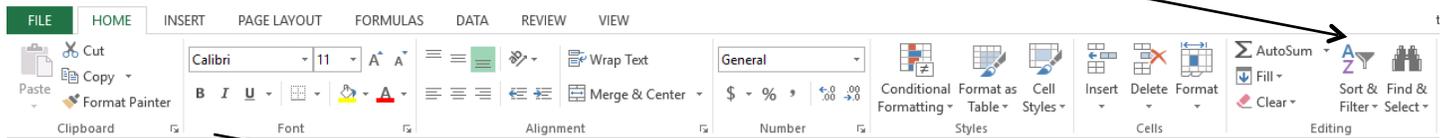


Sort, Filter, Pivot Table

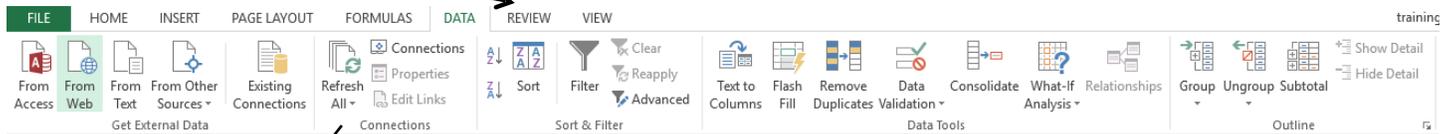
Sort

A common database task is to rearrange the information based on a header/field or headers/fields. This is called Sorting or Filtering. Sorting rearranges all of the information in the database based on the sort criteria. Filtering hides unwanted data. The remaining data may then be sorted.

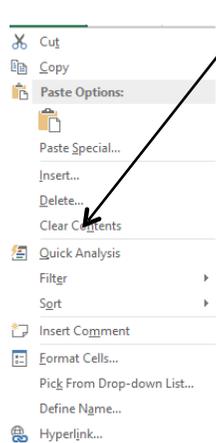
Sorting may be initiated in one of three ways: The “Sort & Filter icon at the far right of the “Home” tab ribbon,



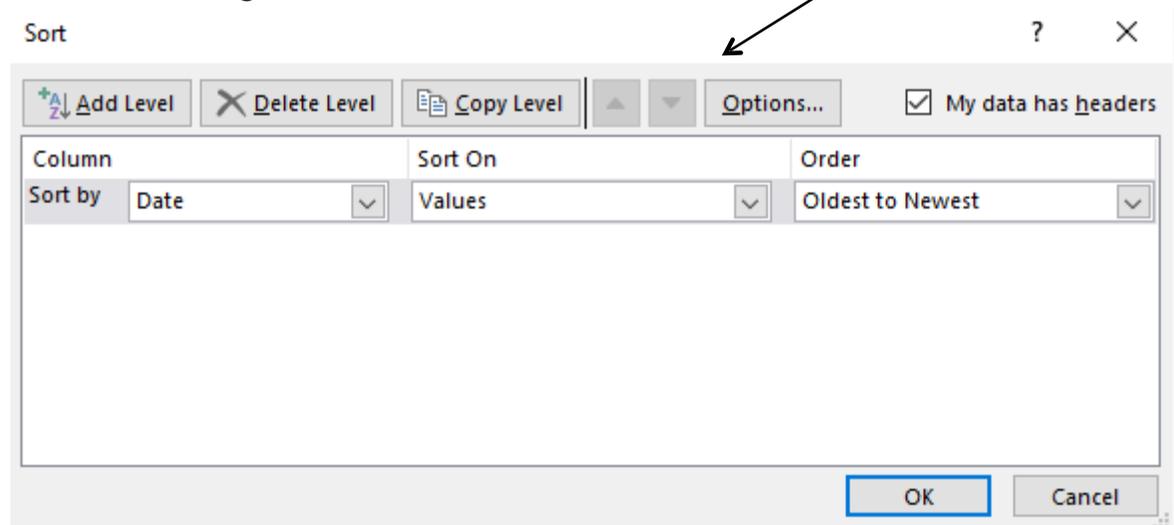
the “Sort” icons on the “Data” tab,



or the “Right-Click” menu.



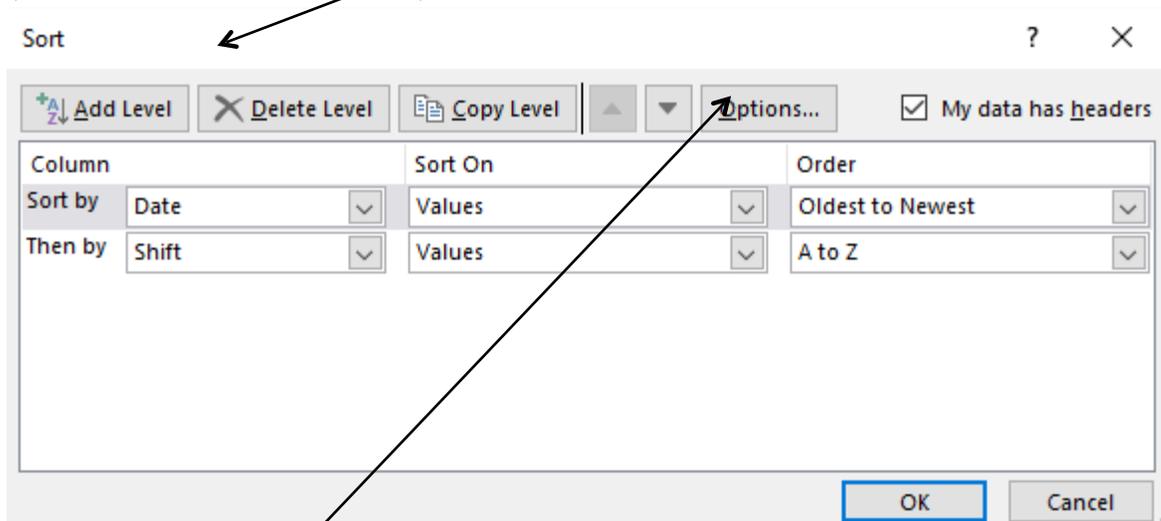
To sort using a single column as the criterion and the “Sort& Filter” icon on the “Home” tab ribbon: Place the “Active Cell” in the column to be used to control the sort; Select “Home” on the Menu Bar; Click on the “Sort & Filter” button at the far right end of the ribbon. Click on the desired sort direction. (Excel will determine the location of all of the data and complete. To sort on multiple columns: Place the “Active Cell” within the data to be sorted; Select “Home” on the Menu Bar; Click on the “Sort & Filter” button at the far right end of the ribbon; Select “Custom Sort”. If the data to be sorted has headers, be sure that the “My data has headers” check box at the far right is checked.



This allows the use of field names in defining the sort. If this is not checked, selection will be by column letter. As shown, this sort is no different than a single column sort based on “Date” (The

“Sort by” field can be changed to a different field by clicking on the down arrow next to “Date” and selecting a different field from the list).

To make it a multiple field sort, click the “Add Level” button. A second level, titled “Then by” has been added to the sort criteria (It comes up blank and the field is chosen from the drop down list. (I chose “Shift” for this level).



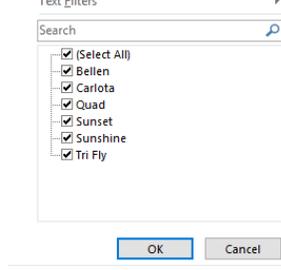
The up and down arrows can be used to change the order of the sort fields. Additional levels may be added as needed by clicking on the “Add level” button. Click on OK at the bottom of the dialog box to execute the sort.

Filter

Filters can be used to narrow down the data in your worksheet and hide parts of it from view. Filtering may be initiated from one of three sources: The “Sort & Filter icon at the far right of the “Home” tab ribbon, the “Filter” icon on the “Data” tab, or the “Right-Click” menu (These are the same locations used with the “Sort” feature). To Filter from the “Home” tab ribbon, click “Sort & Filter” on the Home ribbon. Select “Filter” from the drop down menu. Note that drop down arrows have been added next to each field name.

	A	B	C	D	E
1	Date	Sales Rep	Boomerang Product Name	Shift	Sales
2	9/15/13	Jim	Tri Fly	Shift 1	\$176
3	9/15/13	Michelle	Bellen	Shift 4	\$197
4	9/15/13	Jenifer	Sunset	Shift 5	\$196

Clicking on one of these arrows will display a dialog box from which sorting or filtering can take place. In addition, unique entries in that field will be displayed. Which entries are displayed will be determined by which boxes in the bottom portion of the dialog box are checked. Note that when a filter is in place, the arrow changes to a funnel.



	A	B	C	D	E
1	Date	Sales Rep	Boomerang Product Name	Shift	Sales
3	9/15/13	Michelle	Bellen	Shift 4	\$197
11	9/17/13	Nelya	Bellen	Shift 3	\$324
13	9/17/13	Chunfei	Bellen	Shift 5	\$317

Removing the check from the “Select All” box and then checking the individual boxes will determine which entries are displayed.

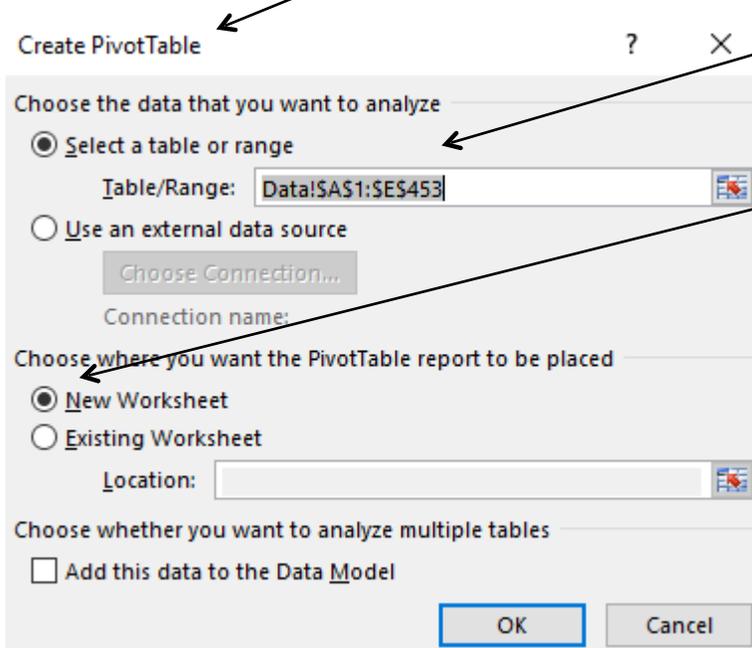
A filter can be placed on more than one field at a time. To remove a filter on a field, click the funnel for that field and select “Clear filter from ...” in the upper portion of the dialog box. To turn off filtering, click “Sort & Filter” on the Home ribbon. Select “Filter” from the drop down menu, or click the “Filter” icon on the Data ribbon, or Click Filter on the right-click menu.

Pivot Tables

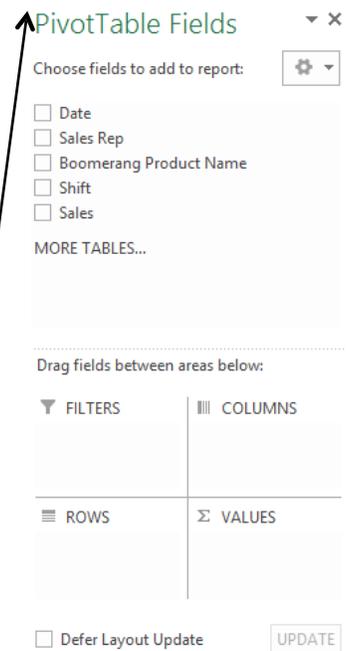
A Pivot table (turning the data to look at it in different ways) in Excel is a versatile reporting tool that makes it easy to extract information from large tables of data without the use of formulas. It may also be thought of as “filtering with calculations”. To create a **Pivot Table**, make a cell within the data the active cell. Click the **Pivot Table** icon at the left end of the Insert ribbon.



The resulting dialog box will have the range of cells to be included in the **Pivot Table** filled in. In this example, “Data” is the name of the sheet containing the data and the exclamation point is added by Excel to separate the sheet name from the data range. To place the **Pivot Table** on a new worksheet, click the “New Worksheet” button”. To place the **Pivot Table** on the current worksheet, click the “Existing Worksheet” button and provide a location for the



upper left corner of the **Pivot Table**. Click “OK”. A “PivotTable Fields” dialog box will appear with the field names in the upper portion and four boxes to be used in defining the **Pivot Table** in the lower portion. The boxes are labeled “Report Filter”, Column Labels”, “Row Labels”, and “Σ Values”. Dragging the desired field name to the appropriate box



Indian Prairie Library - Excel “Sort, Filter, Pivot Table”

will define the Pivot Table and populate it with the requested data.

In this example, “Sales Rep” was dragged to the “Row Labels” box, and “Sales” was dragged to the “Σ Values” box. The table can be rearranged by dragging field names out of or into any of the appropriate boxes.

	A	B	C	D	E	F	G	H	I
1	Date	Sales Rep	Boomerang Product Name	Shift	Sales			Row Labels	Sum of Sales
2	9/15/13	Jim	Tri Fly	Shift 1	\$176			Chunfei	6797
3	9/15/13	Michelle	Bellen	Shift 4	\$197			Dalia	7591
4	9/15/13	Jenifer	Sunset	Shift 5	\$196			David	7731
5	9/15/13	Dalia	Tri Fly	Shift 5	\$230			Devi	8443
6	9/16/13	David	Carlota	Shift 4	\$100			Elaine	8991
7	9/16/13	Michelle	Quad	Shift 4	\$377			Ereney	6201
8	9/16/13	Joey	Sunshine	Shift 4	\$363			Jenifer	5992
9	9/16/13	Sandra	Sunshine	Shift 4	\$218			Jennifer	9677
10	9/17/13	Chunfei	Sunshine	Shift 1	\$215			Jesse	5066
11	9/17/13	Nelya	Bellen	Shift 3	\$324			Jim	8483
12	9/17/13	Nelya	Tri Fly	Shift 3	\$335			Joey	7457
13	9/17/13	Chunfei	Bellen	Shift 5	\$317			Michael	12
14	9/17/13	Michelle	Quad	Shift 5	\$108			Michelle	7912
15	9/18/13	Devi	Sunshine	Shift 1	\$370			Nelya	9026
16	9/18/13	Chunfei	Bellen	Shift 3	\$326			Sandra	5519
17	9/18/13	Jenifer	Sunshine	Shift 3	\$239			Sheri	7500
18	9/18/13	Nelya	Tri Fly	Shift 3	\$389			Grand Total	112398

When working with a Pivot Table, two new tabs are added to the Menu Bar under the heading “PIVOTABLE TOOLS”.



Features on these tabs are used to change the design and appearance of the Pivot Table. In the following example, “Date” was dragged to Columns and then grouped by month and years, “Sales Rep” was dragged to Rows, and “Sales” was dragged to “Σ Values”.

	H	I	J	K	L	M
	Sum of Sales	Years	Date			
	2013					Grand Total
Sales Rep	Sep	Oct	Nov	Dec		
Chunfei	2078	2042	155	2522		6797
Dalia	951	2821	2746	1073		7591
David	250	2352	2184	2945		7731
Devi	859	3271	2929	1384		8443
Elaine	1800	1321	3614	2256		8991
Ereney	323	1416	3291	1171		6201
Jenifer	1332	1732	1305	1623		5992
Jennifer	1727	2896	4268	786		9677
Jesse	899	2005	541	1621		5066
Jim	1124	3276	3053	1030		8483
Joey	677	2146	3515	1119		7457
Michael						12
Michelle	2113	2450	2511	838		7912
Nelya	2803	3040	1929	1254		9026
Sandra	629	2496	2041	353		5519
Sheri	862	2638	2886	1114		7500
Grand Total	18427	35902	36968	21101		112398