

Basic Tips for Working with Data

This guide contains some useful tips we should keep in mind when working with data in Excel.

1. **Categorizing similar items into a row or a column**
2. **Displaying multiple data ranges on a worksheet**
3. **Formatting a data range as a Table**
4. **Prioritising important data**
5. **Avoiding the use of spaces to indent data**
6. **Adding new rows or columns**

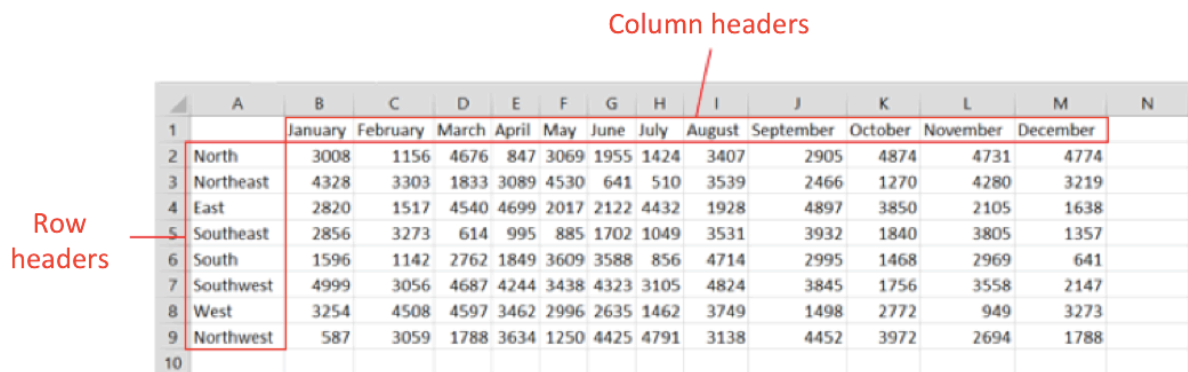
There are a number of features in Excel that allow us to organize and format data on a worksheet.

It's a good idea to keep in mind these guidelines and tips when working with data. They are often overlooked, but are very important to follow especially when we are dealing with large amounts of data in Excel.

Categorizing similar items into a row or a column

A worksheet in Excel is made up of static rows and columns. We can add headers to rows and columns to categorize cell values.

- Row headers are usually found in the first column, starting from cell A2 onwards.
- Column headers are usually found at the top row from cell B1 onwards.



The image shows an Excel worksheet with a table of data. The first column (A2:A10) contains regional names: North, Northeast, East, Southeast, South, Southwest, West, and Northwest. The first row (B1:M1) contains the months of the year: January, February, March, April, May, June, July, August, September, October, November, and December. The data cells contain numerical values. Red boxes highlight the first column (A2:A10) and the first row (B1:M1). A red arrow points to the first column with the label 'Row headers', and another red arrow points to the first row with the label 'Column headers'.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N
1		January	February	March	April	May	June	July	August	September	October	November	December	
2	North	3008	1156	4676	847	3069	1955	1424	3407	2905	4874	4731	4774	
3	Northeast	4328	3303	1833	3089	4530	641	510	3539	2466	1270	4280	3219	
4	East	2820	1517	4540	4699	2017	2122	4432	1928	4897	3850	2105	1638	
5	Southeast	2856	3273	614	995	885	1702	1049	3531	3932	1840	3805	1357	
6	South	1596	1142	2762	1849	3609	3588	856	4714	2995	1468	2969	641	
7	Southwest	4999	3056	4687	4244	3438	4323	3105	4824	3845	1756	3558	2147	
8	West	3254	4508	4597	3462	2996	2635	1462	3749	1498	2772	949	3273	
9	Northwest	587	3059	1788	3634	1250	4425	4791	3138	4452	3972	2694	1788	
10														

Excel will use these headers when we sort or filter data, create reports, pivot tables, graphs etc.

****You may want to think about whether to format your column/row headers differently (e.g. cell fill colour, bold font) in order for them to stand out on your worksheet.***

Displaying multiple data ranges on a worksheet

If you would like to display two different sets of data in a single worksheet, it is always good practice to leave at least 1 row or 1 column empty between the two data ranges, so that it is evident that they are separate. An example of this would be if you wanted to display raw data and summary data on the same worksheet.

Sufficient spacing

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
1		January	February	March	April	May	June	July	August	September	October	November	December			
2	North	3682	3380	3415	522	3839	4990	2844	4895	2819	4652	4879	2889			
3	Northeast	1352	1418	947	2732	1713	1930	2844	2452	4940	4200	2878	4569			
4	East	4787	3082	1276	3888	4555	909	901	2041	1105	3792	1409	2099			
5	Southeast	4122	2877	4938	3492	3158	4848	4771	4907	3701	2218	1350	3558			
6	South	4206	4133	2972	1064	3599	1219	4590	959	1887	4587	1790	2365			
7	Southwest	1450	2418	4065	4154	3586	2594	3254	3153	1563	4854	4061	2128			
8	West	1080	1730	2151	1762	1693	1285	832	4664	4970	3144	2120	1051			
9	Northwest	1131	3877	1740	4836	4228	4363	4982	1651	4711	1898	4750	1198			
10																
11	Quarter	Revenue	Cost	Profits												
12	Q1	50576	29586	20990												
13	Q2	85222	36054	49168												
14	Q3	63718	22843	40875												
15	Q4	54849	23838	31011												

More important than presentation, separating different data ranges helps **Excel easily identify that the data ranges are separate** when we are carrying out data analysis such as **sorting, filtering or using the AutoSum function**.

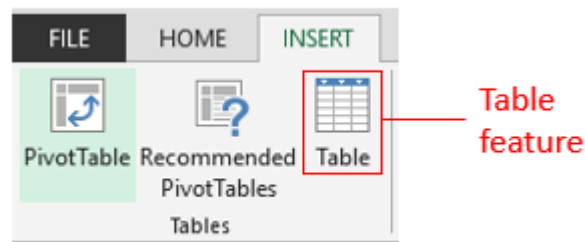
**Given the above, avoid having empty rows or columns within a single data range.*

***You can also distinguish different data ranges using different cell fill colours or cell borders.*

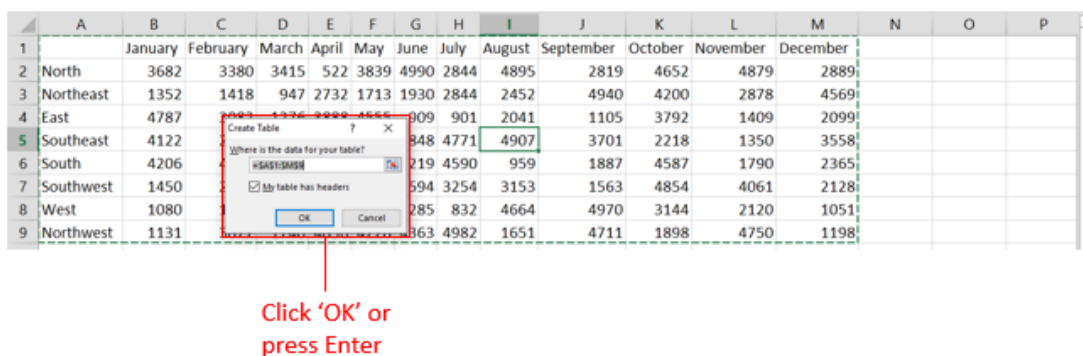
Formatting a data range as an Excel Table

We can help Excel to recognize a range of cells as a Table.

1. Click on a cell within the data range.
2. Click on the Insert Ribbon > Table.



3. Press 'Enter' or click 'OK'



4. Your data range will automatically be formatted using the default table style in Excel.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1	Column1	January	February	March	April	May	June	July	August	September	October	November	December		
2	North	3682	3380	3415	522	3839	4990	2844	4895	2819	4652	4879	2889		
3	Northeast	1352	1418	947	2732	1713	1930	2844	2452	4940	4200	2878	4569		
4	East	4787	3082	1276	3888	4555	909	901	2041	1105	3792	1409	2099		
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9	Northwest	1131	3877	1740	4836	4228	4363	4982	1651	4711	1898	4750	1198		

Sample table in Excel

The Table feature allows us to group multiple data ranges within a worksheet into separate tables quickly. Excel has also several inbuilt **table style formats** we can choose from.

The Table format allows us to use table features seamlessly. (E.g. sort, filter, sum)

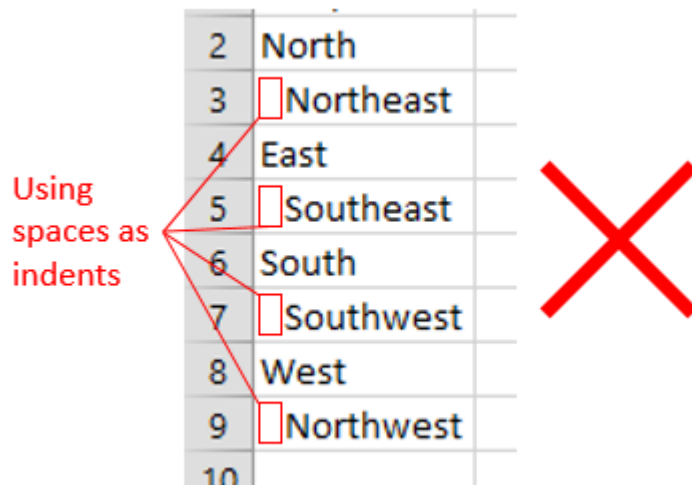
Prioritising Important Data

When we view our worksheet on a computer screen, all rows and columns may not be visible due to space constraints. Hence, it is good to ensure that you prioritize the visibility of important data. You can do this by positioning it above or below another data range in the same worksheet and closer to the first few columns/rows so that it is visible when the worksheet is opened in default view.

	A	B	C	D	E	F	G	H	I	J	K	L	M
1	Column1	January	February	March	April	May	June	July	August	September	October	November	December
2	North	3682	3380	3415	522	3839	4990	2844	4895	2819	4652	4879	2889
3	Northeast	1352	1418	947	2732	1713	1930	2844	2452	4940	4200	2878	4569
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15	Q4	54849	23838	31011									
16													
	Comments for reader: These are sums for FY2017/2018	Increasing the visibility of information outside the data range											

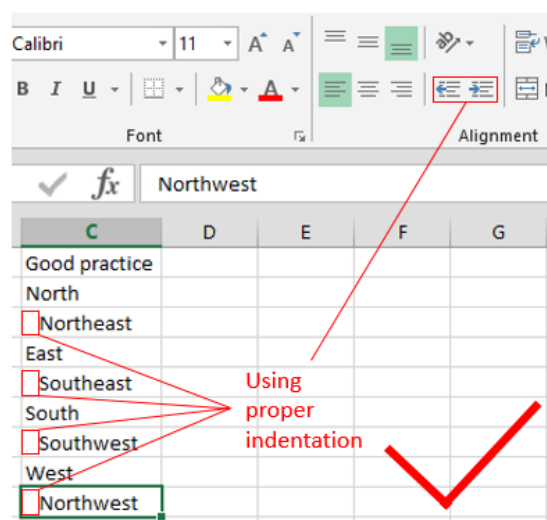
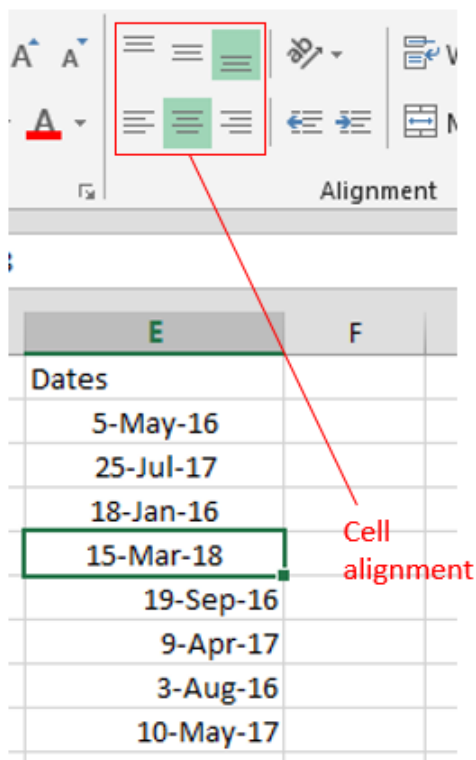
Avoiding the use of spaces to indent data

It's important to avoid indenting data in a cell by adding spaces at the beginning. Spaces can affect how Excel sorts, filters or searches values.



If you need to indent values, use the **Increase or Decrease Indent** icons, or the **align left**, **align centre** or **align right** icons, located in the **Alignment** group in the Home ribbon.

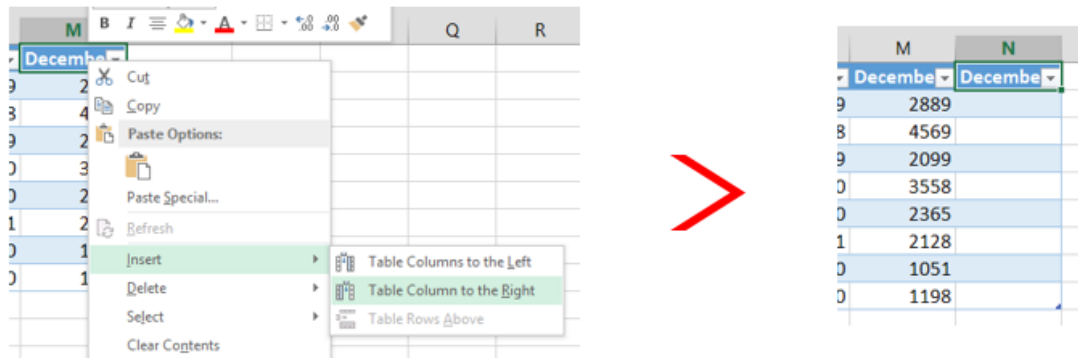
For example, although dates are usually aligned to the right of a cell, we can adjust their alignment using the alignment icons.



Adding new rows or columns

We can add new rows or columns anytime to our tables in Excel.

To add a new column to the right of a table, simply right-click anywhere on the last column, and select Insert > Table Column to the Right.

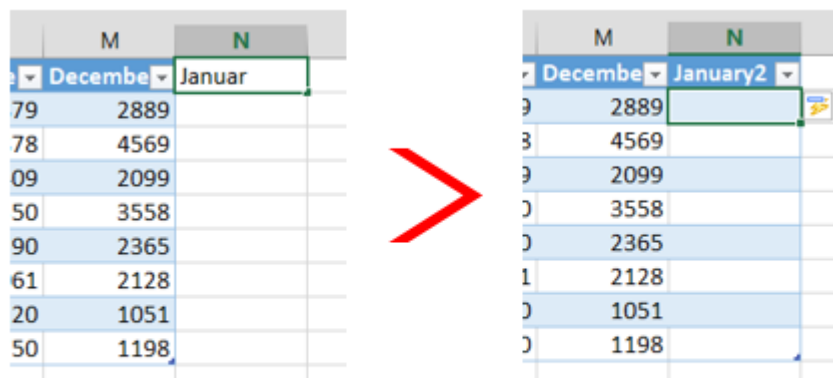


Inserting a new table column

There is another way to do this, which works because of Excel's intellisense!

Excel recognizes the format of your data when it is in a table. If we enter values into cells in a new row at the bottom or a new column to the right of our table, Excel will recognize that you are adding a row/column of data to the existing table and automatically extend both the format and formulas within our existing data set.

For this to work, the previous 3 cells in the row/column must have the same format or formulas for Excel to automatically extend them.



Automatically inserting a new table column by cell entry