

How can I use the FILTER function in Excel?

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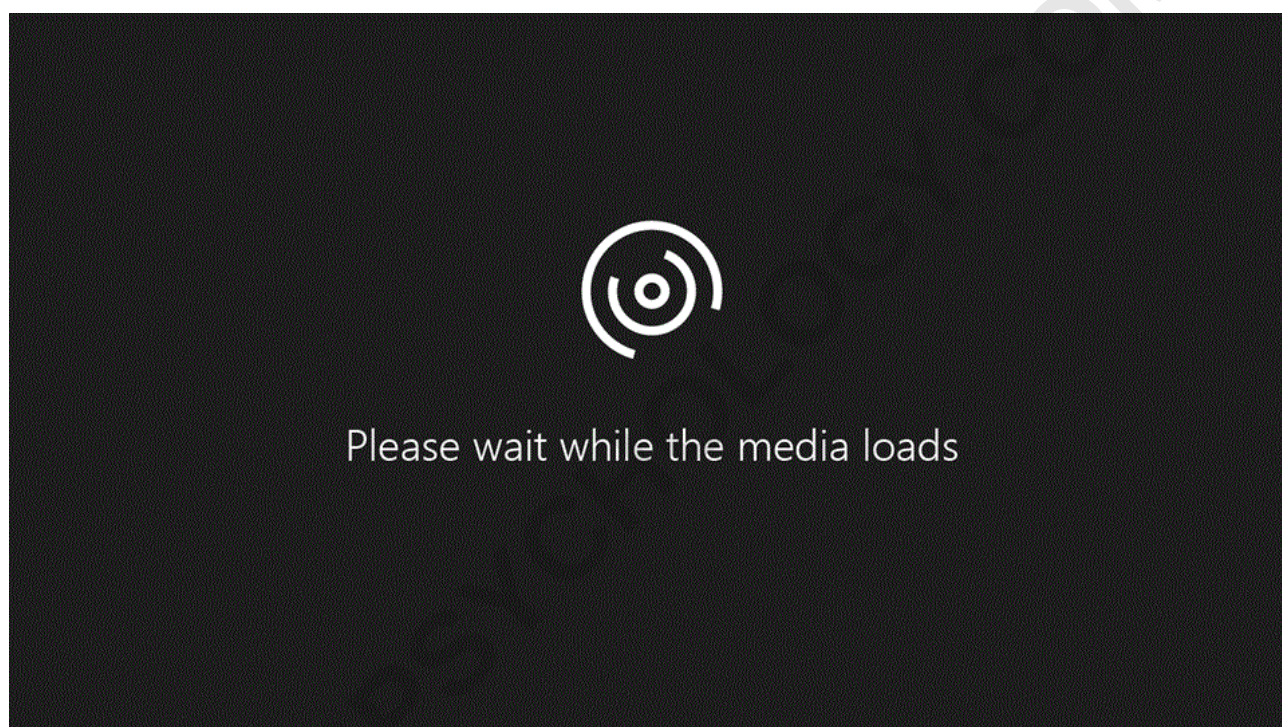
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The FILTER function in Excel is a powerful tool that allows users to extract specific data from a large dataset. This function works by applying multiple criteria to a range of data and returning only the cells that meet those criteria. It is useful for organizing and analyzing data, as well as creating customized reports. To use the FILTER function, users must first select the data range and then specify the criteria they want to filter by. This function is highly versatile and can be applied to various types of data, making it an essential feature for data analysis in Excel.

The **FILTER** function allows you to filter a range of data based on criteria you define.



In the following example we used the formula `=FILTER(A5:D20,C5:C20=H2,"")` to return all records for Apple, as selected in cell H2, and if there are no apples, return an empty string ("").

F5 X ✓ fx =FILTER(A5:D20,C5:C20=H2)									
	A	B	C	D	E	F	G	H	I
1									
2	Sales Transactions						Product:	Apple	
3									
4	Region	Sales Rep	Product	Units	Region	Sales Rep	Product	Units	
5	East	Tom	Apple	6,380	East	Tom	Apple	6,380	
6	West	Fred	Grape	5,619	East	Fritz	Apple	4,394	
7	North	Amy	Pear	4,565	South	Sal	Apple	1,310	
8	South	Sal	Banana	5,323	South	Hector	Apple	9,814	
9	East	Fritz	Apple	4,394					
10	West	Sravan	Grape	7,195					
11	North	Xi	Pear	5,231					
12	South	Hector	Banana	2,427					
13	East	Tom	Banana	4,213					
14	West	Fred	Pear	3,239					
15	North	Amy	Grape	6,420					
16	South	Sal	Apple	1,310					
17	East	Fritz	Banana	6,274					
18	West	Sravan	Pear	4,894					
19	North	Xi	Grape	7,580					
20	South	Hector	Apple	9,814					

The FILTER function filters an array based on a Boolean (True/False) array.

=FILTER(array,include,)

Argument	Description
array Required	The array, or range to filter
include Required	A Boolean array whose height or width is the same as the array
Optional	The value to return if all values in the included array are empty (filter returns nothing)

Notes:

An array can be thought of as a row of values, a column of values, or a combination of rows and columns of values. In the example above, the source array for our FILTER formula is range A5:D20.

The FILTER function will return an array, which will spill if it's the final result of a formula. This means that Excel will dynamically create the appropriate sized array range when you press

Formula: `=SORT(FILTER(A5:D20,(C5:C20=H1)*(A5:A20=H2),""),4,-1)`

Region	Sales Rep	Product	Units
East	Tom	Apple	6,380
East	Fritz	Apple	4,394

In this case, we're using the FILTER function with the addition operator (+) to return all values in our array range (A5:D20) that have Apples **OR** are in the East region, and then sort Units in descending order: **=SORT(FILTER(A5:D20,(C5:C20=H1)+(A5:A20=H2),""),4,-1)**.

=SORT(FILTER(A5:D20,(C5:C20=H1)+(A5:A20=H2),""),4,-1)

E	F	G	H	I	J
		Product:	Apple		
		Region:	East		
	Region	Sales Rep	Product	Units	
	South	Hector	Apple	9,814	
	East	Tom	Apple	6,380	
	East	Fritz	Banana	6,274	
	East	Fritz	Apple	4,394	
	East	Tom	Banana	4,213	
	South	Sal	Apple	1,310	

Notice that none of the functions require absolute references, since they only exist in one cell, and spill their results to neighboring cells.

Need more help?

You can always ask an expert in the [Excel Tech Community](#) or get support in [Communities](#).