The worksheet containing the active cell is the **active worksheet**.
- A **worksheet** is the area of the workbook in which data is entered and manipulated. A worksheet is similar to a ledger sheet. The worksheet is a grid of columns and rows. A workbook is the electronic file, in which data is stored. The default workbook contains three worksheets.
- **Horizontal Scroll Bar** contains scroll arrows and a scroll box used to scroll the worksheet left or right. Click on the scroll arrows, drag the scroll bar, or click anywhere in the scroll bar to scroll through the worksheet.
- **Vertical Scroll Bar** contains scroll arrows and a scroll box which can be used to scroll the worksheet up or down.
- **Worksheet Tabs** contain the names of the individual worksheets within the workbook. Move between worksheets by clicking on the worksheet tabs. The tab for the active worksheet displays in bold.
- **Cell** is the point in a worksheet at which a column and a row intersect.
- A **cell reference** consists of a column letter and a row number and identifies a cell location in a worksheet.

FLASH FILL

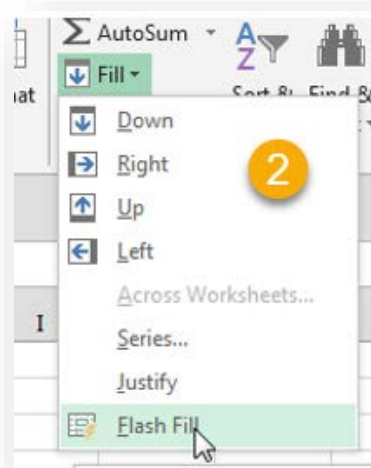
The Flash Fill command on the data tab is an excellent assistant for spreadsheet completion. Flash Fill evaluates example data, compares it to existing data in adjacent cells, determines any patterns, and suggests entries.

Look at this example where a clear pattern has been established for an email format of `firstname@fabrikaminc.onmicrosoft.com`.

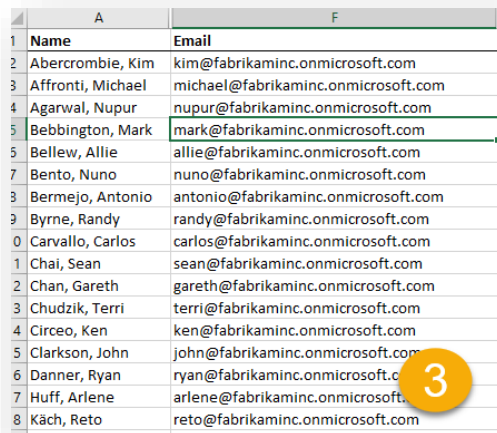
1. In the editing tab, click on **Fill**, then select **Flash Fill**.



Name	Email
Abercrombie, Kim	kim@fabrikaminc.onmicrosoft.com
Affronti, Michael	michael@fabrikaminc.onmicrosoft.com
Agarwal, Nupur	nupur@fabrikaminc.onmicrosoft.com
Bebbington, Mark	
Bellew, Allie	
Bento, Nuno	
Bermejo, Antonio	
Byrne, Randy	
Carvalho, Carlos	
Chai, Sean	
Chan, Gareth	
Chudzik, Terri	
Circeo, Ken	
Clarkson, John	
Danner, Ryan	
Huff, Arlene	
Käch, Reto	
Karásek, Petr	
Taneyhill, Kate	
Weber, Gregory	
Zighetti, Barbara	



2. Excel identifies the pattern to create a fill of the remaining email addresses:



Name	Email
Abercrombie, Kim	kim@fabrikaminc.onmicrosoft.com
Affronti, Michael	michael@fabrikaminc.onmicrosoft.com
Agarwal, Nupur	nupur@fabrikaminc.onmicrosoft.com
Bebbington, Mark	mark@fabrikaminc.onmicrosoft.com
Bellew, Allie	allie@fabrikaminc.onmicrosoft.com
Bento, Nuno	nuno@fabrikaminc.onmicrosoft.com
Bermejo, Antonio	antonio@fabrikaminc.onmicrosoft.com
Byrne, Randy	randy@fabrikaminc.onmicrosoft.com
Carvalho, Carlos	carlos@fabrikaminc.onmicrosoft.com
Chai, Sean	sean@fabrikaminc.onmicrosoft.com
Chan, Gareth	gareth@fabrikaminc.onmicrosoft.com
Chudzik, Terri	terri@fabrikaminc.onmicrosoft.com
Circeo, Ken	ken@fabrikaminc.onmicrosoft.com
Clarkson, John	john@fabrikaminc.onmicrosoft.com
Danner, Ryan	ryan@fabrikaminc.onmicrosoft.com
Huff, Arlene	arlene@fabrikaminc.onmicrosoft.com
Käch, Reto	reto@fabrikaminc.onmicrosoft.com

Flash Fill to Combine Cells

Another great use of Flash Fill is to combine two cells.

1. Look at this example of a database, showing three columns of names.
2. Flash Fill will suggest how to fill the list when it recognizes a pattern.
3. Press Enter to accept the suggestions.

Name	LastName	FirstName
Abercrombie, Kim	Abercrombie	Kim
Affronti, Michael	Affronti	Michael
	Agarwal	Nupur
	Bebbington	Mark
	Bellew	Allie
	Bento	Nuno
	Bermejo	Antonio
	Byrne	Randy
	Carvallo	Carlos
	Chai	Sean
	Chan	Gareth
	Chudzik	Terri
	Circeo	Ken
	Clarkson	John
	Danner	Ryan
	Huff	Arlene
	Käch	Reto
	Karásek	Petr
	Taneyhill	Kate
	Weber	Gregory

1

Name	LastName	FirstName	Tit
Abercrombie, Kim	Abercrombie	Kim	Ac
Affronti, Michael	Affronti	Michael	Di
Agarwal, Nupur	Agarwal	Nupur	Di
Bebbington, Mark	Bebbington	Mark	VP
Bellew, Allie	Bellew	Allie	Re
Bento, Nuno	Bento	Nuno	Di
Bermejo, Antonio	Bermejo	Antonio	Pr
Byrne, Randy	Byrne	Randy	Se
Carvallo, Carlos	Carvallo	Carlos	IT
Chai, Sean	Chai	Sean	VP
Chan, Gareth	Chan	Gareth	So
Chudzik, Terri	Chudzik	Terri	CF
Circeo, Ken	Circeo	Ken	Sa
Clarkson, John	Clarkson	John	Pr
Danner, Ryan	Danner	Ryan	IT
Huff, Arlene	Huff	Arlene	W
Käch, Reto	Käch	Reto	VP
Karásek, Petr	Karásek	Petr	Ac
Taneyhill, Kate	Taneyhill	Kate	CE
Weber, Gregory	Weber	Gregory	VP

2

Name	LastName	FirstName
Abercrombie, Kim	Abercrombie	Kim
Affronti, Michael	Affronti	Michael
Agarwal, Nupur	Agarwal	Nupur
Bebbington, Mark	Bebbington	Mark
Bellew, Allie	Bellew	Allie
Bento, Nuno	Bento	Nuno
Bermejo, Antonio	Bermejo	Antonio
Byrne, Randy	Byrne	Randy
Carvallo, Carlos	Carvallo	Carlos
Chai, Sean	Chai	Sean
Chan, Gareth	Chan	Gareth
Chudzik, Terri	Chudzik	Terri
Circeo, Ken	Circeo	Ken
Clarkson, John	Clarkson	John
Danner, Ryan	Danner	Ryan
Huff, Arlene	Huff	Arlene
Käch, Reto	Käch	Reto
Karásek, Petr	Karásek	Petr
Taneyhill, Kate	Taneyhill	Kate
Weber, Gregory	Weber	Gregory

3

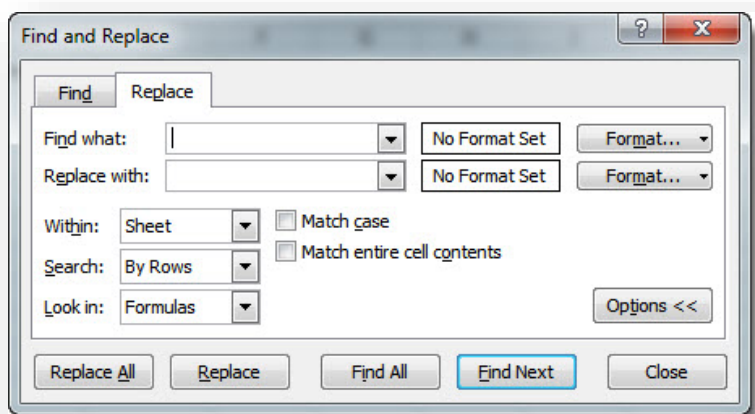
Flash Fill also works the other direction: to split a column of “last name, first name” into two columns. It is an excellent time saving tool.

FIND AND REPLACE

The Find and Replace dialog box has the capability to find and change formatting, as well as options to search across all sheets in a workbook or to restrict the search and subsequent changes to the current worksheet.

Find Option	Used To
Find What text box	Specify the text to be located
Find All button	Locate every instance of the search criteria. It will also populate a list of hyperlinks at the bottom of the Find and Replace dialog.
Find Next button	Locate the next instance of the search criteria

1. Locate the **Editing Group** on the Home Tab. Click the down-arrow associated with the Find & Select Command.
2. **Find and Replace** dialog can also be opened by pressing CTRL+H to open the Find and Replace dialog box (CTRL+F) will open the Find dialog box, although clicking on the Replace tab will open the Replace options.
3. Click the Options button to expand the search options.



4. Click into the Find what text box and enter in the desired text to search.
5. Click into the Replace with text box and type replacement text.
6. Click the Find Next button and the cursor will jump to the next cell in the next row that contains the search term.

- Click the **Replace All** button. A message box will display with the number of instances where replacements were made.

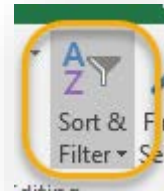
SORTING AND FILTERING

At some point after entering a listing of data it will be necessary to reorganize the data. That is where sorting and filtering comes into play.

Simple Sorting

As long as the range of data does not have completely blank columns or rows included in the data, the entire listing will be sorted. However, if there is a blank row or column as part of the list, the list will be “broken” when sorted.

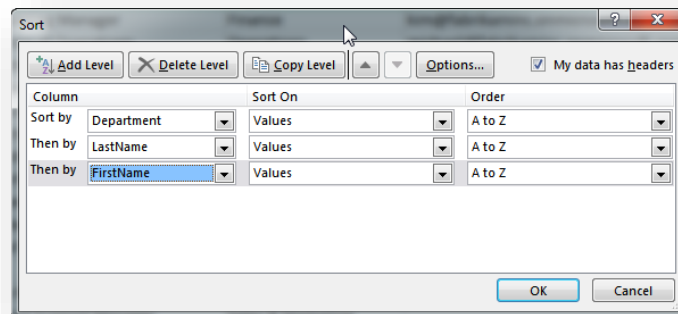
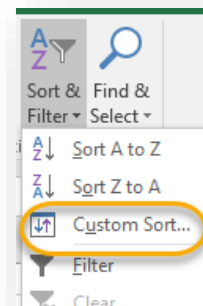
- Place the cursor in one of the cells of the column to be sorted.
- Click the **Sort & Filter** command found in the **Editing** group.
- Choose **Sort A to Z** to sort alphabetically.



Custom Sort

Custom Sorting is used when there are multiple criteria for the sort. For instance, sort the list by Department, Last Name, and First Name.

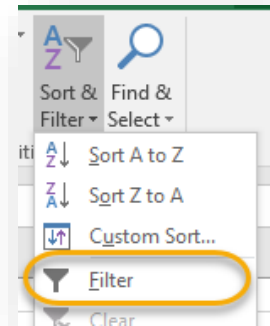
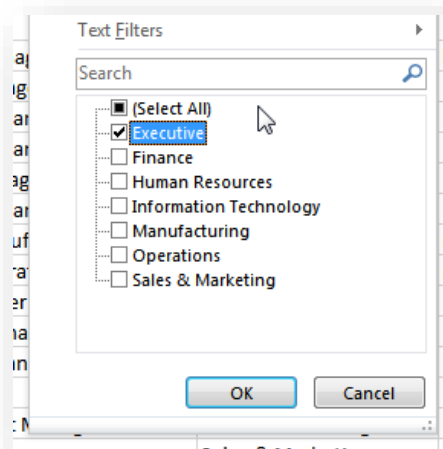
- Place the cursor in one of the cells of a column to be sorted.
- Click the Sort & Filter command found in the Editing group.
- Choose Custom Sort
- In the first Sort by drop down choose the first column to be sorted. ***If the Sort by drop downs list does not show titles but instead columns, make sure the check mark for “My data has headers” is enabled.***
- Click Add Level to add additional criteria
- When finished adding levels, click the Ok button.



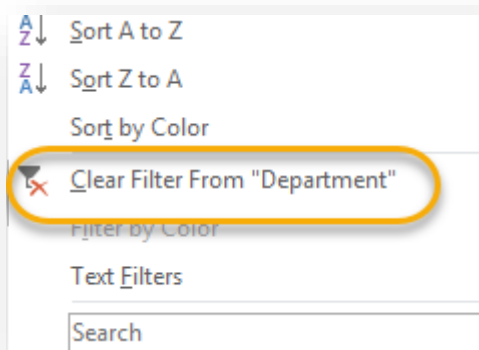
Filtering

There may be times when a subset of the list is necessary. For instance in our example, a listing of only Executives may be required. Filtering can assist with providing the desired data.

1. Place the cursor in one of the cells of the column to be sorted.
2. Click the **Sort & Filter** command found in the Editing group.
3. Choose the **Filter** command.
4. All the headers for the columns now have drop down arrows.
5. Click on a drop down arrow and select filter criteria.
6. Click OK.
7. Only selected records are now displayed.



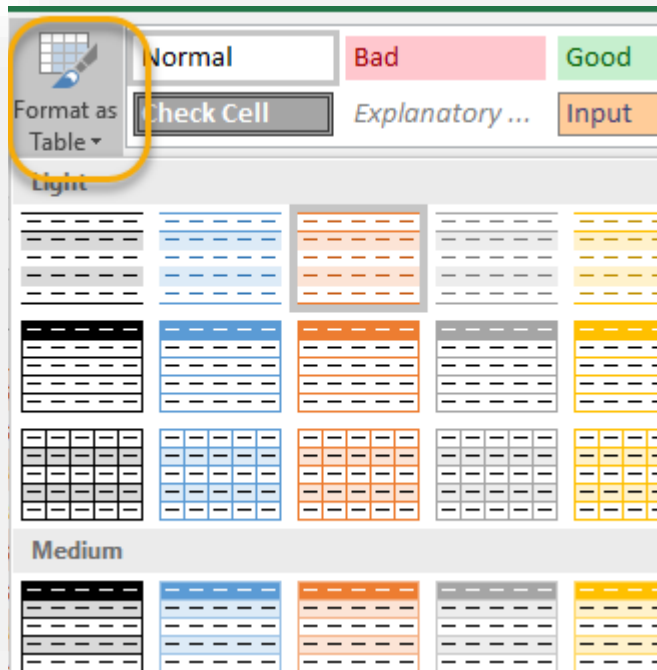
8. To clear a filter, click on the dropdown arrow, and select "Clear Filter from <column name>".



TABLES

To make managing and analyzing a group of related data easier, you can turn a range of cells into a table.

1. Once a database has been created, select **Format as Table** under the Styles pane in the home tab.
2. Select the desired table style from the dropdown. This can be adjusted later if desired.



3. In the subsequent dialog box, confirm that the correct range of cells is selected. Also indicate here if the table has headers.

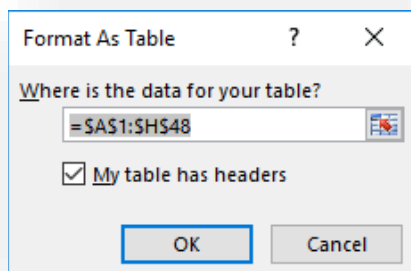
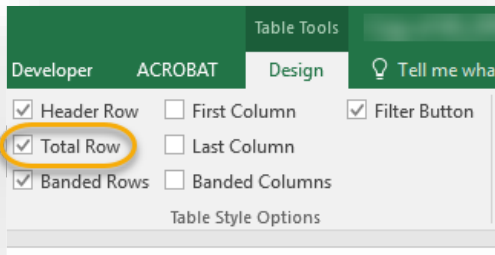


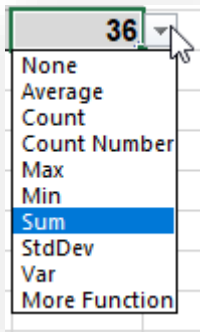
Table Functions

Note that once a table is created, filters appear at the top of each column.

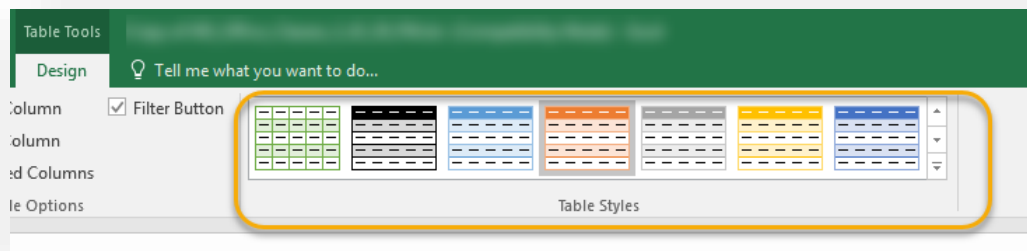
1. Click onto the table until the Table Tools Design tab appears.
2. On the Table Tools Design tab, click the box next to “Total Row” to add a total row at the bottom of the data.



3. Note that on the newly created Total Row, there are additional formula functions in the dropdown.



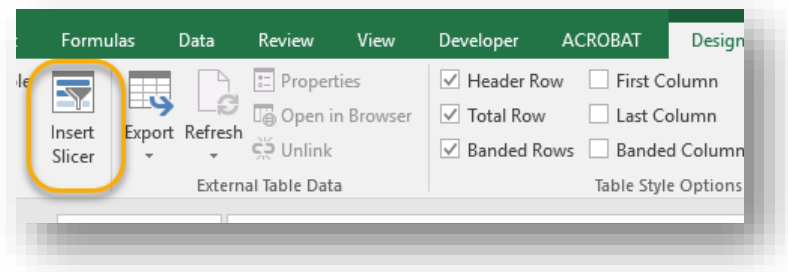
4. At any point, the table style can be altered in the Table Tools Design tab under Table Styles.



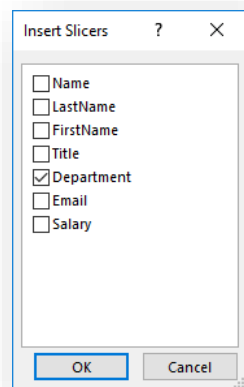
SLICERS

Slicers provide buttons that allow you to easily filter table data. This can be useful in presentations or to allow others a simple way to filter data when sharing documents digitally.

1. Click on the table to activate the Table Tools Design Tab.
2. On the Table Tools Design Tab select **Insert Slicer**.



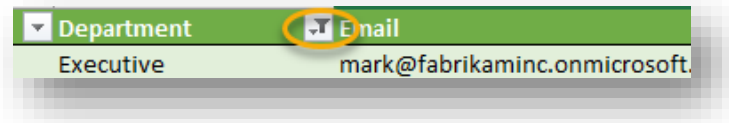
3. Select the desired data to be filtered. More than one may be selected; this will create multiple slicers.



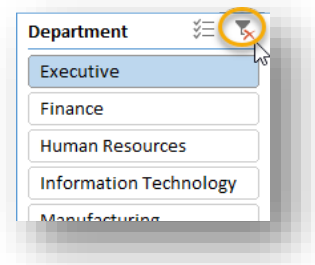
4. In this case, a slicer was created for the “Department” Tab of a spreadsheet. Click on a category to filter the data in this column with one click of a button.



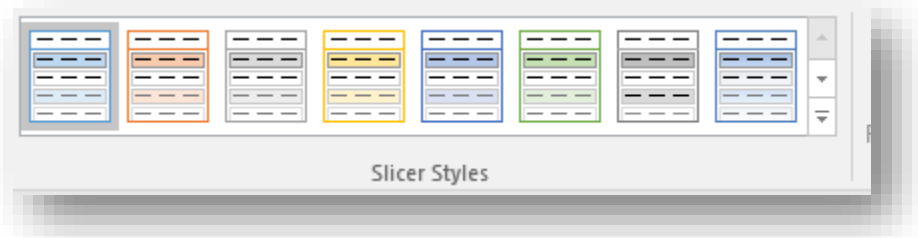
5. Note that this has created a filter at the top of the column. The filter can be controlled either from the slicer panel or the top of the column (See Sorting and Filtering Section).



6. To clear a slicer, click the “Clear Filter” button at the top right of the slicer.



7. To change the appearance of the slicer, select the slicer until the Slicer Tools tab appears, and select a new style from the Slicer Styles menu.

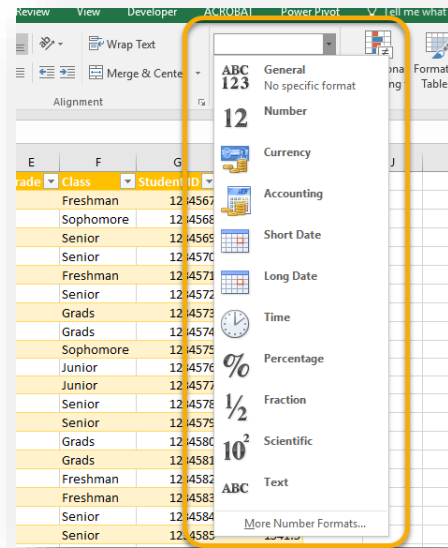


More About Slicers

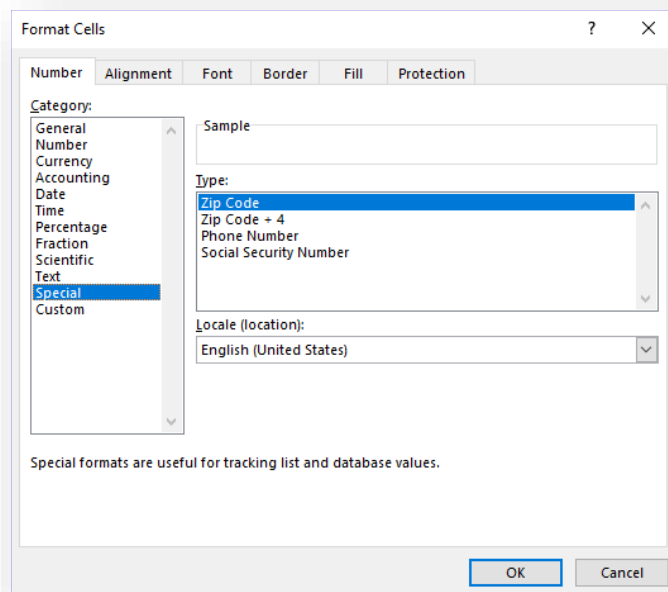
- ✓ Slicer location can be moved with a mouse, much like a picture. To delete the slicer entirely, select the slicer pane and press the delete key.
- ✓ Note that slicers will print, so remember to delete them before printing, if desired.
- ✓ Slicers will default to showing data alphabetically. To change the order, create a custom list (see Create Custom List), with the desired list order.

NUMBER FORMATTING

Number formatting is an important setting to understand. Formatting numbers will not interfere with formulas and functions. Number formatting options can be found in the Home tab, Number group. Select the dropdown to see a full range of options:



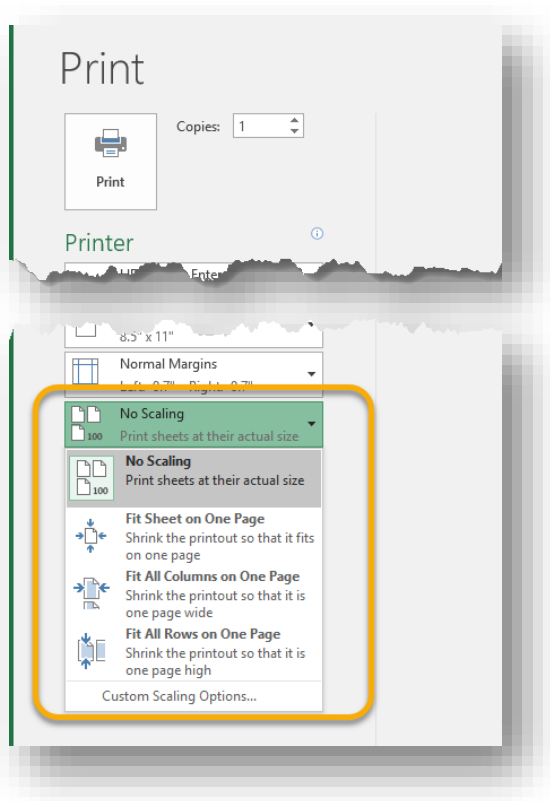
The last option, **More Number Formats**, will allow users to create custom number formats, or use **Special** number formats, like zip code or phone number.



SCALING

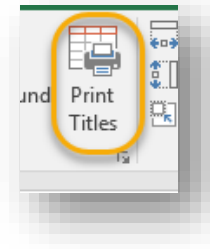
When printing a spreadsheet, it is helpful to know about scaling options. Occasionally users will have a spreadsheet that is too wide to fit onto one page, for instance.

1. Go to File → Print
2. On the Print menu, the last option says “No Scaling.” Select that dropdown to see full range of options.
3. Note the option to fit the entire sheet onto one page, or the option to fit all columns onto one page.

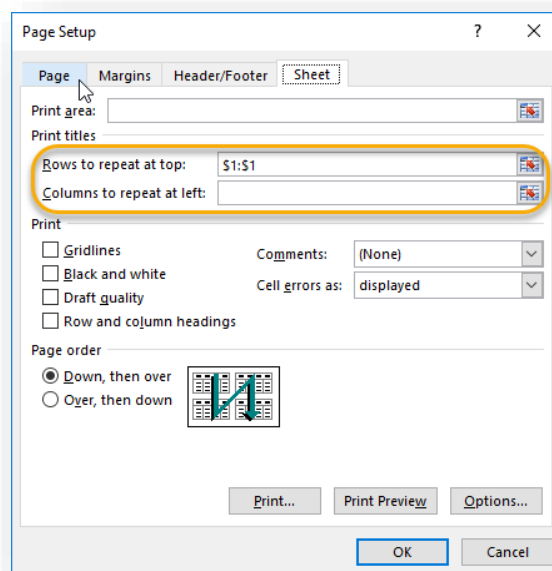


SET REPEATING TITLES

A repeating title is a specified range of cells that print at the top of every page or at the left of every page. Use repeating titles if the worksheet has multiple pages and adding the column or row titles on every printed page will add clarity to the data.

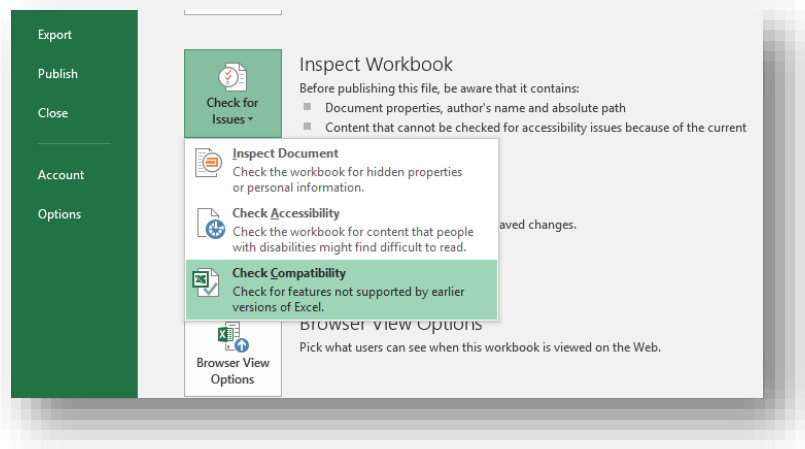


1. From the Page Layout Tab menu, select the **Print Titles** button found in the Page Setup Group.
2. The Sheet Tab will be displayed.
3. Click the white space next to the **Rows to repeat at top** prompt.
4. Select the Row(s) desired to repeat on each page of the printout.
5. Note there is also an option to select the Column(s) desired to repeat on each page of the printout.



INSPECTION OPTIONS

There are three inspection options in Excel (and many Microsoft Office programs). To see these options, Go to File → Check for Issues



Inspect Document: This option is a great general check for a document before publishing. It will check for possible issues like, author information, printer information, picture crop information, headers and footers, and much more.

Check Accessibility: Checking for accessibility is very important. Your audience may be accessing your document with a screen reader, and this check will help ensure that they will be able to access all the various elements.

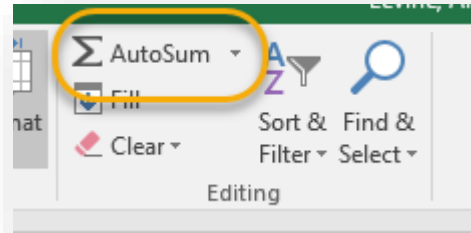
- ✓ Missing Alt Text is a common error. Alt Text is the text that will be read to somebody accessing a document with a screen reader to describe pictures and other elements.
- ✓ Remember that for most programs, Alt text may be found in a right click menu (Format Picture, or table properties are a couple examples).

Check Compatibility: This will inspect the document for compatibility across older versions of Excel and tell users possible issues that could arise with newer features (e.g. slicers).

AUTOSUM

While creating formulas manually is a great skill, there are also some shortcuts available in the home tab for some popular simple functions.

1. Select the cell where the formula is to appear.
2. Go to Home Tab → Editing Group → **AutoSum**
3. Note the drop down options include the ability to quickly calculate the following from data:
 - ✓ Sum
 - ✓ Average
 - ✓ Max
 - ✓ Min
 - ✓ Count
4. Note the wavy green line that appears after making a selection from the Auto Sum dropdown. Sometimes Excel guesses correctly for the data to calculate, and sometimes the wavy line needs to be corrected.
 - ✓ To correct the data source, select the first cell to be included, hold down the mouse and drag to the end of data source.
6. Press **Enter** or **Tab** to accept the formula.



	A	B	C	D	E	F	G	H	I	J
Desserts		Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	Weekend Totals	Week Totals
Chocolate Pie		15	8	9	25	10	42	55		=SUM(B2:I2)
Apple Strudel		4	17	12	44	35	74	70		
Cheesecake		5	1	2	0	3	8	10		
Snickerdoodle Cookies		12	48	48	12	72	120	120		
									Grand Total	

SHORTCUTS

Frequently Used Shortcuts

Frequently used shortcuts	Key Command
Close a spreadsheet	Ctrl+W
Open a spreadsheet	Ctrl+O
Go to home tab	Alt+H
Save a spreadsheet	Ctrl+S
Copy	Ctrl+C
Paste	Ctrl+V
Undo	Ctrl+Z
Redo	Ctrl+Y
Remove cell contents	Delete key
Cut	Ctrl+X

Frequently used shortcuts	Key Command
Go to Page Layout tab	Alt+P
Go to Data tab	Alt+A
Go to View tab	Alt+W
Delete Column	Alt+H, D, then C
Go to Formula tab	Alt+M
Hide selected rows	Ctrl+9
Hide selected columns	Ctrl+0
Create table	Ctrl+T
Check spelling	F7
Current Time	Ctrl+Shift+colon (:)
Current Date	Ctrl+Shift+semicolon (;)

Formatting Shortcuts

Formatting	Key Command
Italicize text	Ctrl+I
Bold text	Ctrl+B
Underline Text	Ctrl+U
Strikethrough	Ctrl+5
Outline border	Ctrl+Shift+7
General number format	Ctrl+Shift+~
Currency number format	Ctrl+Shift+4
Choose a fill color	Alt+H,H
Center align cell contents	Alt+H,A,then C
Add borders	Alt+H,B

Navigation

Navigation	Command
Up one cell	Up arrow key
Down one cell	Down arrow key
Left one cell	Left arrow key
Right one cell	Right arrow key OR Tab
Edge of current data	Ctrl+arrow key
Last cell in worksheet	Ctrl+End
Extend selection to last cell	Ctrl+Shift+End
First cell of a worksheet	Ctrl+Home
Previous sheet in a workbook	Ctrl+Page Up

WSU MICROSOFT OFFICE POWER USER PROGRAM

Become a Power User! Attend a full suite of Microsoft Office trainings from ITS and receive a Power User Certificate. For more information, visit: wichita.edu/poweruser

