Excel Next Steps 2



Trust for London Tackling poverty and inequality

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Splitting columns

Often there is a need to break down data to make it easier to work with. For example, if you want to sort people in alphabetical order using their surname you will need to make sure their name is split into first name & surname columns.



Tip: Create a column to the right of the column you wish to split for the results.

A **Delimiter** is a blank space, comma, or other character or symbol that indicates the beginning or end of a character string, word, or data item

Convert Text to Columns Wizard - Step 2 of 3 This screen lets you set the delimiters your data contains. You can see I in the preview below.	how your text is affected
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Merging columns together (CONCAT)

Excel has a built in function to merge text strings together. For example, if you have a first name column and a last name column but you want a Full name column where first and last name are joined together.

The function, when using a table, is as follows:

=CONCAT(Tablename[@[tablecolumnname1]:[tablecolumnname2]])

But Excel can build the formula for you:

- 1. Add an extra column in your table to the right of the two columns you are merging
- 2. Enter the = sign and start typing CONCAT
- 3. Select the CONCAT function suggested by Excel
- 4. Select the first cell in the 2 columns you want to join together.

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5 4 Donald Duck HMP Be	Imarsh SE28	OEB		A	Υ	HMP
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7 6 Ali Baba HMP Bri	xton SW2	5XF		A	Y	HMP
8 7 Wiley Coyote HMP Bri	xton SW2	5XF		А	Y	HMP
9 8 Butch Cassidy HMP Bri	xton SW2	5XF		A	Υ	HMP

If you want to add a space between the text you will need to use a slightly different technique:

- 5. Add an extra column in your table to the right of the two columns you are merging
- 6. Enter the = sign and start typing CONCAT
- 7. Select the CONCAT function suggested by Excel

8. Select the first cell you want to join, then add to the formula," ", and then select the next cell you want to join together. See the screen print below.

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7		6 Ali Baba	HMP Brixton	SW2	5XF	SW25XF	A	Y	HMP
8		7 Wiley Coyote	HMP Brixton	SW2	5XF	SW25XF	А	Y	HMP
9		8 Butch Cassidy	HMP Brixton	SW2	5XF	SW25XF	A	Y	HMP
10		9 Robin Hood	HMP Brixton	SW2	5XF	SW25XF	А	Y	HMP

=CONCAT([@tablecolumnname1]," ", [@ tablecolumnname2])

Data Validation

The Data Validation feature in Microsoft Excel controls what can be input into a cell to ensure accurate and consistent data. Here we're

- 1. Ensure Correct data format
- 2. Limit data entry options to a list

Data Validation for data format

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Data Validation with list options

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6	5 Alain Prost HMP Manche		er 264	59				Guitar			
7		6 Andre	Agassi	HMP Swansea	209	24				Guitar	

An alternative to typing the list in is to use source data you already have. For that you'll need to put the cell references of where the data is into the Source field. Where this is in another sheet – just move to this sheet and select the Column containing the list of options you want displayed.

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Make your data into a table

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4	Andre Agassi	HMP Swansea	14/12/1975		21/03/2003		Guitar		

→ Alternative shortcut: Ctrl + T



Name the table

It is good practice to name the table as it makes life much easier later when working with formulas. Naming the formula is basically giving your data set a name which will enable you to recognise which data set you need to be working with.

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Pivot Tables

Creating a pivot table

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Field values

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Sorting & Filtering a pivot table

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Formatting a pivot table

Like Tables, Pivot Tables can be formatted.



Refreshing data in a Pivot table

If you make changes to the data set being used to the pivot table, you might need to refresh the chart so that the changes are immediately reflected in the chart.

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Recommended Pivot Tables

A short cut to creating pivot tables can be to use the recommended Pivot table function.

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Changing value field settings

In pivot tables you can select different types of setting for the values portion of your Pivot table. You can:

- Give the value set a custom (display) name
- Specify how you want to summarise values
- Specify how you want to display values



Custom value name

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Summarise values by

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Most common calculations used to summarise data:

Function	Summarizes
Sum	The sum of the values adds all the values in the selected data range. This is the default
	function for numeric values.
Count	The number of values. The Count summary function works the same as the COUNTA
	worksheet function. Count is the default function for values other than numbers.
Average	The average of the values. The average is the mean average of the numbers. To
	calculate: Excel adds up all the numbers, then divides by how many numbers there
	are. In other words it is the sum divided by the count.
Max	The largest value.
Min	The smallest value.
Product	The product of the values. The product is the result of multiplying the numbers eg the
	product of 2 and 3 is 6.

Show values As

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Most common ways of displaying data:

Use this calculation	То
No calculation	Turn off custom calculation.
% of Column	Display all the values in each column or series as a percentage of the total for
Total	the column or series.
% of Row Total	Display the value in each row or category as a percentage of the total for the
	row or category.
Rank smallest	Display the rank of selected values in a specific field, listing the smallest item in
to largest	the field as 1, and each larger value with a higher rank value. Create a new
	column for Rank if you want to show the specific amounts too.
Rank largest to	Display the rank of selected values in a specific field, listing the largest item in
smallest	the field as 1, and each smaller value with a higher rank value. Create a new
	column for Rank if you want to show the specific amounts too.

Changing the sort order

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Grouping dates

In Excel 2016 and later versions, Excel automatically groups dates by months & quarters. If you are working with an Excel version prior to that or you want to change the automatic grouping you can manually group dates.



Sub totals and Grand totals

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Summary sheets

In a summary sheet you can display data held in various other sheets in your workbook to see alongside each other. The data in the sheet will dynamically update if new data is added to the other sheets in question.

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You can then copy down the formula as usual.