

# Excel – What is it Good For?

Professional Development

Thursday 25<sup>th</sup> February

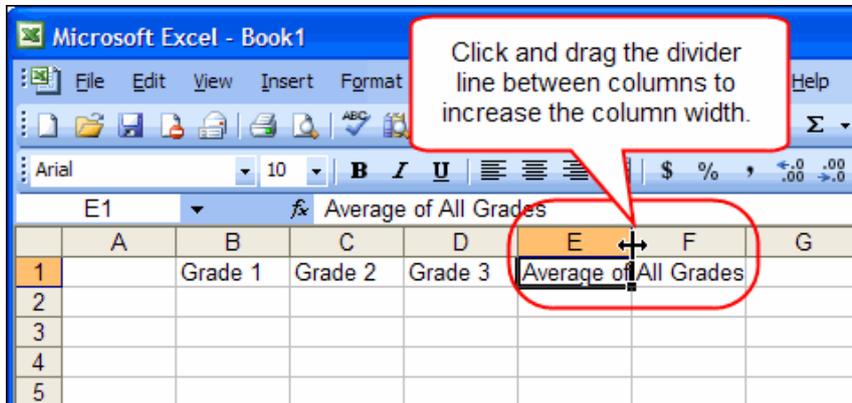
Tapping Primary School

Presenter: Annette Italiano



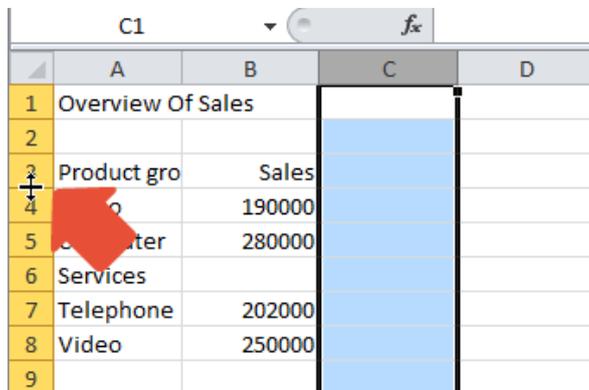
# Useful Things to Know About Excel

## Changing Column Widths



This will change a single column. If you wish to change several columns at the same time, highlight the columns by dragging the mouse across the letters for the number of columns you wish to change and then drag the divider line to the desired width.

Alternately, highlight the column/columns you wish to change by clicking on the column letter, right click, click on column width and change the column/s to the desired width.



## Changing Row Heights

Click on the divider line between the numbers and drag the row/s to the desired size.

Alternately, right click on the number in the row, click on Row Height and change the row/s to the desired size.

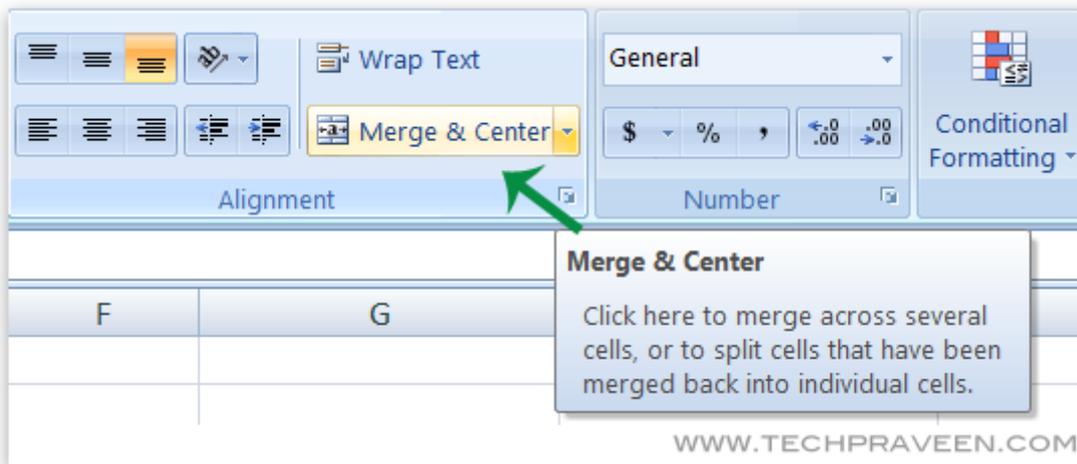
## Changing Text Direction



By clicking on this icon, you can change the direction of the text.

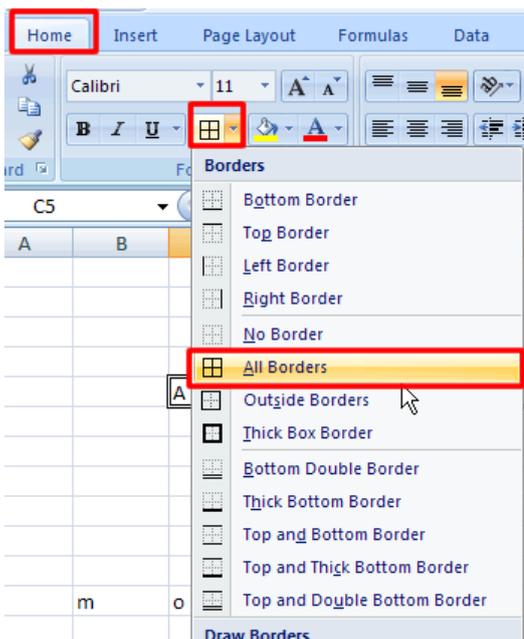
Alternately, right click on the cell/cells in which you wish to change the text direction, Format Cells, Alignment, and change the orientation using the arrows to the left of the screen.

## Merging/Splitting Cells



Alternately, highlight the cells you wish to merge, right click, Format Cells, Merge Cells. If you wish to split or 'unmerge' cells which have previously been merged, follow the same process.

## Putting Borders Around Cells



Highlight the cells you wish to put a border around and click on the type of border you wish to add.

It is best to complete all the inside borders first, and then finish off with a thick box border if you want one.

Alternately, highlight the cells to be bordered, right click, Format Cells, Border and fill in the type of borders you require.

## Other Useful Functions on the Home Toolbar

### Autosum

When want to add up a row or column of numbers, click an empty cell below a column of numbers or to the right of a row of numbers, and then click 'AutoSum'. Excel selects what it determines to be the most likely range of data. If you want to change the range of data being totalled, click an empty cell below a column of numbers or to the right of a row of numbers, and then type in **@sum(** highlight the cells you want added **)** and press enter.

### Sort

Highlight the names and data next to them and click on 'Sort and Filter' in the toolbar at the top right. You can sort your data alphabetically.

### Format as a Table

Highlight the cells where you would like your table to be. Click on 'Format as Table' in the toolbar at the top right. You can expand the table by dragging it out from the corners.

### Wrap Text

If you want text to fit in a cell and it needs two or more lines, highlight on the cell/s and click on **Wrap Text** on the toolbar.

## Printing in Excel

When you print in excel, you can print everything on the spread sheet or you can choose a section of data to be printed. If you want to choose part of the spread sheet to print, **highlight the area to be printed**, press **Print**, and where it says **Print Active Sheet** change it to **Print Selection**.

As with word, you can change the page to portrait or landscape and can edit the margins.

If you go in to **Custom Margins**, you can centre your page both horizontally and vertically.

If you find your worksheet doesn't fit on the page, go back to the spread sheet and you will see the lines on the sheet to show you where each page starts and finishes. You may need to adjust your margins further, or reduce the row height or column width and font to make the data fit the page.

# Excel Formulae

The cells used under the Formula heading will change according to the cells in your spreadsheet. The parts which may change are in bold italics.

Purpose of the formula	Formula
Add two cells together	= <b><i>A1+B2</i></b> or + <b><i>A1+B2</i></b>
Add three cells together	= <b><i>A1+B1+C1</i></b> or + <b><i>A1+B1+C1</i></b>
To add a row or column of numbers	=sum( <b><i>highlight the cells you wish to add</i></b> ) or click on Autosum
Subtract one cell from another	= <b><i>A1-B1</i></b>
Dividing one cell by another	= <b><i>A1/A2</i></b>
Multiplying one cell by another	= <b><i>A1*A2</i></b>
To find an average	=average( <b><i>A1: A10</i></b> ) or click on Autosum, Average
To find the largest number in a column or row	=max( <b><i>highlight the cells required</i></b> )
To find the smallest number in a column or row	=min( <b><i>highlight the cells required</i></b> )
To find the most common number in a column or row	=mode( <b><i>highlight the cells required</i></b> )

## Creating Lists in Excel

(This is useful for when you are printing out spelling lists or mental computation lists for differentiated groups).

1. Type the following; Cell A1 = **Group A**, Cell A2 = **Unit 1**, Cell B1 = **Group B**, Cell B2 = **Unit 1**.
2. In cells A3 – A6, type in any four words as if you were making a spelling list. Press enter after you have typed each word.
3. In cells B3 – B6, type in another four words for a different level of spelling group. Press enter after you have typed each word.
4. Put borders around all the cells with text in them. (Highlight the cells and then click on the toolbar, border icon, all borders.)
5. Highlight cells B1 – B6, right click and copy. Move to cell D1, right click and paste.
6. Type the following; Cell E1 **+\$D\$1**, press enter, Cell E2 **+\$D\$2**, press enter, Cell E3 **+\$D\$3**, press enter, Cell E4 **+\$D\$4**, press enter, Cell E5 **+\$D\$5**, press enter, Cell E6 **+\$D\$6**, press enter.
7. Highlight column E by clicking on the letter E at the top of the column, right click, copy. Highlight columns F – H, right click and paste.
8. Add your borders as in step 4. Centre your lists if you wish (Highlight the columns you wish to centre, click on centre icon in the toolbar.)
9. If you want to change the lists on columns D – H, all you need to do is copy from column A or B and paste to column D only. The rest of the lists will automatically change.
10. To print out your lists, highlight the area from D1 to H6.
11. Click on File, Print, change from Print Active Sheets to Print Selection.
12. If you need to, you can adjust your margins under the Print options - Margins. You can also centre your lists horizontally and vertically by going into custom margins. You can change from portrait to landscape here or under page setup on the toolbar.
13. **YOU CAN MAKE MULTIPLE LISTS IN THE SAME FILE WITHOUT HAVING TO SET UP EACH PAGE AGAIN.**
14. Click on the space above the 1 and next to the A top left of your current spread sheet. Right click, Copy. It should highlight the whole sheet.
15. Click on Sheet 2 (bottom left). Go to the same space as step 14, right click, Paste Special, Okay. This should transfer all the formulae and information from the Sheet 1. You may need to adjust the column widths or row heights. You can now put different words in each list.
16. You can rename each sheet. Click where it says Sheet 2, right click on Rename and change the name to Unit 2.
17. Click where it says Sheet 1. Right click on Sheet 1, click on Rename and change the name to Unit 1.
18. Remember when you go to print your work, you need to highlight the area you wish to print and change the print settings from Print Active *Sheet* to Print Selection.

## Creating an Assessment Checklist – Numerical Data

1. In cell A2, type in **Student**. Press enter.
2. In cell A3 type the name **Bob**. Press enter. In the cells below, type in the names **Jane, Michelle and Ralph**. (Press enter once you have typed each name.)
3. In cell A7, type in **Total**
4. In cell B2, type in **Addition**. Press enter. In the cells below, type in the scores **20, 15, 17 and 19**. (Press enter once you have typed in each number.)
5. In cell C2, type in **Subtraction**. Press enter. In the cells below type in the scores **17, 16, 16 and 18**. (Press enter once you have typed in each number.)
6. In cell D2, type in **Total**. Highlight cells D3-D6 and click on the Autosum symbol( $\Sigma$ ).
7. **Highlight cells B7 – D7. Click on the Autosum symbol ( $\Sigma$ ).**
8. **In cell A8, type in =counta( highlight cells A3 to A6 ) and press enter.**
9. Click on cell A8 and drag the formula across to cells B8 – D8.
10. In cell A9 type in **Average**.
11. In cell B9, type in **+B7/B8**. (This is the total divided by the number of students.)
12. Highlight the cells B9. Hover over the dot in the bottom right until you see the cross, then drag the formula across cells C9 and D9. Press enter. The formula should copy across.
13. Click on the letter A at the top of the column, hold the mouse down and drag it across to column D until columns A to D are highlighted. Move to the bar between columns D and E and double click. This should change the column widths so that all the headings fit in the allocated space. While you have the cells highlighted, click on the Centre button on the toolbar.
14. Highlight cells A1 to D1, then click on Merge and Centre on the tool bar.
15. Type in **Mental Computation**. Press enter.
16. Highlight the area where you have text/data by clicking and dragging the mouse. Click on Borders, and All Borders.
17. You can add the thick border to titles and totals if you wish. You can also highlight cells by using the paint pot to fill cells in with colour. Font size can be changed as you would do in Word.
18. To print the data in Excel is similar to Word. Click on File, Print. If you want to centre your data, under Print, click on Normal Margins, change it to Custom Margins and click on centre Horizontally and Vertically. You will see what your printout will look like on the preview to the right. (This can also be done under Page Layout on the toolbar menu in Excel.)

## Creating an Assessment Checklist using Text Data

1. In cell A2, type in **Student**. Press enter.
2. In cell A3 type the name **Bob**. Press enter. In the cells below, type in the names **Jane, Michelle and Ralph** . (Press enter once you have typed each name.)
3. In cell B2, type in **Capitals – beginning of sentences**. Press enter. In the cells below, type in the letters **S, C, U and S**. (Press enter once you have typed each letter.) When you type in the letter C, it will come up with Capitals etc. Press delete and it will revert to C.
4. In cell C2, type in **Full Stops**. Press enter. In the cells below type in the letters **N, U, U and U**. (Press enter once you have typed each letter.)
5. In cell D2, type in **Commas**. Press enter. In the cells below type in type in the letters **N, S, U and S**. (Press enter once you have typed each letter.)
6. Highlight cells A2 to D2, click on Wrap Text in the toolbar, click on Text Direction in the toolbar and change the text to Rotate Text Up. Click on Centre
7. Type in to cells as follows; A7 = **C**, A8 = **U**, A9 = **S**, A10 = **N**, A11 = **Total**. Press enter after each entry. The letters represent consistently, usually, sometimes and never.
8. Highlight columns A to D by clicking and dragging on the letters at the top, click on Centre.
9. In cell B7 type in **=countif**( highlight the range B3 – B6, "**C**" ). This will count the number of 'C's in the range given.
10. Click on cell B7. The formula should appear in the formula toolbar. In front of and behind both 'B's, add a dollar sign so that the formula looks like this **=countif(\$B\$3:\$B\$6,"C")**. Go to the end of the formula and press Enter.
11. Click on Cell B7, copy the formula down to B10.
12. Each cell from B8 to B10 will then need the letter in inverted commas edited. Click on Cell B8, change "C" to "U" in the formula toolbar. Click on Cell B9, change "C" to "S". Click on Cell B10, change "C" to "N".
13. Highlight cells B7 to B10 and copy across to columns C and D.
14. Click on Cell C7. Go to the formula bar and change the 2 letter B's between the dollar signs to the letter C. Repeat for cells C8 – C10.
15. Click on Cell D7. Go to the formula bar and change the 2 letter B's between the dollar signs to the letter D. Repeat for cells D8 – D10.
16. Highlight cells B11 to D11 and click on Autosum ( $\Sigma$ )
17. Highlight cells A1 – D1, click on Merge and Centre. Type in **Punctuation**.
18. Add borders as you feel necessary.
19. Change the column widths as necessary by highlighting the columns, (drag the mouse across the letters at the top of the relevant columns), and double click on the bar between the two letters of columns D and E.

## **What your sheets should look like!**

### **Assessment Checklist using Text Data**

<b>Punctuation</b>			
Student	Capitals - Beginning of sentences	Full Stops	Commas
Bob	S	N	N
Jane	C	U	S
Michelle	S	U	U
Ralph	U	U	S
C	1	0	0
U	1	3	1
S	2	0	2
N	0	1	1
<b>TOTAL</b>	<b>4</b>	<b>4</b>	<b>4</b>

### **Assessment Checklist – Numerical Data**

<b>Mental Computation</b>			
Student	Addition	Subtraction	Total
Bob	20	17	37
Jane	15	16	31
Michelle	17	18	35
Ralph	19	18	37
Total	71	69	140
4	4	4	4
Average	17.75	17.25	35

### **Creating Lists in Excel**

Group A	Group B
Unit 1	Unit 1
big	ball
bat	bath
bet	baby
bit	bread

| Group B |
|---------|---------|---------|---------|---------|
| Unit 1  |
ball	ball	ball	ball	ball
bath	bath	bath	bath	bath
baby	baby	baby	baby	baby
bread	bread	bread	bread	bread