

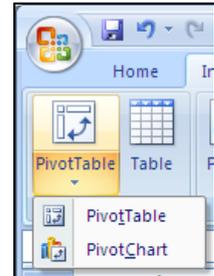
Guess the Olympian Pivot Tables in Excel 2007

A Pivot Table is a way to present data quickly.

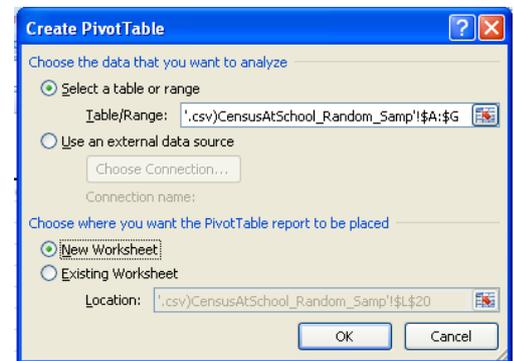
Use a Pivot Table to see who children named as famous Olympians in 2009
(from Phase 9 *CensusAtSchool* questionnaire)

Open the Excel spreadsheet **Guess the Olympian Clean Data.xls** (or use **Guess the Olympian Raw Data.xls** after the data has been cleaned). This is a random sample of size 60 taken from the *CensusAtSchool* Phase 9 questionnaire. (See Phase 9 Questionnaire and Phase 9 Coding Sheet.) Click the cursor on a cell within the table of data.

In Excel select **Insert/PivotTable/PivotTable**.



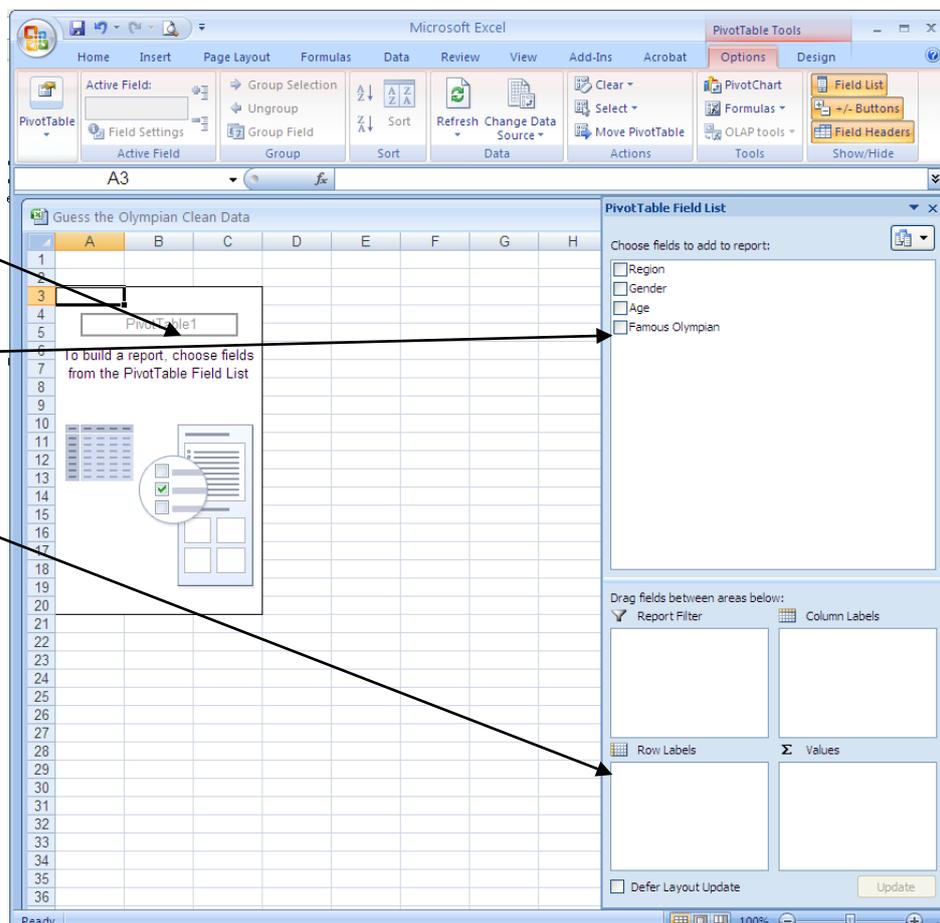
Click on **Select a table or range** (the whole data set should be included. There is no need to select any cells before inserting a pivot table). Click on **New Worksheet/OK**.



Your screen should have an area to build your report.

A list of all the variables in the spreadsheet.

Boxes where you can drag the variables.



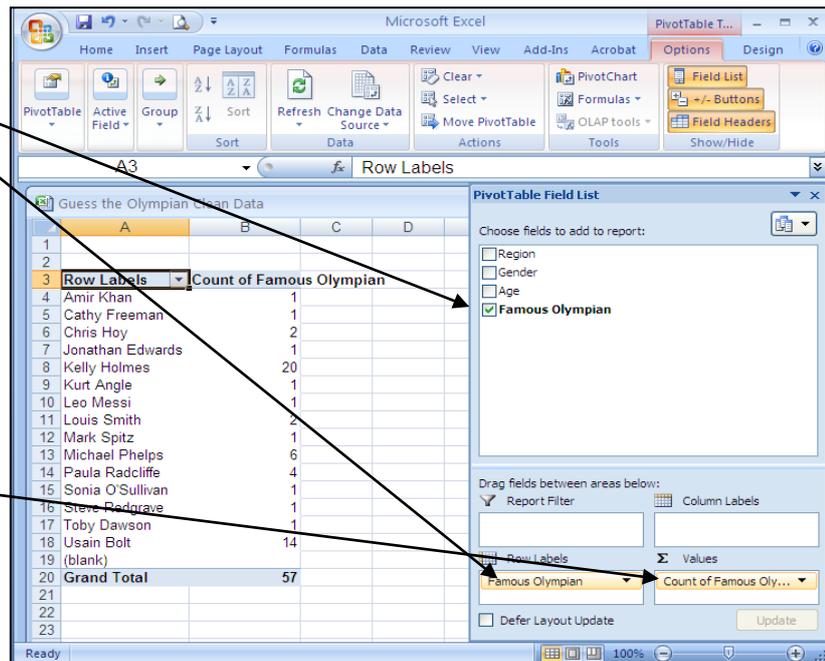
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Select **Famous Olympian** in the **Pivot Table Field List** so it is ticked. This should appear in the **Row Labels**.

Make sure your cursor is in the table in Column A. If the cursor is outside the table the variables on the right hand side will disappear.

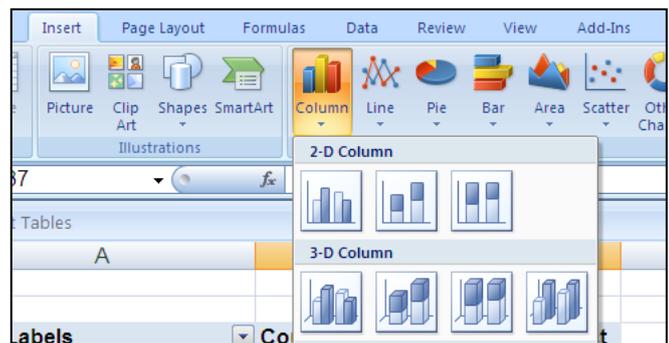
Drag **Famous Olympians** from the **Pivot Table Field List** to the **Σ Values**.

The frequencies appear in the table in column B. Kelly Holmes has the highest frequency. This would be much easier to see displayed in a chart.



To plot a bar chart from a pivot table

Insert/Column select the first graph in **2-D Column**.



The chart that appears is not very well presented.

The graph needs:

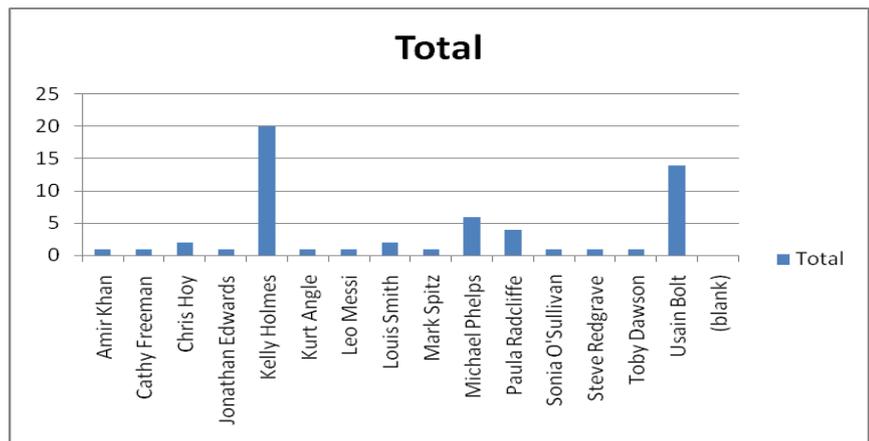
A title;

Horizontal labeling on the horizontal axis (if possible);

Labeling for vertical axis;

Bars arranged in descending frequencies.

Only the top 6 highest frequencies need to be displayed.



To improve a graph in Excel right click on the parts of the graph you would like to change.

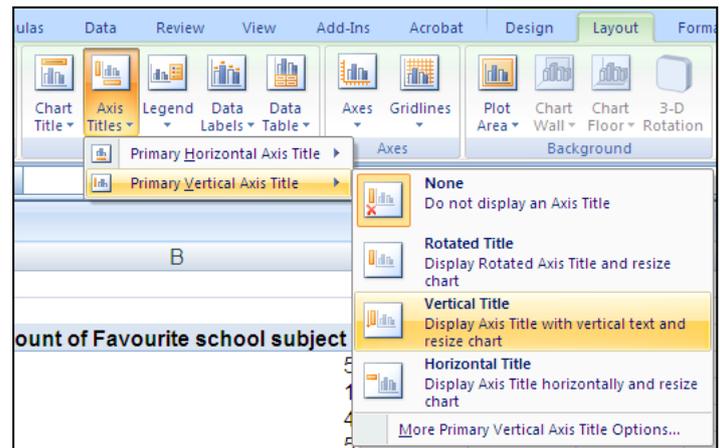
To change the title click on **the title box and type in the title/Enter**. It may need the font size to be made smaller.

Also we do not need the legend on the right hand side of the chart.

Click on the **legend/Delete**.

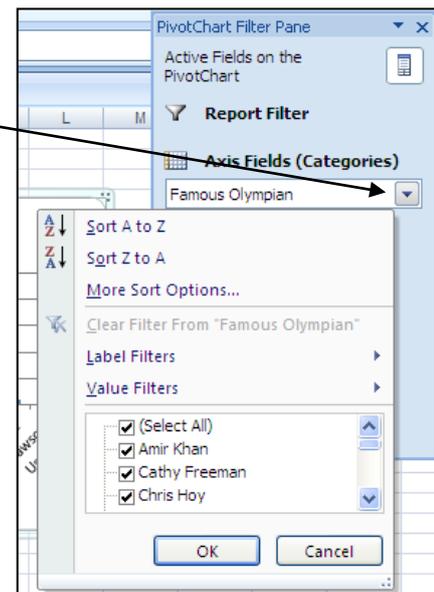
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To add the vertical label
Click on the **chart/Layout**
Select **Axis Titles/Primary Vertical Axis Title/Vertical Title**
Type **Frequency/Enter**.

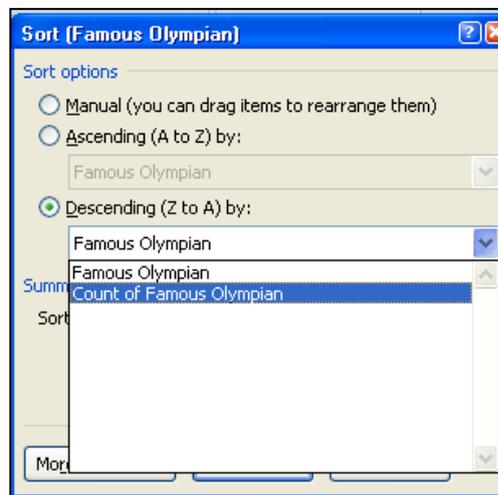


To order the bars from high to low frequency

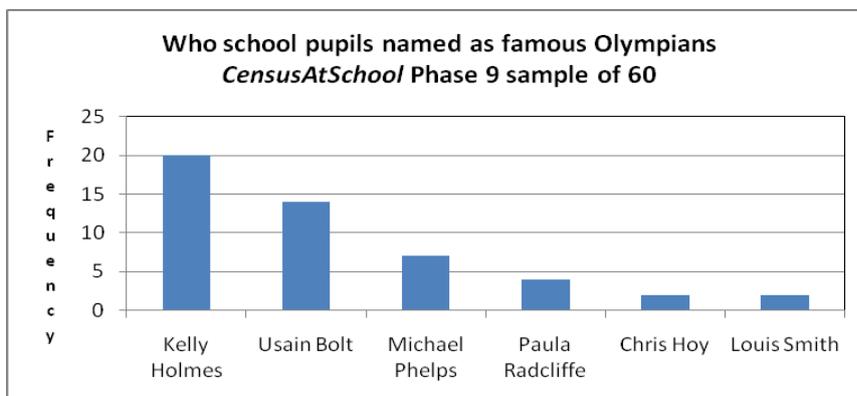
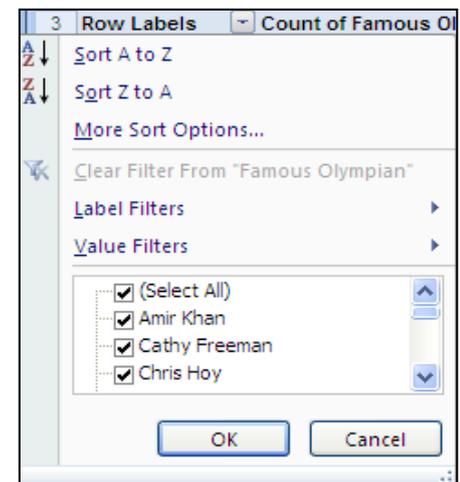
Click on the chart
The **PivotChart Filter Pane** will appear.
Click on the arrow at the right hand side of **Famous Olympian**
Select **More Sort Options**.



Select **Descending (Z to A)** by:
Click on the arrow on the right hand side of **Famous Olympian**
Select **Count of Famous Olympian/OK**.



To display the top 6 only
Click on the arrow to the right of **Famous Olympian** in cell A4.
You want the first 6 Olympians ticked only. 'Untick' all Olympian names except the top 6.



So for this sample of 60, Kelly Holmes was named most often as a famous Olympian.

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Further investigations

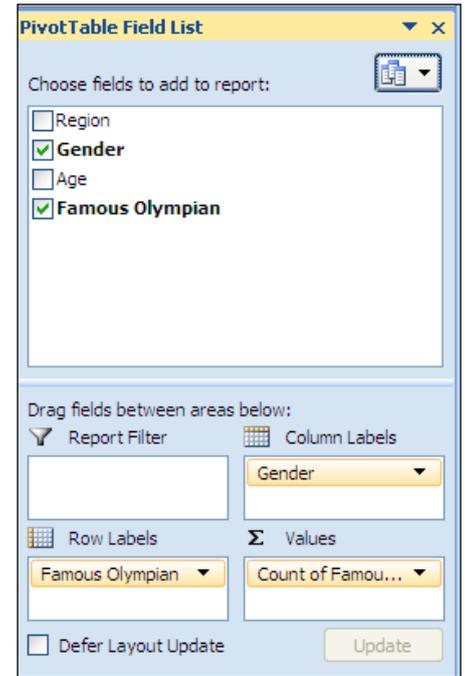
Do boys and girls name the same famous Olympians?

Click on **Gender** in the Pivot Table Field List.

The Gender tab will appear in the **Row Labels**. This needs to be moved to the **Column Labels**.

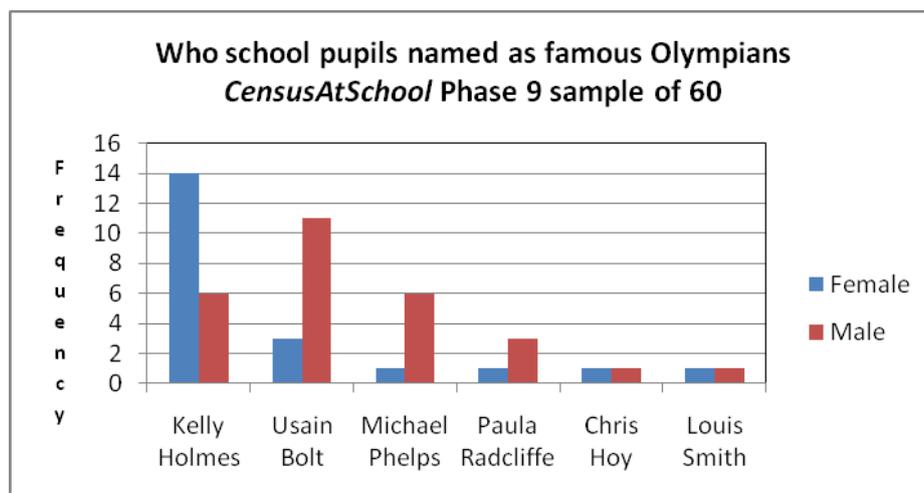
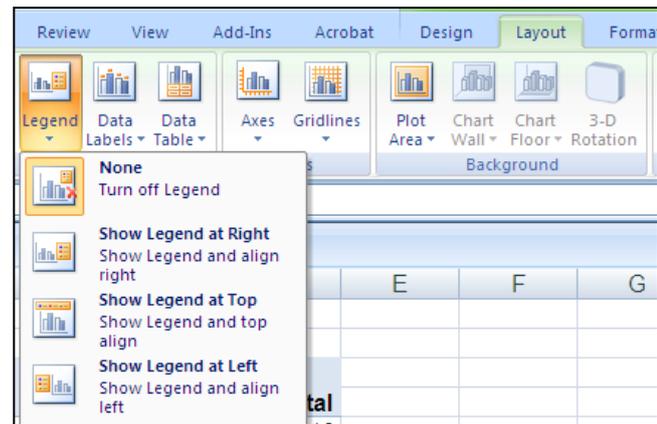
Drag **Gender** tab from **Row Labels** to **Column Labels**.

To show blue represents girls and red represents boys we need to add a legend.



Select **Layout/Legend/Show Legend at Right**.

Type **Female** in cell B4 and **Male** in cell C4.



For this sample of children, Usain Bolt is named more often by boys and Kelly Holmes is named more often by girls as famous Olympians.