



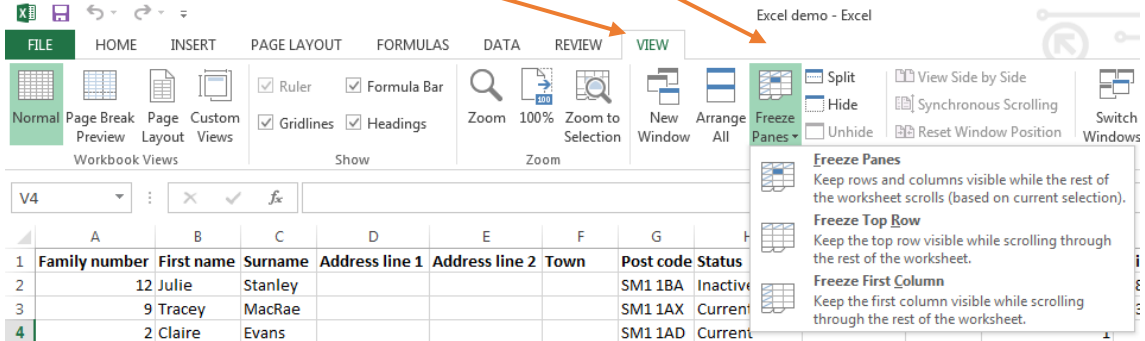
Excel for monitoring & evaluating impact

Contents

1) Freeze panes	2
2) Hide columns.....	2
3) Sorting	3
4) Splitting columns	4
5) Filtering	5
6) Printing	6
7) Basic calculations & formulae	8
8) Copying Formulae	8
9) Absolute Cell references	9
10) AutoSum.....	9
11) Age calculation formula.....	9
12) Average & Max / Min	9
13) COUNTIF	9
14) IF	10
15) Remove duplicates.....	10
16) Conditional formatting	11
17) Validating data entry	12
18) Summary sheets / dashboards – linking sheets	13
19) Quick analysis –	14
20) Pivot tables.....	15
21) Pivot charts	18

1) Freeze panes – allows you to control areas of the spreadsheet to be fixed as you scroll.

- a. Go to the **View** tab and select **Freeze Panes** (click arrow at bottom right for this to drop down as below)

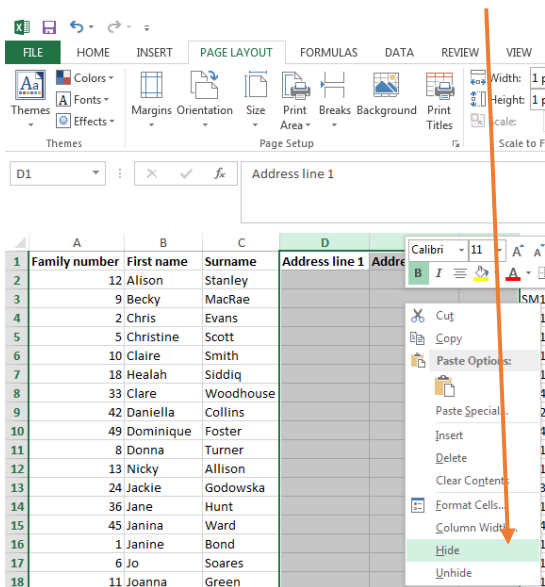


- b. Now select either to freeze the row above and to the left of the cell your cursor is in – or alternatively just to freeze the first row or first column.

2) Hide columns is a way of only seeing data you need – and very useful if your spreadsheet has lots of columns.

- a. Highlight the column/s you want to hide by selecting the column letter/s at the top and if more than one - dragging across

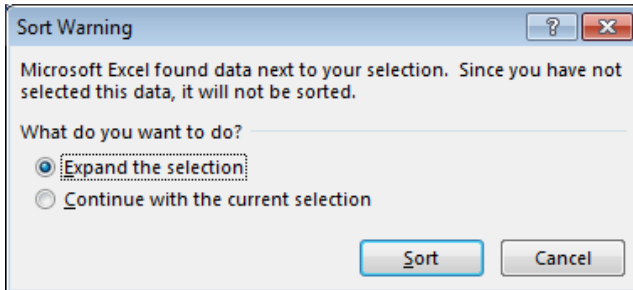
- b. Next right click and select Hide



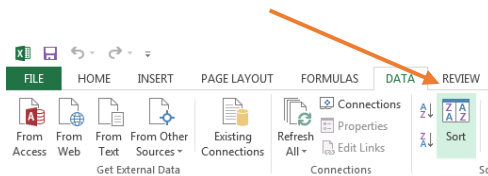
- c. To Unhide – select the columns either side of the hidden columns and then right click again and select to Unhide.

3) **Sorting** column information.

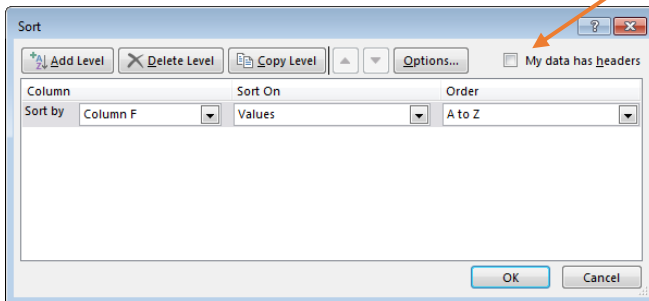
- a. First select the column you want to reorder, then go to the Data tab and select the AZ↓ option.
- b. You will then see a warning box asking – Do you want to expand the selection? This is to safeguard against just sorting this column in isolation (i.e. not rearranging the other column information in line with this one – ending up with rows of information being mixed up).



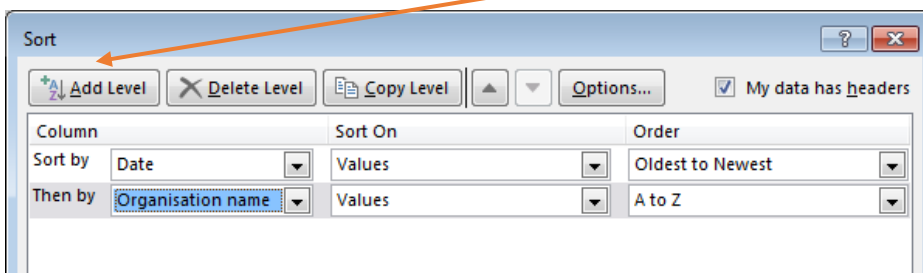
- c. A safer option is to select the whole sheet (highlight the top left hand cell) and then select the Sort icon in the Data tabs, as below



- d. The Sort dialogue box opens up and here you can select the Columns that you want to sort. Remember to tick the My data has headers box if relevant.



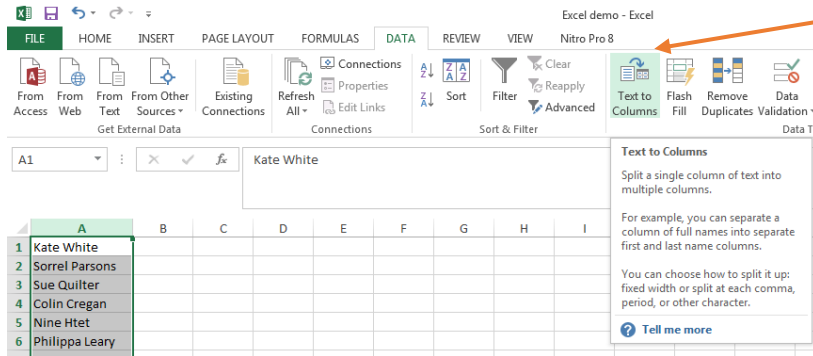
- e. You can Sort by any number of criteria by selecting Add level.



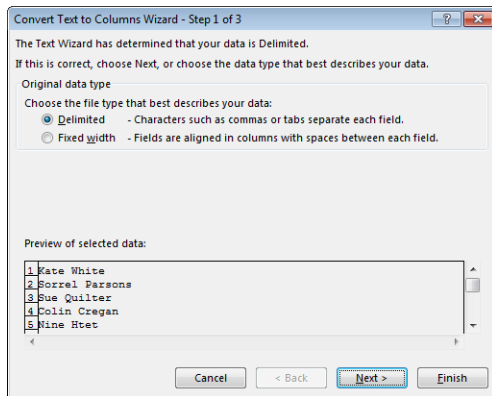
In the example above – we've chosen to sort by Date - Oldest to Newest and then alphabetically by Organisation name.

4) Splitting columns of data

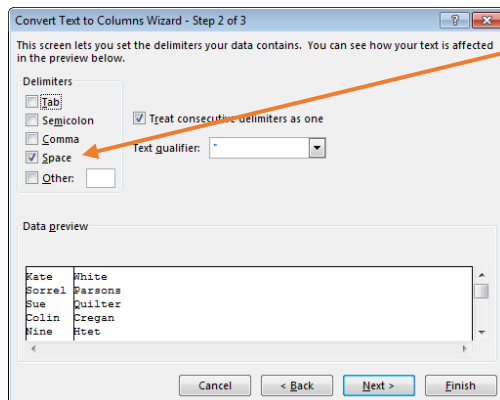
a. Highlight the column you want to split, go to the Data tab and then select Text to Columns



b. Now check the Delimited option is selected and then click Next

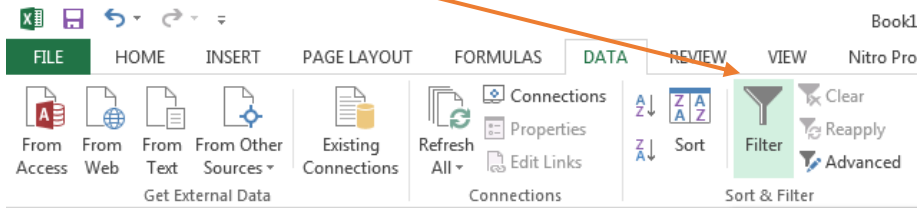


c. Now select the appropriate Delimiter which in this case is the Space option, and then click Finish



5) **Filtering** data allows you to see a subset of your data (in terms of rows) based on criteria you select.

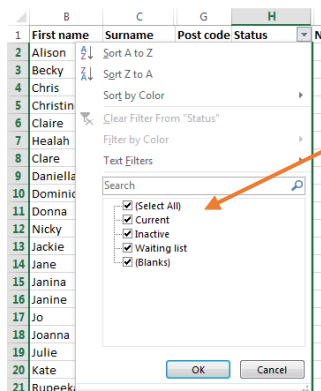
a. Select the column containing the data you want to Filter on, then select the Data tab and click on the Filter icon



b. There should now be a drop down arrow in the header cell for that column

	B	C	G	H	
1	First name	Surname	Post code	Status	No. c
2	Alison	Stanley	SM1 1BA	Inactive	
3	Becky	MacRae	SM1 1AX	Current	
4	Chris	Evans	SM1 1AD	Current	
5	Christine	Scott	SM1 3NQ	Waiting list	
6	Claire	Smith	SM1 1AY	Waiting list	
7	Healah	Siddiq	SM1 1BN	Current	

c. If you click on the down arrow you can then select / deselect the options you want to filter on

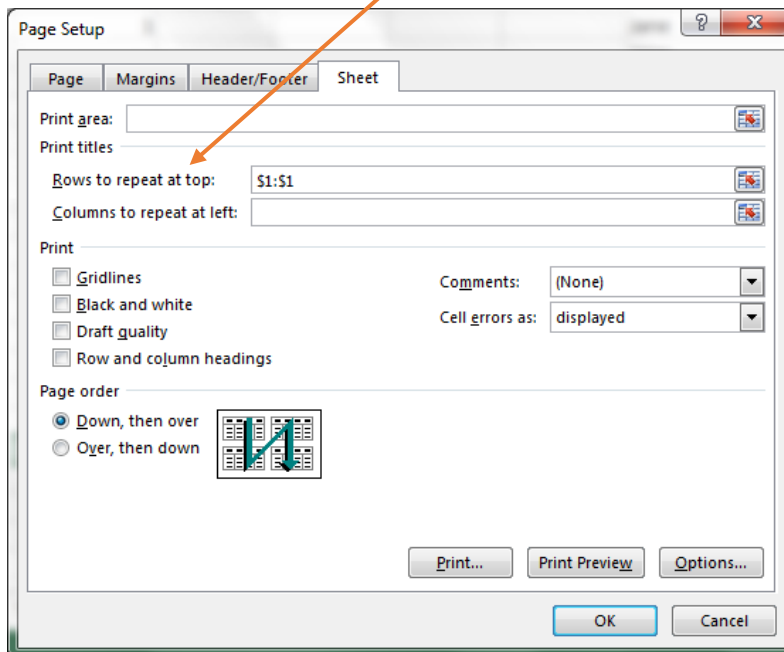


d. The Filter icon then displays in place of the down arrow to indicate a Filter has been switched on

	B	C	G	H
1	First name	Surname	Post code	Status
2	Alison	Stanley	SM1 1BA	Inactive
17	Jo	Soares	SM1 1QD	Inactive
18	Joanna	Green	SM1 1AZ	Inactive
21	Rupeeka	Riazi	SM3 8BJ	Inactive
22	Kathleen	Ghuman	SM3 8BP	Inactive
23	Kathy	Jenkins	SM5 1HP	Inactive
31	Mireide	Williams	SM2 7PY	Inactive

6) **Printing** - there are a number of options to make printing spreadsheets easier and importantly easier to read.

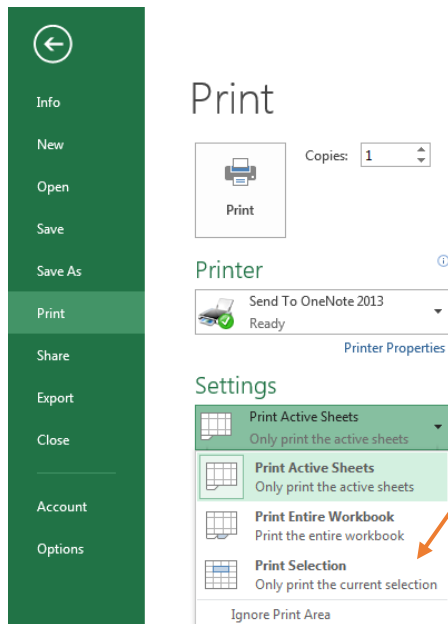
- To set it so that row or column headers repeat when printing across a number of pages (much like the Freeze pane option for viewing on screen when scrolling) – go to the Page Layout tab and then select the Print titles option
- Now put your cursor in the 'Print titles – Rows to repeat at the top' box and then highlight the header row in your spreadsheet



c. Now select Print Preview to check before selecting Print.

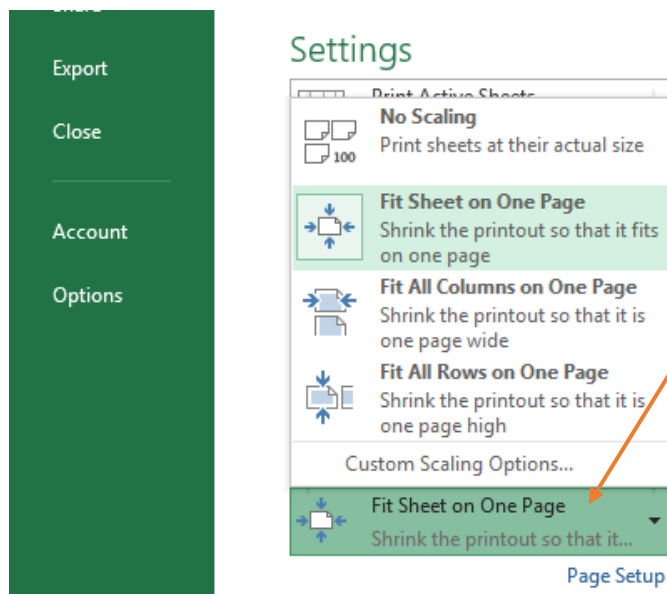
d. To just print part of your worksheet, select the area you need and go to Print and

then choose Print selection



e. If you have a large spreadsheet you might also want to use the Scale to print options.

f. Select the drop down arrow from the bottom option - Fit Sheet on One Page and choose the best option for the size / shape of your spreadsheet. (If you go to the Page Layout tab you can also adjust margin sizing)



7) Basic calculations & formulae

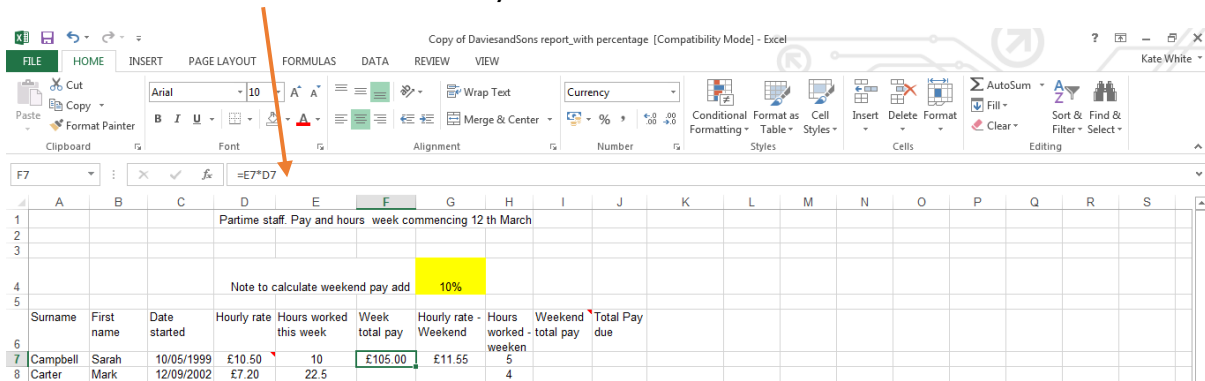
Always start with an = and then the order of operations is Divide (/) Multiply (*) Add (+) Subtract (-). To 'force' Excel to do differently – use Brackets e.g.

$$5+3*2 = 11$$

but...

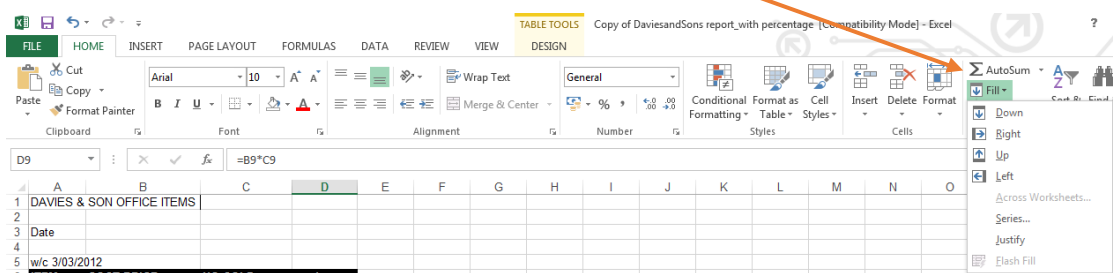
$$(5+3)*2 = 16$$

Check the Formula bar to see if your formula is correct

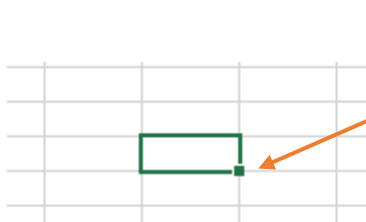


8) Copying Formulae

- a. To copy formulae either use the Fill command and then select Down, Right, Up or Left



- b. Alternatively select the cell with the formula in and then use the Ctrl D shortcut and drag to copy Down to cells beneath
- c. Or Select the cell with the formula in and then hover over the filled in square in the bottom right and when the cursor becomes a + - then drag the box down to cover the relevant cells and the formula will be copied.

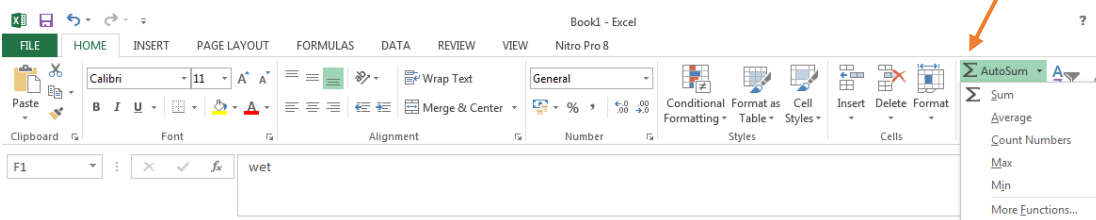


9) Absolute Cell references

- Sometimes, instead of your formulae automatically updating its references as you copy down / across on a spreadsheet – you may want to include a fixed element in your calculations.
- To do this use the \$ operator before the letter and number cell reference e.g. \$A\$D

10) AutoSum is used to quickly sum up numbers in a row or column.

- First highlight the numbers in question and then select the AutoSum icon from the Home tab (or Formula tab)



- AutoSum will calculate the total and display this in the next cell.

11) Age calculation formula

- Calculating Age from Date of birth

`=YEAR(TODAY())-YEAR(L2)-IF(L2-DATE(YEAR(L2),1,1)>TODAY()-DATE(YEAR(TODAY()),1,1),1,0)`

Remember to change the DOB reference cell which in this case is L2

12) Average & Max / Min

- These all work in the same way – highlight the range of cells in question and then select the Function you need.

13) COUNTIF

- This is a really useful function to add up numbers of times a certain criteria is present in a specified range of cells.
- It uses the following formula `=COUNTIF(range, criteria)` and the criteria can either be a number, value or cell reference
- Select the range of cells and then the criteria e.g. `=COUNTIF(H2:H50, R36)` or `COUNTIF(H2:H50, "Current")` (this will return the same result where Current is an entry in the Column H)

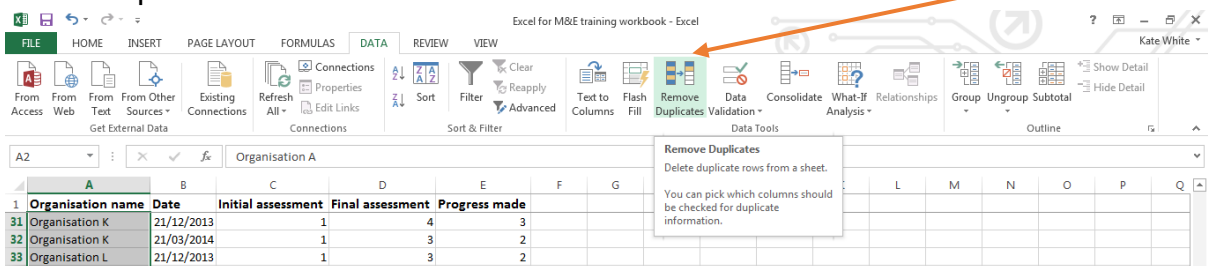
14) IF – this checks whether a condition is met and returns one value if True and another if False

- a. Use the formula =IF(criteria, "option 1 to display if true", "option 2 to display if false")

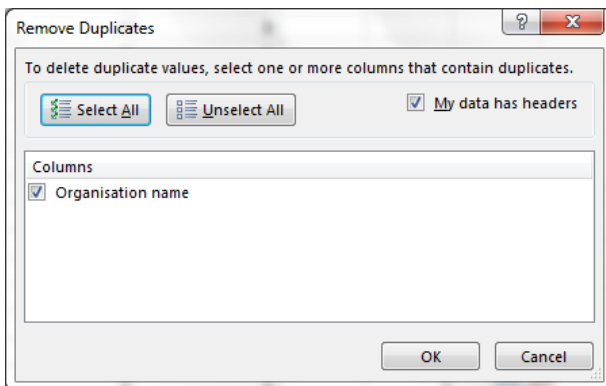
For example =IF(C3>B3,"Targets met", "Targets unmet")

15) Remove duplicates

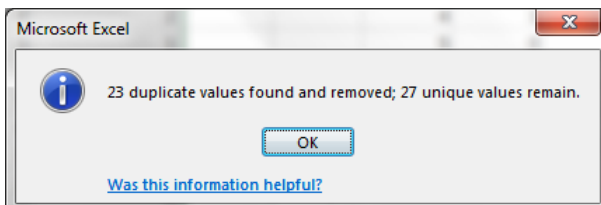
- a. Another handy way to see how many unique entries are in a column is to remove duplicates.
- b. Highlight the column in question and go to the Data tab and select Remove Duplicates



- c. Select the column with duplicate values and click OK



- d. Excel will then return the column of data minus duplicates and indicate how many have been removed.



16) Conditional formatting

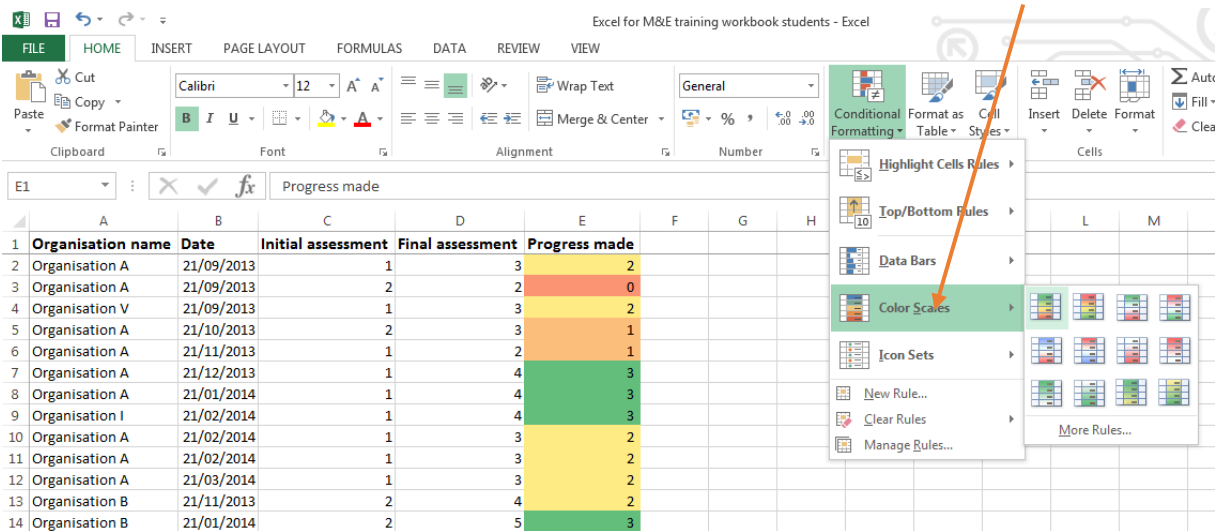
- a. Select the required column / area of worksheet and then in the Home tab select Conditional Formatting

	A	B	C	D	E	F	G	H
1	Organisation name	Date	Initial assessment	Final assessment	Progress made			
2	Organisation A	21/09/2013	1	3	2			
3	Organisation A	21/09/2013	2	2	0			
4	Organisation V	21/09/2013	1	3	2			
5	Organisation A	21/10/2013	2	3	1			
6	Organisation A	21/11/2013	1	2	1			
7	Organisation A	21/12/2013	1	4	3			
8	Organisation A	21/01/2014	1	4	3			
9	Organisation I	21/02/2014	1	4	3			
10	Organisation A	21/02/2014	1	3	2			
11	Organisation A	21/02/2014	1	3	2			
12	Organisation A	21/03/2014	1	3	2			
13	Organisation B	21/11/2013	2	4	2			
14	Organisation B	21/01/2014	2	5	3			
15	Organisation C	21/12/2013	2	4	2			
16	Organisation C	21/02/2014	2	5	3			
17	Organisation D	21/01/2014	2	3	1			
18	Organisation E	21/09/2013	2	1	-1			
19	Organisation E	21/09/2013	3	5	2			

- b. There are a number of options including Highlighting Cells based on Rules you can specify as below (red for any less than 2)

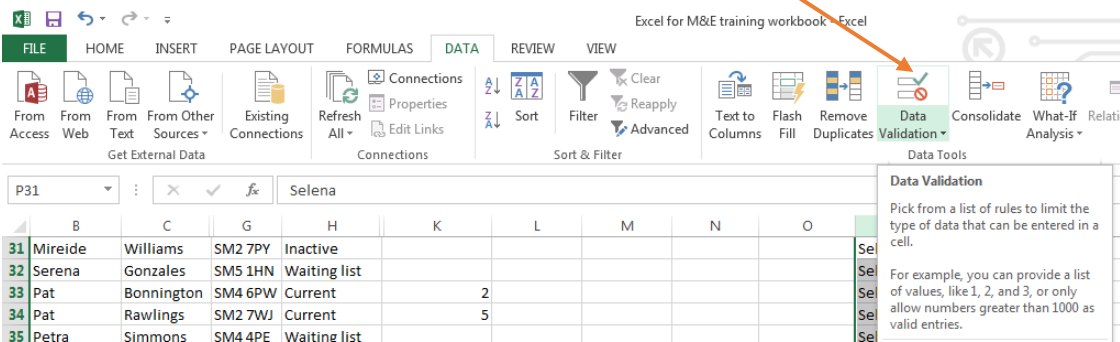
	A	B	C	D	E	F	G	H	I	J	K	L	M
1	Organisation name	Date	Initial assessment	Final assessment	Progress made								
2	Organisation A	21/09/2013	1	3	2								
3	Organisation A	21/09/2013	2	2	0								
4	Organisation V	21/09/2013	1	3	2								
5	Organisation A	21/10/2013	2	3	1								
6	Organisation A	21/11/2013	1	2	1								
7	Organisation A	21/12/2013	1	4	3								
8	Organisation A	21/01/2014	1	4	3								
9	Organisation I	21/02/2014	1	4	3								
10	Organisation A	21/02/2014	1	3	2								
11	Organisation A	21/02/2014	1	3	2								
12	Organisation A	21/03/2014	1	3	2								
13	Organisation B	21/11/2013	2	4	2								
14	Organisation B	21/01/2014	2	5	3								
15	Organisation C	21/12/2013	2	4	2								
16	Organisation C	21/02/2014	2	5	3								
17	Organisation D	21/01/2014	2	3	1								
18	Organisation E	21/09/2013	2	1	-1								

c. Alternatively you can employ an automated traffic light Colour Scale!

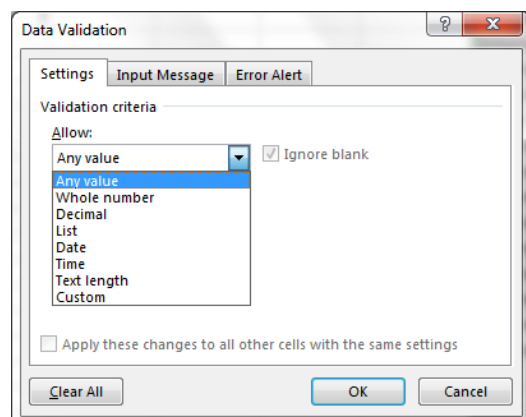


17) Validating data entry - Excel also allows you to pre-set criteria with which to validate cell entries.

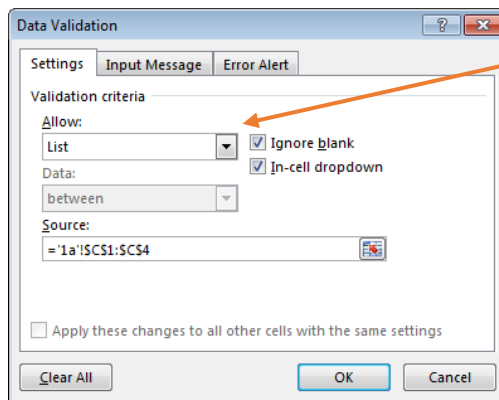
- a. This enables you to ensure consistency & standardisation – particularly useful if a number of people are entering data.
- b. Go to the Data tab and select Data validation



c. There are a number of criteria you can choose from and you can even put in your own input message to guide explain to others what's required well as your own error message.



- d. If you have a set list of options you want people to select from (and not enter anything else) e.g. ethnicity categories, then choose the List option.



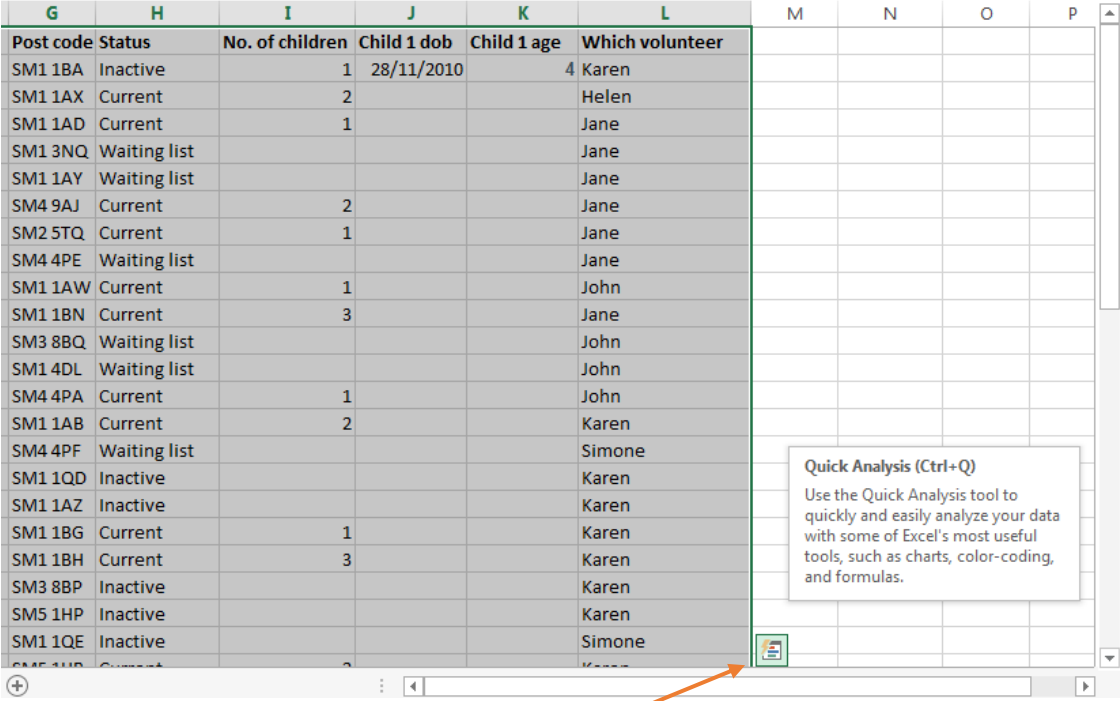
- e. It will now ask you to indicate where this List can be found by selecting the cell range in the Source, as above. Navigate to where you have previously entered list options and highlight - it is a good idea to dedicate a separate Worksheet to your look up lists

18) Summary sheets / dashboards – linking sheets – these take data from other Worksheets to feed into summary reports to help with monitoring

- a. Open a new Worksheet and rename
 - b. Add the parameters you need to track and then in the formula expression, 'bring in' data from the other Worksheets by selecting cells / ranges as appropriate. You will notice in the formula box that this is indicated by a **'Worksheet name'!** the cell reference or range
- e.g. =COUNTIF('Training stats'!E2:E50,'Training summary'!A31)

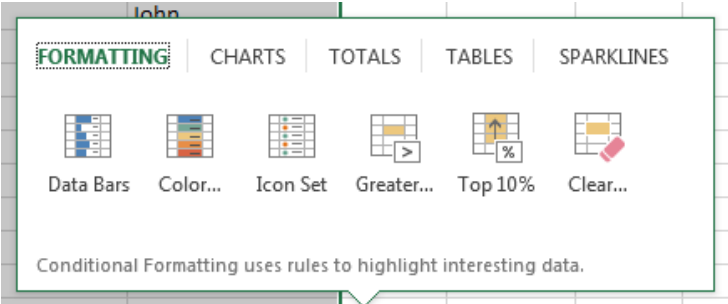
19) Quick analysis – this is a handy short cut option in Excel 2013

- a. Click any cell in your data and then click Ctrl & Asterisk (the Ctrl key, Shift key and number 8 key)

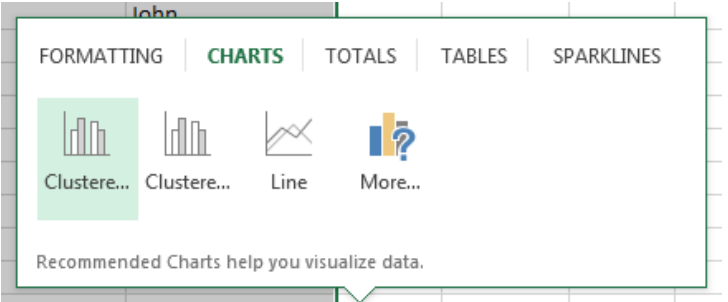


- b. Clicking on the Quick Analysis icon then brings up a range of options as below:

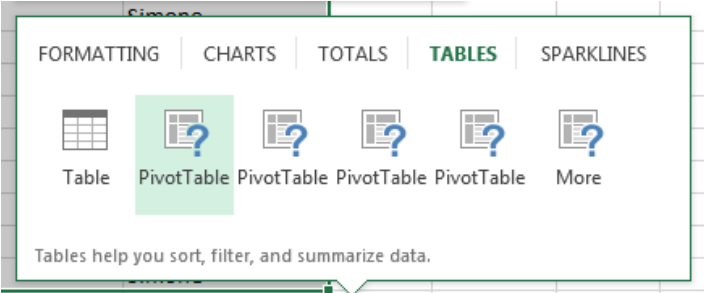
Formatting option



Charts option



Tables option – here there is a short cut to Pivot Tables

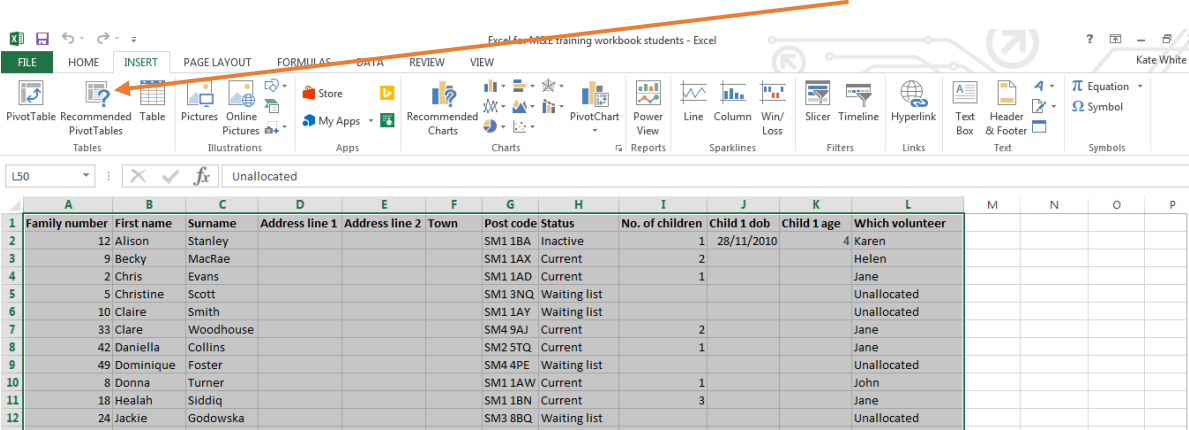


20) Pivot tables Quick Analysis gives you a number of pre-defined Pivot table options, selected as the best fit for the data in your worksheet

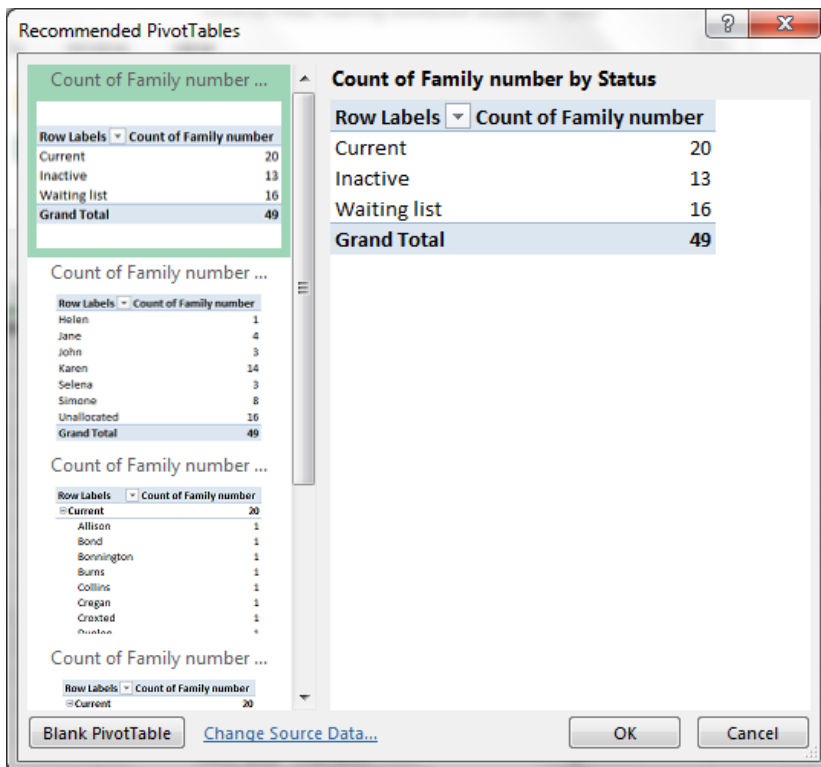
- a. . Hover over the options and select the one that fits your needs (you can make changes later)

1		
2		
3	Row Labels	Count of Family number
4	Current	20
5	Inactive	13
6	Waiting list	16
7	Grand Total	49
8		
9		

- b. You can also create a Pivot table by selecting the worksheet area and then going to the Insert tab and selecting Recommended Pivot Tables



c. Again you will be presented with a choice of Pivot Tables

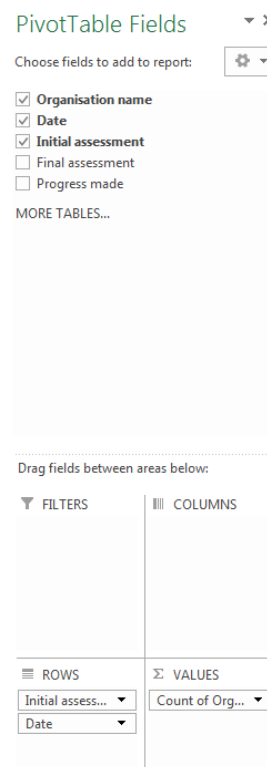


d. Finally - you can also start from scratch by opting to inset a Blank PivotTable

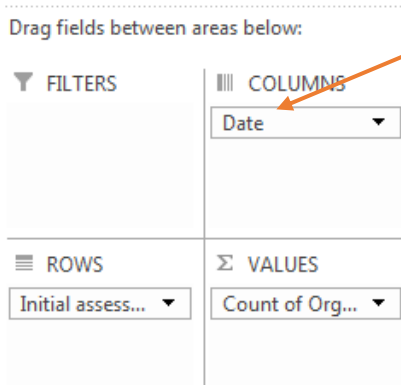
e. The Pivot table side bar is where you can now 'drag and drop' fields around to control the data analysis as you need

f. First check the fields you want displayed – here we've added the Date field and it is automatically added as a row.

Row Labels	Count of Organisation name
1	20
21/09/2013	5
21/11/2013	2
21/12/2013	6
21/01/2014	1
21/02/2014	3
21/03/2014	3
2	20
21/09/2013	4
21/10/2013	1
21/11/2013	3
21/12/2013	3
21/01/2014	3
21/02/2014	4
21/03/2014	2
(blank)	
3	8
21/09/2013	6
21/01/2014	1
21/02/2014	1
4	1
21/02/2014	1
Grand Total	49



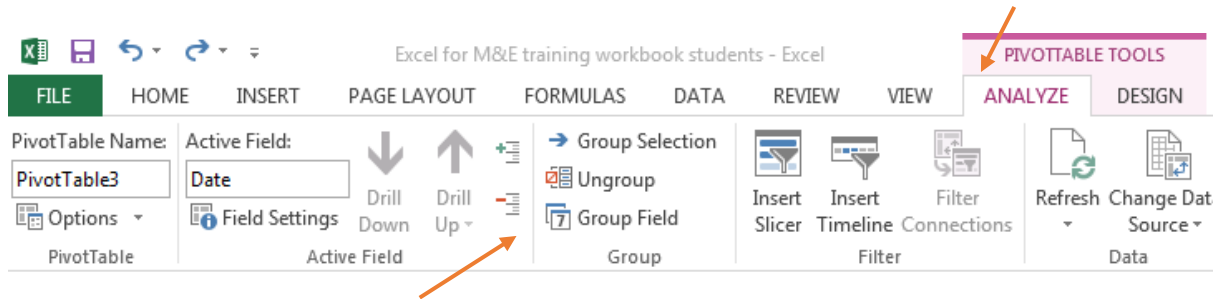
g. Now you can drag the Date field to the Columns quadrant



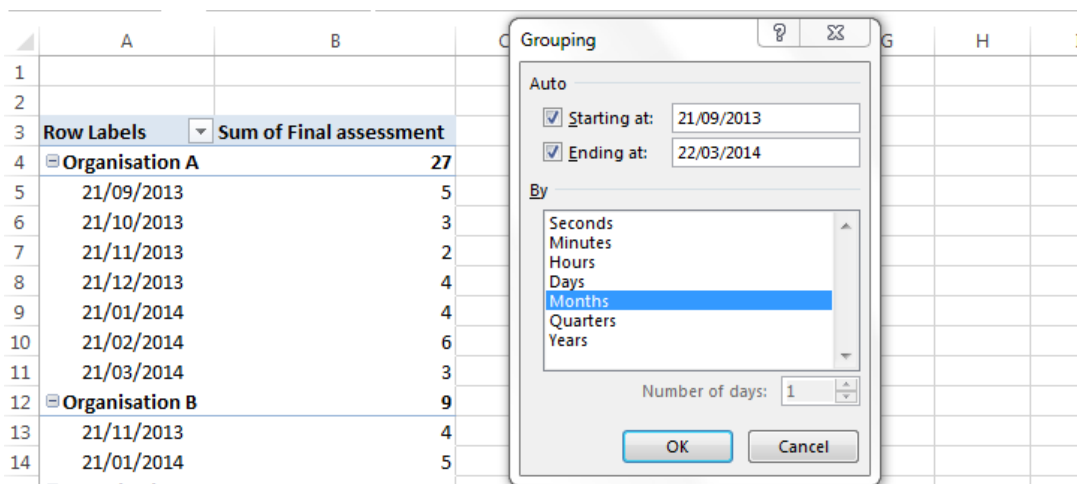
h. This will automatically update the table as below, now displaying dates across as columns

Count of Organisation name	Column Labels								
Row Labels	21/09/2013	21/10/2013	21/11/2013	21/12/2013	21/01/2014	21/02/2014	21/03/2014	(blank)	Grand Total
1	5		2	6	1	3	3		20
2	4	1	3	3	3	4	2		20
3	6				1	1			8
4						1			1
Grand Total	15	1	5	9	5	9	5		49

i. To analyse data further, now select Pivot Table Tools and the Analyze tab.



j. This gives you a range of tools to help you further customise your Pivot Table e.g. Group fields. In this example we can group dates by Months and / or Quarters.



Row Labels	Count of Organisation name
1	20
Qtr1	
Jan	1
Feb	3
Mar	3
Qtr3	
Sep	5
Qtr4	
Nov	2
Dec	6

21) Pivot charts

a. You can also create a PivotChart from the Insert tab

