

What is it?

Excel is a prominent member of the Microsoft Office Suite – as important as Word

Excel can be thought of as a giant calculator; however it is used in many inventive ways, for many purposes. Three main uses are:

- Number crunching:
 - Lots of built in formulas with the ability to create your own formulas
 - Ideal for developing budgets, projections and so on.
- Charts and graphs: visual analysis of data
- Databases – great for keeping track of long lists of names and related data



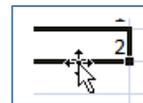
Definitions and Concepts:

Cursor – can appear in five different ways:

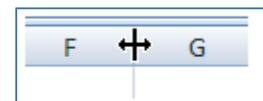
- White cross for basic cell selection



- Thin black cross for dragging cell contents elsewhere



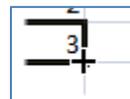
- A thin vertical line with two arrows at the side for widening columns (or the same symbol sideways for rows)



- Downward arrow for selecting an entire column (or the same symbol sideways for rows)

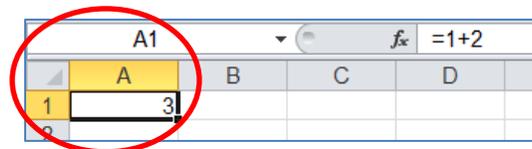


- Small black cross for copying or filling



Spreadsheet: A table of values (or cells) arranged in rows and columns. Each value can have a relationship to the other values

Cell: an individual box on the spreadsheet grid, identified by the column letter and row number (eg. A1)



Column: the vertical stack of cells in a spreadsheet table identified by a letter name

Row: the horizontal set of cells in a spreadsheet table identified by a number

Basic Math Operators: plus +, minus -, multiply *, divide / , brackets ()

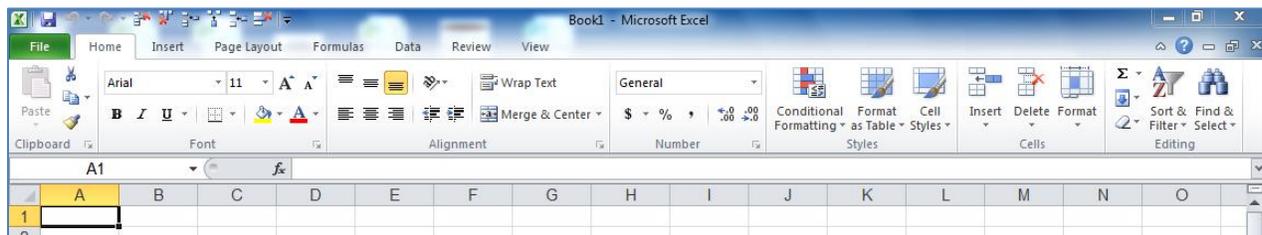
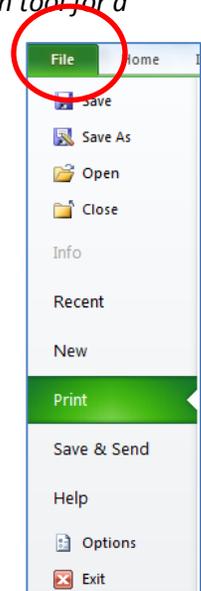
Orientation / Ribbons

As in other Microsoft Office products, the toolbar at the top is divided into Ribbons. Ribbons are like trays in a toolbox – you wouldn't find a saw next to a screwdriver. Similarly each tray has a different (but related) set of tools available. Use the tabs to access the different Ribbons. *Mouse-over each tool for a brief explanation and keyboard shortcut*

File Tab: This is where you Print, Save, Open, Close, Access recent spreadsheets used, and so on

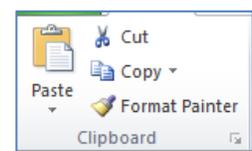
Home Tab: This is where a new spreadsheet opens. It's the tab you'll use most frequently; note that the tools (aka commands) are arranged in groups. The Home Tab groups contain the tools to:

- Move and copy material (Clipboard group)
- format text and numbers (Font group)
- Align material in your spreadsheet (Alignment group)
- Express numbers in different ways - as dollars, percentage, etc. (Number group)
- Show data in different ways (Styles group)
- Insert, delete, or alter cells rows and columns (Cells group)
- Sort, filter, access common formulas (Editing group)



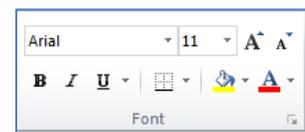
Clipboard Group:

The Clipboard is used exactly the same as in MS Word. This is where you get the tools to cut or copy data and paste it elsewhere in your spreadsheet. Also very handy is the 'Format Painter' which allows you to copy only the formatting of a cell (not the data) and paste that formatting into another cell. Most useful for making column headings or other titles match



Font Group:

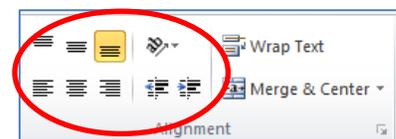
Just as with MS Word, the Font group is where you go to increase the text / number **SIZE** or **font type**; to **Bold**, *Italicize*, or Underline; change **colour**, etc.



Alignment Group:

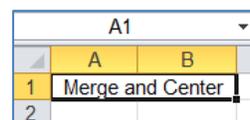
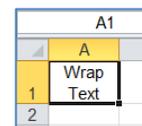
The Alignment group contains tools allowing you to arrange (or 'align') your text or numbers for ease of reading, labelling, and so on

- You can align to the left, centre, right or even justify



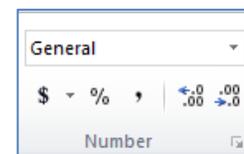
horizontally within a cell. Unlike with MS Word, you can also align vertically or even rotate text diagonally to label narrow rows or columns

- Wrap Text allows you to make text in a cell visible by expressing it on multiple lines while keeping it within one cell
- Merge & Center joins multiple cells into one – often used for labelling purposes



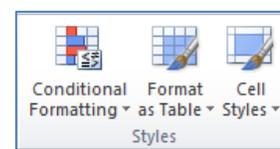
Numbers Group:

With these tools, you can express your numerical values in various ways: as dollars (with dollar signs, comma separators, and two decimal places), percentages, more or fewer decimal places, and so on



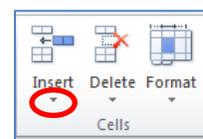
Styles Group:

This is where you access some more complex functions like conditional formatting (a bit beyond an intro class, but fun to play with and quite useful). You can also arrange your dataset in a preformatted table or utilize a predefined cell style to highlight its content



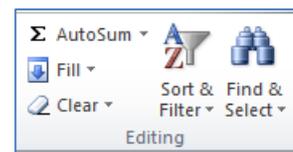
Cells Group:

The Cells group of tools is where you can insert or delete a column or row in your existing dataset – just click the down-arrow beneath the command to access the options

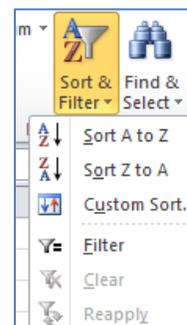
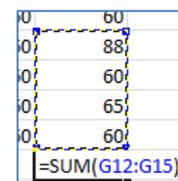


Editing Group:

The Editing tool group contains a disparate set of options. “AutoSum” allows you to quickly insert a pre-set formula to add up a column of numbers, get an average, and so on. “Sort & Filter” allows you to sift the data in your table in various ways that make it easier to analyse. “Find & Select” permits you to locate all instances of a piece of data within you dataset and replace that with another

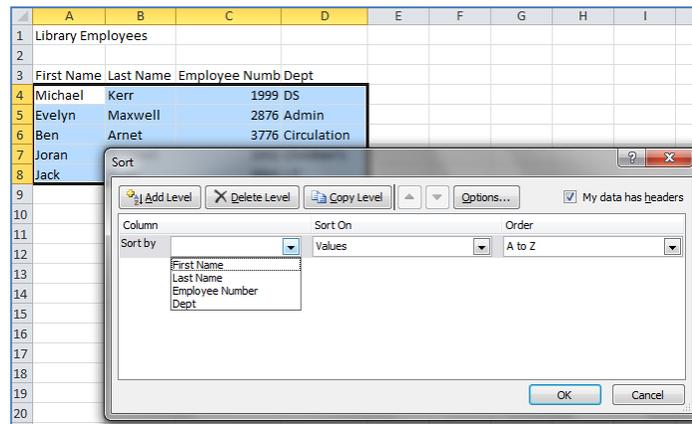


- To use AutoSum, select the cell where you want the total of a column (or row) of numbers to appear. Click on the AutoSum tool and ensure that the flickering line encompasses all the numbers you want to be included in your total. Press ‘enter’ or ‘return’ and you’ll have a total
- Sort & Filter must be used carefully. Make sure all the data in your table is selected before sorting in ascending or descending order. Otherwise, only part of your dataset will be sorted and your data will be ruined

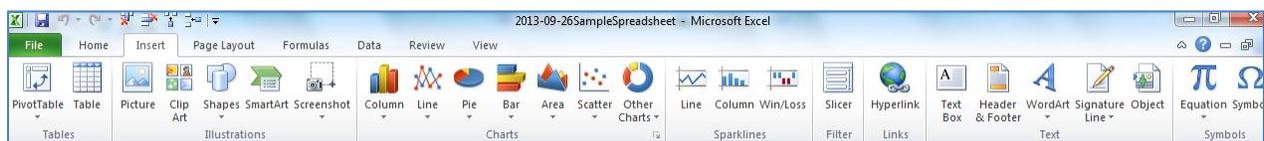


	A	B	C	D
1	Library Employees			
2				
3	First Name	Last Name	Employee Num	Dept
4	Michael	Kerr	1999	DS
5	Evelyn	Maxwell	2876	Admin
6	Ben	Arnet	3776	Circulation
7	Joran	Tunwell	3992	Children's
8	Jack	Ryan	5933	I.T.

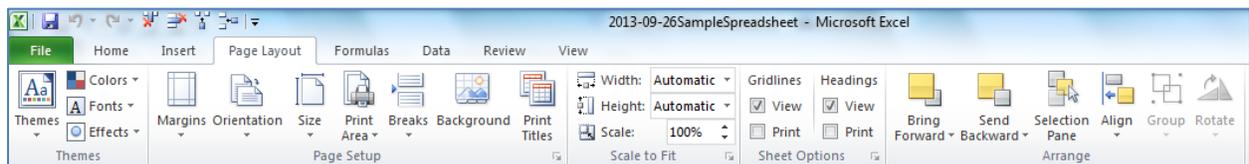
- Use “Custom Sort” to specify exactly how you want your data arranged. In the example shown you might choose to arrange the data by last name, or by employee number



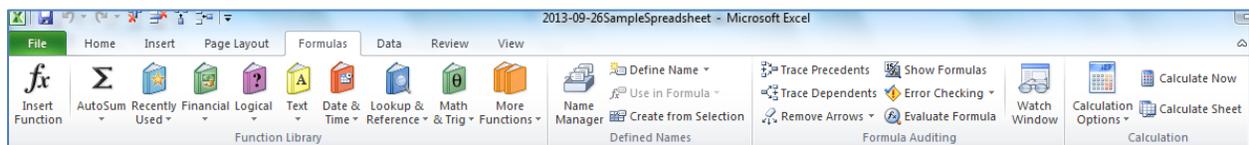
Insert Tab: This is where you will find things to add to your spreadsheet – things like pictures, charts, text boxes, symbols and so on



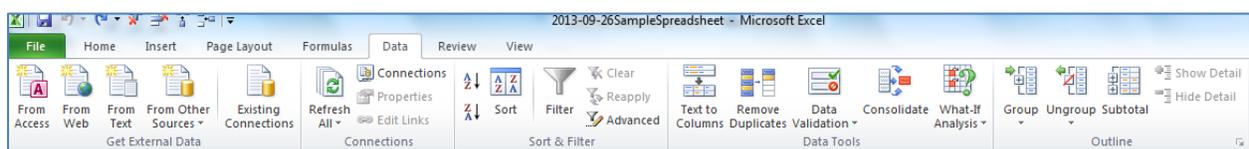
Page Layout: This is where you’ll arrange your spreadsheet for final viewing. You can change the page orientation (portrait to landscape), set the print area, scale to fit, and otherwise adjust how your document will finally look



Formulas: This is where you will find complex formulas – beyond the range of an introductory class



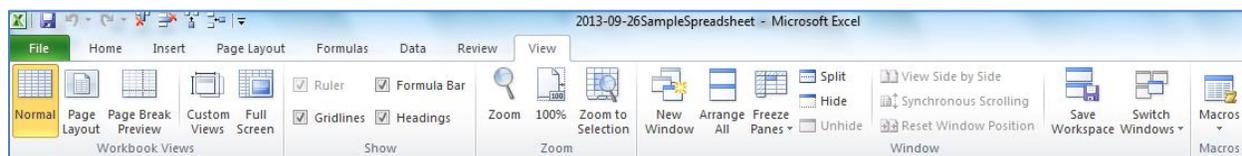
Data: This is also quite complex. The Sort functions, however, are found here, and are quite easy to use, and very helpful in managing long lists of names and addresses (also accessible on the Home tab)



Review: This is where you'll find tools for proofreading, and items to help you work collaboratively, like the comments options, track changes, and so on

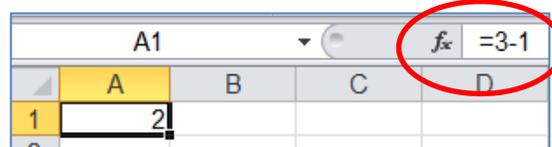


View: The final tab provides things to help you work with what your spreadsheet looks like on the screen. (By contrast, the Page Layout view allows you to see what the shape of your document will be like when you print it – a kind of print view.) Freeze panes is also available in this tab; this tool allows you to keep the headers in place as you scroll off the bottom of the page with long data sets.



Create a Formula

To create your own formula within Excel, you must always begin by entering an equals sign into your cell. The formula you enter will show in the formula bar (circled) and the outcome will be expressed in the cell into which the formula was entered. In the example shown, “=3-1” was typed into cell A1; the outcome (2) shows in the cell, and the formula (ie, how that outcome was arrived at) shows in the formula bar



Further Help

- Help Button**, upper right of spreadsheet (also available in File tab): 
- Class Resources:** www.nvcl.ca > Using the Library > Computer Classes > Scroll down to Intro to MS Excel > Class Resources
- Books:** Nonfiction Row 26, 005.54
- Safari Books Online:** www.nvcl.ca/databases > Safari
- Lynda.com:** www.nvcl.ca/databases > Lynda.com
- Online tutorials:** <http://www.gcflearnfree.org/excel2010>
- Set an appointment with a library staff member: techconnect@cnv.org or 604-982-3941