

Pivot Tables

Pivot tables are a powerful way of summarizing data held in an excel spreadsheet. They can automatically sort, count or average data and display the results in a summary table.

Source data

The best source data to use with pivot tables is a simple table with one row per item. This keeps the source data simple and allows the pivot tables to work well.

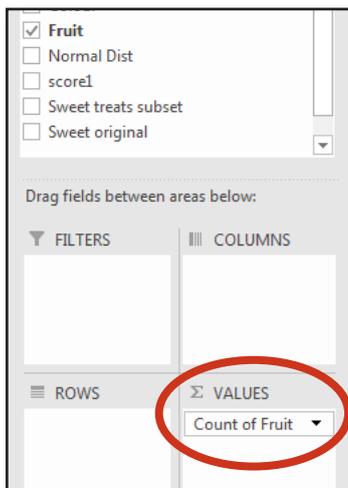
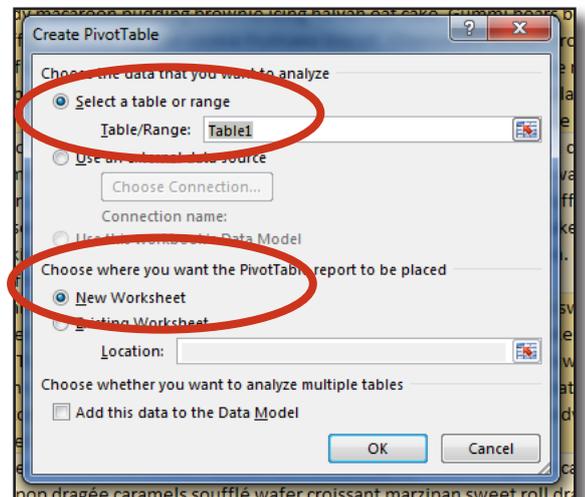
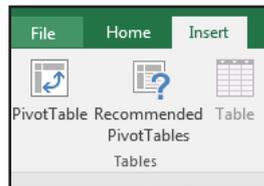
	A	B	C
1	Date	Item	Cost
2	21-Mar	oranges	£2.50
3	13-May	Bread	£1.43
4	01-Jun	Cheese	£1.99
5	14-Jun	Bread	£1.43
6	04-Jul	Cheese	£1.99
7	06-Jul	Tea	£0.90

H	I	J	K	L	M	N	O	P	Q
March	March	April	April	May	May	June	June	July	July
Item	Cost	Item	Cost	Item	Cost	Item	Cost	Item	Cost
oranges	£2.50			Bread	£1.43				
						Cheese	£1.99		
						Bread	£1.43		
								Cheese	£1.99
								Tea	£0.90

Ideally, data will not have any gaps and will have unique column headings on the top row. Best practice is to format your data as a table so extra data will be automatically included.

Create a pivot table

Click within your data and click on the **Insert** menu and **PivotTable**. Confirm the range and where you want the PivotTable to be placed.

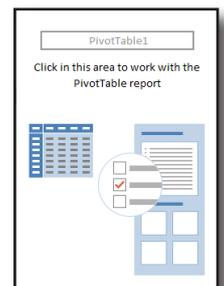


The PivotTable will start blank. to make the simplest table, **drag** a field to the **Σ Values** box.

2		
3	Count of Fruit	
4		100
5		

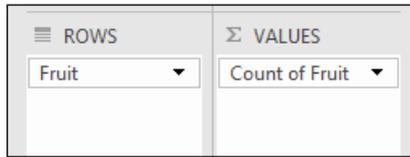
You should see a **count** of all of the items in that column which should be the same as the number of rows in the original data. If it is a numeric field you will see **sum of**

If the controls are not show click in the PivotTable area or on the symbol.



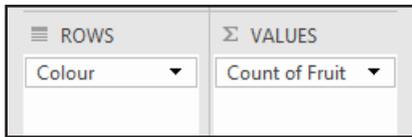
Summarize

Dragging a field into the **Rows** box will summarize the data.



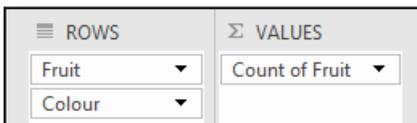
Row Labels	Count of Fruit
apple	13
banana	21
grapes	14
kiwis	16
orange	18
plums	18
Grand Total	100

It does not have to be the same field as the **Count**



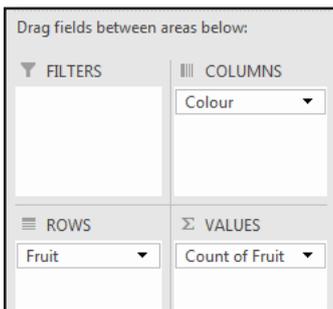
Row Labels	Count of Fruit
blue	12
cyan	13
green	22
orange	16
purple	14
red	23
Grand Total	100

Row Labels	Count of Fruit
apple	13
blue	2
cyan	2
green	3
orange	2
purple	2
red	2
banana	21
blue	4
cyan	2
green	2
orange	4
purple	2
red	7
grapes	14
blue	3
green	6
orange	1



It is possible to have more than one field in the rows box although it may be better to use **columns**

Using columns

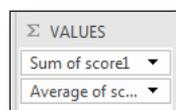
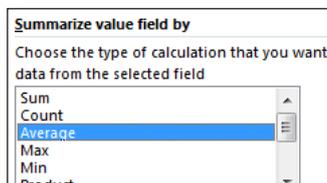
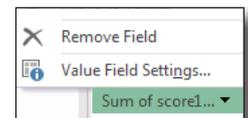
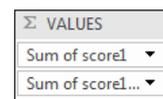


Add a field into the Columns box to provide sub totals.

Row Labels	blue	cyan	green	orange	purple	red	Grand Total
apple	2	2	3	2	2	2	13
banana	4	2	2	4	2	7	21
grapes	3		6	1	1	3	14
kiwis	1	1	4	4	1	5	16
orange			6	3	2	4	18
plums	2	2	4	3	5	2	18
Grand Total	12	13	22	16	14	23	100

Adding different representations of the data

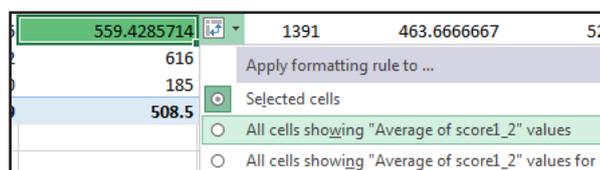
The same field can be added more than one to the **VALUES** box. Click on one of the fields and Value Field Settings and choose a calculation.



	grapes	kiwis	orange
Sum of score1	1601	533.7	3266
Average of score1_2	542.75	533.666667	544.333333
Sum of score1	3916	559.4	1391
Average of score1_2	609.444444	559.428571	463.666667
Sum of score1	148	1232	616
Average of score1_2	148	1232	616
Sum of score1	370	185.0	1701
Average of score1_2	370	185.0	1701
Grand Total	7119	508.5	8930
Grand Total	7119	508.5	8930

Adding conditional formatting

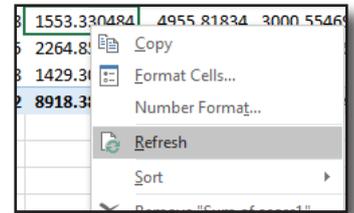
Add conditional formatting to one cell in a PivotTable. The option to extend it to other data will be available next to that cell.



	grapes	kiwis	orange
Average of score1_2	542.75	533.666667	544.333333
Sum of score1	3916	559.428571	1391
Average of score1_2	148	1232	616
Sum of score1	370	185	1701
Average of score1_2	370	185	1701
Grand Total	7119	508.5	8930
Grand Total	7119	508.5	8930

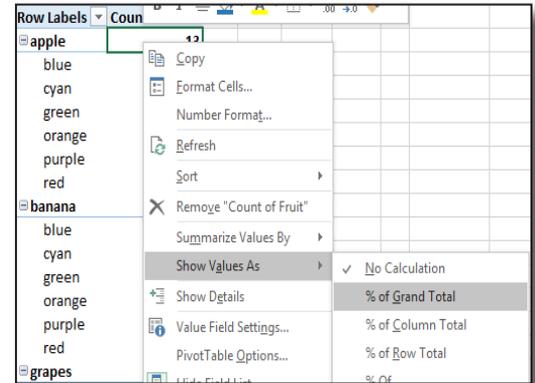
Refreshing the PivotTable

The values on a PivotTable will not update automatically. **Right-click** anywhere on the data and select **Refresh**



Showing different value representations

Right-click on a piece of data to show as a different value such as % of Grand Total.



See the data behind the totals

Double-clicking on one of the summary cells will create an extra sheet showing the detail that makes that total

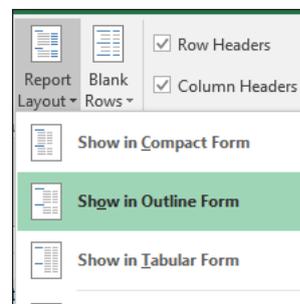
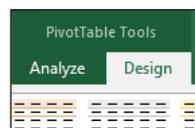
Row Labels	apple	banana	grapes	kiwis
Arts	3	4	3	6
Finance		9	7	3
ILS	6	2	2	5

Identifier	Name	First Contact	Intv date	Department	Colour	Fruit	Normal Dist	score1	Sweet treats subset	Sweet original
73	Price Padi	Sep 26, 2014	14/6/2015	Arts	red	kiwis	0.50086493	929	wder candy bear claw.	Sweet roll tiramisu de:
46	Madonna	Sep 20, 2015	1/6/2015	Arts	green	kiwis	0.17807051	307	ing caramels sweet roll	Cotton candy muffin cl
3	Phelan Jol	Nov 10, 2014	15/6/2015	Arts	blue	kiwis	-0.123911525	371	ubes tart. Lollipop mar:	Gummies powder toffi
27	Keegan Kr	Jul 29, 2015	3/6/2015	Arts	orange	kiwis	0.127977491	898	onut ici	Sweet roll tiramisu de:
20	Paula Can	Jun 25, 2015	9/6/2015	Arts	red	kiwis	-0.245342779	569	n ginge	Fruitcake candy canes:
7	Cassandra	Apr 7, 2015	3/6/2015	Arts	orange	kiwis	0.533987648	192	ups donut icing. Dragée	Sweet roll tiramisu de:

Change the view

The standard view refers to row and column labels. Click on PivotTable Tools, Design and then on report Layout and Show in Outline Form

Row Labels	apple
Arts	3



Department	apple	ba
Arts	3	

