



Sort and filter lists

Excel is an excellent number cruncher, but it's also great for creating and managing lists. You can track everything from e-mail addresses to inventory items in a list, but for lists to be useful, you need to be able to quickly find the information that you're looking for. Take this tutorial to learn how.

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Before you begin

What you'll learn

After completing this tutorial, you'll be able to:

- Organize a worksheet to be managed as a list.
- Quickly arrange a list alphabetically or numerically.
- Filter a list to show specific items.
- Sort and filter a list by using several criteria.
- Reset and remove filters that have been applied to a list.

Requirements

- Excel for Mac 2011
- Basic Excel skills, including how to open a workbook, and select cells, columns, and rows.

 **Tip** If you are new to Excel, first take the tutorial "Excel basics".

Practice file

Tutorial lessons are designed to be viewed in order. Use the practice file **SortFilterLists.xlsx** for hands-on experience while taking the tutorial.

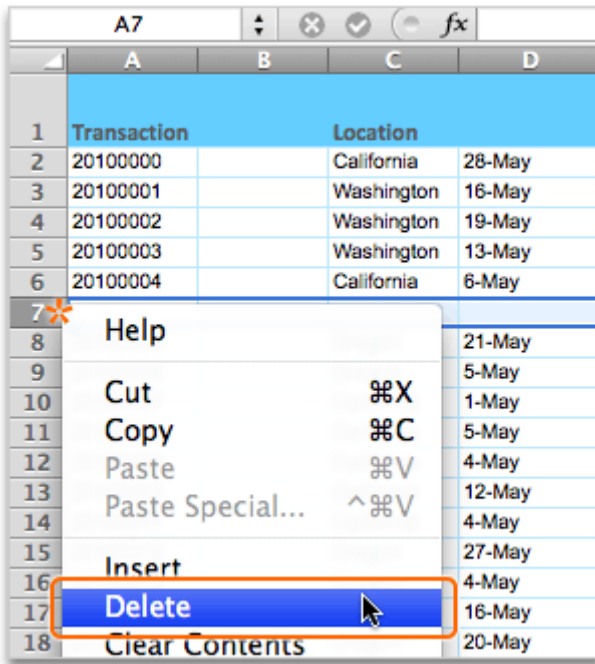
Estimated time to complete:  20 minutes

1. Prepare your worksheet

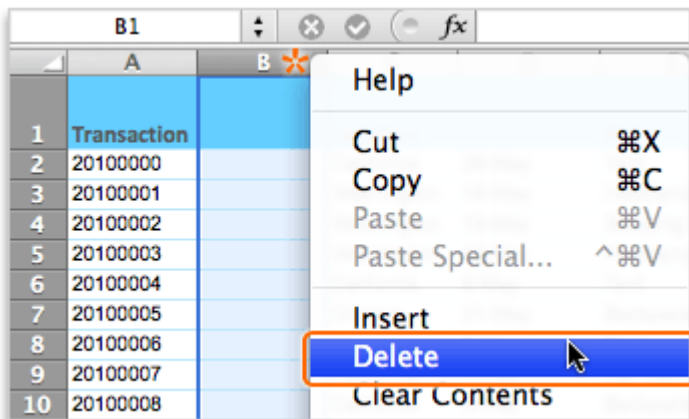
In Excel, a list can contain one or many columns of data. To manage a list, you first need to make sure that your worksheet data is organized properly. For example, the data should be arranged in labeled columns and should not contain any blank rows or blank columns.

Let's organize the worksheet for this tutorial so that it's easy to manage as a list.

- 1 Open the practice file, which is located at the beginning of this tutorial.
- 2 Hold down CONTROL and click the heading for row 7 (or right-click the heading), and then click **Delete**.



- 3 Hold down CONTROL and click the heading for column B (or right-click the heading), and then click **Delete**.



- 4 Click cell C1, type **Date** for the label, and then press RETURN.

	A	B	C	D
1	Transaction	Location	Date	Item
2	20100000	California	28-May	Tent
3	20100001	Washington	16-May	Headlamp
4	20100002	Washington	19-May	Sleeping Bag

- 5 Notice that all columns are now labeled, and that the list no longer contains any blank rows or columns.

	A	B	C	D	E	F	G
1	Transaction	Location	Date	Item	Wholesale Price	Number Sold	Total Sales
2	20100000	California	28-May	Tent	\$199.00	2	\$398.00
3	20100001	Washington	16-May	Headlamp	\$39.99	2	\$79.98
4	20100002	Washington	19-May	Sleeping Bag	\$58.50	1	\$58.50
5	20100003	Washington	13-May	Headlamp	\$39.99	1	\$39.99
6	20100004	California	6-May	Tent	\$199.00	3	\$597.00
7	20100005	Oregon	21-May	Backpack	\$98.77	1	\$98.77
8	20100006	Oregon	5-May	Backpack	\$98.77	1	\$98.77

Hints

- To keep column labels visible as you scroll through a long list, you can freeze the row that contains them. For example, on the practice sheet, click anywhere in row 2 (such as cell A2), and then click **Window > Freeze Panes**. To unfreeze the row, click **Window > Unfreeze Panes**.

Before you move on

Make sure that you can do the following:

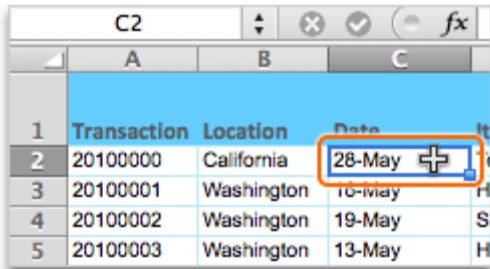
- Prepare a worksheet to be managed as a list by adding heading labels and deleting blank rows and columns.

2. Sort information in a list

One way to arrange data in a list is to sort it alphabetically or numerically. For example, you might want to see all transactions arranged by date.

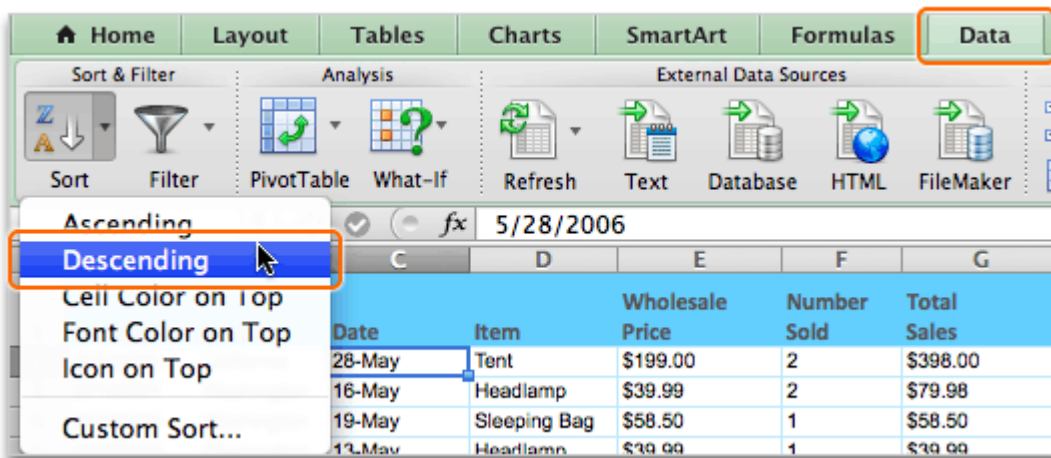
Let's sort the list to show the transactions by date, with the most recent date shown first.

- 1 Click any cell in column C that contains data (for example, C2).



	A	B	C
1	Transaction	Location	Date
2	20100000	California	28-May
3	20100001	Washington	16-May
4	20100002	Washington	19-May
5	20100003	Washington	13-May

- 2 On the **Data** tab, under **Sort & Filter**, click the arrow next to **Sort**, and then click **Descending**.




The screenshot shows the Microsoft Office ribbon with the 'Data' tab selected. The 'Sort & Filter' group is expanded, and the 'Descending' option is selected from the dropdown menu. The background shows a spreadsheet with the following data:

Date	Item	Wholesale Price	Number Sold	Total Sales
28-May	Tent	\$199.00	2	\$398.00
16-May	Headlamp	\$39.99	2	\$79.98
19-May	Sleeping Bag	\$58.50	1	\$58.50
13-May	Headlamp	\$39.99	1	\$39.99

- 3 Notice that the list is now arranged by date, with the most recent transactions appearing first. Also, all associated data in the other columns is arranged to correspond to the order of the sorted column.

	A	B	C	D	E	F	G
1	Transaction	Location	Date	Item	Wholesale Price	Number Sold	Total Sales
2	20100019	California	30-May	Backpack	\$220.30	2	\$440.60
3	20100047	California	30-May	Sleeping Bag	\$58.50	3	\$175.50
4	20100093	Washington	30-May	Car Rack	\$415.75	2	\$831.50
5	20100125	Washington	30-May	Tent	\$269.00	6	\$1,614.00
6	20100146	Washington	30-May	Sleeping Bag	\$99.00	1	\$99.00
7	20100172	Oregon	30-May	Headlamp	\$24.99	4	\$99.96
8	20100181	Washington	30-May	Tent	\$269.00	6	\$1,614.00
9	20100218	Oregon	30-May	Car Rack	\$560.25	2	\$1,120.50
10	20100222	Oregon	30-May	Car Rack	\$560.25	2	\$1,120.50
11	20100247	California	30-May	Sleeping Bag	\$139.99	4	\$559.96
12	20100257	Oregon	30-May	Tent	\$269.00	3	\$807.00
13	20100300	Washington	30-May	Sleeping Bag	\$139.99	4	\$559.96
14	20100322	Oregon	30-May	Headlamp	\$24.99	1	\$24.99
15	20100327	Washington	30-May	Headlamp	\$65.00	4	\$260.00
16	20100340	California	30-May	Car Rack	\$560.25	1	\$560.25
17	20100343	California	30-May	Tent	\$379.00	5	\$1,895.00
18	20100358	Washington	30-May	Car Rack	\$560.25	1	\$560.25
19	20100510	Washington	30-May	Tent	\$229.00	1	\$229.00
20	20100532	California	30-May	Headlamp	\$65.00	4	\$260.00
21	20100552	California	30-May	Headlamp	\$65.00	4	\$260.00
22	20100570	California	30-May	Tent	\$359.00	5	\$1,795.00
23	20100678	Washington	30-May	Tent	\$359.00	5	\$1,795.00
24	20100696	California	30-May	Headlamp	\$65.00	1	\$65.00
25	20100028	Washington	29-May	Sleeping Bag	\$58.50	5	\$292.50
26	20100072	Oregon	29-May	Sleeping Bag	\$58.50	1	\$58.50
27	20100111	California	29-May	Headlamp	\$39.99	4	\$159.96

 **Note** When your data contains heading labels (for example, Location, Date, Item), the labels are not included when you sort.

Hints

- To view the list in its original order, make sure that one column retains its original order, and then sort by that column (for example, a column of transaction numbers such as the Transaction column in the tutorial practice file).
- You can sort columns, but not rows.
- You cannot sort a column that contains merged cells. To unmerge cells, select the cells that contain merged data. On the **Home** tab, under **Alignment**, click the arrow next to **Merge**, and then click **Unmerge Cells**.
- When you sort a column of cells that contains text data rather than numerical data, the data is arranged alphabetically.

Before you move on

Make sure that you can do the following:

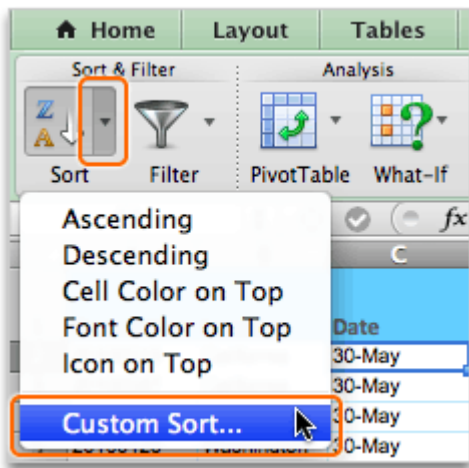
- Sort a list that contains either numerical or text data.

3. Sort by several columns at once

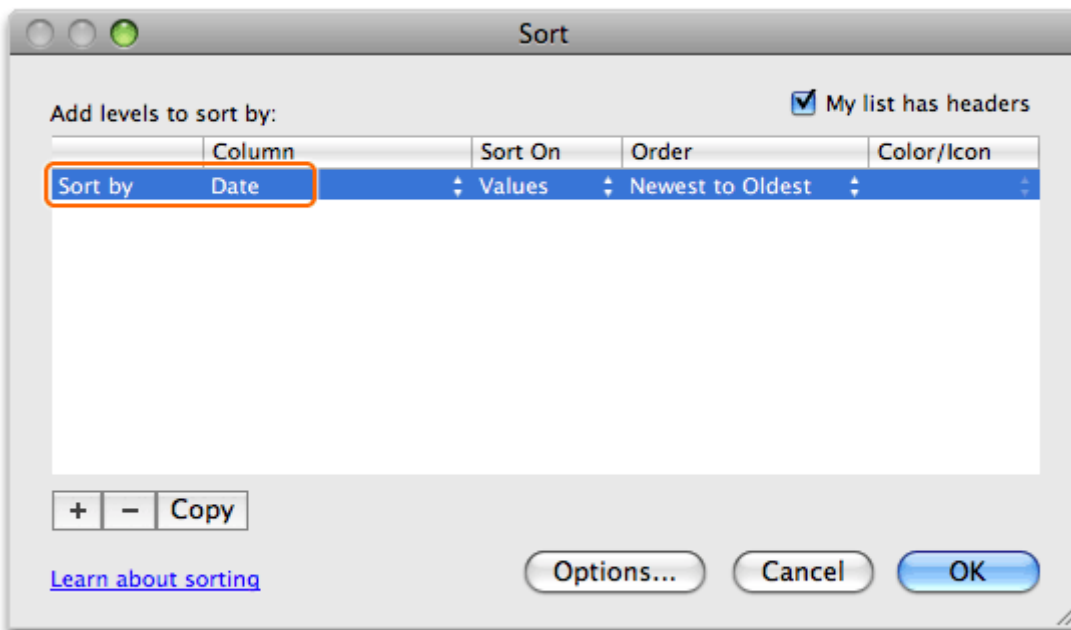
In the last lesson, you sorted the list by date, showing the transactions from newest to oldest. But what if you want to sort the list by additional criteria? For example, you might want to see the transactions listed by date, and then for each date, transactions listed by price from highest to lowest.

Let's sort the list by additional criteria.

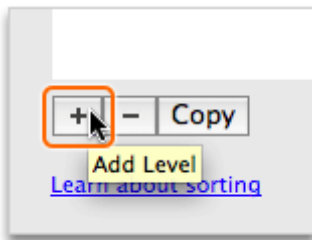
- 1 Click the arrow next to **Sort**, and then click **Custom Sort**.



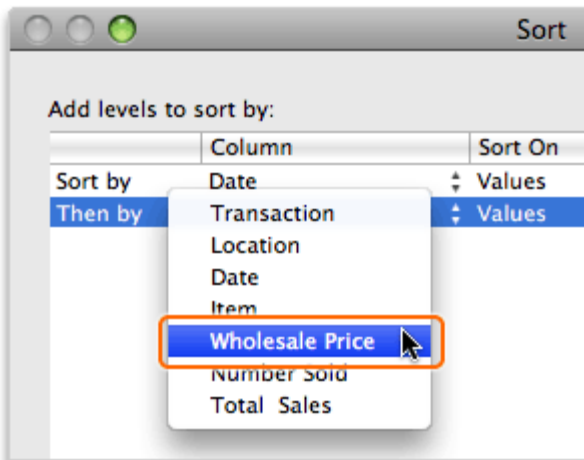
- 2 Notice that the **Sort** dialog box already includes one sort criterion (for example, Sort by Date) based on the sort done in the previous lesson.



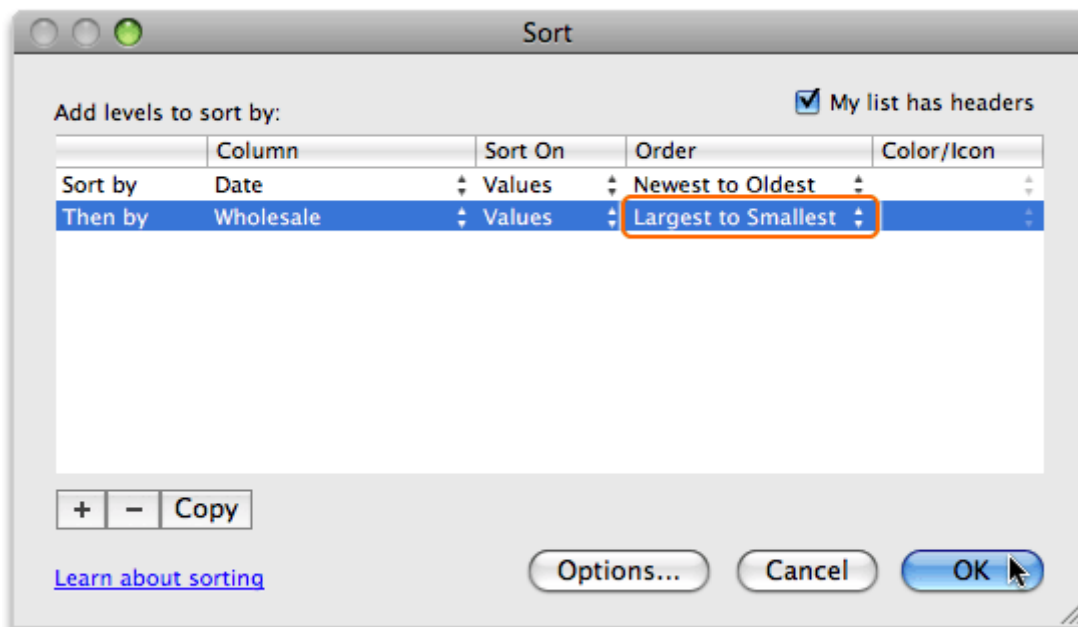
- 3 To add another sort criteria, click the + button.




- 4 Click the blank area to the right of **Then by**, and then click **Wholesale Price**.



- 5 On the **Order** pop-up menu, click **Largest to Smallest**, and then click **OK**.



 **Tip** To change the order of sort criteria, click **Sort by** or **Then by**, and then drag the criteria in to the order that you want.

- 6 Notice that the list is now sorted by date, newest to oldest, and within each date, by wholesale price, largest to smallest.

	A	B	C	D	E	F
1	Transaction	Location	Date	Item	Wholesale Price	Number Sold
2	20100218	Oregon	30-May	Car Rack	\$560.25	2
3	20100222	Oregon	30-May	Car Rack	\$560.25	2
4	20100340	California	30-May	Car Rack	\$560.25	1
5	20100358	Washington	30-May	Car Rack	\$560.25	1
6	20100093	Washington	30-May	Car Rack	\$415.75	2
7	20100343	California	30-May	Tent	\$379.00	5
8	20100570	California	30-May	Tent	\$359.00	5
9	20100678	Washington	30-May	Tent	\$359.00	5
10	20100125	Washington	30-May	Tent	\$269.00	6
11	20100181	Washington	30-May	Tent	\$269.00	6
12	20100257	Oregon	30-May	Tent	\$269.00	3
13	20100510	Washington	30-May	Tent	\$229.00	1

Before you move on

Make sure that you can do the following:

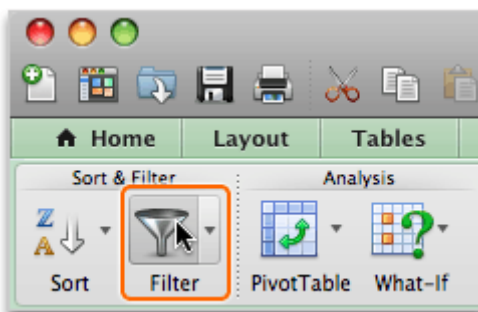
- Sort a list by multiple criteria.

4. Filter a list

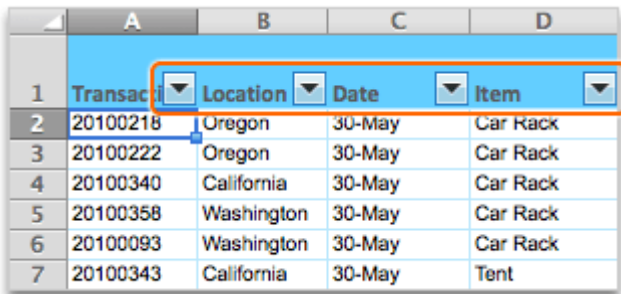
Filtering is another way to view data in a list. While sorting arranges all items either alphabetically or numerically, filtering shows only those items that meet certain criteria. For example, you might want to see only those transactions that occurred on a specific date.

Let's filter the list to show transactions that occurred on May 05.

- 1 Click any cell in the list that contains data (for example, A2).
- 2 On the **Data** tab, under **Sort & Filter**, click **Filter**.



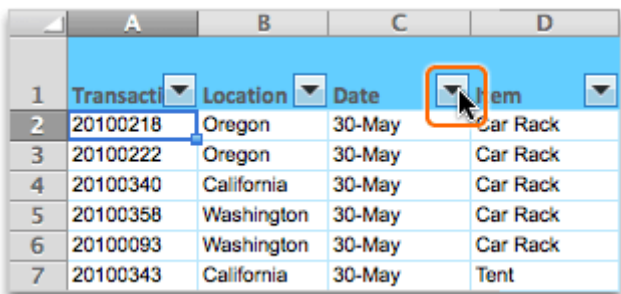
- 3 Notice that a filter arrow appears on the cell of each column label.



A screenshot of an Excel spreadsheet with columns A, B, C, and D. The header row (row 1) contains the labels 'Transacti', 'Location', 'Date', and 'Item'. Each label has a small downward-pointing arrow (filter arrow) to its right. A blue box highlights the filter arrows for the 'Location', 'Date', and 'Item' columns. The data rows (rows 2-7) contain transaction numbers, locations (Oregon, California, Washington), dates (30-May), and items (Car Rack, Tent).

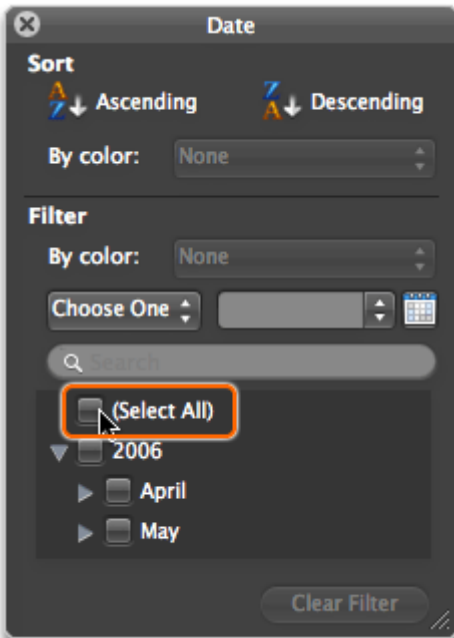
	A	B	C	D
1	Transacti	Location	Date	Item
2	20100218	Oregon	30-May	Car Rack
3	20100222	Oregon	30-May	Car Rack
4	20100340	California	30-May	Car Rack
5	20100358	Washington	30-May	Car Rack
6	20100093	Washington	30-May	Car Rack
7	20100343	California	30-May	Tent

- 4 Click the filter arrow for the **Date** column label.

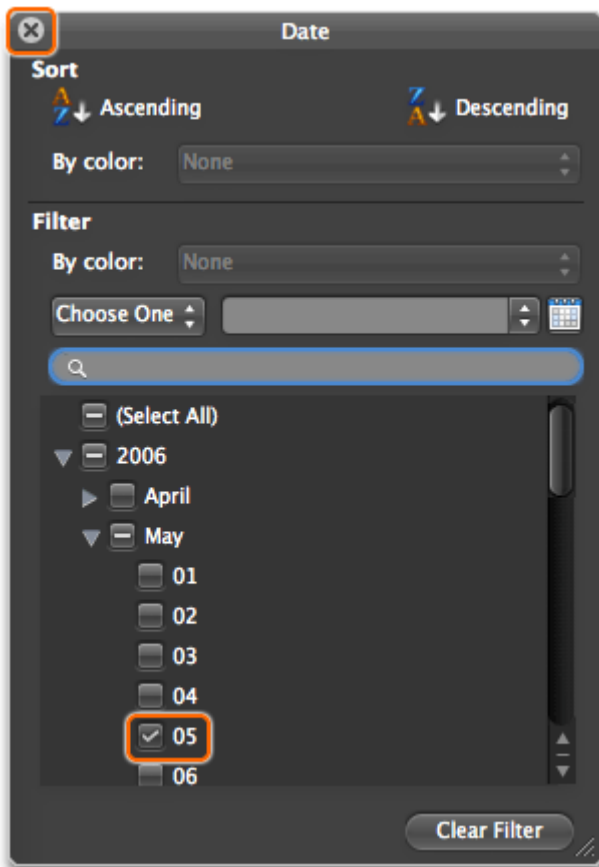


A screenshot of the same Excel spreadsheet as in step 3. The filter arrow for the 'Date' column label is highlighted with a red box. A mouse cursor is positioned over the arrow, indicating it is about to be clicked.

- 5 In the Filter panel, clear the **Select All** check box.




- 6 Click the arrow next to **May**, select the **05** check box, and then click **X** to close the Filter panel.



- 7 Notice that the list is filtered to show only the transactions that occurred on May 05, and that the row numbers for the rows that match the filter criteria appear in blue.

	A	B	C	D	E
1	Transacti	Location	Date	Item	Wholesale Price
592	20100179	California	5-May	Car Rack	\$560.25
593	20100185	Washington	5-May	Car Rack	\$560.25
594	20100208	Oregon	5-May	Car Rack	\$560.25
595	20100294	Oregon	5-May	Car Rack	\$560.25
596	20100431	Washington	5-May	Car Rack	\$560.25
597	20100016	California	5-May	Car Rack	\$415.75
598	20100269	Oregon	5-May	Tent	\$379.00
599	20100636	California	5-May	Tent	\$359.00
600	20100501	California	5-May	Backpack	\$275.79
601	20100581	California	5-May	Backpack	\$275.79
602	20100237	Washington	5-May	Tent	\$269.00
603	20100255	Washington	5-May	Tent	\$269.00
604	20100383	Oregon	5-May	Sleeping Bag	\$269.00
605	20100400	Washington	5-May	Sleeping Bag	\$269.00
606	20100417	Oregon	5-May	Sleeping Bag	\$269.00

Hints

- A filter icon  appears on the columns that have been filtered.
- To move the Filter panel to another location on the sheet, drag the panel toolbar.

Before you move on

Make sure that you can do the following:

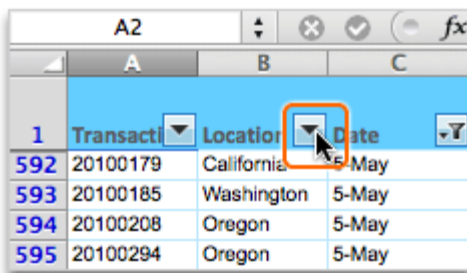
- Filter a list by several criteria.

5. Filter by custom criteria

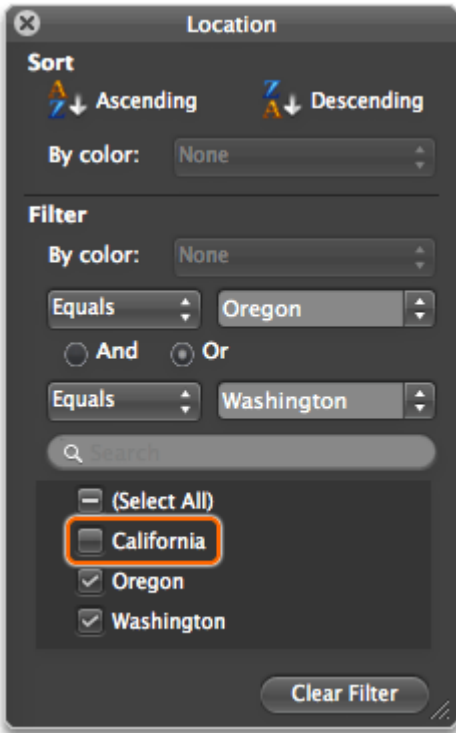
You can filter a list by more than one column at a time, as well as by custom criteria. For example, of the items that appear on a specific date, you might want to see only transactions for a specific location within a specific price range.

Let's filter the list to show the May 05 transactions in Oregon and Washington with total sales between \$500 and \$1000.

- 1 Click the filter arrow for the **Location** column label.



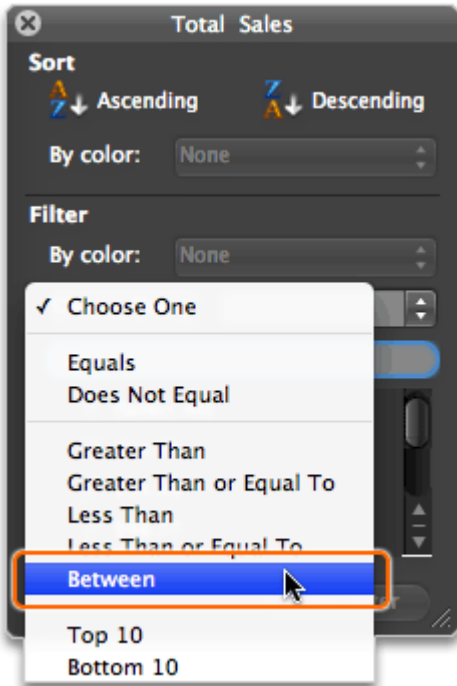
- 2 Clear the **California** check box, and then click **X** to close the Filter panel.



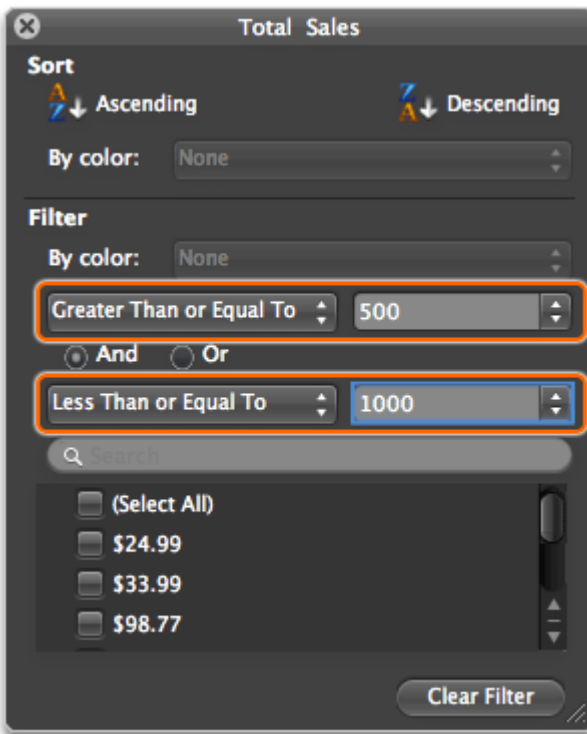
- 3 Click the filter arrow for the **Total Sales** column label.

Wholesale Price	Number Sold	Total Sales
\$560.25	2	\$1,120.50
\$560.25	2	\$1,120.50
\$560.25	1	\$560.25
\$560.25	2	\$1,120.50

- 4 On the **Choose One** pop-up menu, click **Between**.



- 5 In the boxes, type **500** and **1000** as shown below, and then click **X** to close the Filter panel.



- 6 Notice that the list now shows only May 05 transactions in Washington and Oregon with total sales between \$500 and \$1000.

	A	B	C	D	E	F	G
1	Transacti	Locati	Date	Item	Wholesale Price	Number Sold	Total Sales
595	20100294	Oregon	5-May	Car Rack	\$560.25	1	\$560.25
598	20100269	Oregon	5-May	Tent	\$379.00	2	\$758.00
602	20100237	Washington	5-May	Tent	\$269.00	2	\$538.00
606	20100417	Oregon	5-May	Sleeping Bag	\$269.00	3	\$807.00

Before you move on

Make sure that you can do the following:

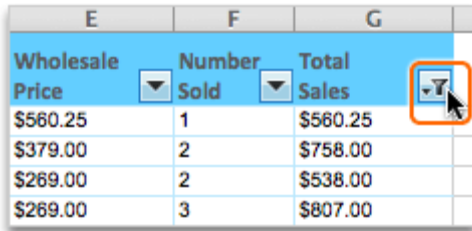
- Filter a list by custom criteria.

6. Reset filters

After you filter a list to see the information that you want, you can reset the filters to show the hidden rows. You can reset filters one at a time or all at once.

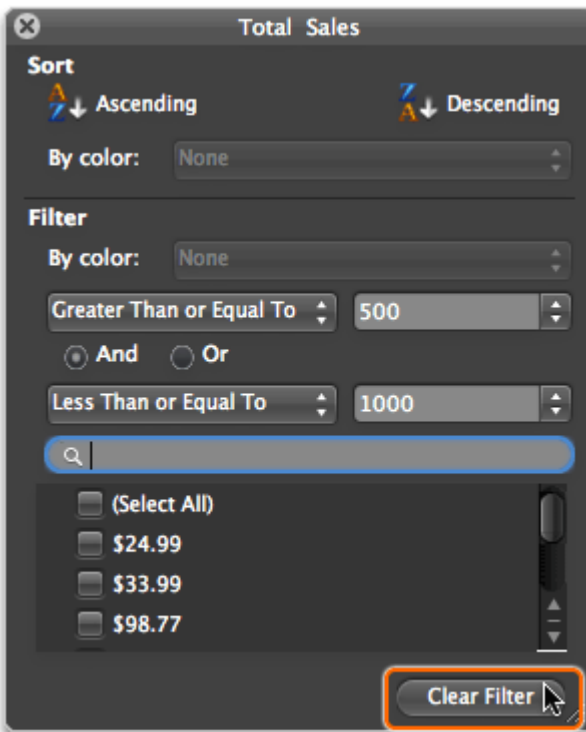
Let's reset a filter for a single column and then for the entire list.

- 1 Click the filter arrow for the **Total Sales** column label.

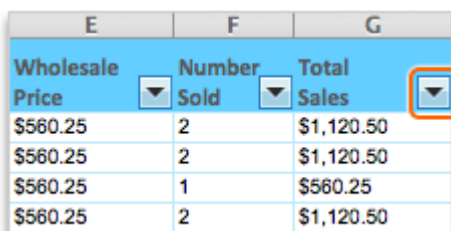


Wholesale Price	Number Sold	Total Sales
\$560.25	1	\$560.25
\$379.00	2	\$758.00
\$269.00	2	\$538.00
\$269.00	3	\$807.00

- 2 In the Filter panel, click **Clear Filter**, and then click X to close the Filter panel.

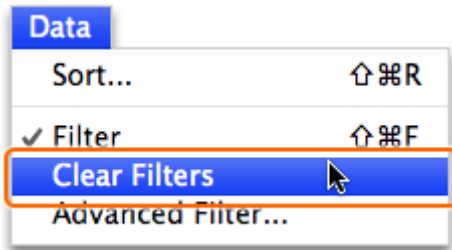



- 3 Notice that the **Total Sales** column is no longer filtered and that the filter icon no longer appears on the column label.



Wholesale Price	Number Sold	Total Sales
\$560.25	2	\$1,120.50
\$560.25	2	\$1,120.50
\$560.25	1	\$560.25
\$560.25	2	\$1,120.50

- 4 To reset filters for the entire list, click **Data > Clear Filters**.



 **Note** If the **Clear Filters** option is unavailable, all filters have been reset.

- 5 Notice that the filter icons no longer appear on the column labels and that row numbers no longer appear in blue, indicating that no filters are applied to the list.

	A	B	C	D	E	F	G
1	Transacti	Location	Date	Item	Wholesale Price	Number Sold	Total Sales
2	20100218	Oregon	30-May	Car Rack	\$560.25	2	\$1,120.50
3	20100222	Oregon	30-May	Car Rack	\$560.25	2	\$1,120.50
4	20100340	California	30-May	Car Rack	\$560.25	1	\$560.25
5	20100358	Washington	30-May	Car Rack	\$560.25	1	\$560.25
6	20100093	Washington	30-May	Car Rack	\$415.75	2	\$831.50
7	20100343	California	30-May	Tent	\$379.00	5	\$1,895.00

Hints

- To turn off filtering for the entire sheet, on the **Data** tab, under **Sort & Filter**, click **Filter**.

Before you move on

Make sure that you can do the following:

- Reset a filter applied to one column and filters applied to an entire list.

Quick Reference Card

To	Do this
Delete a blank row or column	Hold down CONTROL and click the column or row heading (for example, A or 1), and then click Delete . Or, right-click the column or row heading, and then click Delete .
Keep column labels visible while scrolling	Click anywhere in the row below the one that you want to remain visible. Then click Window > Freeze Panes . To unfreeze the row, click Window > Unfreeze Panes .
Sort a column	Click any data cell in the column. On the Data tab, under Sort & Filter , click the arrow next to Sort , and then select an option.
Return a list to the order in which the data was originally entered	Make sure the list includes a column (for example, "Transaction") that organizes the data in the order that it was entered. Then, sort by that column.
Sort by several columns at once	On the Data tab, under Sort & Filter , click the arrow next to Sort , and then click Custom Sort . Then, add your sort criteria.
Turn on filtering	On the Data tab, under Sort & Filter , click Filter .
Show the Filter panel	Click the filter arrow on the column label for the column that you want to filter.
Clear a filter from one column	Click the filter arrow on the column label, and then click Clear Filter .
Clear all filters from a list	Click Data > Clear Filters .

More Hints

- Sorting arranges all items in a list either alphabetically or numerically. Filtering shows only those items in a list that meet specific criteria.
- Before you sort or filter a list, you should delete empty columns and rows, and add a descriptive name for all column labels (for example, Location, Date, Item).
- A filter icon on the column label indicates that the column has been filtered. Also, row headings (for example, 1, 2, 3) appear in blue to indicate which rows meet the selected filter criteria.
- You can sort columns, but not rows.
- Additional sort and filter options are available on the **Data** menu (for example, **Data > Clear Filters**).