



Microsoft Excel —Databases

Setting up the File

Columns are *fields*

Rows are *records*

- The first row of the file must contain the field headings
- Columns must have unique names

Selecting Before Sorting...

In earlier versions of Excel, you had to select all of the records in a list before you could sort it. Starting in Excel 5.0, a list is identified by placing at least one blank row or column between the list and any other data on the worksheet. Before you can sort by a single field you must click anywhere in the column within the list

Freezing Panes...

When working with lists it's often necessary to freeze part of the list, generally the first one or two columns as well as heading titles. To freeze panes, **click the cell just below the column titles and just to the right of the information you would like to freeze on the left**. Choose Freeze Panes from the View tab, Window Group. Now as you scroll down and scroll to the right you will still be able to view the column headings and row information.

Special Number Formats

Excel has included special number formats for telephone numbers, zip codes and social security numbers. These are in the Format menu ► Cells ► Special. Click the column header to apply these to the entire column. **Do not use** the Special format for zip codes if you are going to merge to Word, instead use the Text format.

Sorting a List by One Field



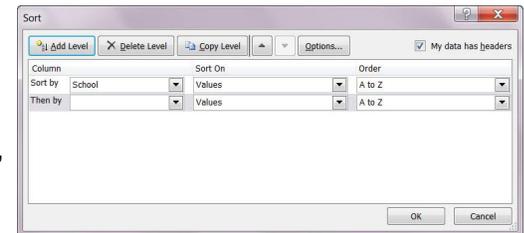
When you sort a list, Microsoft Excel rearranges rows according to the contents of a column you choose. You can also choose an ascending or descending sort order. The sort order is the way you want the data arranged. For example, when you use an ascending sort order, numbers are sorted from 1 to 9, text is sorted from A to Z, and dates are sorted from earliest to latest. When you use a descending sort order, numbers are sorted from 9 to 1, text is sorted from Z to A, and dates are sorted from latest to earliest.

1. Click on any cell in the column to be sorted
2. Click on the Sort Ascending button or the Sort Descending button on the Home tab

Sorting a List by More Than One Field

If you want to sort duplicate rows further, you can specify a second column to sort by using the Add Level button. If there are duplicate items in this second column, you can specify a third column to sort by using the Add Level button.

Microsoft Excel saves the sort options you select in the Sort dialog box and Sort Options dialog box — such as the Sort By column, sort order (ascending or descending), and sort orientation (top to bottom or left to right) — and displays them each time you choose the Sort command until you change the options or sort another list.

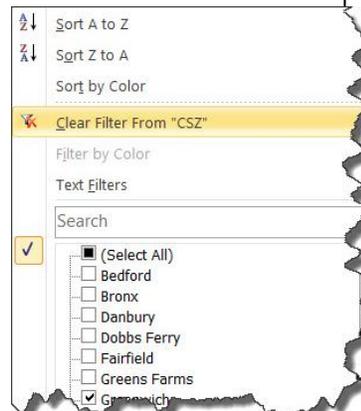
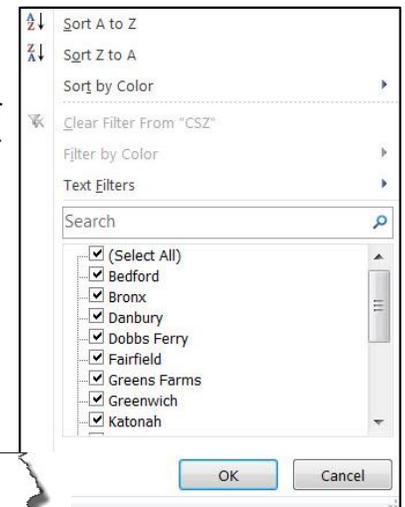


Filtering Lists Using AutoFilter

Auto Filter enables you to display a subset of your list with a click of a mouse button. Home tab, Editing group, Sort & Filter, Filter will display the filter menus. Microsoft Excel places drop-down arrows directly on the column labels of your list. Clicking on an arrow displays a list of all the unique items in the column. Use the check boxes in the filter menu to identify the records you would like to view.

Removing a Filter

To remove filter criteria for a single column, select Clear Filter from ... in the filter pull down menu. To remove the filters entirely from the columns use the Home tab, Editing group, Sort & Filter and click Filter..



Excel Outlines...

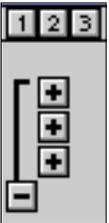
Automatic subtotals inserts sub-total and Grand Total rows and outlines the list

Using the outline symbols, you can hide detail data to display only summary data

Clicking on the numbers in the outline headings hides or shows the values associated with that outline level.

	C	D	E	F
1	Salesperson	Region	Units	Sales
2	Buchanan	North	3400	\$ 9,662
3	Buchanan	North	590	\$ 9,062
4	Buchanan	North	234	\$ 1,450
5	Buchanan	East	4105	\$ 265
6	Buchanan Total			\$ 20,439
7	Carroll	South	767	\$ 6,711
8	Carroll	North	6740	\$ 699
9	Carroll	South	9435	\$ 6,040
10	Carroll Total			\$ 13,450
11	Devolio	West	1329	\$ 386
12	Devolio	West	5585	\$ 5,720
13	Devolio	East	295	\$ 350
14	Devolio Total			\$ 6,456
15	Grand Total			\$ 40,345

	C	D	E	F
1	Salesperson	Region	Units	Sales
6	Buchanan Total			\$ 20,439
10	Carroll Total			\$ 13,450
14	Devolio Total			\$ 6,456
15	Grand Total			\$ 40,345



Viewing Pivot Table Data...

After you have created a Pivot Table, double click the data to view the records that make up that number. Data will be displayed on a new worksheet.

Changing Pivot Table Data...

Generally data is displayed as a Sum or Count of the data. You can change that to other functions or % of data.

1. Click the value field in the Pivot Table creation window.



2. Choose Value Field Settings

Auto Subtotals

Because sub totals are needed so often in an Excel spreadsheet, Microsoft added a Subtotal feature to the program.

1. Make sure the active cell is in your database area
2. Sort the data by the information you want to sub-total
3. From the Data Tab, Outline group, click Subtotal
4. Select the column name you want to group by
5. Select the function (Sum, Average, etc.) you want to use
6. Click the check box to identify the column(s) you want the subtotals added to.
7. Click OK

The subtotals will be displayed in an Outline format, allowing you to expand or collapse the data.

Removing Subtotals

1. From the Data Tab, Outline group, click Subtotal
2. Click the Remove All button in the dialog box

Creating a Pivot Table

A pivot table is an interactive worksheet table that quickly summarizes large amounts of data when using a format and calculation method you choose. It is called a pivot table because you can rotate its row and column headings around the core data area to give you different views of the source data. As source data changes you can update a pivot table. Because it resides on a worksheet, you can integrate a pivot table

A pivot table provides an easy way for you to display and analyze summary information about data already created in Excel or an other application.

1. Choose the PivotTable command from the Insert tab
2. Click OK to create a pivot table on a new worksheet
3. Drag the fields into the correct location on the Pivot table creation window.

Creating a Pivot Chart

Click the pivot table chart button on the pivot table toolbar to create a chart.

NOTE: Dragging fields on the chart will change the pivot table. Formatting fields on the pivot table will change the chart.

