

Using a Pivot Table to track expenditure

Data Entry

The most important thing to remember is that:

- the data must be entered into consecutive columns - **no blank columns**
- the data must be entered into consecutive rows - **no blank rows**

Each column must have a unique column name. Use a clearly descriptive name. Once data is organised in this way, it is called an Excel list. An **Excel list** consists of consistent data in consecutive columns and rows with unique column headings for each column. Excel has been programmed to be able to pick up a list automatically and perform a wide range of operations on the data within it. One of those functions is a **Pivot Table Report**.

Surname	First Name	Year or Department	Item	Cost (\$)	Order No.
Ponting	Ricky	1	Bats	300	980101
Waugh	Mark	2	Pads	100	980102
Ponting	Ricky	1	Shoo Gloo	8.5	980103
Bevan	Michael	3	Balls	50	980104
Bevan	Michael	3	Band-aids	12	980105
Healy	Ian	4	Gloves	40	980106

The problem ...

I want to see the expenditure for each teacher displayed as totals for each teacher and for the Year or Department that they are responsible for.

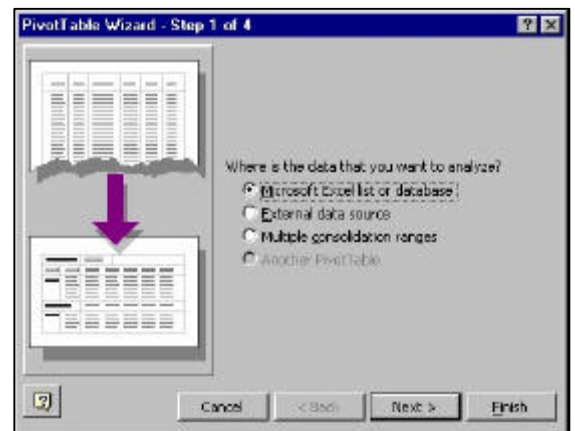
Getting Started

- Start Microsoft Excel. Open the spreadsheet called **pivotdata.xls**
- Save it as **pivotdata_yourname.xls**

In the **Raw Data** worksheet, put the cell marker anywhere within the data list and choose **Data | Pivot Table Report**. The **Pivot Table Wizard** will start and walk you through the creation process. There are only four steps.

Step 1:

The data you want is in an Excel spreadsheet and it is the spreadsheet you are in so there are no changes to be made here. Click the **NEXT** button.



Step 2:

You are being asked where the data is. Because you have an Excel list and you put the cell marker within the list, Excel will select the list automatically. You will see the dotted rectangular area on your worksheet. Click the **NEXT** button.

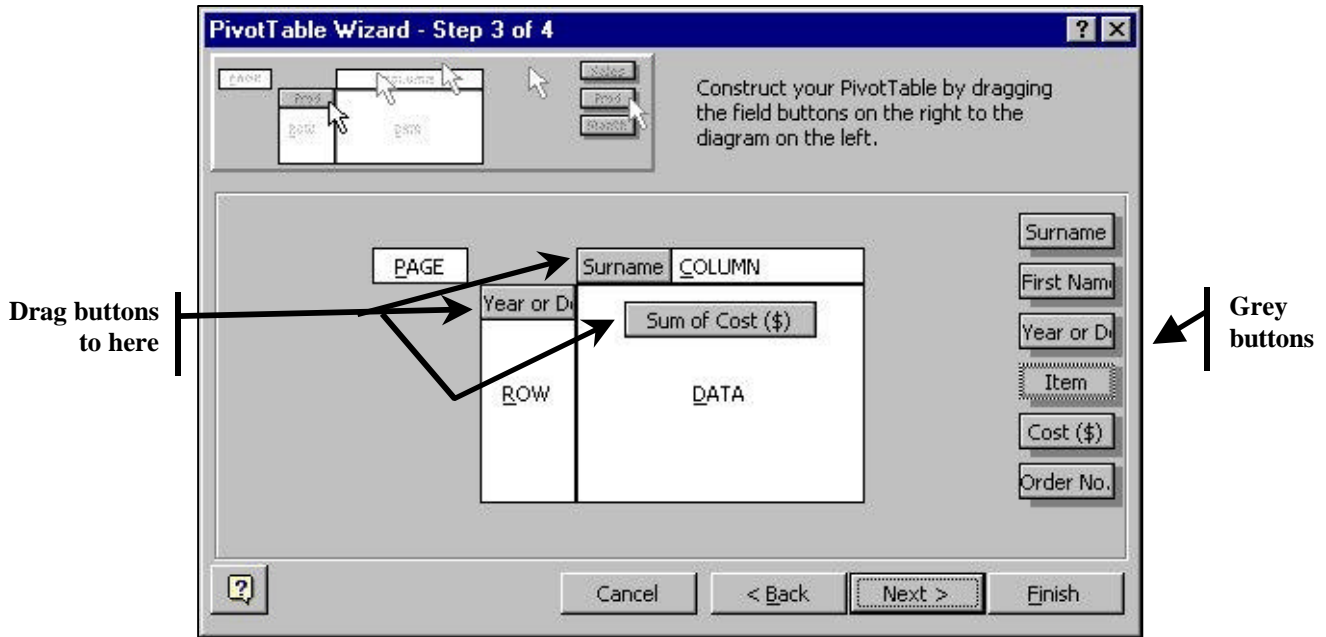


Step 3:

The only difficult thing about creating pivot tables is determining how to convert the word problem into a set of choices. In this case, the word problem is:

I want to see the expenditure for each teacher displayed as totals for each teacher and for the Year or Department that they are responsible for.





The gray buttons on the right have to be dragged into the white column/row/data areas. Which ones to drag where – that is the question.

- It is the *cost* data that we want to deal with so drag the **Cost (\$)** button into the data area.
- The teacher's surname will be across the columns in the resulting display so, drag the **Surname** button into the column area.
- The cost data should grouped by *Year or Department*. Click and drag the **Year or Department** button into the row area.

You have finished entering the pivot information, click the **NEXT** button.

Step 4:

Now it just a matter of choosing whether to place the pivot tables into a new worksheet or into an existing worksheet. Leave it as it is — **New worksheet**. Click the **FINISH** button.



The Pivot Table will be created as a new worksheet. You will see a new worksheet tab at the bottom left hand side of the status bar (at the bottom of the screen).

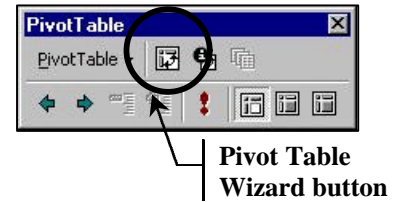
Examine the table closely and you will see that it provides the information defined by the word problem from the raw data that was entered. Running totals are provided for each teacher and each year level as well as grand totals for the whole list of data.

Sum of Cost (\$)	Surname										
Year or Department	Beyan	Bichel	Healy	Law	Maher	Ponting	Warne	Waugh	Wilson	Grand Total	
1						361			240.45	601.45	
2								171		171	
3	100.75									100.75	
4			40							40	
5			51							51	
6				65			2075			2140	
7					150					150	
ART							17			17	
MUSIC								92		92	
Grand Total	100.75	51	40	65	150	378	2075	263	240.45	3363.2	



Rearranging Pivot Tables with the Pivot Table Wizard

You can use the Pivot Table Wizard to change the arrangement of the Pivot Table Fields. Click one of the Pivot Table Fields — **Year** or **Department**. Click the **Pivot Table Wizard** button on the **Pivot Table** toolbar. You will be taken to step three of the Pivot Table Wizard. You can now remove or add fields. Drag the **Item** button into the **row** area and click **FINISH**. You should now see that each item is listed under the Year/Department.



Hiding and revealing data

You can hide entire pivot table fields but you cannot hide totals or subtotals shown in rows and columns. To hide detail within a Pivot Table, select the data you want to hide, right-click it, and choose **Group and Outline | Hide Detail**. Try it. Click in the Year 1 area and then right-click and hide the details.

Updating an existing Pivot Table

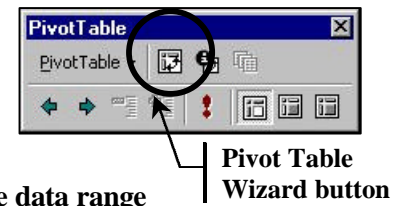
You will add more rows of data to your list as teachers purchase additional items. You can choose to create a new Pivot Table when you need to or update the existing one. You know how to create a new one so let's look at updating an existing one.

❖ Step 1: Add the rows

In the **Raw Data** worksheet, Add three new rows of data to the list.

❖ Step 2: Update the Pivot Table

- Go to the worksheet that has the Pivot Table on it. If the **Pivot Table** toolbar is not visible, choose **View | Toolbars | Pivot Table** from the menu bar to make it visible. Click the **Pivot Table Wizard** button on the toolbar.
- The wizard will start at the Step 3 screen of the wizard. **You want to change the data range (you have added new rows) so click the BACK button** to get to Step 2.



Click the **Collapse** button and select the range of cells that includes the new rows. Press the **ENTER** key when you have selected the range of cells.

When the Step 3 box comes up again, click the **NEXT** button.



- The Step 4 box will appear again. This time the existing worksheet option is chosen. You can create a new one if you wish but if you are updating the existing one, just choose the **FINISH** button and the Pivot Table will be updated to include the additional rows of data.

Note: When **data** in the source range changes and you want to incorporate the new information into the active PivotTable, click **Refresh Data** on the PivotTable toolbar.

Notes: