

Microsoft Excel: Pivot Tables



STRUCTURED RANGE

In order to create a Pivot Table, it is useful to begin with a Structured Range (a list that contains a set of data, such as invoice numbers and amounts). Tips for creating a structured range:

1. Label each column in the list. The labels should be formatted differently than the rest of the data (usually **bold**).
2. The same type of data should be in each column, such as all text or all numbers
3. Avoid blank rows or columns in the range
4. Don't insert extra spaces at the beginning of a cell as they affect sorting and spacing.
5. Avoid having more than one range on a worksheet because some features, such as filtering, can be used on only one list at a time.

| | A | B | C | D | E | F |
|----|-----------------|-------------------|-----------------------|----------------|---------------------|-----------------|
| 1 | Order ID | Order Date | Company Name | Country | Order Amount | Shipping |
| 2 | 10837 | 1/1/2014 | Kochen | Germany | \$13.32 | 1.47 |
| 3 | 10856 | 1/4/2014 | Sam's General Store | Venezuela | \$58.43 | 6.43 |
| 4 | 10857 | 1/7/2014 | Kochen | Germany | \$188.85 | 20.77 |
| 5 | 10866 | 1/10/2014 | Kochen | Germany | \$109.11 | 12.00 |
| 6 | 10875 | 1/13/2014 | Kochen | Germany | \$32.37 | 3.56 |
| 7 | 10918 | 1/16/2014 | Bottom-Dollar Markets | Canada | \$48.83 | 5.37 |
| 8 | 10924 | 1/19/2014 | Kochen | Germany | \$151.52 | 16.67 |
| 9 | 10936 | 1/22/2014 | Mary's Market | USA | \$33.68 | 3.70 |
| 10 | 10943 | 1/25/2014 | Paul's Beverages | Canada | \$2.17 | 0.24 |
| 11 | 10944 | 1/28/2014 | Bottom-Dollar Markets | Canada | \$52.92 | 5.82 |
| 12 | 10947 | 1/31/2014 | Paul's Beverages | Canada | \$3.26 | 0.36 |
| 13 | 10949 | 2/3/2014 | Bottom-Dollar Markets | Canada | \$74.44 | 8.19 |
| 14 | 10952 | 2/6/2014 | Arnold's | USA | \$40.42 | 4.45 |
| 15 | 10975 | 2/9/2014 | Bottom-Dollar Markets | Canada | \$32.27 | 3.55 |
| 16 | 10982 | 2/12/2014 | Bottom-Dollar Markets | Canada | \$14.01 | 1.54 |

SORTING A LIST

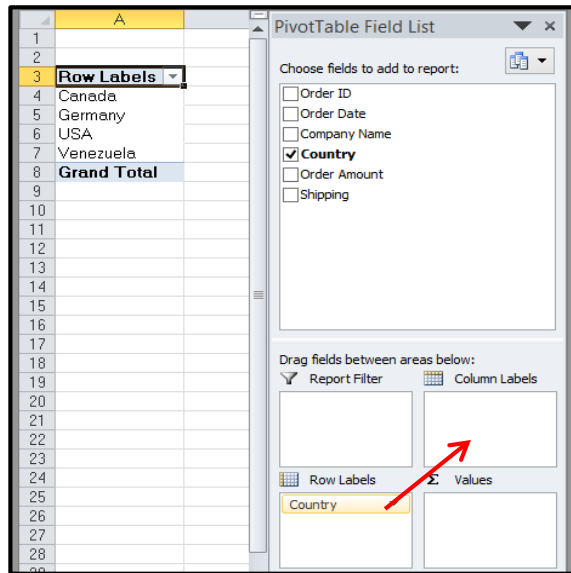
- To sort by a single column, select a single cell in that column and click **Sort A > Z** on the **Data** tab 
- To sort by more than one column, select a single cell in the list and click the **Sort** button on the **Data** tab 

PIVOT TABLES

A Pivot Table quickly summarizes, or cross-tabulates, large amounts of data. To create a Pivot Table complete these steps:



1. Click on any cell in the range
2. On the **Insert** tab, click on **Pivot Table**
3. Verify that the range is correct and click **OK**
4. Click to check the fields you want to display
5. If needed, drag a field from one area at the bottom to another (ex: row label to column label)

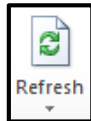


Note: Pivot Tables open in separate worksheets.

See the example below. The company name is used as the **Row Label** and the country is used as the **Column Label**. The Order Amounts are the **Values**.

| Sum of Order Amount | Column Labels | Canada | Germany | USA | Venezuela | Grand Total |
|-----------------------|-----------------|---------------|-----------------|--------------|-----------------|-------------|
| Arnold's | | | 162.64 | 112.16 | | 274.80 |
| Bon Appetite | 906.18 | | | | | 906.18 |
| Bottom-Dollar Markets | 744.13 | | | | | 744.13 |
| Hans Market Stand | | | 78.35 | | | 78.35 |
| Kate's Kountry Store | | | | 36.21 | | 36.21 |
| Kochen | | | 495.17 | | | 495.17 |
| K-Restaurante | | | | 101.47 | 23.68 | 125.15 |
| Mary's Market | | | | 963.31 | | 963.31 |
| Paul's Beverages | 244.36 | | | | | 244.36 |
| Sam's General Store | 85.52 | | | 22.00 | 58.43 | 165.95 |
| Grand Total | 1,980.19 | 736.16 | 1,235.15 | 82.11 | 4,033.61 | |

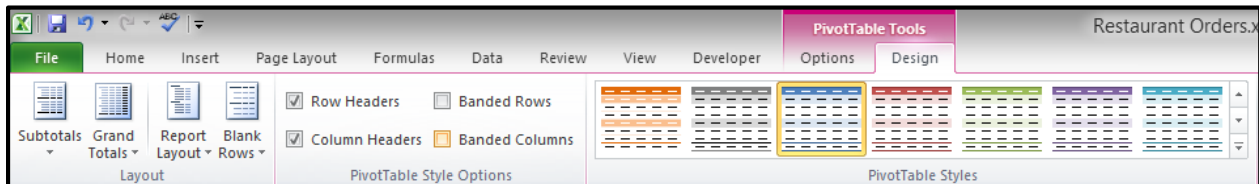
TO UPDATE A PIVOT TABLE (WHEN THE DATA CHANGES):



1. Click in the Pivot Table
2. Under the **Pivot Table Tools**, click the **Options** tab, then **Refresh**

TO FORMAT A PIVOT TABLE

1. Click inside the Pivot Table
2. Choose one of the **Styles** under the **Pivot Table Tools** from the **Design** tab.



IF YOU NEED TO FORMAT A FIELD IN YOUR PIVOT TABLE:

1. Click on the field in the Pivot Table Field List
2. Select "Field Settings" or "Value Field Settings"

In this case, the value field shows a **Sum**, but other calculations may be selected, such as **Count** or **Average**.

To change the format of the field, click **Number Format**

Note: do not simply select a range of values in the Pivot Table and change formatting from the **Home** tab **Number Command Group**. You must alter the settings for fields, not ranges.

