

# Excel for Sorting & Analysing



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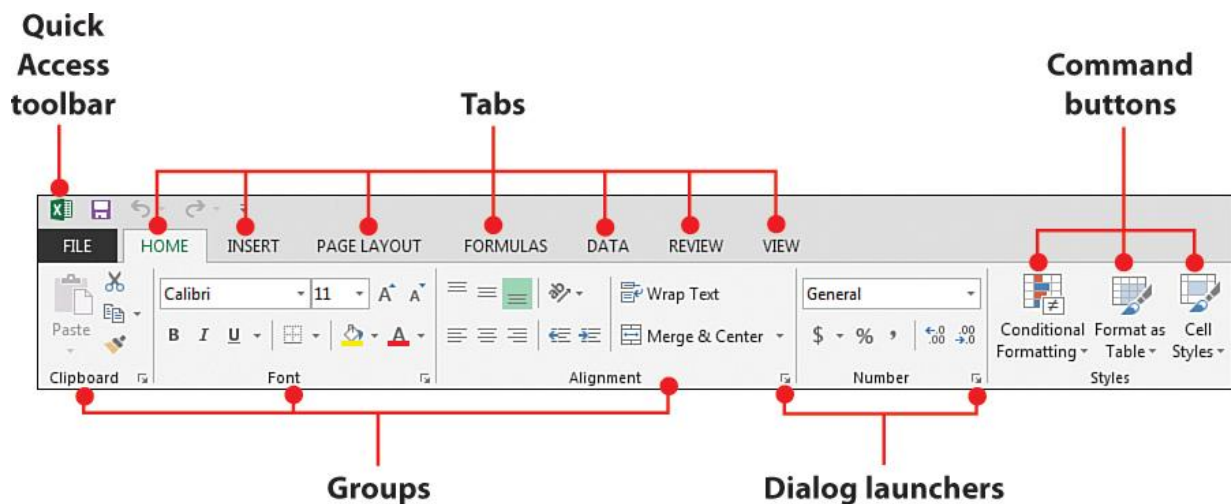
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## Working with Excel

### 1. Understanding the Ribbon

It really helps to get to grips with the Excel terminology as it makes like a lot easier to find things & understand instructions when using the Microsoft Excel help feature or the internet for help.

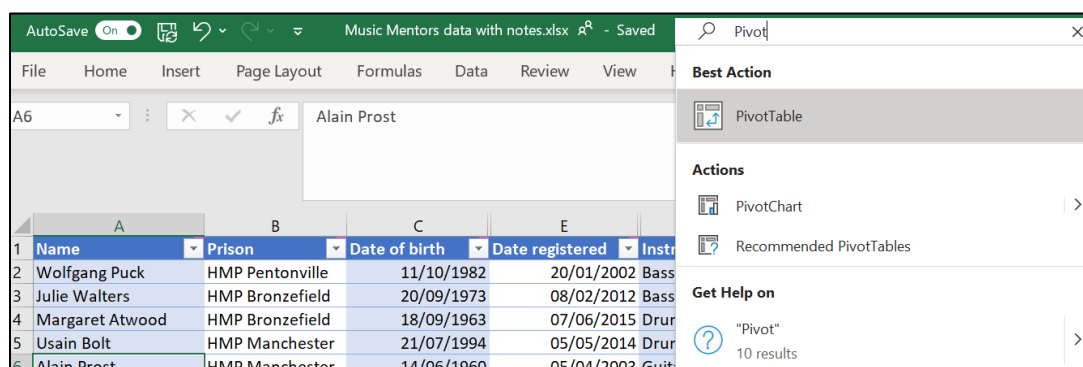


The Ribbon is made up of five basic components: the Quick Access Toolbar, tabs, groups, command buttons, and dialog launchers.

- The **Quick Access Toolbar** is essentially a customizable toolbar to which you can add commands that you use most frequently.
- **Tabs** contain groups of commands that are loosely related to core tasks. It helps to think of each tab as a category.
- **Groups** contain sets of commands that fall under the umbrella of that tab's core task. Each group contains buttons, which you click to activate the command you want to use.
- **Dialog launchers** are activated by clicking the small arrow located in the lower-right corner of certain groups. Clicking any dialog launcher activates a dialog box containing all the commands available for a given group.
- **Command buttons** when clicked launch a macro which perform a specified action in Excel.

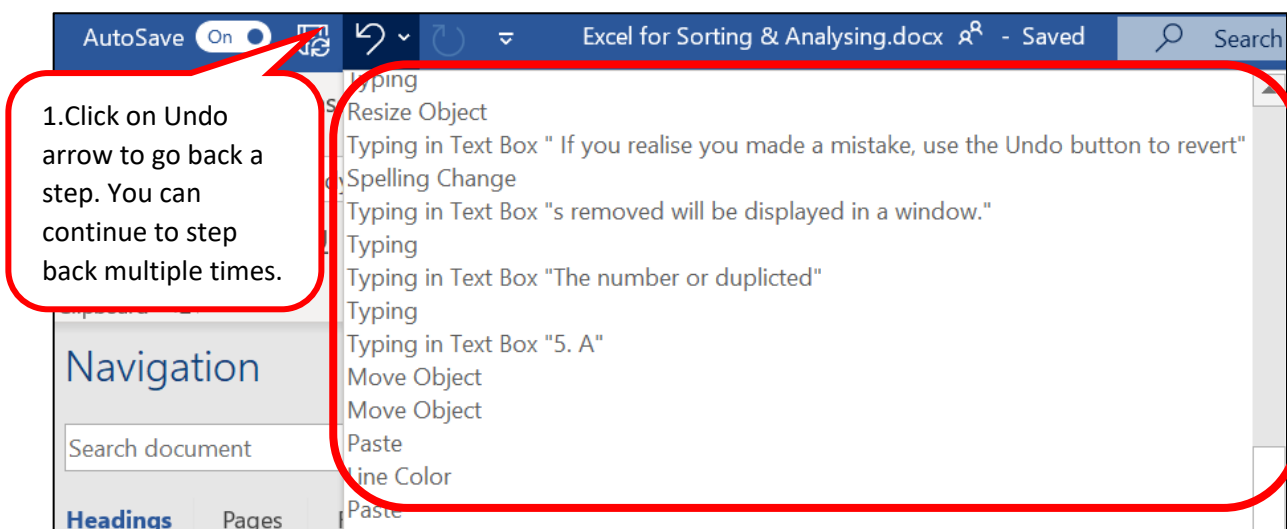
### 2. Getting help

If you can't remember where to find a function in Excel, use the search function at the top to get assistance.



### 3. Correcting mistakes

Microsoft Excel tracks all the changes you make to a file, if you make a mistake (or two!) you can step yourself backwards through the changes you made to reverse anything you did wrong.



### 4. Different Versions of Excel

There are several different version of Microsoft Excel, be aware that different versions offer different features and existing features might be accessed via different means.

These different versions & how they look on a laptop versus a PC means that the screen prints in this document might not always look exactly the same as the screen in front of you. But the features will be there so look for the icons which remain consistent or use the search feature to find them.

#### Microsoft 365

Make sure you have the latest version of Microsoft 365 (10 free licences if NFP)

#### Microsoft Office 2016 & Later

You can get buy a licence from charity digital for £33 for Microsoft Office 2019. .

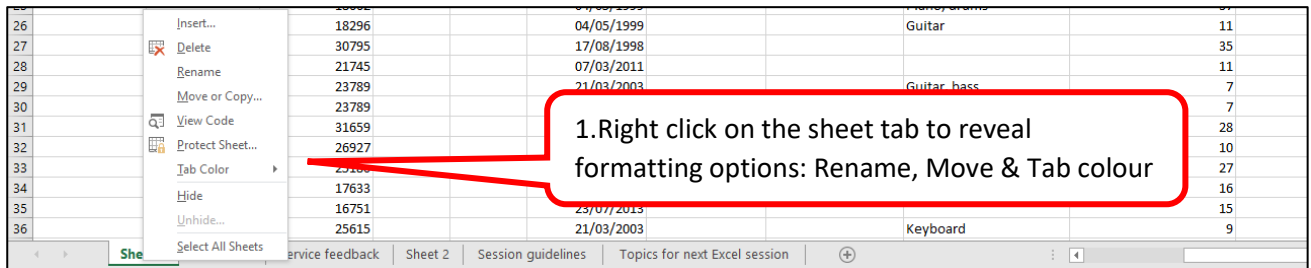
Microsoft licencing is done on a 2 year open licence which means you get upgrades so check before buying anything in case you are eligible for an upgrade rather than paying extra when you want to upgrade to a newer version.



## Viewing Spreadsheets

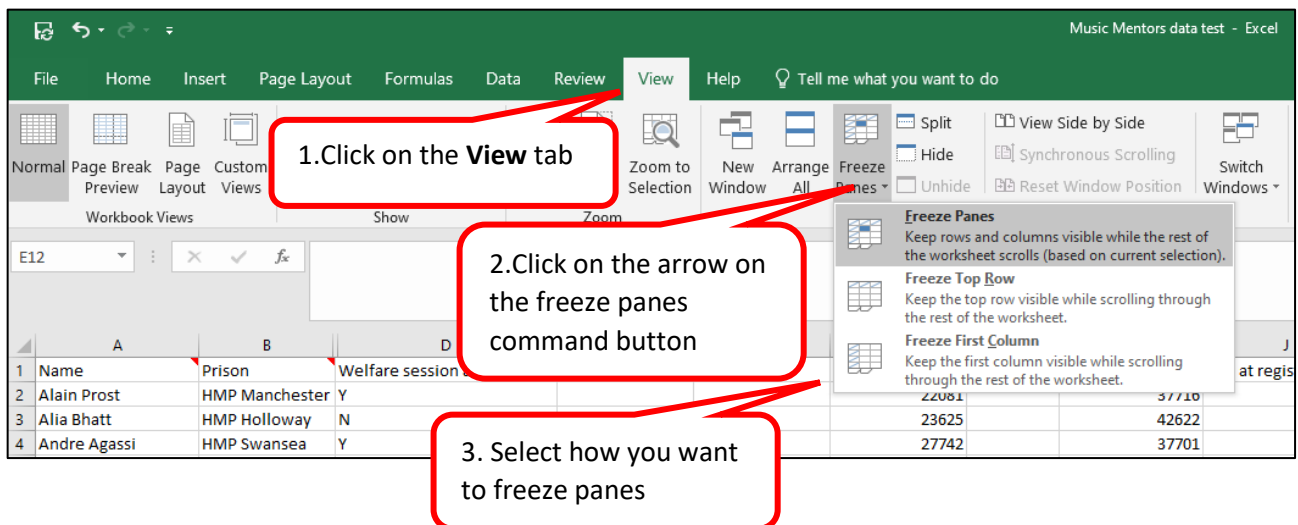
Working with workbooks with large amount of data in each sheet can be very unwieldy. Before starting it's worth getting your view sorted out so that you can easily move around between worksheets.

### 5. Format tabs

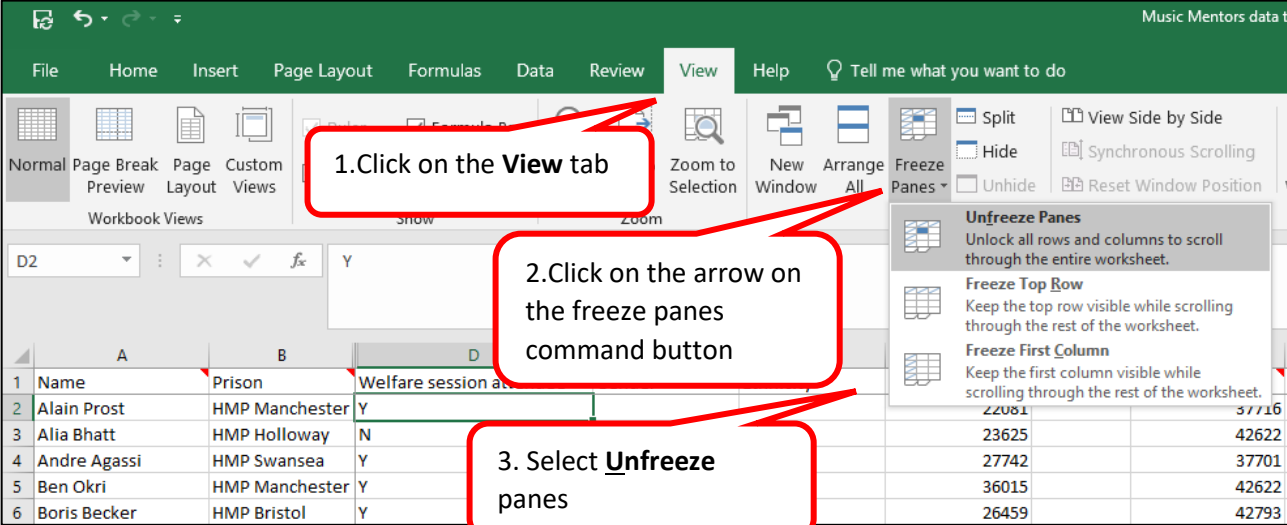


### 6. Freeze panes

Allows you to control areas of the spreadsheet to be fixed as you scroll.



## 7. Unfreeze panes



1. Click on the **View** tab

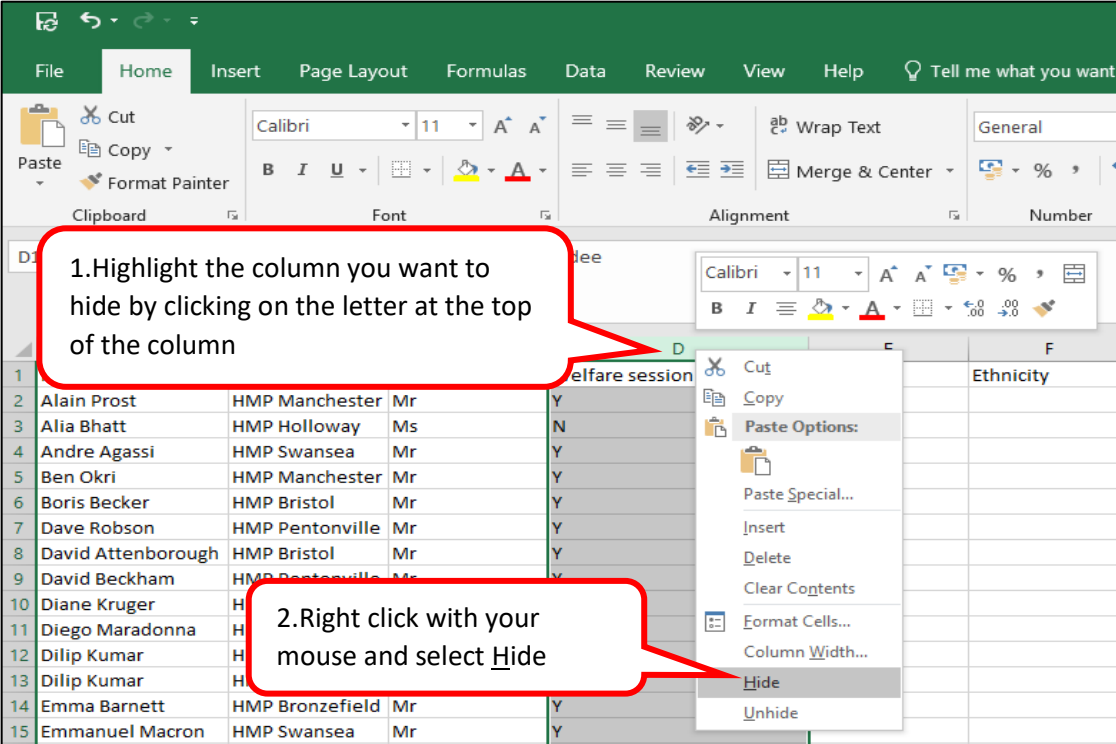
2. Click on the arrow on the freeze panes command button

3. Select **Unfreeze** panes

Name	Prison	Welfare session attended	Score	Total
Alain Prost	HMP Manchester	Y	22081	37716
Alia Bhatt	HMP Holloway	N	23625	42622
Andre Agassi	HMP Swansea	Y	27742	37701
Ben Okri	HMP Manchester	Y	36015	42622
Boris Becker	HMP Bristol	Y	26459	42793

## 8. Hide columns

Hiding columns from view can be very useful when working with big spreadsheets so that you only work with the columns you need.



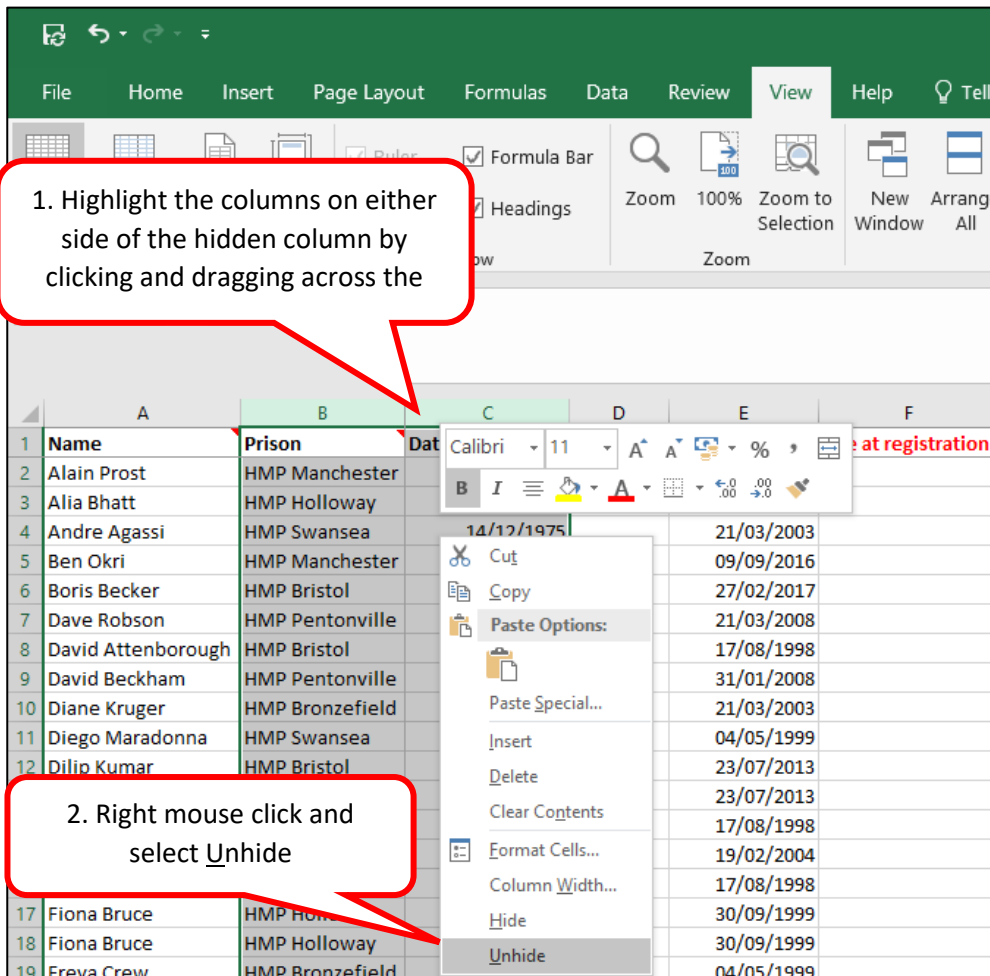
1. Highlight the column you want to hide by clicking on the letter at the top of the column

2. Right click with your mouse and select **Hide**

Name	Prison	Mr	Y	Ethnicity
Alain Prost	HMP Manchester	Mr	Y	
Alia Bhatt	HMP Holloway	Ms	N	
Andre Agassi	HMP Swansea	Mr	Y	
Ben Okri	HMP Manchester	Mr	Y	
Boris Becker	HMP Bristol	Mr	Y	
Dave Robson	HMP Pentonville	Mr	Y	
David Attenborough	HMP Bristol	Mr	Y	
David Beckham	HMP Pentonville	Mr	Y	
Diane Kruger	HMP Pentonville	Mr	Y	
Diego Maradona	HMP Pentonville	Mr	Y	
Dilip Kumar	HMP Pentonville	Mr	Y	
Dilip Kumar	HMP Pentonville	Mr	Y	
Emma Barnett	HMP Bronzefield	Mr	Y	
Emmanuel Macron	HMP Swansea	Mr	Y	
Epid Bluton	HMP Bronzefield	Mr	Y	



## 9. Unhide Columns

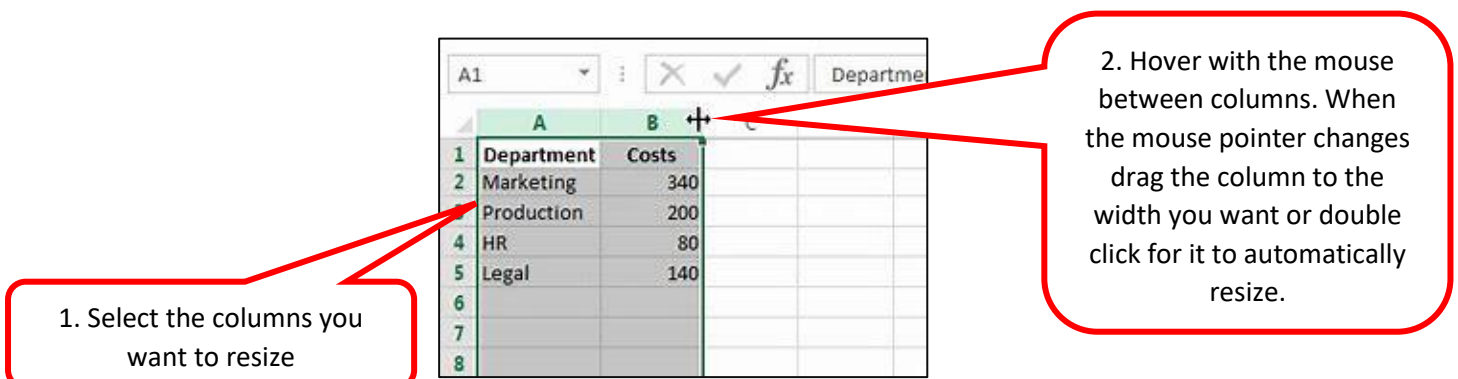


1. Highlight the columns on either side of the hidden column by clicking and dragging across the

2. Right mouse click and select Unhide

	A	B	C	D	E	F
1	Name	Prison	Date			at registration
2	Alain Prost	HMP Manchester				
3	Alia Bhatt	HMP Holloway				
4	Andre Agassi	HMP Swansea				
5	Ben Okri	HMP Manchester			21/03/2003	
6	Boris Becker	HMP Bristol			09/09/2016	
7	Dave Robson	HMP Pentonville			27/02/2017	
8	David Attenborough	HMP Bristol			21/03/2008	
9	David Beckham	HMP Pentonville			17/08/1998	
10	Diane Kruger	HMP Bronzefield			31/01/2008	
11	Diego Maradona	HMP Swansea			21/03/2003	
12	Dilip Kumar	HMP Bristol			04/05/1999	
13					23/07/2013	
14					23/07/2013	
15					17/08/1998	
16					19/02/2004	
17	Fiona Bruce	HMP Holloway			17/08/1998	
18	Fiona Bruce	HMP Holloway			30/09/1999	
19	Fiona Bruce	HMP Holloway			30/09/1999	
20	Fiona Bruce	HMP Holloway			04/05/1999	

## 10. Resize columns



1. Select the columns you want to resize

2. Hover with the mouse between columns. When the mouse pointer changes drag the column to the width you want or double click for it to automatically resize.

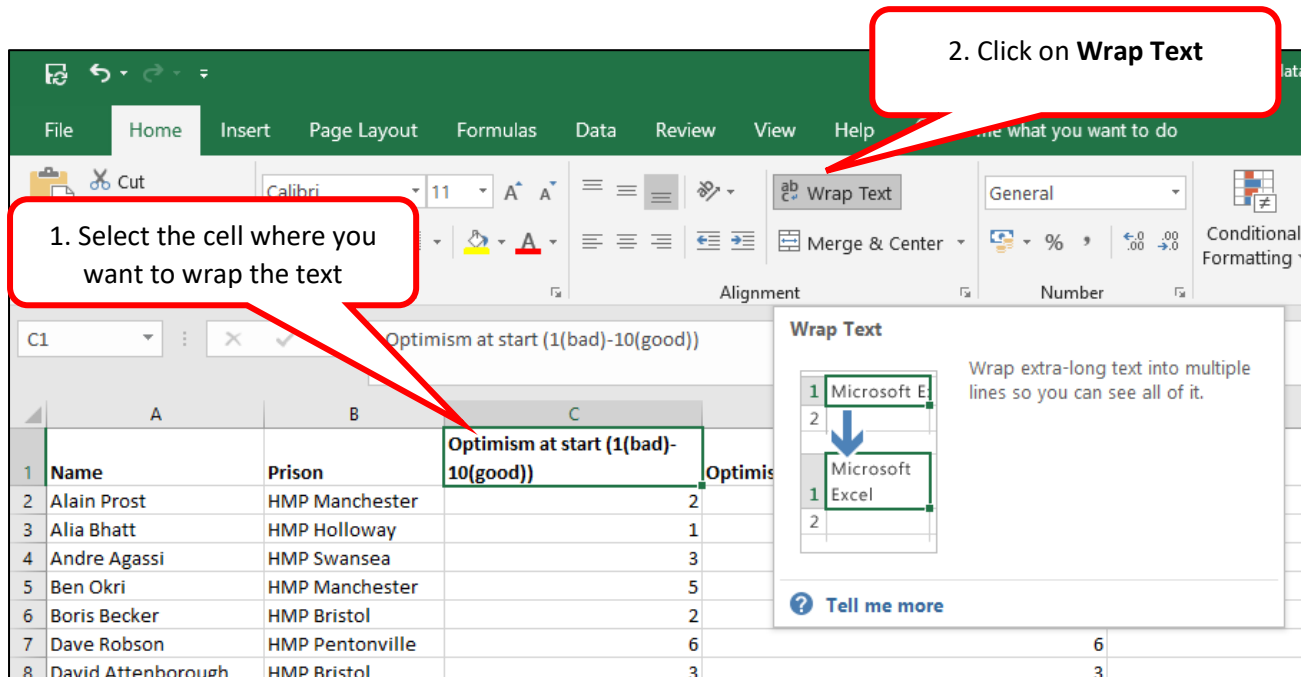
	A	B	C
1	Department	Costs	
2	Marketing	340	
3	Production	200	
4	HR	80	
5	Legal	140	
6			
7			
8			





## 11. Wrap text

Wrap text allows you to display a long line of text on multiple lines so that it can all fit in one cell.



2. Click on **Wrap Text**

1. Select the cell where you want to wrap the text

	A	B	C	
1	Name	Prison	Optimism at start (1(bad)-10(good))	Optimis
2	Alain Prost	HMP Manchester		2
3	Alia Bhatt	HMP Holloway		1
4	Andre Agassi	HMP Swansea		3
5	Ben Okri	HMP Manchester		5
6	Boris Becker	HMP Bristol		2
7	Dave Robson	HMP Pentonville		6
8	David Attenborough	HMP Bristol		3

**Wrap Text**

Wrap extra-long text into multiple lines so you can see all of it.

1 Microsoft E  
2  
1 Microsoft  
2 Excel

[Tell me more](#)

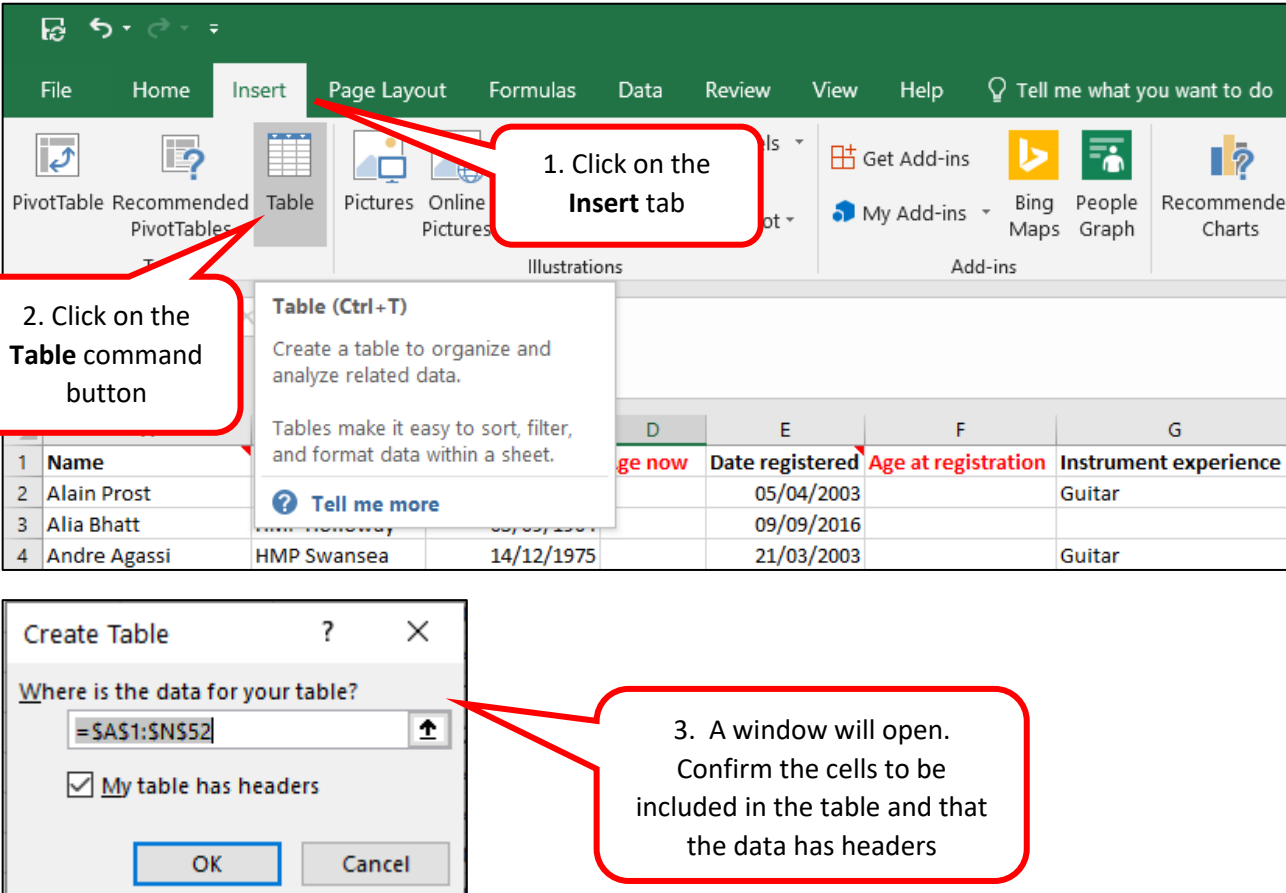


## Managing data with tables

The advantages of an Excel table include all of the following:

- **Quick Styles**  
Add color, banded rows, and header styles with just one click to style your data.
- **Table Names**  
Give a table a name to make it easier to reference in other formulas.
- **Cleaner Formulas**  
Excel Formulas are much easier to read and write when working in tables.
- **Auto Expand**  
Add a new row or column to your data, and the Excel table automatically updates to include the new cells.
- **Filters & Subtotals**  
Automatically add filter buttons and subtotals that adapt as you filter your data.
- **Dynamic Pivot tables**  
If you use an Excel Table for the source data of your pivot table, the data range becomes "dynamic". A dynamic range will automatically expand and shrink the table as you add or remove data, so won't have to worry that the pivot table is missing the latest data. When you use a Table for your pivot table, the pivot table will always be in sync with your data.

### 12. Make your data into a table



1. Click on the **Insert** tab

2. Click on the **Table** command button

3. A window will open. Confirm the cells to be included in the table and that the data has headers

**Create Table**

Where is the data for your table?

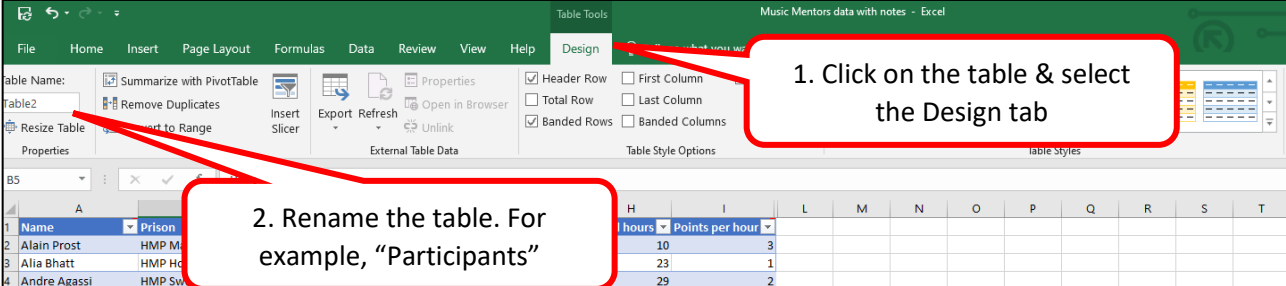
☒ My table has headers

	D	E	F	G
1	Name	Age now	Date registered	Age at registration
2	Alain Prost		05/04/2003	Guitar
3	Alia Bhatt		09/09/2016	
4	Andre Agassi	HMP Swansea	14/12/1975	21/03/2003



### 13. Naming the table

It is good practice to name the table as it makes life much easier later when working with formulas. Naming the formula is basically giving your data set a name which will enable you to recognise which data set you need to be working with.



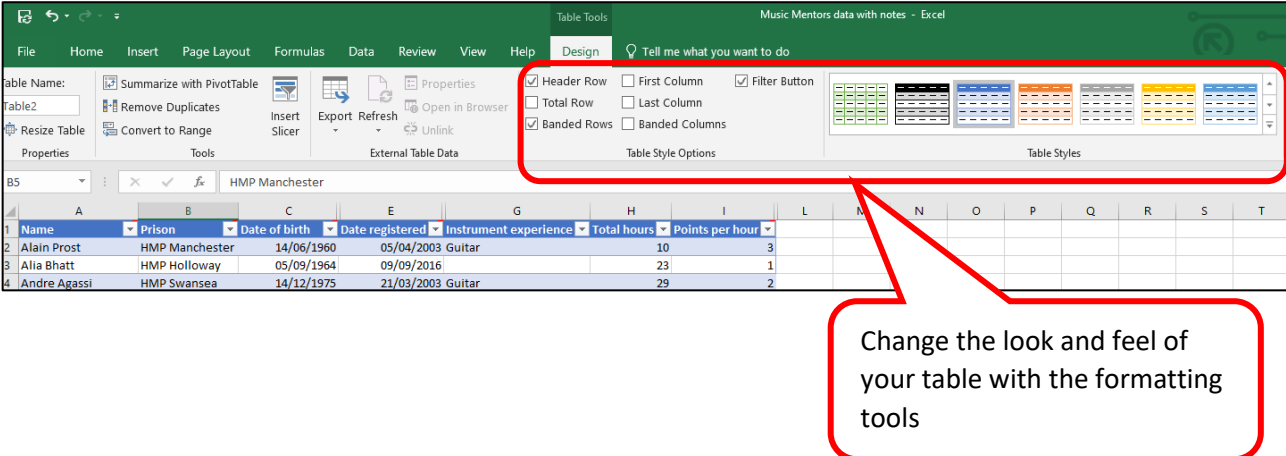
1. Click on the table & select the Design tab

2. Rename the table. For example, "Participants"

Name	Prison	Total hours	Points per hour
Alain Prost	HMP Manchester	10	3
Alia Bhatt	HMP Holloway	23	1
Andre Agassi	HMP Swansea	29	2

### 14. Formatting the table

There are a number of table formatting options in Excel. The benefit of the table format is that it ensures each new column or row you add to your table will be automatically formatted in the same way.



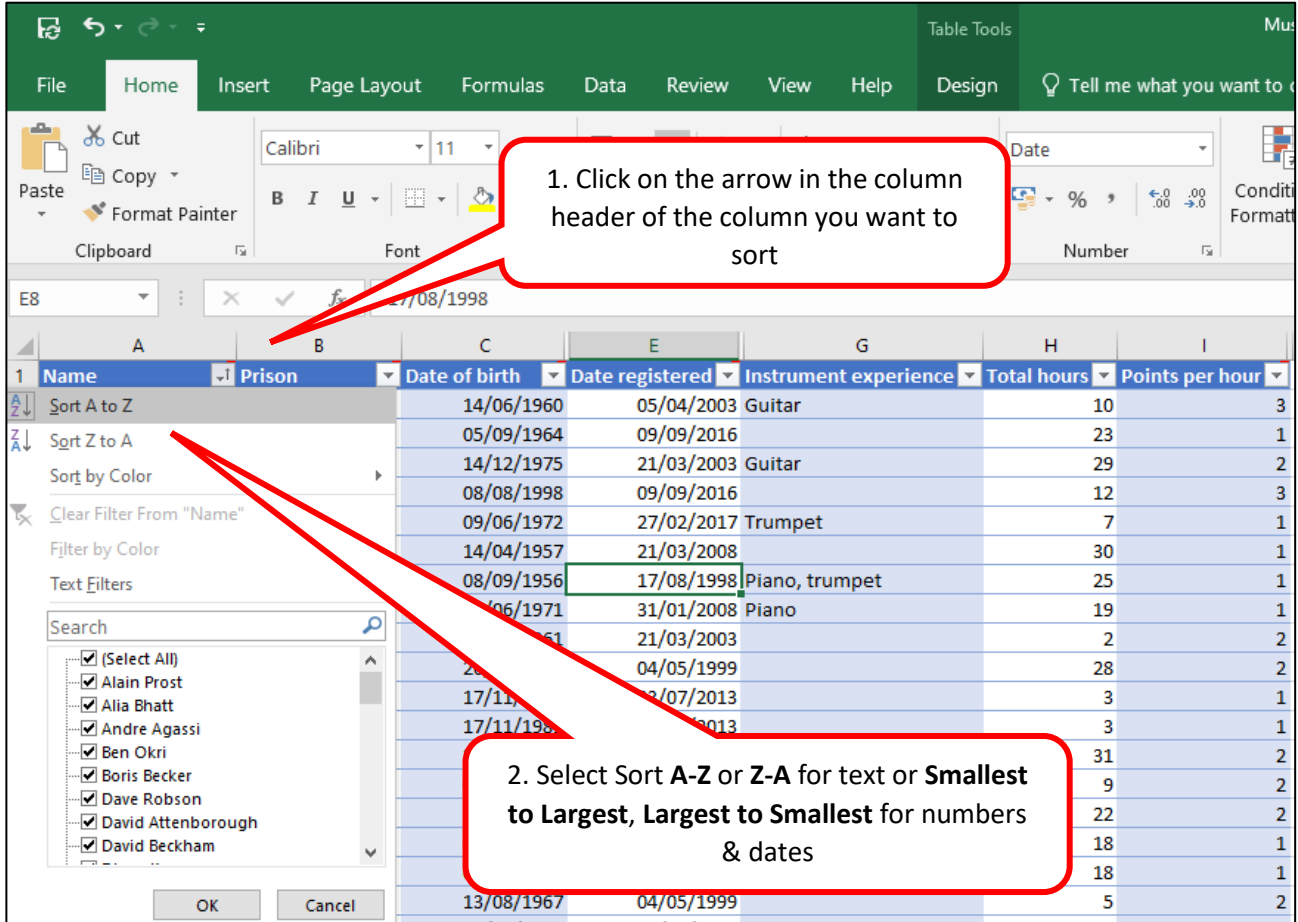
Change the look and feel of your table with the formatting tools

Name	Prison	Date of birth	Date registered	Instrument experience	Total hours	Points per hour
Alain Prost	HMP Manchester	14/06/1960	05/04/2003	Guitar	10	3
Alia Bhatt	HMP Holloway	05/09/1964	09/09/2016		23	1
Andre Agassi	HMP Swansea	14/12/1975	21/03/2003	Guitar	29	2



## 15. Sorting (Single level)

Simple sorting can be done using the options available in each column header.



1. Click on the arrow in the column header of the column you want to sort

2. Select Sort A-Z or Z-A for text or **Smallest to Largest, Largest to Smallest** for numbers & dates

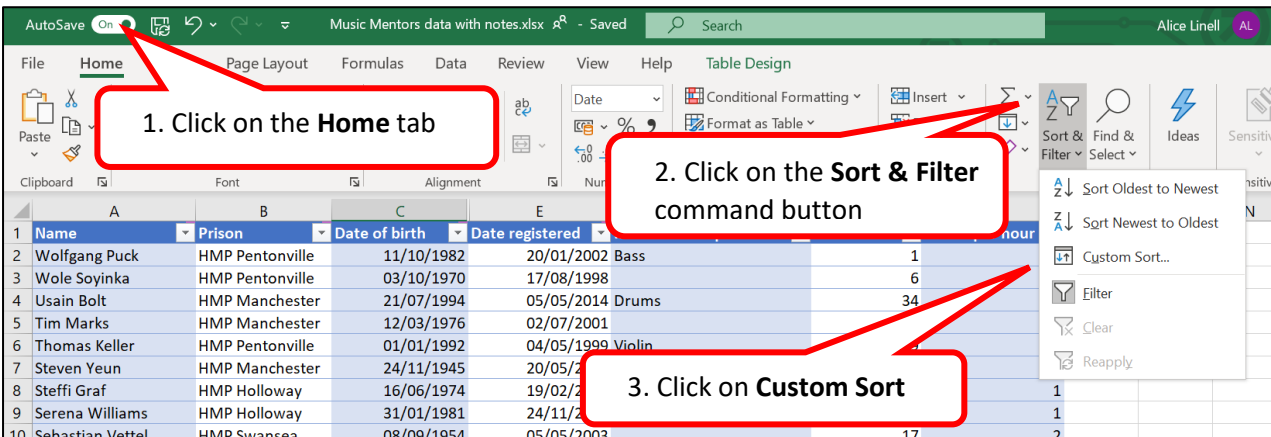
Name	Prison	Date of birth	Date registered	Instrument experience	Total hours	Points per hour
Sort A to Z		14/06/1960	05/04/2003	Guitar	10	3
Sort Z to A		05/09/1964	09/09/2016		23	1
Sort by Color		14/12/1975	21/03/2003	Guitar	29	2
Clear Filter From "Name"		08/08/1998	09/09/2016		12	3
Filter by Color		09/06/1972	27/02/2017	Trumpet	7	1
Text Filters		14/04/1957	21/03/2008		30	1
Search		08/09/1956	17/08/1998	Piano, trumpet	25	1
<input checked="" type="checkbox"/> (Select All)		06/1971	31/01/2008	Piano	19	1
<input checked="" type="checkbox"/> Alain Prost		06/1961	21/03/2003		2	2
<input checked="" type="checkbox"/> Alia Bhatt		28/05/1999	04/05/1999		28	2
<input checked="" type="checkbox"/> Andre Agassi		17/11/1963	03/07/2013		3	1
<input checked="" type="checkbox"/> Ben Okri		17/11/1963	03/07/2013		3	1
<input checked="" type="checkbox"/> Boris Becker					31	2
<input checked="" type="checkbox"/> Dave Robson					9	2
<input checked="" type="checkbox"/> David Attenborough					22	2
<input checked="" type="checkbox"/> David Beckham					18	1
					18	1
					5	2



## 16. Sorting (Multi-level)

More complex sorting options are available via the Home tab including:

- Multi-level sorting
- Custom sort orders



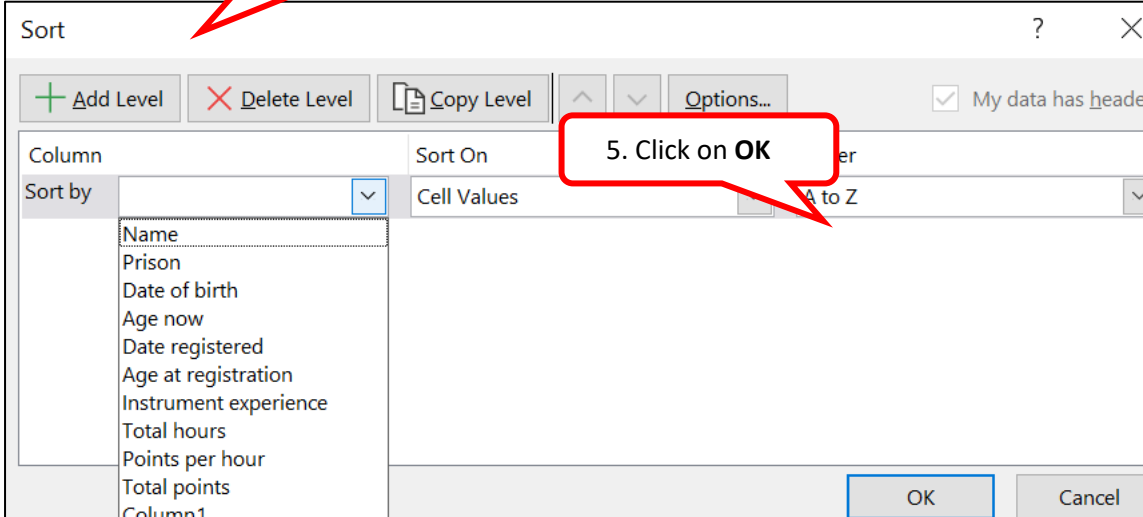
1. Click on the **Home** tab

2. Click on the **Sort & Filter** command button

3. Click on **Custom Sort**

Name	Prison	Date of birth	Date registered	Instrument	Points per hour
Wolfgang Puck	HMP Pentonville	11/10/1982	20/01/2002	Bass	1
Wole Soyinka	HMP Pentonville	03/10/1970	17/08/1998		6
Usain Bolt	HMP Manchester	21/07/1994	05/05/2014	Drums	34
Tim Marks	HMP Manchester	12/03/1976	02/07/2001		
Thomas Keller	HMP Pentonville	01/01/1992	04/05/1999	Violin	
Steven Yeun	HMP Manchester	24/11/1945	20/05/2003		
Steffi Graf	HMP Holloway	16/06/1974	19/02/2001		
Serena Williams	HMP Holloway	31/01/1981	24/11/2003		
Sebastian Vettel	HMP Swansea	08/09/1954	05/05/2003		17

4. A window will open. Select the column you want to sort by, the value to sort by and the sort order for the first level of sorting.



5. Click on **OK**

Sort by: Name

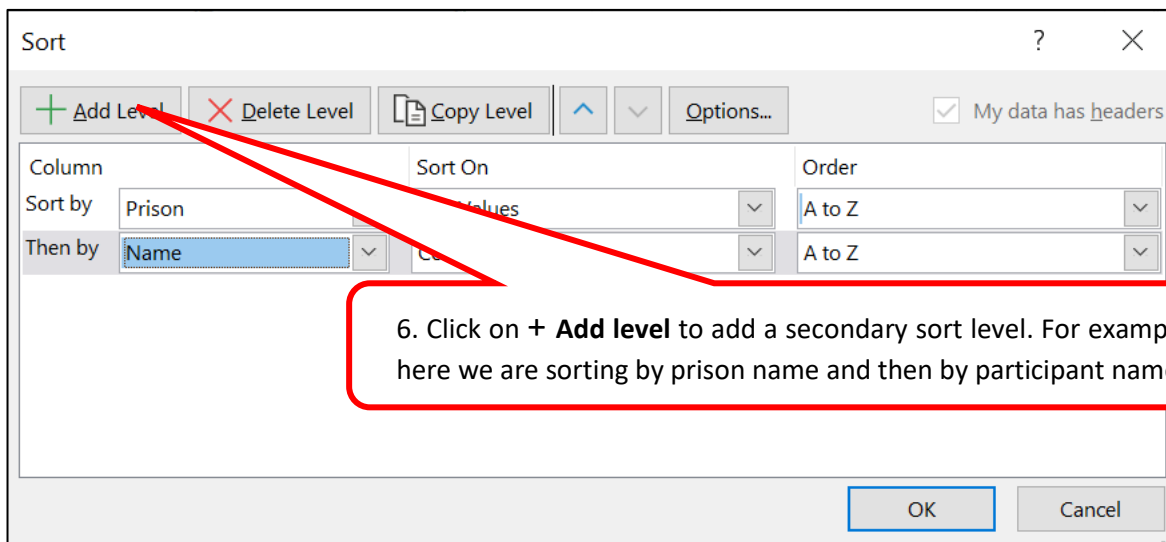
Sort On: Cell Values

Order: A to Z

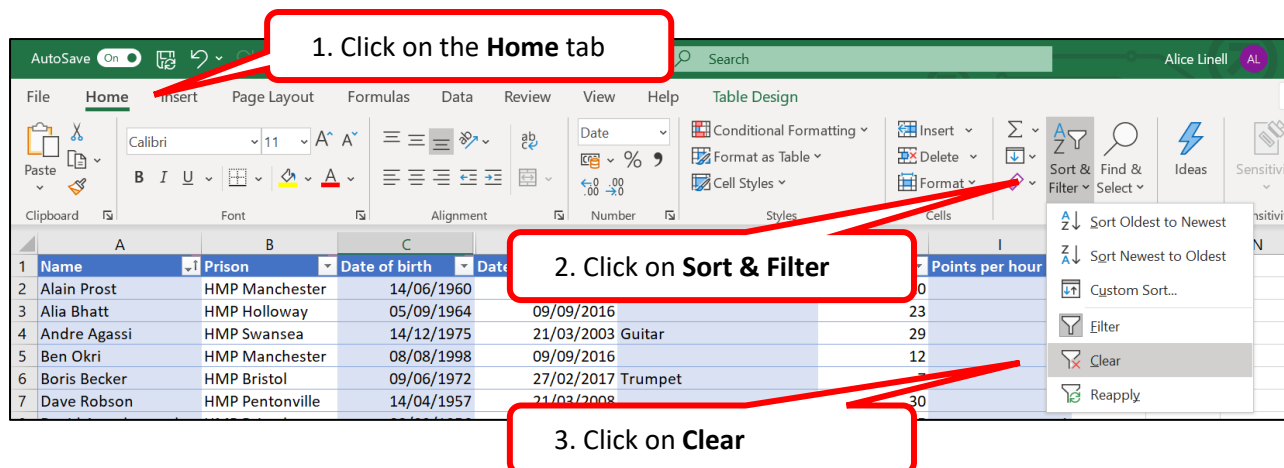
My data has headers: ☒

Buttons: Add Level, Delete Level, Copy Level, Options..., OK, Cancel





## 17. Clear sort order



## 18. Filtering (Select & Deselect)

AutoSave On Music Mentors data with notes.xlsx - Saved Search

File Home Insert Page Layout Design

1. Click on the arrow next to the column header of the column you want to filter by

Name	Prison	Date of birth	Date registered	Instrument experience	Total hours	Points per hour
Sort A to Z		14/06/1960	05/04/2003	Guitar	10	
Sort Z to A		05/09/1964	09/09/2016		23	
Sort by Color		14/12/1975	21/03/2003	Guitar	29	
Clear Filter From "Prison"		08/08/1998	09/09/2016		12	
Filter by Color		09/06/1972	27/02/2017	Trumpet	7	
Text Filters		14/04/1957	21/03/2008		30	
Search		08/09/1956	17/08/1998	Piano, trumpet	25	
		19/06/1971	31/01/2008	Piano	19	
		29/06/1961	21/03/2003		2	
					28	
					3	
					3	
		28/06/1969	17/08/1998		31	
		09/09/1984	19/02/2004		9	
		18/05/1961	17/08/1998	Guitar, Piano	22	
		04/04/1979	30/09/1999		18	
		04/04/1979	30/09/1999		18	

2. Select the values you want to filter by

- ☒ (Select All)
- ☒ HMP Bristol
- ☒ HMP Bronzefield
- ☒ HMP Holloway
- ☒ HMP Manchester
- ☒ HMP Pentonville
- ☒ HMP Swansea

When you have applied the filter, look at the bottom of the sheet to see the total count of the filtered rows.

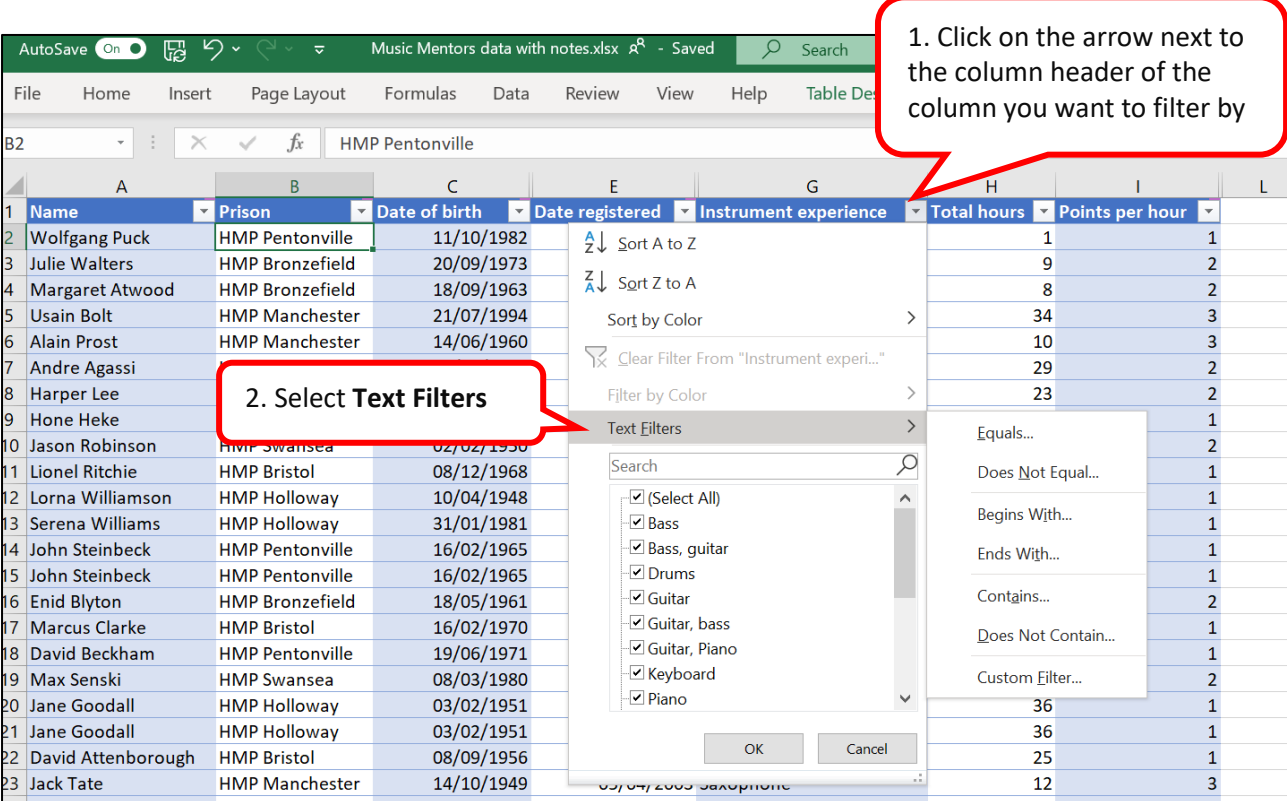
Participants Attendance Service feedback Outcomes

Ready 20 of 51 records found



## 19. Filtering (Text filters)

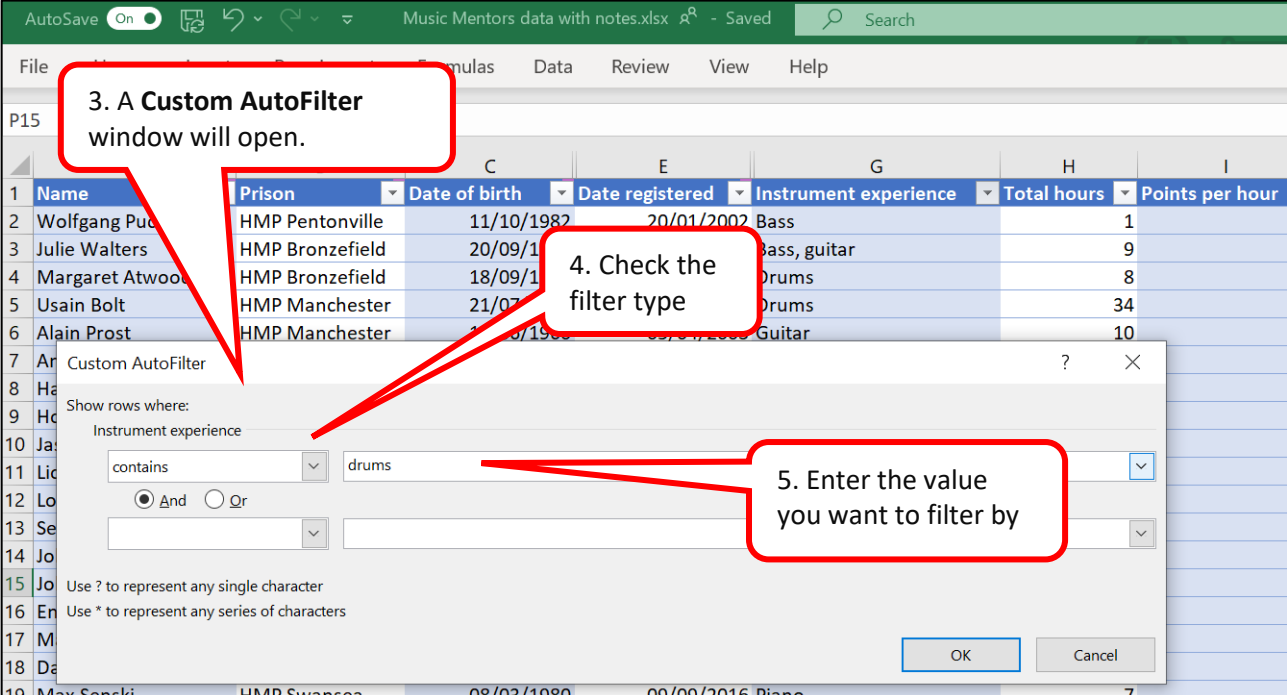
Excel has more advanced filtering options available via text filters:



1. Click on the arrow next to the column header of the column you want to filter by

2. Select Text Filters

Name	Prison	Date of birth	Date registered	Instrument experience	Total hours	Points per hour
Wolfgang Puck	HMP Pentonville	11/10/1982			1	1
Julie Walters	HMP Bronzefield	20/09/1973			9	2
Margaret Atwood	HMP Bronzefield	18/09/1963			8	2
Usain Bolt	HMP Manchester	21/07/1994			34	3
Alain Prost	HMP Manchester	14/06/1960			10	3
Andre Agassi					29	2
Harper Lee					23	2
Hone Heke						1
Jason Robinson	HMP Swansea	02/02/1950				2
Lionel Ritchie	HMP Bristol	08/12/1968				1
Lorna Williamson	HMP Holloway	10/04/1948				1
Serena Williams	HMP Holloway	31/01/1981				1
John Steinbeck	HMP Pentonville	16/02/1965				1
John Steinbeck	HMP Pentonville	16/02/1965				1
Enid Blyton	HMP Bronzefield	18/05/1961				2
Marcus Clarke	HMP Bristol	16/02/1970				1
David Beckham	HMP Pentonville	19/06/1971				1
Max Senski	HMP Swansea	08/03/1980				2
Jane Goodall	HMP Holloway	03/02/1951			36	1
Jane Goodall	HMP Holloway	03/02/1951			36	1
David Attenborough	HMP Bristol	08/09/1956			25	1
Jack Tate	HMP Manchester	14/10/1949			12	3



3. A Custom AutoFilter window will open.

4. Check the filter type

5. Enter the value you want to filter by

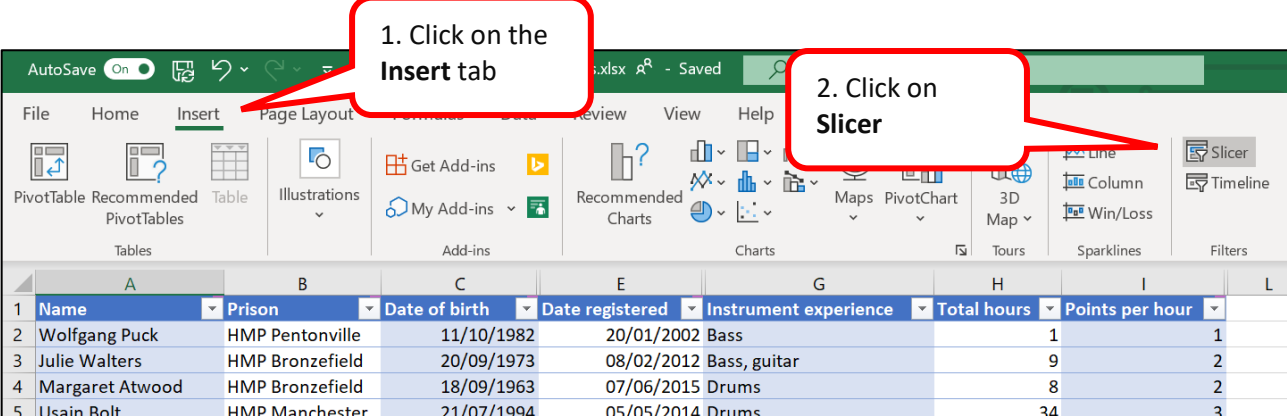
Name	Prison	Date of birth	Date registered	Instrument experience	Total hours	Points per hour
Wolfgang Puck	HMP Pentonville	11/10/1982	20/01/2002	Bass		1
Julie Walters	HMP Bronzefield	20/09/1973		Bass, guitar	9	
Margaret Atwood	HMP Bronzefield	18/09/1963		Drums	8	
Usain Bolt	HMP Manchester	21/07/1994		Drums	34	
Alain Prost	HMP Manchester	14/06/1960		Guitar	10	





## 20. Data Slicers

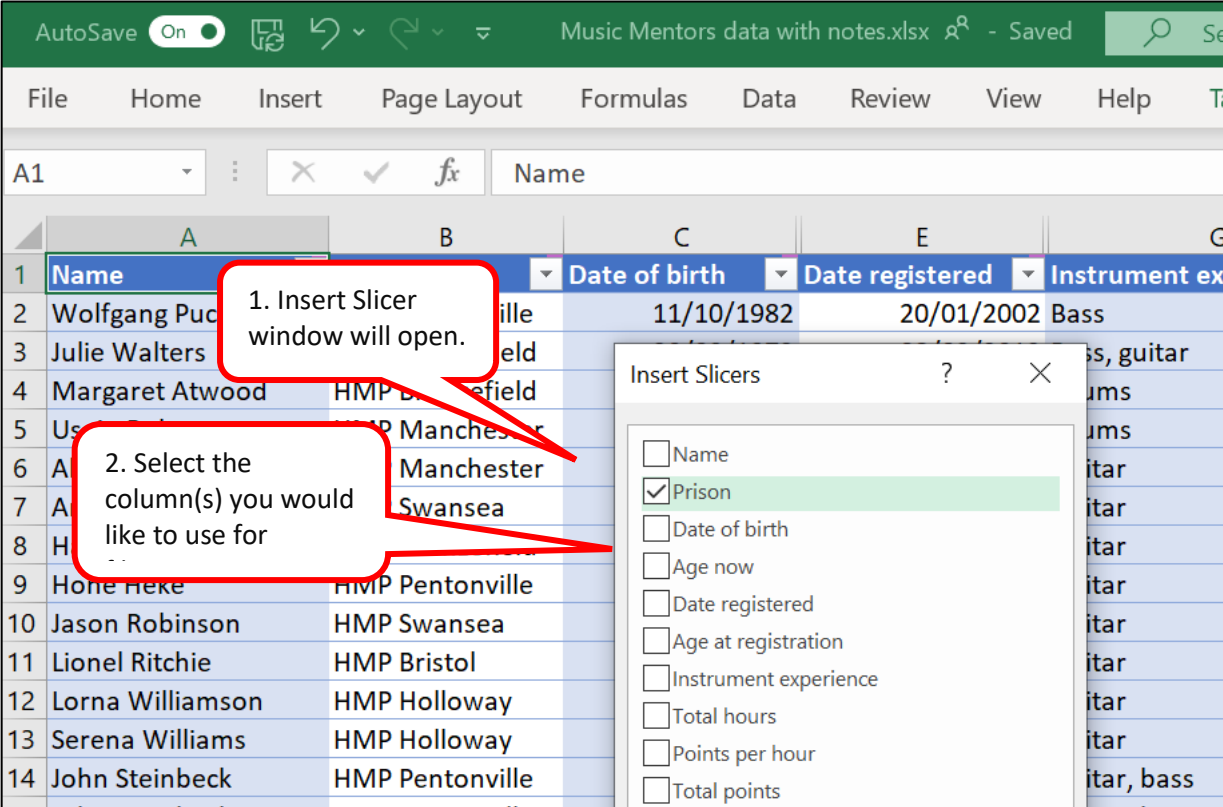
Slicers are visual filters. Using a slicer, you can filter your data (or pivot table or pivot chart) by clicking on the type of data you want.



1. Click on the **Insert** tab

2. Click on **Slicer**

Name	Prison	Date of birth	Date registered	Instrument experience	Total hours	Points per hour
Wolfgang Puck	HMP Pentonville	11/10/1982	20/01/2002	Bass	1	1
Julie Walters	HMP Bronzefield	20/09/1973	08/02/2012	Bass, guitar	9	2
Margaret Atwood	HMP Bronzefield	18/09/1963	07/06/2015	Drums	8	2
Usain Bolt	HMP Manchester	21/07/1994	05/05/2014	Drums	34	3



1. Insert Slicer window will open.

2. Select the column(s) you would like to use for

Name	Prison	Date of birth	Date registered	Instrument experience
Wolfgang Puck	HMP Pentonville	11/10/1982	20/01/2002	Bass
Julie Walters	HMP Bronzefield			Bass, guitar
Margaret Atwood	HMP Bronzefield			Drums
Usain Bolt	HMP Manchester			Drums
Jason Robinson	HMP Swansea			Guitar
Lionel Ritchie	HMP Bristol			Guitar
Lorna Williamson	HMP Holloway			Guitar
Serena Williams	HMP Holloway			Guitar
John Steinbeck	HMP Pentonville			Guitar, bass

Insert Slicers

- ☐ Name
- ☒ Prison
- ☐ Date of birth
- ☐ Age now
- ☐ Date registered
- ☐ Age at registration
- ☐ Instrument experience
- ☐ Total hours
- ☐ Points per hour
- ☐ Total points



AutoSave On Music Mentors data with notes.xlsx - Saving... Search Alice Linell AL

File Home Insert Page Layout Formulas Data Review View Help Slicer

Prison

3. Drag and drop the slicer to the location you want

Name	Prison	Date of birth	Date registered	Instrument experience	Total hours	Points per hour
Wolfgang Puck	HMP Pentonville	11/10/1982			1	
Julie Walters	HMP Bronzefield	20/09/1973			2	
Margaret Atwood	HMP Bronzefield	18/09/1963			2	
Usain Bolt	HMP Manchester	21/07/1994	05/05/2014	Drums	3	
Alain Prost	HMP Manchester	14/06/1960	05/04/2003	Guitar	3	
Andre Agassi	HMP Swansea	14/12/1975	21/03/2003	Guitar	2	
Harper Lee	HMP Bronzefield	07/09/1949	04/04/2009	Guitar	2	
Hone Heke	HMP Pentonville	27/04/1983	09/09/2016	Guitar	1	
Jason Robinson	HMP Swansea	02/02/1950	04/05/1999	Guitar	2	
Lionel Ritchie	HMP Bristol	08/12/1968	27/04/2007	Guitar	1	
Lorna Williamson	HMP Holloway	10/04/1948	19/02/2004	Guitar	1	
Serena Williams	HMP Holloway	31/01/1981	24/11/2005	Guitar	1	
John Steinbeck	HMP Pentonville	16/02/1965	21/03/2003	Guitar, bass	1	
John Steinbeck	HMP Pentonville	16/02/1965	21/03/2003	Guitar, bass	1	

Prison

- HMP Bristol
- HMP Bronzefield
- HMP Holloway
- HMP Manchester
- HMP Pentonville
- HMP Swansea

AutoSave On Music Mentors data with notes.xlsx - Saved Search Alice Linell AL

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P27

4. Select a single filter option to apply the filter

Name	Prison	Date of birth	Date registered	Instrument experience	Total hours	Points per hour
Usain Bolt	HMP Manchester	21/07/1994	05/05/2014	Drums	34	3
Alain Prost	HMP Manchester	14/06/1960	05/04/2003	Guitar	10	3
Jack Tate	HMP Manchester	14/10/1949	05/04/2003	Saxophone	12	3
Raj Kapoor	HMP Manchester	27/01/1997	25/05/2015	Violin, Guitar	7	3
Ben Okri	HMP Manchester	08/08/1998	09/09/2016		12	3
Robert Hall	HMP Manchester	20/05/1966	21/03/2003		5	3
Roger Federer	HMP Manchester	08/08/1998	09/09/2016		12	3
Steven Yeun	HMP Manchester	16/02/1965	21/03/2003	Guitar, bass	1	3
Tim Marks	HMP Manchester	16/02/1965	21/03/2003	Guitar, bass	24	3

Prison

- HMP Bristol
- HMP Bronzefield
- HMP Holloway
- HMP Manchester
- HMP Pentonville
- HMP Swansea

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A3 Julie Walters

5. To add more than one filter click on the **Multi-Select** button

6. Select multiple filter options to apply

Name	Prison	Date of birth	Date registered	Instrument experience	Total hours	Points per hour
Julie Walters	HMP Bronzefield	20/09/1973			2	
Margaret Atwood	HMP Bronzefield	18/09/1963			2	
Harper Lee	HMP Bronzefield	07/09/1949	04/04/2009	Guitar	23	2
Lorna Williamson	HMP Holloway	10/04/1948	19/02/2004	Guitar	15	1
Serena Williams	HMP Holloway	31/01/1981	24/11/2005	Guitar	14	1
Enid Blyton	HMP Bronzefield	18/09/1963			2	
Jane Goodall	HMP Holloway	03/09/1949			36	1
Jane Goodall	HMP Holloway	03/09/1949			36	1
Jacina Ardern	HMP Bronzefield	12/11/1981			23	2
Alia Bhatt	HMP Holloway	05/05/1997			23	1
Diane Kruger	HMP Bronzefield	29/06/1961	21/03/2003		2	2
Emma Barnett	HMP Bronzefield	28/06/1969	17/08/1998		31	2
Fiona Bruce	HMP Holloway	04/04/1979	30/09/1999		18	1
Fiona Bruce	HMP Holloway	04/04/1979	30/09/1999		18	1
Freya Crew	HMP Bronzefield	13/08/1967	04/05/1999		5	2

Prison

- HMP Bristol
- HMP Bronzefield
- HMP Holloway
- HMP Manchester
- HMP Pentonville
- HMP Swansea



## Creating a workable data set

You don't always have control over the format and type of data that you import from an external data source or over internal data entered by different users in different ways. Before you can analyze the data, you often need to clean it up in order to create a robust data set.

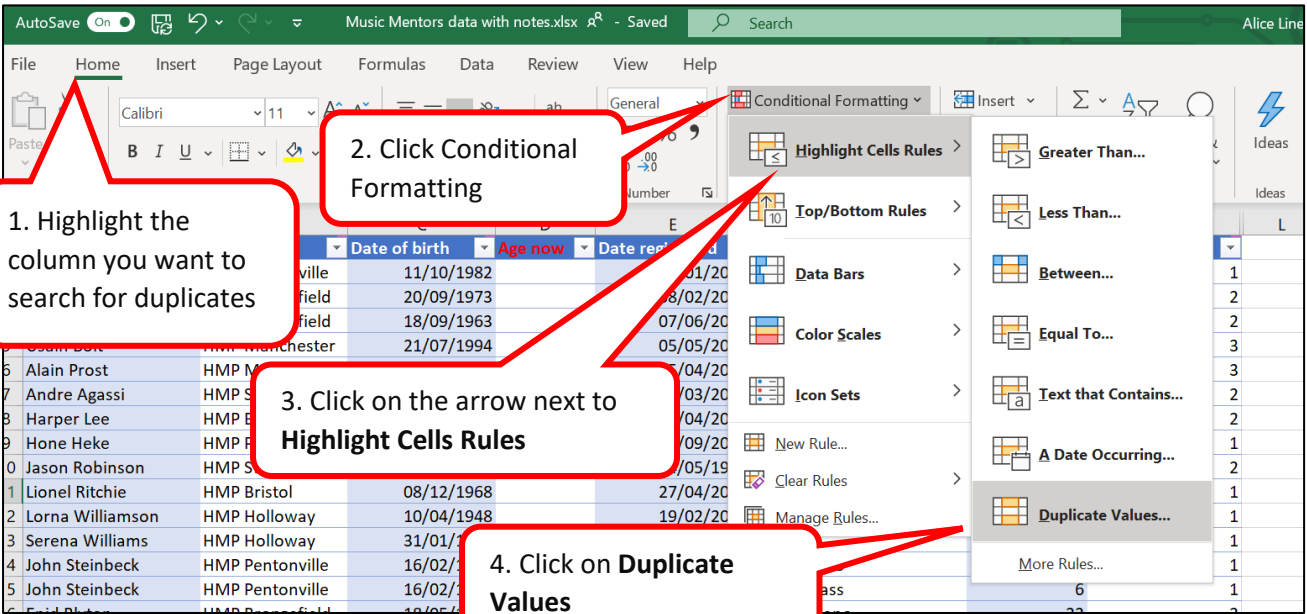
To create a robust and workable dataset you need to ensure that your data has:

- No Duplicate records
- Unique Record Identifiers
- Accurate data entry – No spelling mistakes, spaces, extra punctuation that shouldn't be there
- Consistent data entry - Spelling, punctuation, layout of data is the same for similar bit of data
- Correct format - Fields are formatted correctly for the data type you're using & data is a format you can use
- Consistent format
- No missing data (what does a blank mean?)

**Before you begin working with data, take a back up to ensure if you make a mistake you can revert to the original.**

## 21. Identifying duplicates

Use the Highlight duplicates function in Conditional formatting to identify duplicates



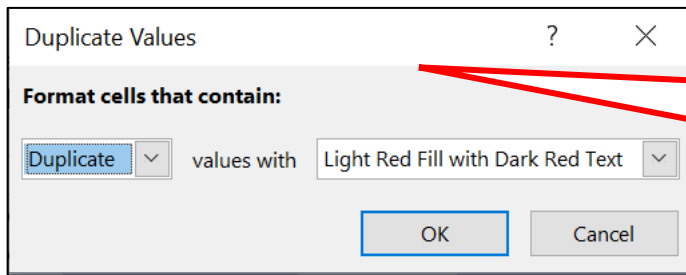
1. Highlight the column you want to search for duplicates

2. Click Conditional Formatting

3. Click on the arrow next to Highlight Cells Rules

4. Click on Duplicate Values

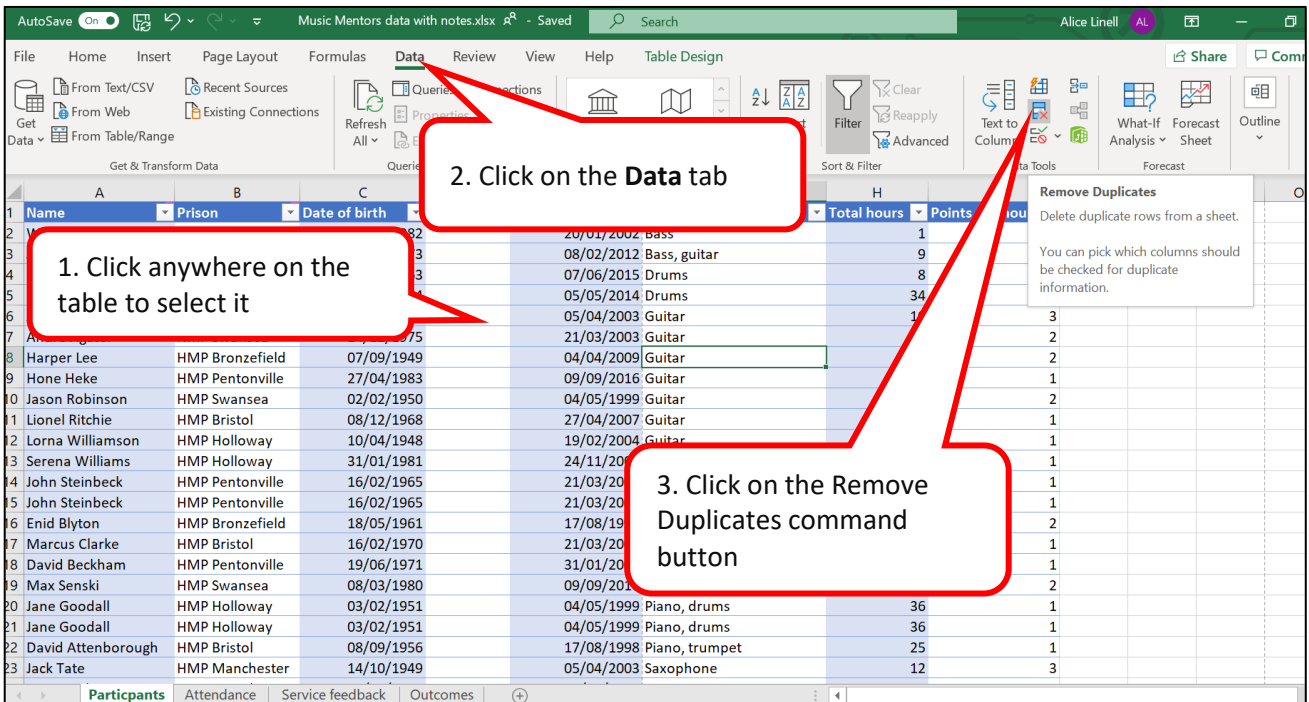




6. The **Duplicate Values** window will open giving you the opportunity if you want to highlight Duplicate or Unique values and what colour you wish



## 22. Removing duplicates

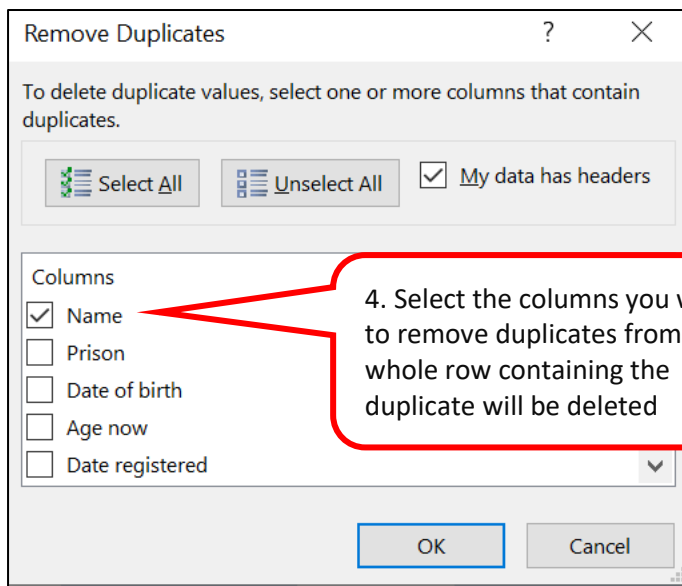


1. Click anywhere on the table to select it

2. Click on the Data tab

3. Click on the Remove Duplicates command button

Name	Prison	Date of birth	Total hours	Points
Harper Lee	HMP Bronzefield	07/09/1949		
Hone Heke	HMP Pentonville	27/04/1983		
Jason Robinson	HMP Swansea	02/02/1950		
Lionel Ritchie	HMP Bristol	08/12/1968		
Lorna Williamson	HMP Holloway	10/04/1948		
Serena Williams	HMP Holloway	31/01/1981		
John Steinbeck	HMP Pentonville	16/02/1965		
John Steinbeck	HMP Pentonville	16/02/1965		
Enid Blyton	HMP Bronzefield	18/05/1961		
Marcus Clarke	HMP Bristol	16/02/1970		
David Beckham	HMP Pentonville	19/06/1971		
Max Senski	HMP Swansea	08/03/1980		
Jane Goodall	HMP Holloway	03/02/1951		
Jane Goodall	HMP Holloway	03/02/1951		
David Attenborough	HMP Bristol	08/09/1956		
Jack Tate	HMP Manchester	14/10/1949		



Remove Duplicates

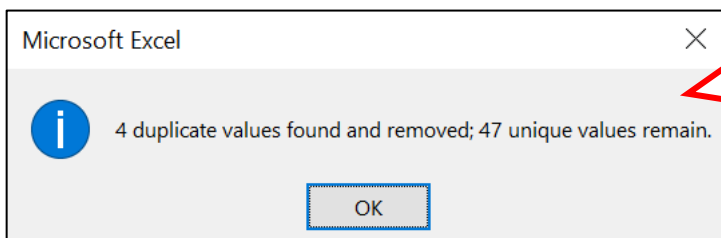
To delete duplicate values, select one or more columns that contain duplicates.

☒ Select All ☐ Unselect All ☒ My data has headers

Columns

- ☒ Name
- ☐ Prison
- ☐ Date of birth
- ☐ Age now
- ☐ Date registered

OK Cancel



Microsoft Excel

4 duplicate values found and removed; 47 unique values remain.

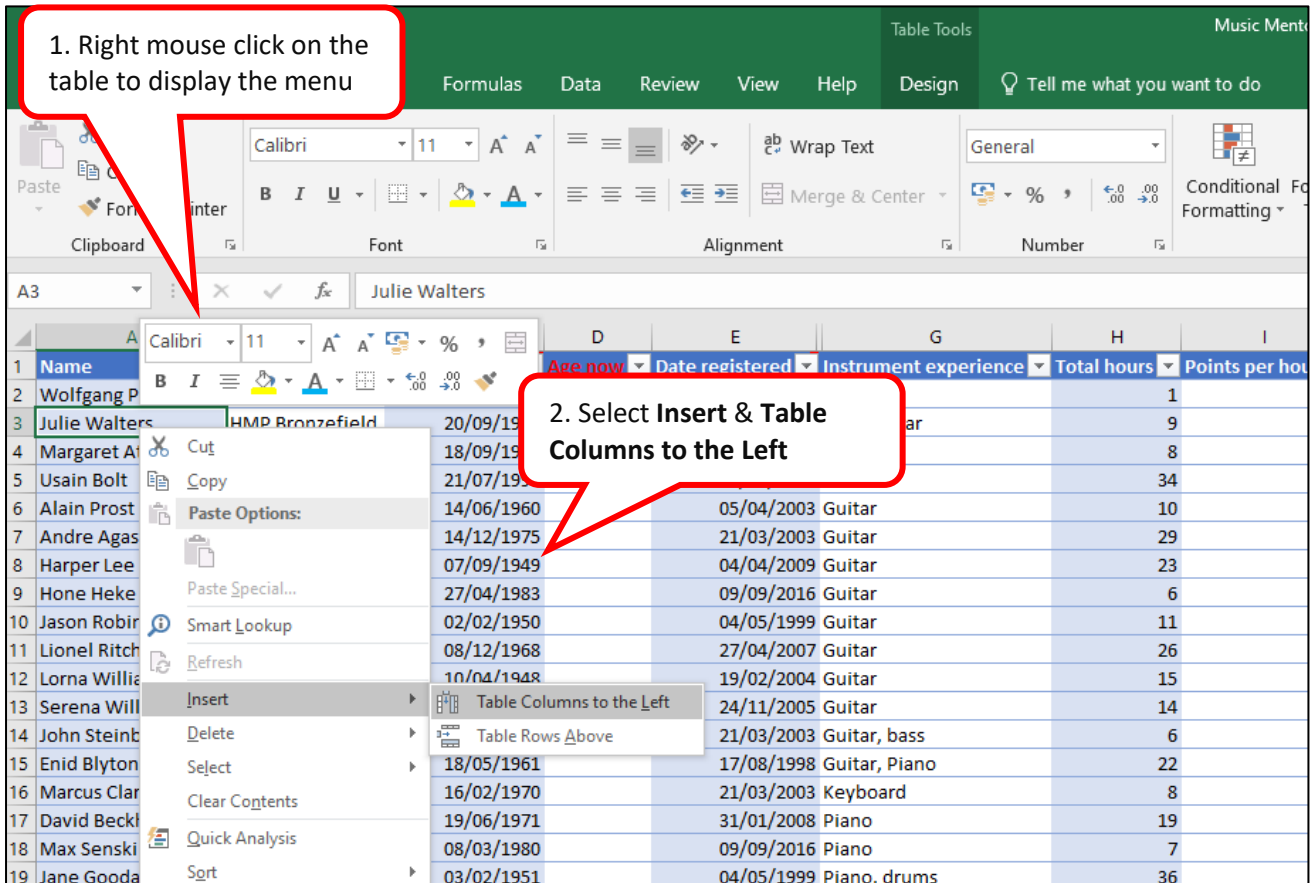
OK

5. The number of duplicates removed will be displayed in a window. If you realise you made a mistake, use the **Undo** button.



### 23. Adding a unique reference number

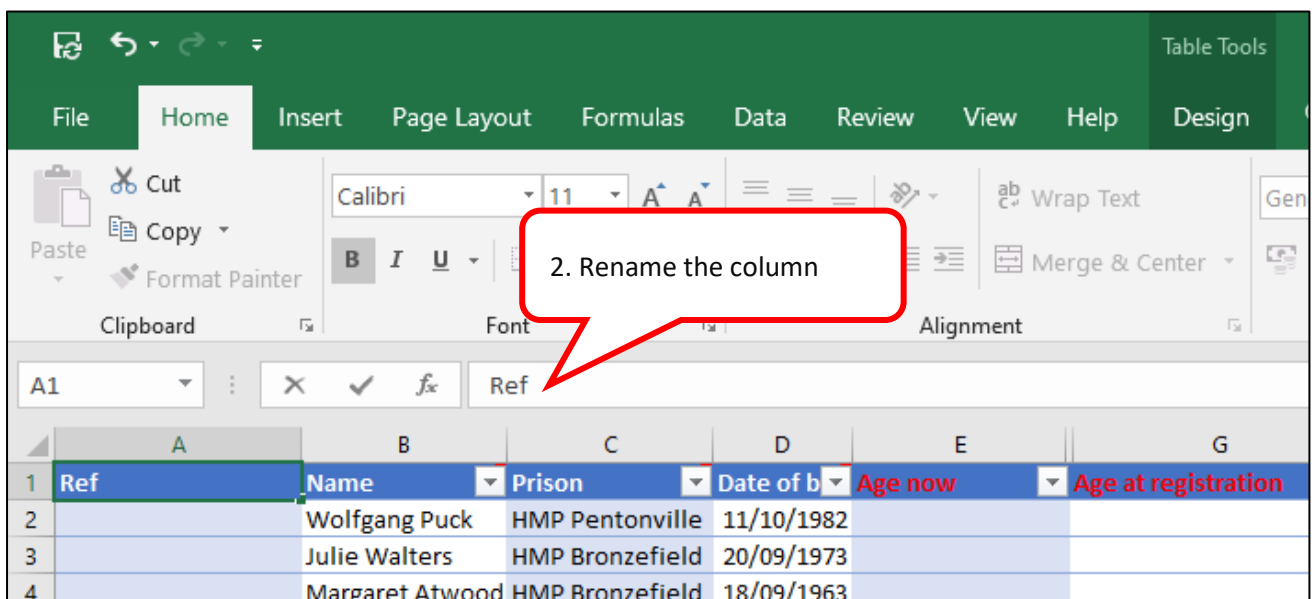
After having removed all duplicates it's good practice to give all your rows of data a unique reference number, that way how ever much you sort and filter them you can always return to the original order.



1. Right mouse click on the table to display the menu

2. Select Insert & Table Columns to the Left

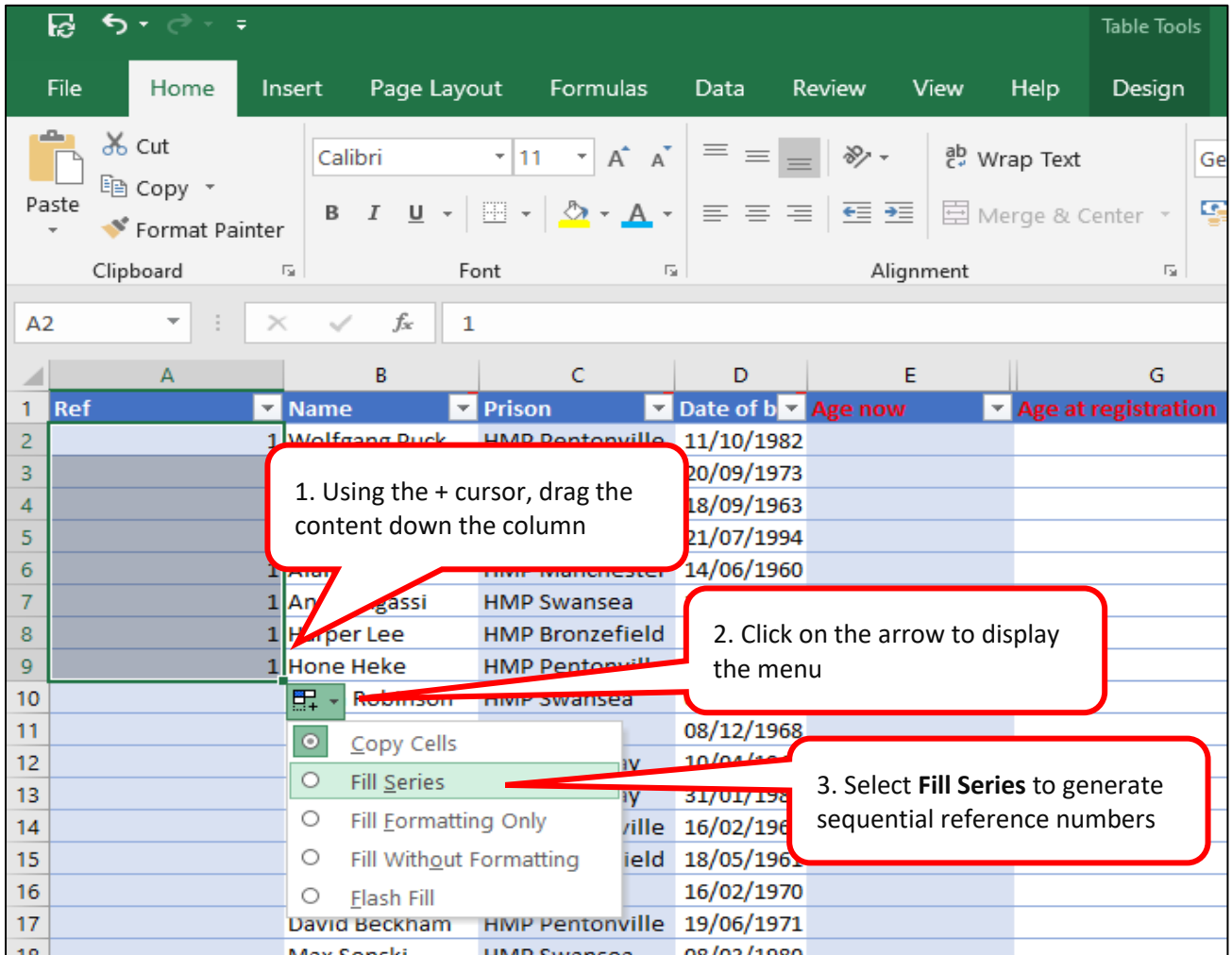
Name	Date registered	Instrument experience	Total hours	Points per hour
Wolfgang Puck	11/10/1982			1
Julie Walters	20/09/1973			9
Margaret Atwood	18/09/1963			8
Usain Bolt	21/07/1986			34
Alain Prost	14/06/1960	05/04/2003	Guitar	10
Andre Agassi	14/12/1975	21/03/2003	Guitar	29
Harper Lee	07/09/1949	04/04/2009	Guitar	23
Hone Heke	27/04/1983	09/09/2016	Guitar	6
Jason Robins	02/02/1950	04/05/1999	Guitar	11
Lionel Richie	08/12/1968	27/04/2007	Guitar	26
Lorna Williams	10/04/1948	19/02/2004	Guitar	15
Serena Williams	24/11/2005	Guitar		14
John Steinbeck	21/03/2003	Guitar, bass		6
Enid Blyton	17/08/1998	Guitar, Piano		22
Marcus Clarke	21/03/2003	Keyboard		8
David Beckham	31/01/2008	Piano		19
Max Senski	09/09/2016	Piano		7
Jane Goodall	04/05/1999	Piano, drums		36



2. Rename the column

Ref	Name	Prison	Date of birth	Age now	Age at registration
	Wolfgang Puck	HMP Pentonville	11/10/1982		
	Julie Walters	HMP Bronzefield	20/09/1973		
	Margaret Atwood	HMP Bronzefield	18/09/1963		





The screenshot shows the Excel 'Home' tab with the 'Clipboard' group. A context menu is open over cell A2, showing options like 'Copy Cells', 'Fill Series', 'Fill Formatting Only', 'Fill Without Formatting', and 'Flash Fill'. The 'Fill Series' option is selected.

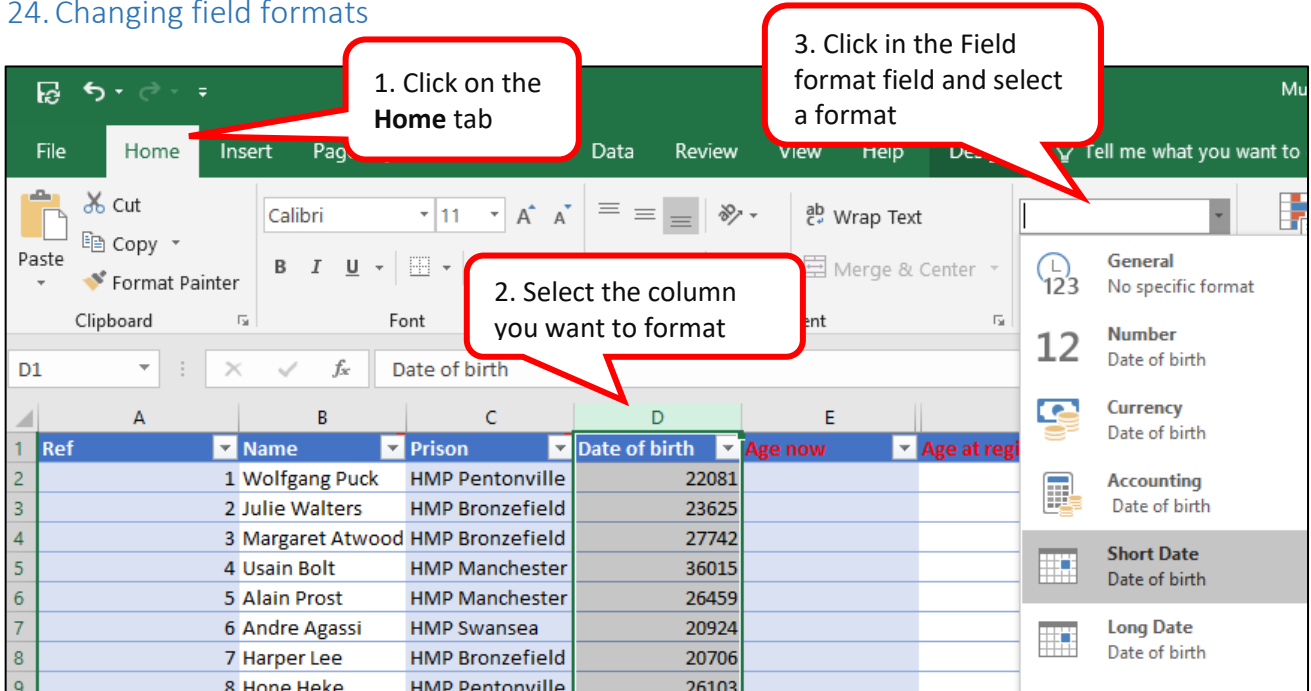
1. Using the + cursor, drag the content down the column

2. Click on the arrow to display the menu

3. Select **Fill Series** to generate sequential reference numbers

Ref	Name	Prison	Date of b	Age now	Age at registration
1	Wolfgang Puck	HMP Pentonville	11/10/1982		
2			20/09/1973		
3			18/09/1963		
4			21/07/1994		
5			14/06/1960		
6	Alain Prost	HMP Manchester			
7	Andre Agassi	HMP Swansea			
8	Harper Lee	HMP Bronzefield			
9	Hone Heke	HMP Pentonville			
10	Robinson	HMP Swansea			
11			08/12/1968		
12			10/01/1968		
13			31/01/1968		
14			16/02/1968		
15			18/05/1968		
16			16/02/1970		
17	David Beckham	HMP Pentonville	19/06/1971		
18	Max Sponki	HMP Swansea	08/02/1980		

## 24. Changing field formats



The screenshot shows the Excel 'Home' tab with the 'Field Format' task pane open on the right. The task pane shows various format options like 'General', 'Number', 'Currency', 'Accounting', 'Short Date', and 'Long Date'. The 'Number' format is selected.

1. Click on the **Home** tab

2. Select the column you want to format

3. Click in the Field format field and select a format

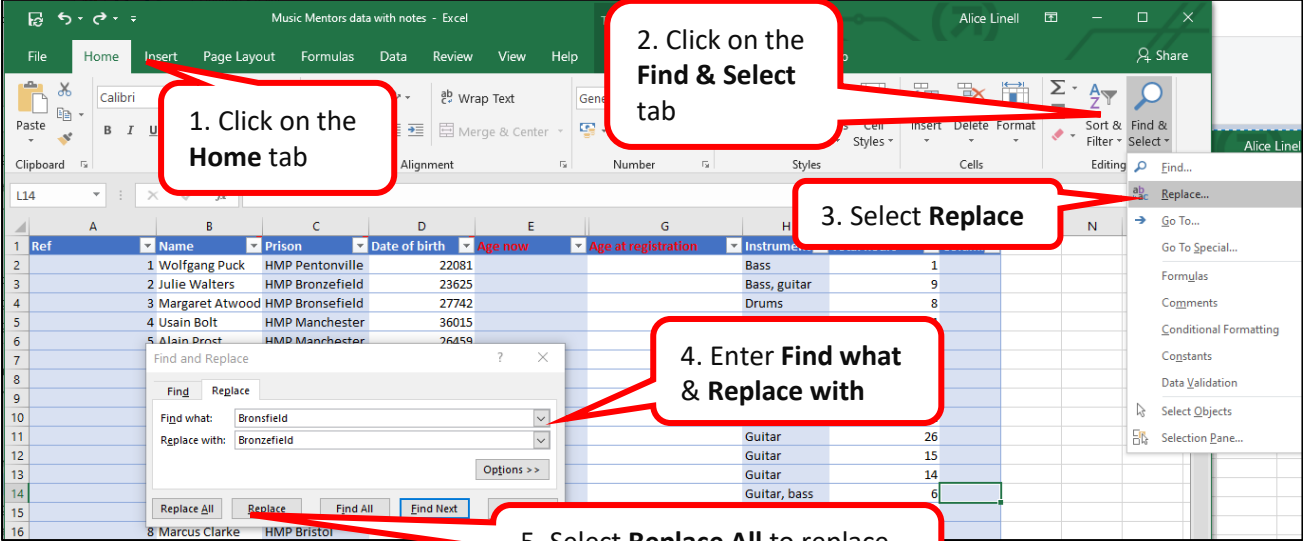
Ref	Name	Prison	Date of birth	Age now	Age at registration
1	Wolfgang Puck	HMP Pentonville	22081		
2	Julie Walters	HMP Bronzefield	23625		
3	Margaret Atwood	HMP Bronzefield	27742		
4	Usain Bolt	HMP Manchester	36015		
5	Alain Prost	HMP Manchester	26459		
6	Andre Agassi	HMP Swansea	20924		
7	Harper Lee	HMP Bronzefield	20706		
8	Hone Heke	HMP Pentonville	26103		





## 25. Find & Replace

Find and Replace can be used to bulk correct data. For example, a constantly repeated spelling mistake.



1. Click on the **Home** tab

2. Click on the **Find & Select** tab

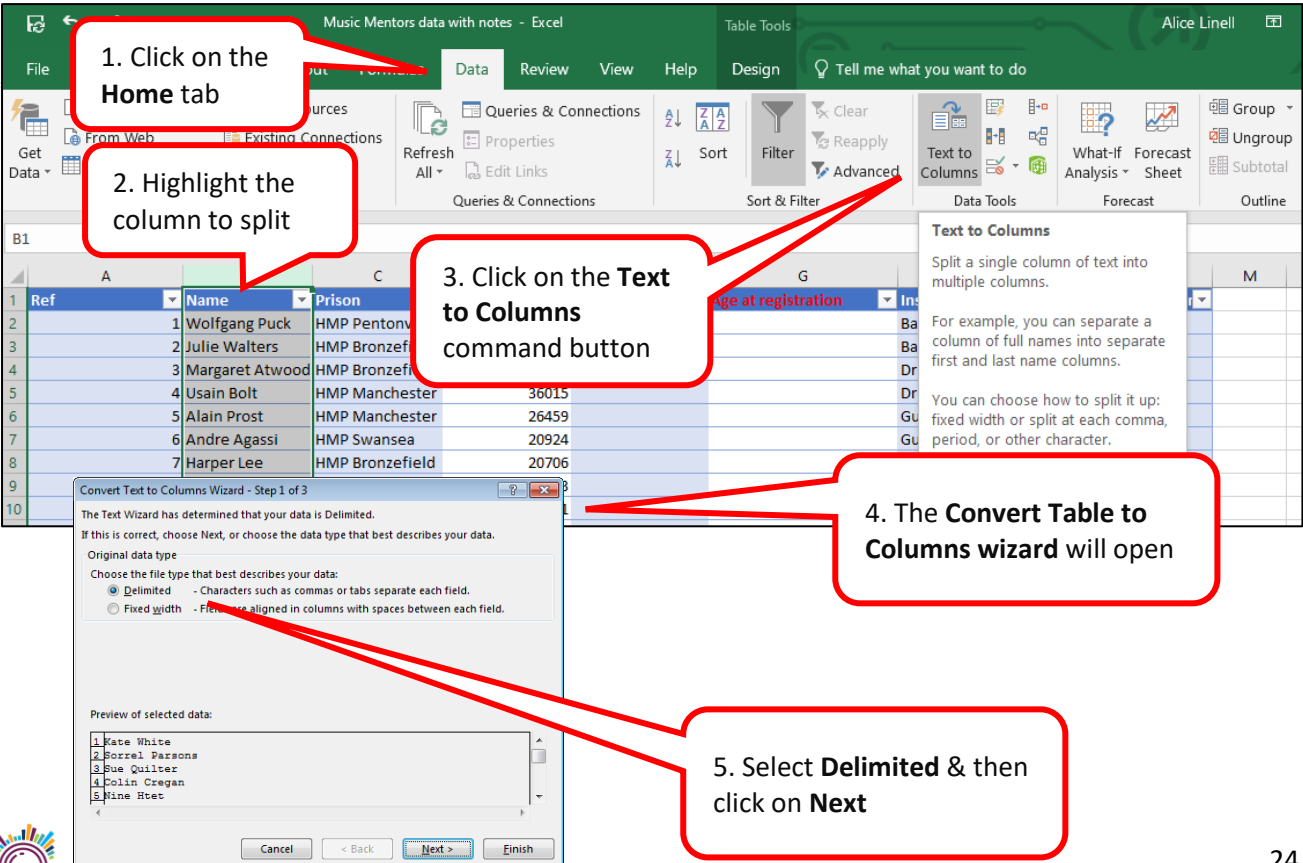
3. Select **Replace**

4. Enter **Find what** & **Replace with**

5. Select **Replace All** to replace all instances

## 26. Splitting columns

Often there is a need to break down data to make it easier to work with. For example, if you want to sort people in alphabetical order using their surname you will need to make sure their name is split into first name & surname columns.



1. Click on the **Home** tab

2. Highlight the column to split

3. Click on the **Text to Columns** command button

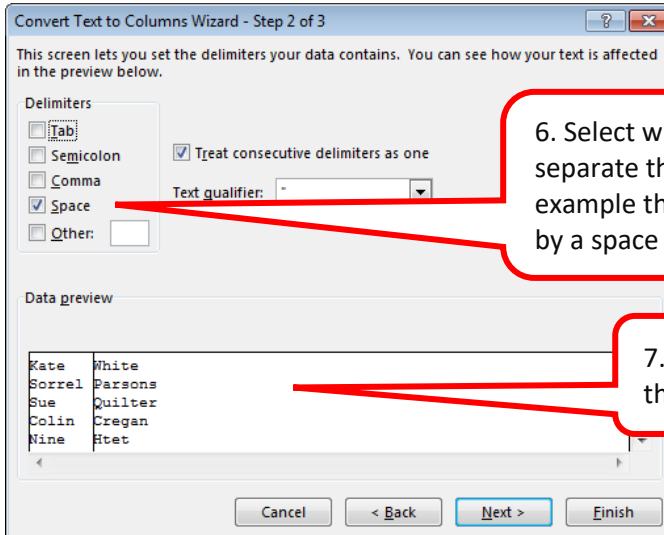
4. The **Convert Table to Columns wizard** will open

5. Select **Delimited** & then click on **Next**





A **Delimiter** is a blank space, comma, or other character or symbol that indicates the beginning or end of a character string, word, or data item



Convert Text to Columns Wizard - Step 2 of 3

This screen lets you set the delimiters your data contains. You can see how your text is affected in the preview below.

Delimiters:

- ☐ Tab
- ☐ Semicolon
- ☐ Comma
- ☒ Space
- ☐ Other:

☒ Treat consecutive delimiters as one

Text qualifier:

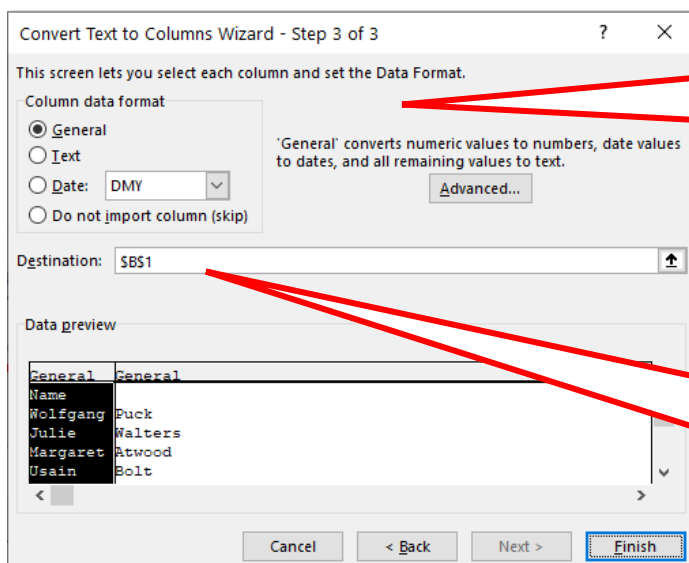
Data preview:

Name	Surname
Kate	White
Sorrel	Parsons
Sue	Quilter
Colin	Cregan
Nine	Htet

Buttons: Cancel, < Back, Next >, Finish

6. Select what delimiter to use to separate the data into columns. In this example the data to split is separated by a space

7. The wizard displays how the text will be split



Convert Text to Columns Wizard - Step 3 of 3

This screen lets you select each column and set the Data Format.

Column data format:

- ☒ General
- ☐ Text
- ☐ Date:
- ☐ Do not import column (skip)

'General' converts numeric values to numbers, date values to dates, and all remaining values to text.

Advanced...

Destination:

Data preview:

Name	Surname
Wolfgang	Fuck
Julie	Walters
Margaret	Atwood
Usain	Bolt

Buttons: Cancel, < Back, Next >, Finish

8. Select the data format for each column. **General** automatically converts the column to the most appropriate format. You can override that now or later after the split

9. The wizard makes the assumes you wish to replace your single column with your new double column. Changing the destination cell enables you to keep the

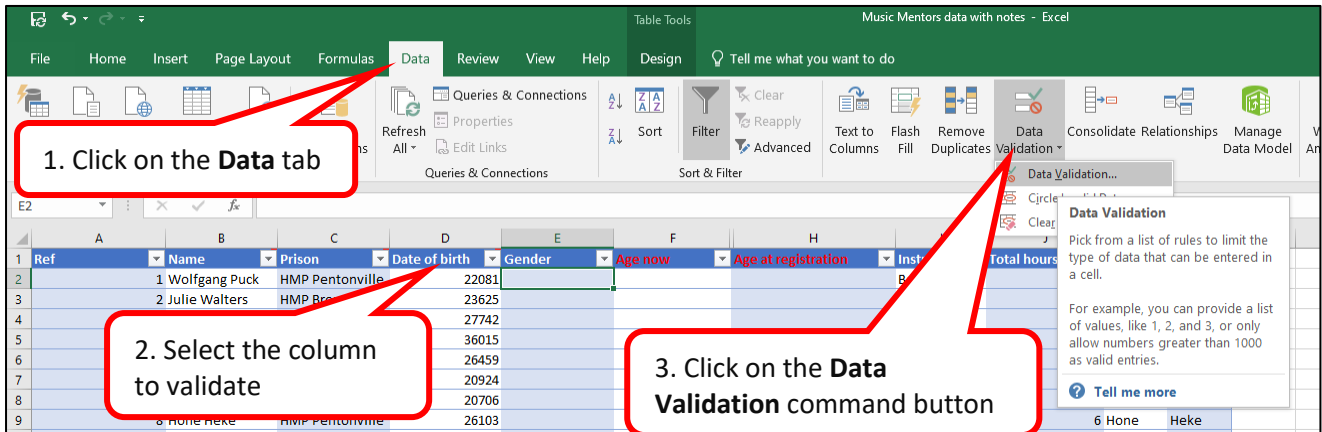
## 27. Data Validation

The Data Validation feature in Microsoft Excel controls what can be input into a cell to ensure accurate and consistent data. Here we're

1. Ensure Correct data format
2. Limit data entry options to a list



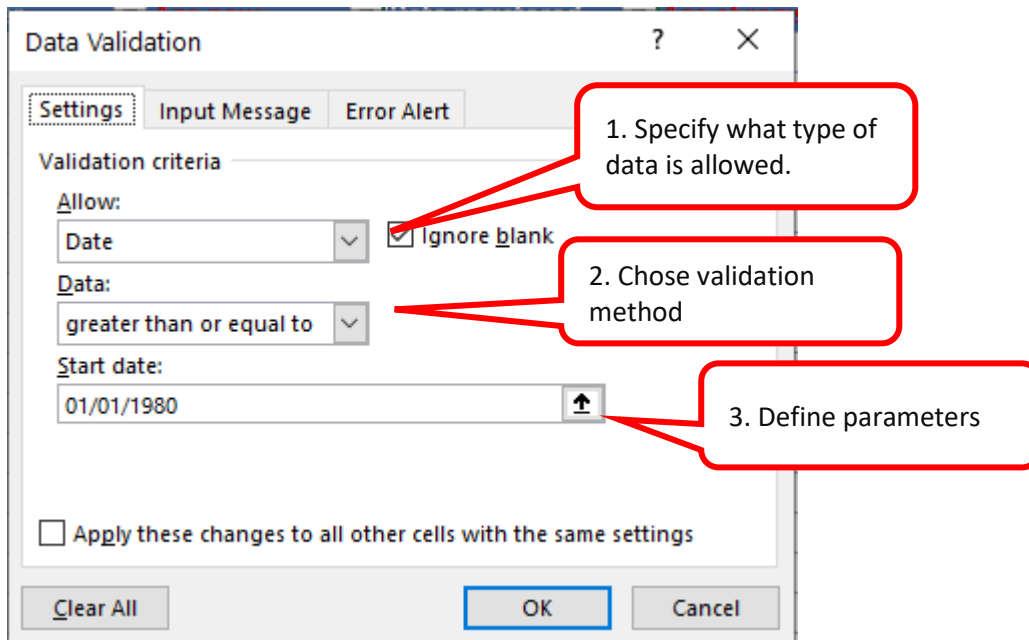
## Data Validation for data format



1. Click on the **Data** tab

2. Select the column to validate

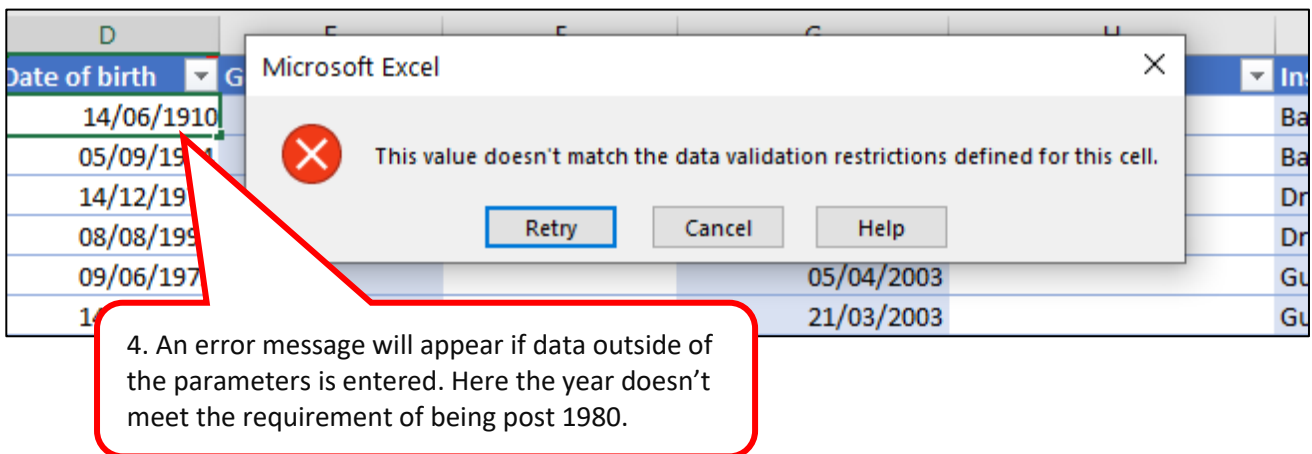
3. Click on the **Data Validation** command button



1. Specify what type of data is allowed.

2. Chose validation method

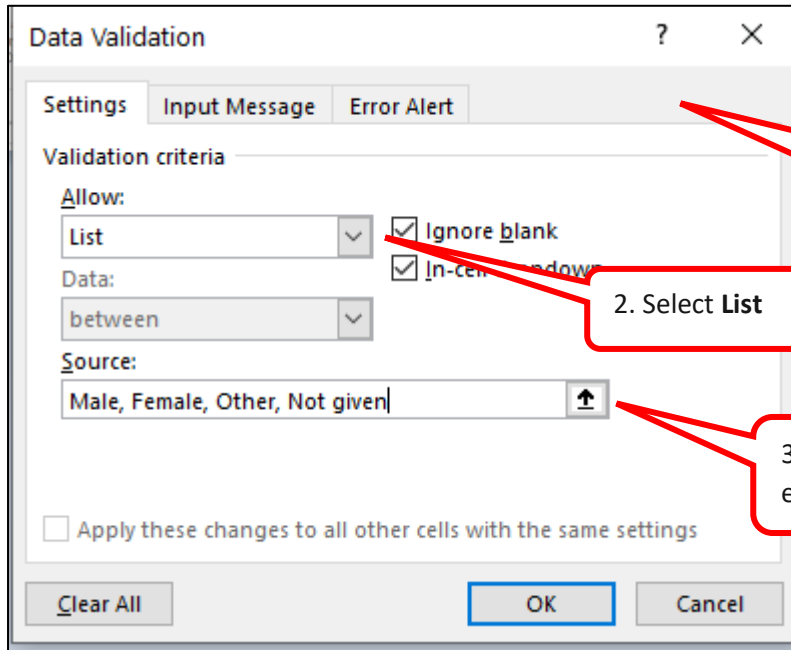
3. Define parameters



4. An error message will appear if data outside of the parameters is entered. Here the year doesn't meet the requirement of being post 1980.



## Data Validation with list options



**Data Validation**

Settings | Input Message | Error Alert

Validation criteria

Allow: List

Data: between

Source: Male, Female, Other, Not given

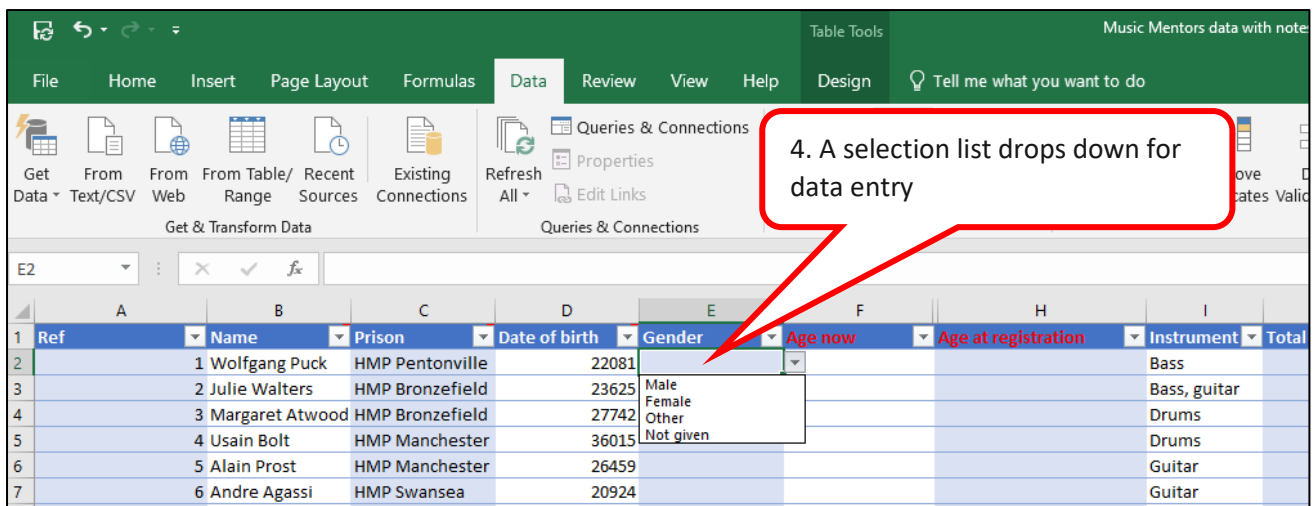
☐ Apply these changes to all other cells with the same settings

Clear All OK Cancel

1. Follow the steps as above to access the data validation options

2. Select List

3. Enter the data entry list with each item separated by commas



4. A selection list drops down for data entry

Ref	Name	Prison	Date of birth	Gender	Age now	Age at registration	Instrument	Total
1	Wolfgang Puck	HMP Pentonville	22081	Male			Bass	
2	Julie Walters	HMP Bronzefield	23625	Female			Bass, guitar	
3	Margaret Atwood	HMP Bronzefield	27742	Other			Drums	
4	Usain Bolt	HMP Manchester	36015	Not given			Drums	
5	Alain Prost	HMP Manchester	26459				Guitar	
6	Andre Agassi	HMP Swansea	20924				Guitar	



## Formulas & Functions

In common business practice, Excel users use the terms formula and function almost interchangeably. From a communication and comprehension perspective, there's not a big difference. But technically a function is a piece of code that executes a predefined calculation, while a formula is something you create yourself.

### 28. Calculations

There 4 most frequently used calculation functions in Excel are:

#### Sum

Adds up the total value of the cells selected

#### Average

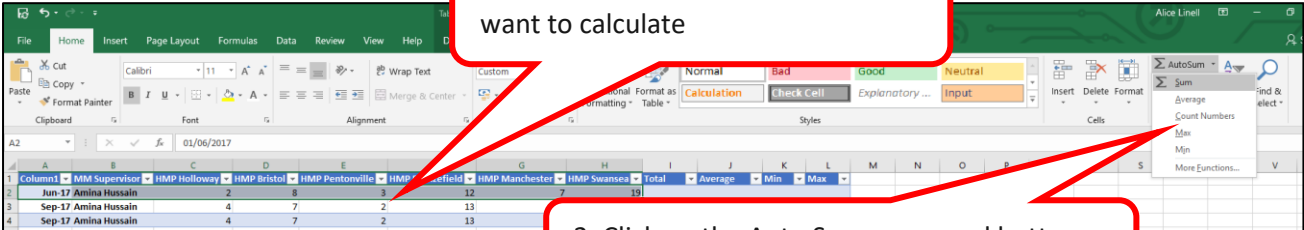
Returns the mean average of the cells selected. The mean average is calculated by dividing the sum of the values in the set by their number.

#### Max

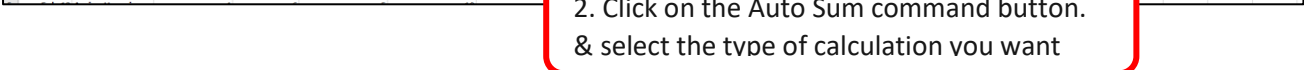
Returns the largest or highest value in the cells selected.

#### Min

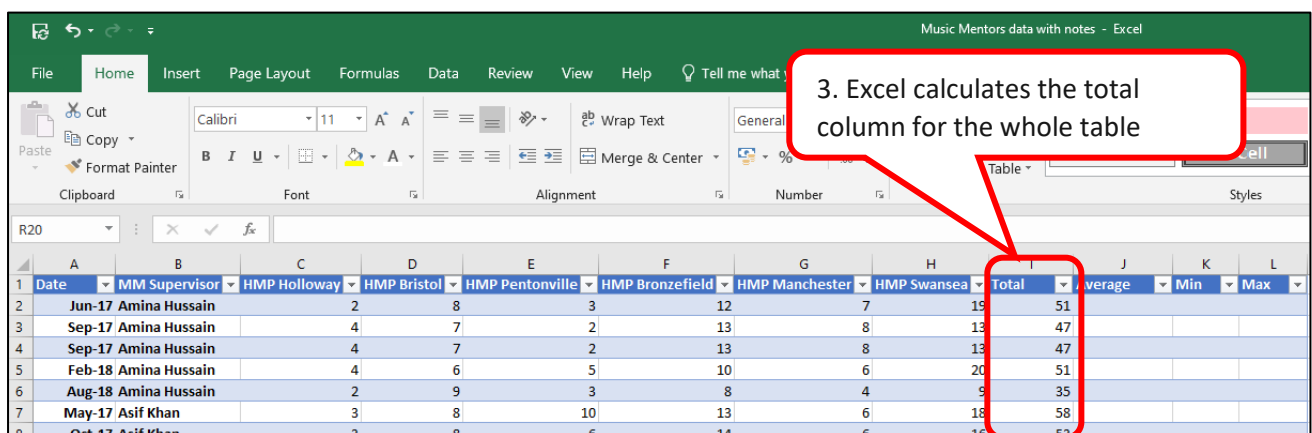
Returns the smallest or lowest value in the cells selected



1. Select the top row of the data you want to calculate



2. Click on the Auto Sum command button. & select the type of calculation you want



3. Excel calculates the total column for the whole table

Date	MM Supervisor	HMP Holloway	HMP Bristol	HMP Pentonville	HMP Bronzefield	HMP Manchester	HMP Swansea	Total	Average	Min	Max
Jun-17	Amina Hussain	2	8	3	12	7	15	51			
Sep-17	Amina Hussain	4	7	2	13	8	13	47			
Sep-17	Amina Hussain	4	7	2	13	8	13	47			
Feb-18	Amina Hussain	4	6	5	10	6	20	51			
Aug-18	Amina Hussain	2	9	3	8	4	9	35			
May-17	Asif Khan	3	8	10	13	6	18	58			
Oct-17	Asif Khan	3	8	6	14	6	16	53			



4. If you want to continue adding calculated totals, highlight the data set again.

5. Click on the Auto Sum command button. & select the type of calculation you want

6. Excel automatically puts the next calculation in the next column

7. Use the decimal place command buttons to increase or decrease decimal places

## 29. Formulas & Operators

Formulas are built using operators which define what action you want to take.

Common Operators in Microsoft Excel	
Plus	+
Minus	-
Multiply	*
Divide	/
Equal to	=
Not Equal to	<>
Greater than	>
Greater than or equal to	>=
Less than	<
Less than or equal to	<=

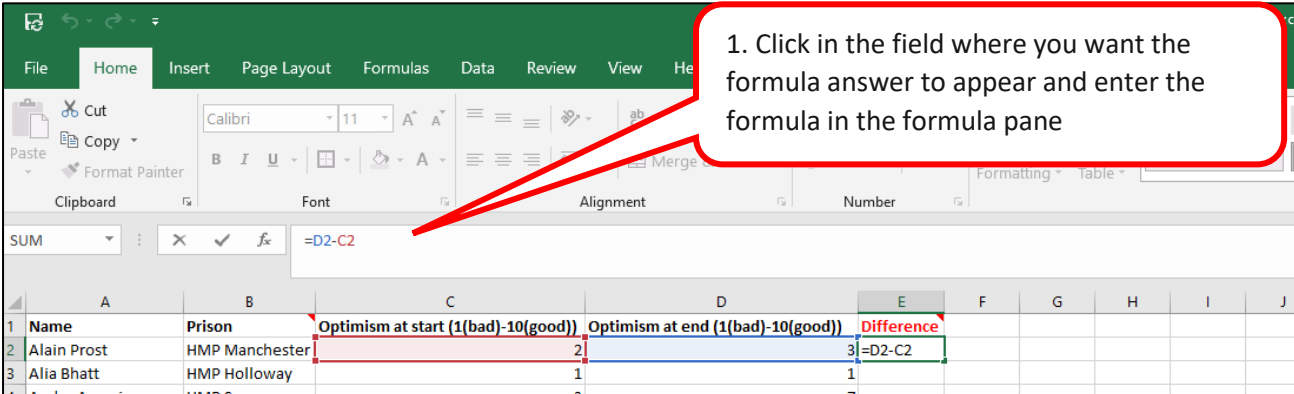


Always start with an = and then the order of operations is Divide (/) Multiply (\*) Add (+) Subtract (-). To 'force' Excel to do differently – use Brackets e.g.

$$5+3*2 = 11$$

but...

$$(5+3)*2 = 16$$



1. Click in the field where you want the formula answer to appear and enter the formula in the formula pane

	A	B	C	D	E	F	G	H	I	J
1	Name	Prison	Optimism at start (1(bad)-10(good))	Optimism at end (1(bad)-10(good))	Difference					
2	Alain Prost	HMP Manchester	2	3	=D2-C2					
3	Alia Bhatt	HMP Holloway	1	1						
4	Andre Agassi	HMP Swansea	2	7						

### 30. Copying formulas

Formulas can be copied from one cell to the next by selecting and dragging the highlighted field down.

### 31. Absolute Cell references

Sometimes, instead of your formulae automatically updating its references as you copy down / across on a spreadsheet – you may want to include a fixed element in your calculations.

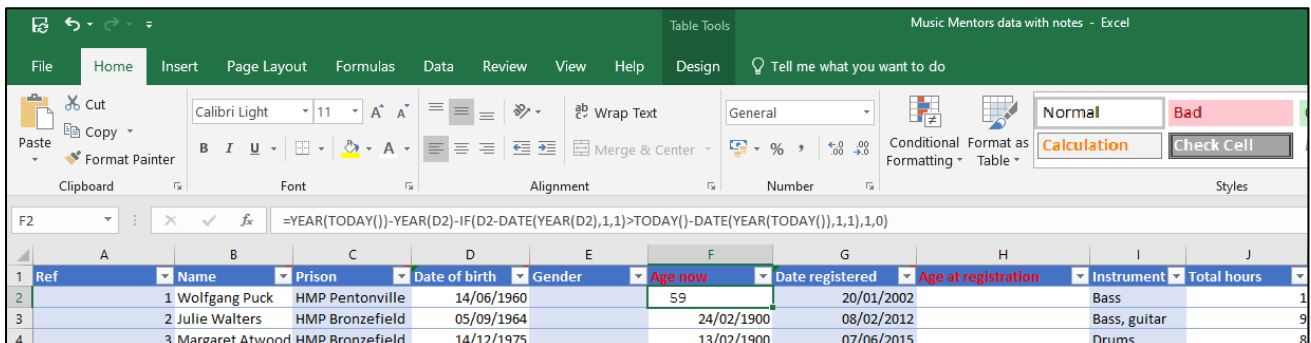
To do this use the \$ operator before the letter and number cell reference e.g. \$A\$D



## 32. Age calculation formula

Here is the formula for calculating a person's age from their date of birth. The D2 in this formula applies to the D2 cell reference in the screen print below, the first date of birth cell in our Date of birth column. To adapt the formula for your data copy the formula into the first cell in your age column and replace the highlighted D2 with the first cell reference in your date of birth column

`=YEAR(TODAY())-YEAR(D2)-IF(D2-DATE(YEAR(D2),1,1)>TODAY()-DATE(YEAR(TODAY()),1,1),1,0)`



The screenshot shows an Excel spreadsheet titled "Music Mentors data with notes - Excel". The formula bar for cell F2 displays the formula: `=YEAR(TODAY())-YEAR(D2)-IF(D2-DATE(YEAR(D2),1,1)>TODAY()-DATE(YEAR(TODAY()),1,1),1,0)`. The spreadsheet has columns: Ref, Name, Prison, Date of birth, Gender, Age now, Date registered, Age at registration, Instrument, and Total hours. The data rows are:

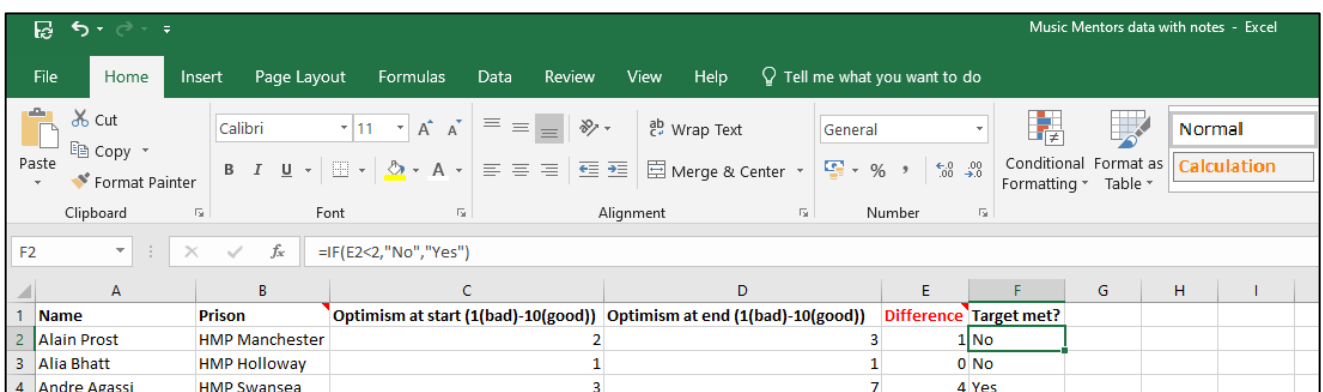
Ref	Name	Prison	Date of birth	Gender	Age now	Date registered	Age at registration	Instrument	Total hours
1	Wolfgang Puck	HMP Pentonville	14/06/1960		59	20/01/2002		Bass	1
2	Julie Walters	HMP Bronzefield	05/09/1964			24/02/1900	08/02/2012	Bass, guitar	9
3	Margaret Atwood	HMP Bronzefield	14/12/1975			13/02/1900	07/06/2015	Drums	8

## 33. IF formula

The IF formula checks whether a condition is met and returns one value if True and another if False

In the example below, if a 2 point increase in optimism, as shown by the Difference column meant your target was met you could use the following formula to return if the target was met or not:

`IF(E2<2,"No","Yes")`



The screenshot shows an Excel spreadsheet titled "Music Mentors data with notes - Excel". The formula bar for cell F2 displays the formula: `=IF(E2<2,"No","Yes")`. The spreadsheet has columns: Name, Prison, Optimism at start (1(bad)-10(good)), Optimism at end (1(bad)-10(good)), Difference, and Target met?. The data rows are:

Name	Prison	Optimism at start (1(bad)-10(good))	Optimism at end (1(bad)-10(good))	Difference	Target met?
Alain Prost	HMP Manchester	2	3	1	No
Alia Bhatt	HMP Holloway	1	1	0	No
Andre Agassi	HMP Swansea	3	7	4	Yes

## 34. Count If

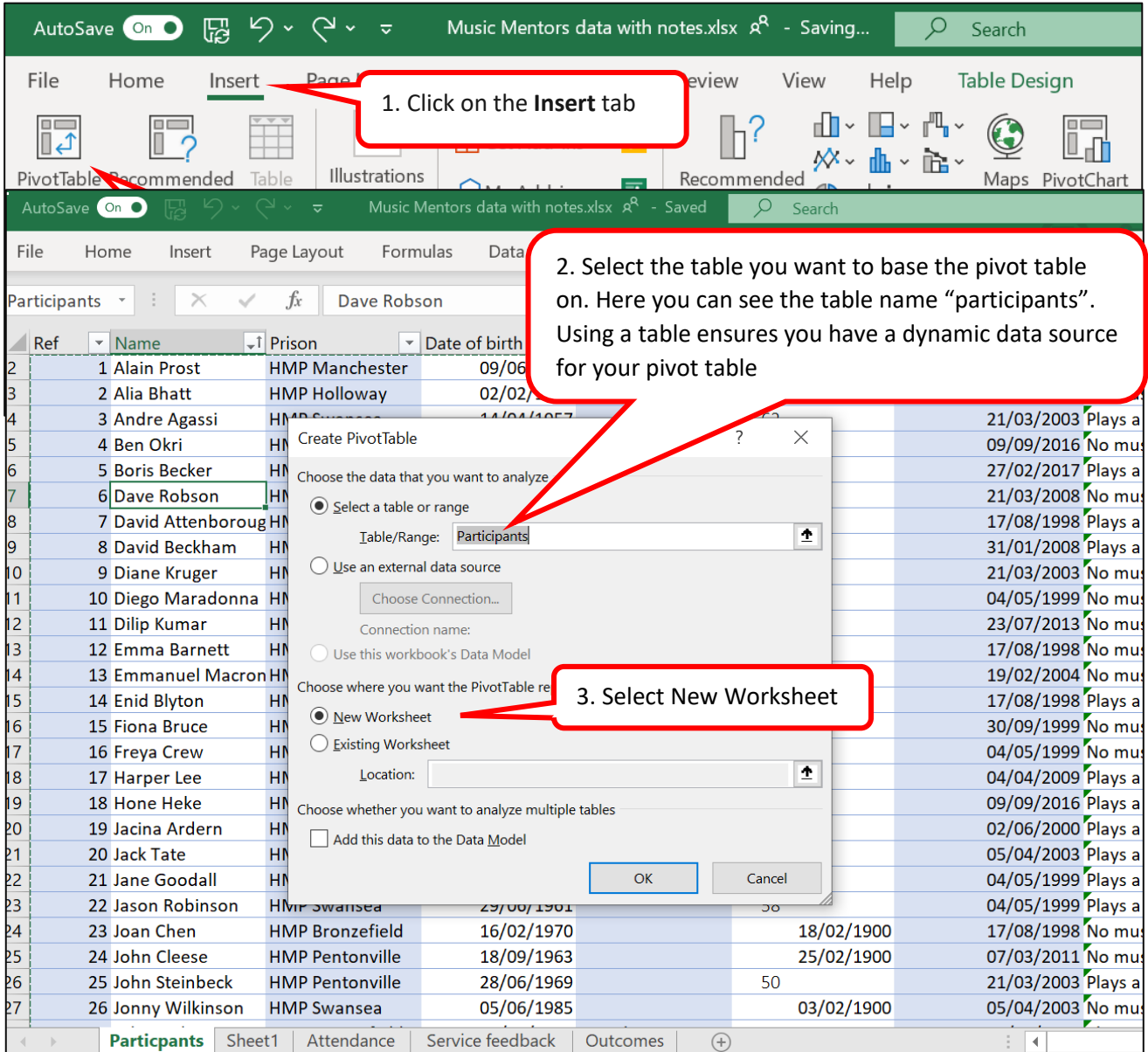
Used to count the number of cells that meet the criteria

`=COUNTIF(D2,"*guitar*")`



## Pivot Tables

### 35. Creating a pivot table



1. Click on the **Insert** tab

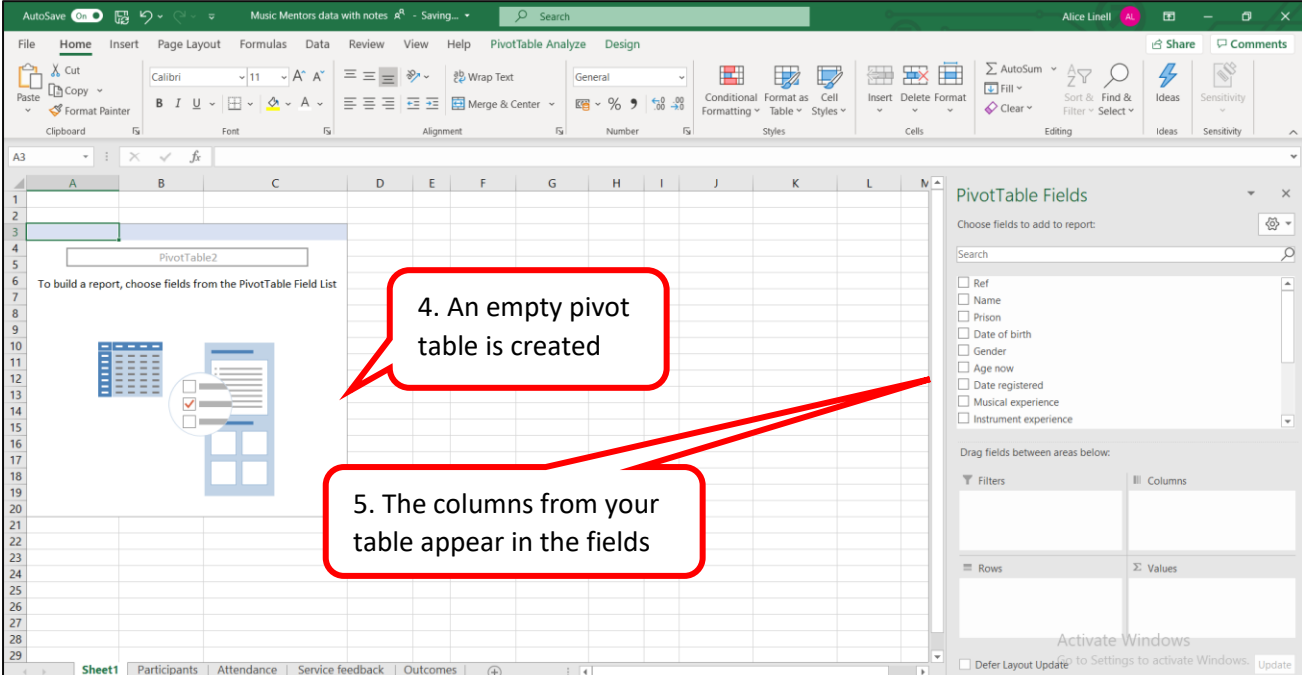
2. Select the table you want to base the pivot table on. Here you can see the table name "participants". Using a table ensures you have a dynamic data source for your pivot table

3. Select **New Worksheet**

Ref	Name	Prison	Date of birth
2	1 Alain Prost	HMP Manchester	09/06/1957
3	2 Alia Bhatt	HMP Holloway	02/02/1987
4	3 Andre Agassi	HMP Swansea	11/04/1975
5	4 Ben Okri	HMP Swansea	11/04/1975
6	5 Boris Becker	HMP Swansea	11/04/1975
7	6 Dave Robson	HMP Swansea	11/04/1975
8	7 David Attenborough	HMP Swansea	11/04/1975
9	8 David Beckham	HMP Swansea	11/04/1975
10	9 Diane Kruger	HMP Swansea	11/04/1975
11	10 Diego Maradona	HMP Swansea	11/04/1975
12	11 Dilip Kumar	HMP Swansea	11/04/1975
13	12 Emma Barnett	HMP Swansea	11/04/1975
14	13 Emmanuel Macron	HMP Swansea	11/04/1975
15	14 Enid Blyton	HMP Swansea	11/04/1975
16	15 Fiona Bruce	HMP Swansea	11/04/1975
17	16 Freya Crew	HMP Swansea	11/04/1975
18	17 Harper Lee	HMP Swansea	11/04/1975
19	18 Hone Heke	HMP Swansea	11/04/1975
20	19 Jacina Ardern	HMP Swansea	11/04/1975
21	20 Jack Tate	HMP Swansea	11/04/1975
22	21 Jane Goodall	HMP Swansea	11/04/1975
23	22 Jason Robinson	HMP Swansea	11/04/1975
24	23 Joan Chen	HMP Bronzefield	16/02/1970
25	24 John Cleese	HMP Pentonville	18/09/1963
26	25 John Steinbeck	HMP Pentonville	28/06/1969
27	26 Jonny Wilkinson	HMP Swansea	05/06/1985







4. An empty pivot table is created

5. The columns from your table appear in the fields

PivotTable Fields

Choose fields to add to report:

Search

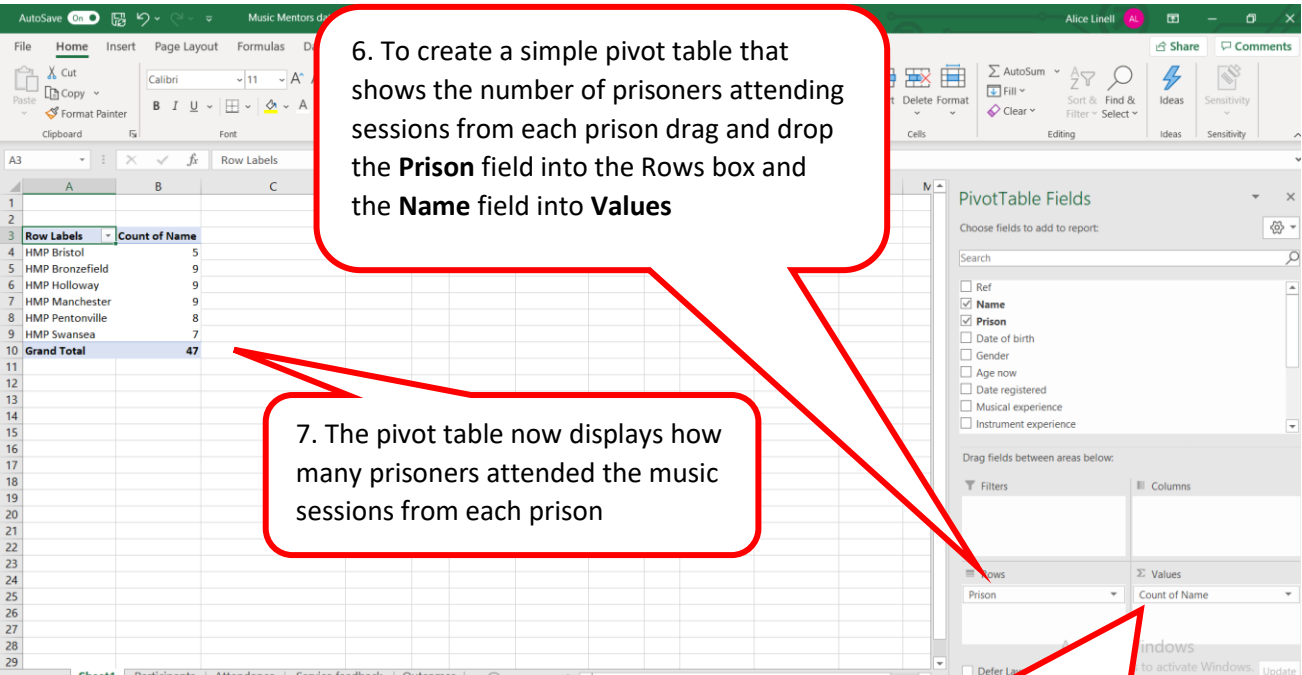
☐ Ref  
☐ Name  
☐ Prison  
☐ Date of birth  
☐ Gender  
☐ Age now  
☐ Date registered  
☐ Musical experience  
☐ Instrument experience

Drag fields between areas below:

Filters Columns

Rows Values

Activate Windows  
Go to Settings to activate Windows. Update



6. To create a simple pivot table that shows the number of prisoners attending sessions from each prison drag and drop the **Prison** field into the Rows box and the **Name** field into Values

7. The pivot table now displays how many prisoners attended the music sessions from each prison

PivotTable Fields

Choose fields to add to report:

Search

☐ Ref  
☒ Name  
☒ Prison  
☐ Date of birth  
☐ Gender  
☐ Age now  
☐ Date registered  
☐ Musical experience  
☐ Instrument experience

Drag fields between areas below:

Filters Columns

Rows Values

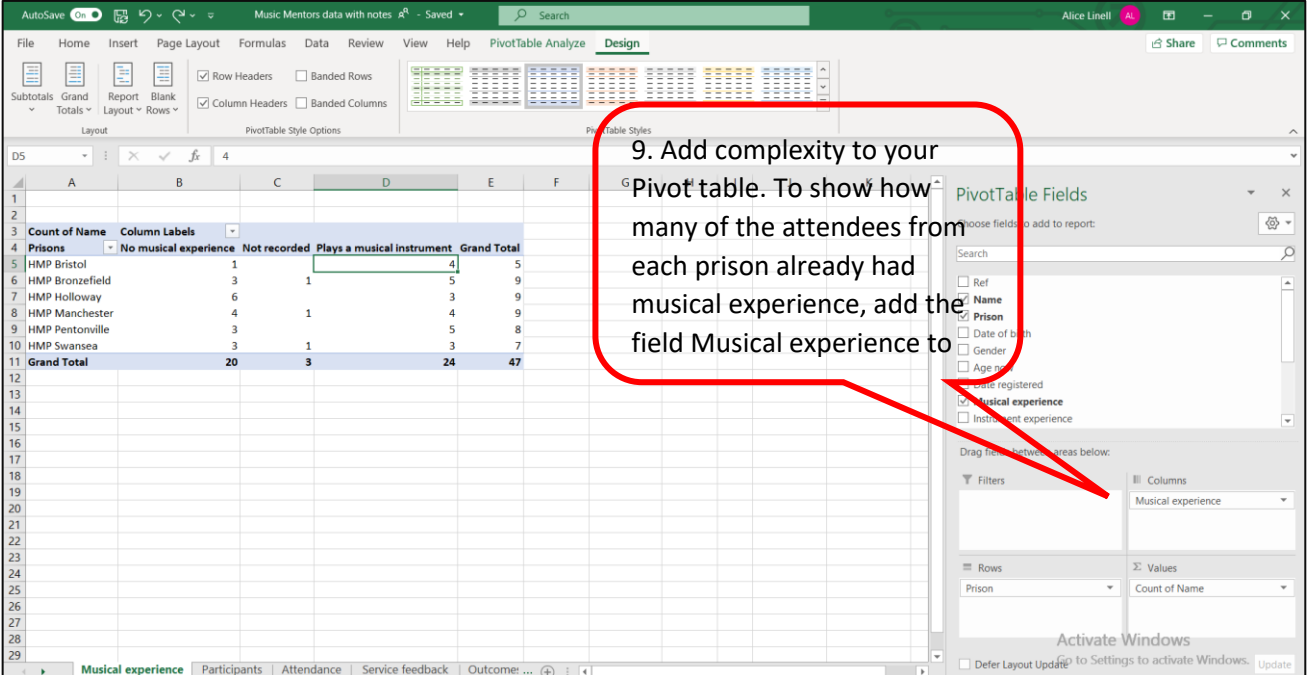
Prison Count of Name

Activate Windows  
Go to Settings to activate Windows. Update

Row Labels	Count of Name
HMP Bristol	5
HMP Bronzefield	9
HMP Holloway	9
HMP Manchester	9
HMP Pentonville	8
HMP Swansea	7
<b>Grand Total</b>	<b>47</b>

8. As the name field is text the pivot table assumes you want to **Count** the number of records in the Name

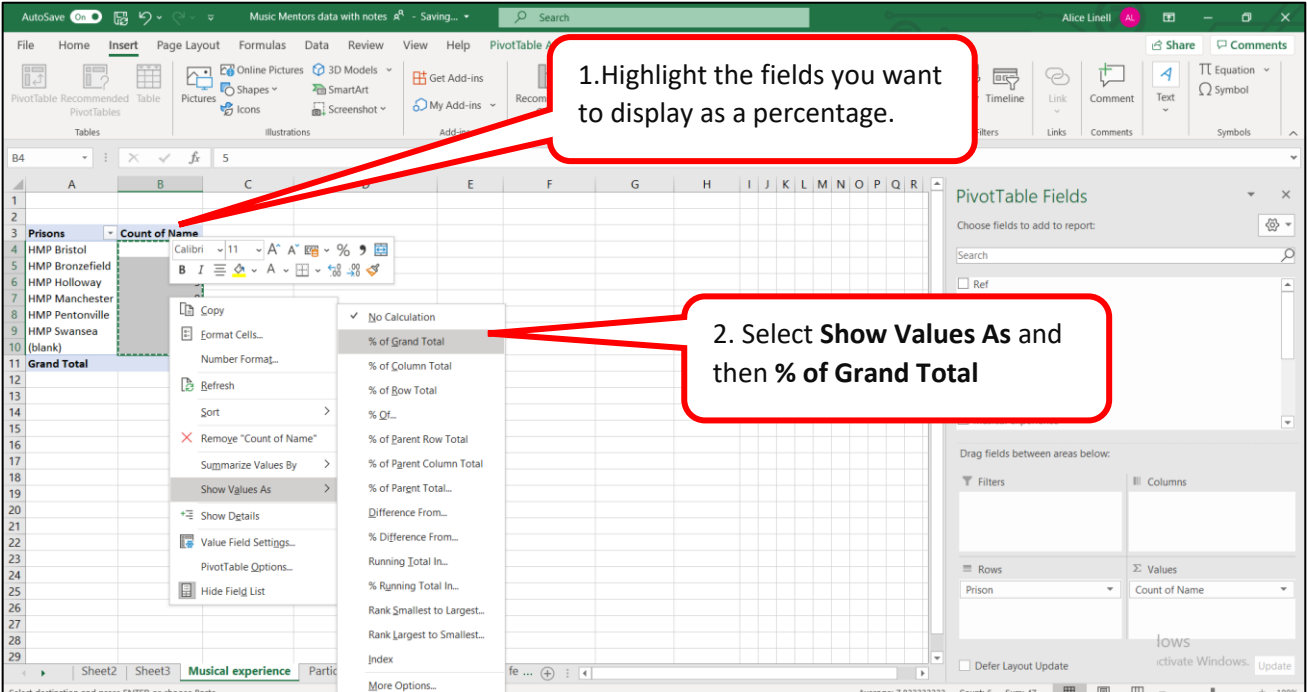




9. Add complexity to your Pivot table. To show how many of the attendees from each prison already had musical experience, add the field Musical experience to

Count of Name	Column Labels				
Prisons	No musical experience	Not recorded	Plays a musical instrument	Grand Total	
HMP Bristol	1		4	5	
HMP Bronzefield	3	1	5	9	
HMP Holloway	6		3	9	
HMP Manchester	4	1	4	9	
HMP Pentonville	3		5	8	
HMP Swansea	3	1	3	7	
<b>Grand Total</b>	<b>20</b>	<b>3</b>	<b>24</b>	<b>47</b>	

## 36. Field values

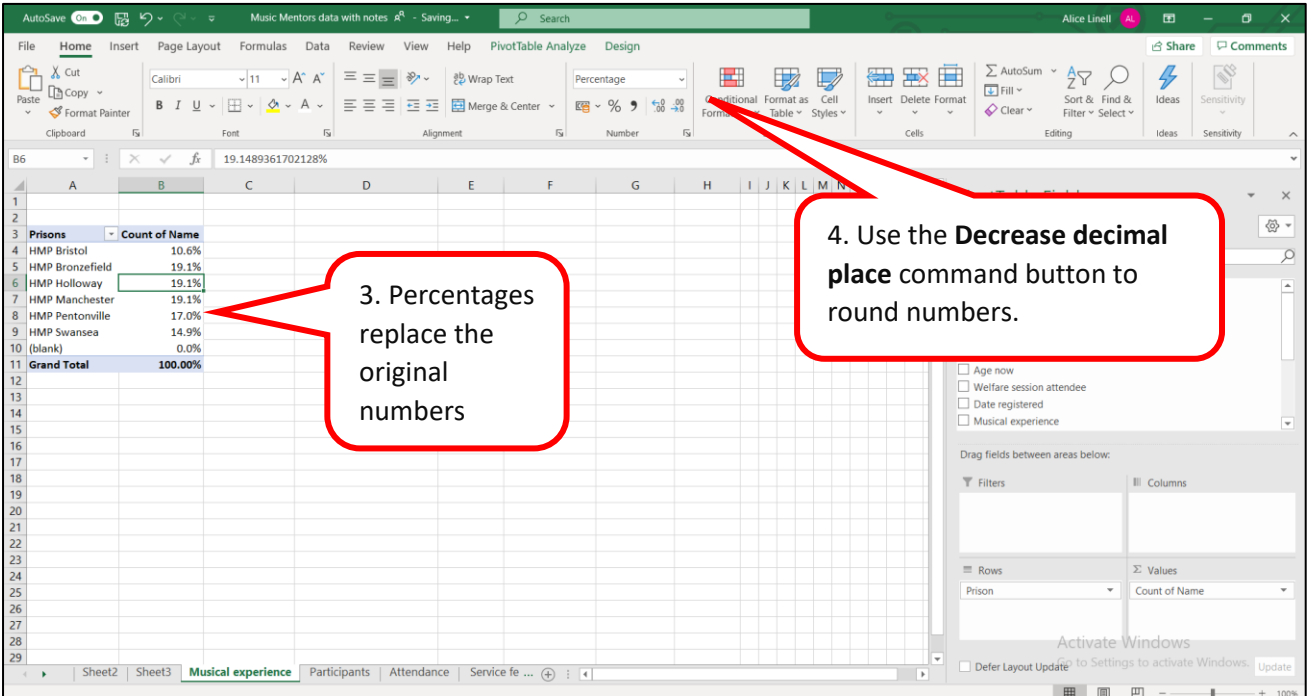


1. Highlight the fields you want to display as a percentage.

2. Select **Show Values As** and then **% of Grand Total**

Prisons	Count of Name
HMP Bristol	
HMP Bronzefield	
HMP Holloway	
HMP Manchester	
HMP Pentonville	
HMP Swansea	
(blank)	
<b>Grand Total</b>	





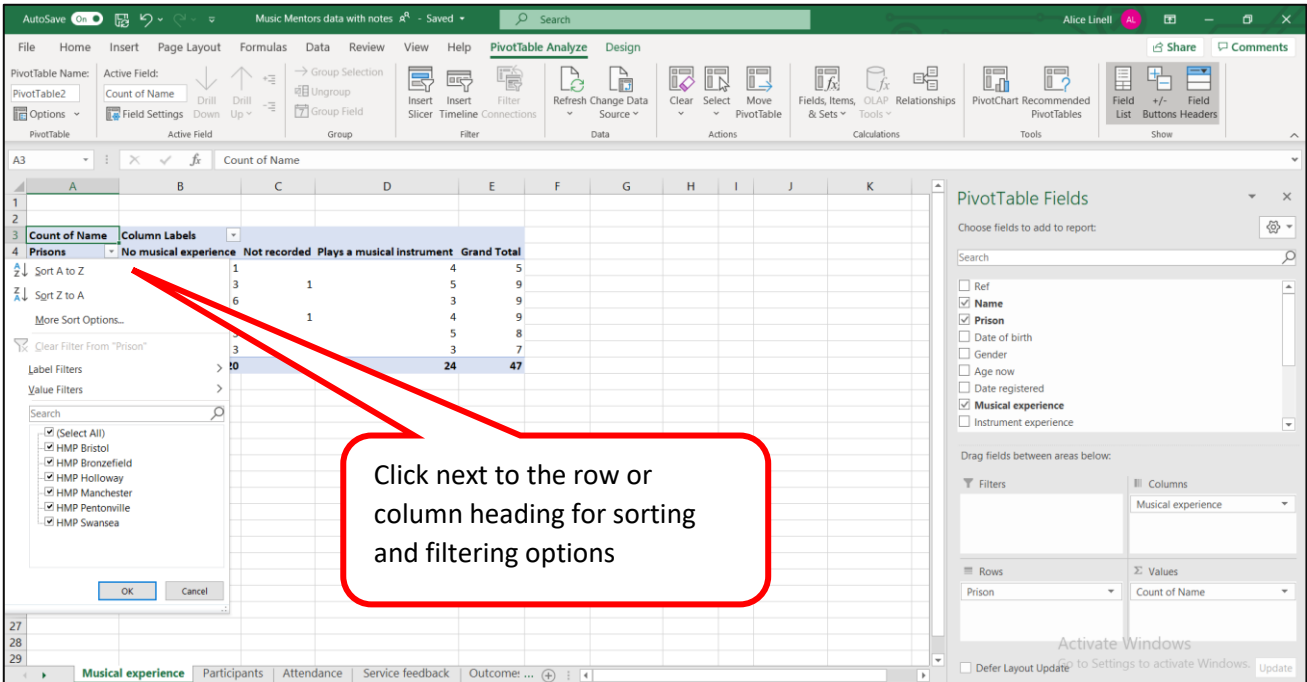
3. Percentages replace the original numbers

4. Use the **Decrease decimal place** command button to round numbers.

Prisons	Count of Name
HMP Bristol	10.6%
HMP Bronzefield	19.1%
HMP Holloway	19.1%
HMP Manchester	19.1%
HMP Pentonville	17.0%
HMP Swansea	14.9%
(blank)	0.0%
<b>Grand Total</b>	<b>100.00%</b>

### 37. Sorting & Filtering a pivot table

Simple sorting and filtering work exactly the same as elsewhere in Excel.

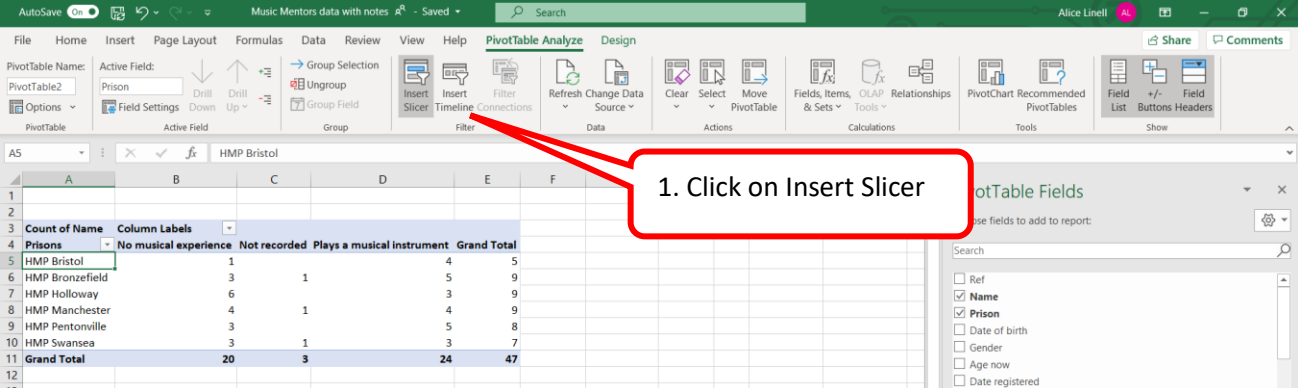


Click next to the row or column heading for sorting and filtering options

Count of Name	Column Labels				
Prisons	No musical experience	Not recorded	Plays a musical instrument	Grand Total	
Sort A to Z	1		4	5	
Sort Z to A	3	1	5	9	
More Sort Options...	6		3	9	
Clear Filter From "Prison"		1	4	9	
Label Filters			5	8	
Value Filters			3	7	
	10		24	47	



### 38. Add a Slicer to a pivot table

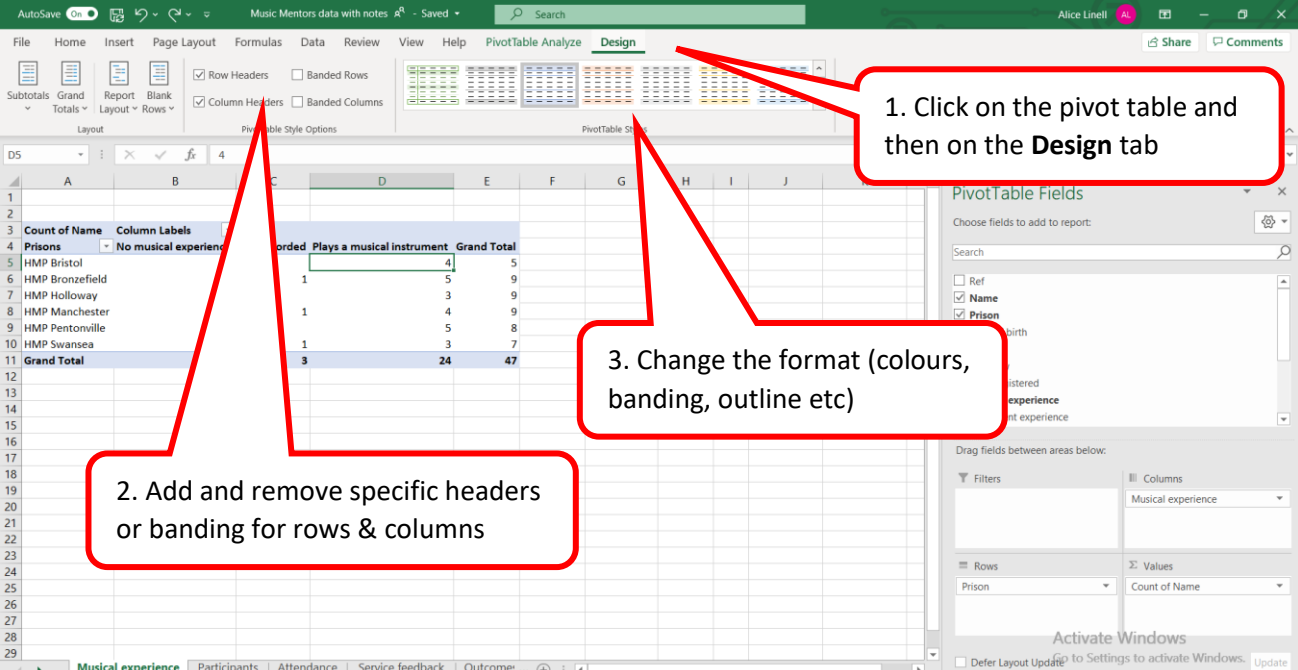


1. Click on Insert Slicer

Count of Name	Column Labels				
Prisons	No musical experience	Not recorded	Plays a musical instrument	Grand Total	
HMP Bristol	1		4	5	
HMP Bronzefield	3	1	5	9	
HMP Holloway	6		3	9	
HMP Manchester	4	1	4	9	
HMP Pentonville	3		5	8	
HMP Swansea	3	1	3	7	
<b>Grand Total</b>	<b>20</b>	<b>3</b>	<b>24</b>	<b>47</b>	

### 39. Formatting a pivot table

Like Tables, Pivot Tables can be formatted.



1. Click on the pivot table and then on the **Design** tab

2. Add and remove specific headers or banding for rows & columns

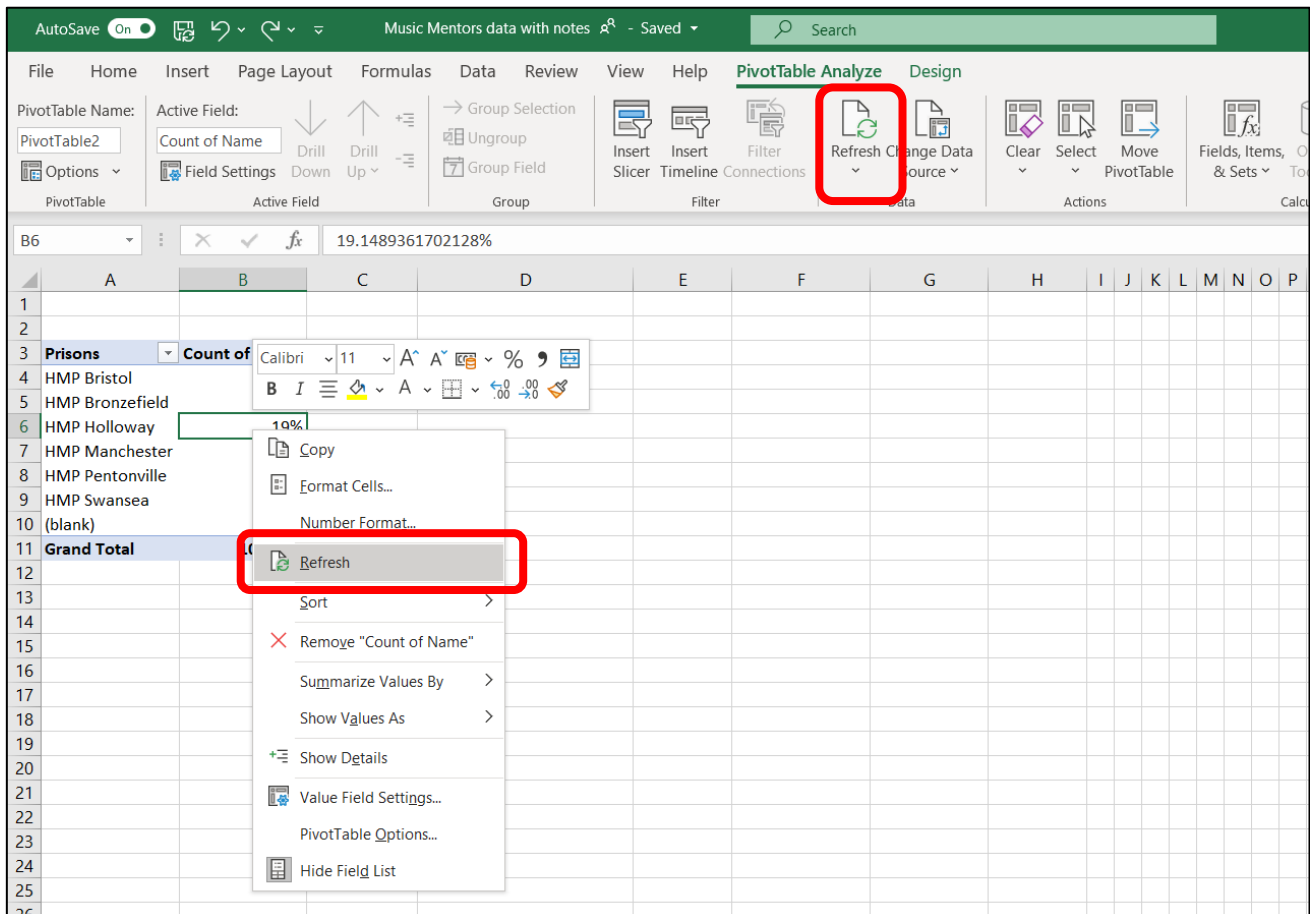
3. Change the format (colours, banding, outline etc)

Count of Name	Column Labels				
Prisons	No musical experience	Not recorded	Plays a musical instrument	Grand Total	
HMP Bristol	1		4	5	
HMP Bronzefield	3	1	5	9	
HMP Holloway	6		3	9	
HMP Manchester	4	1	4	9	
HMP Pentonville	3		5	8	
HMP Swansea	3	1	3	7	
<b>Grand Total</b>	<b>3</b>		<b>24</b>	<b>47</b>	



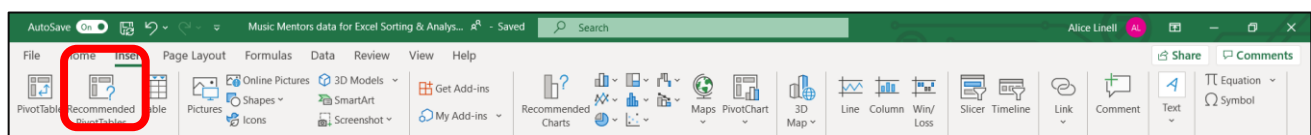
## 40. Refreshing data in a Pivot table

If you make changes to the data set being used to the pivot table, you might need to refresh the chart so that the changes are immediately reflected in the chart.

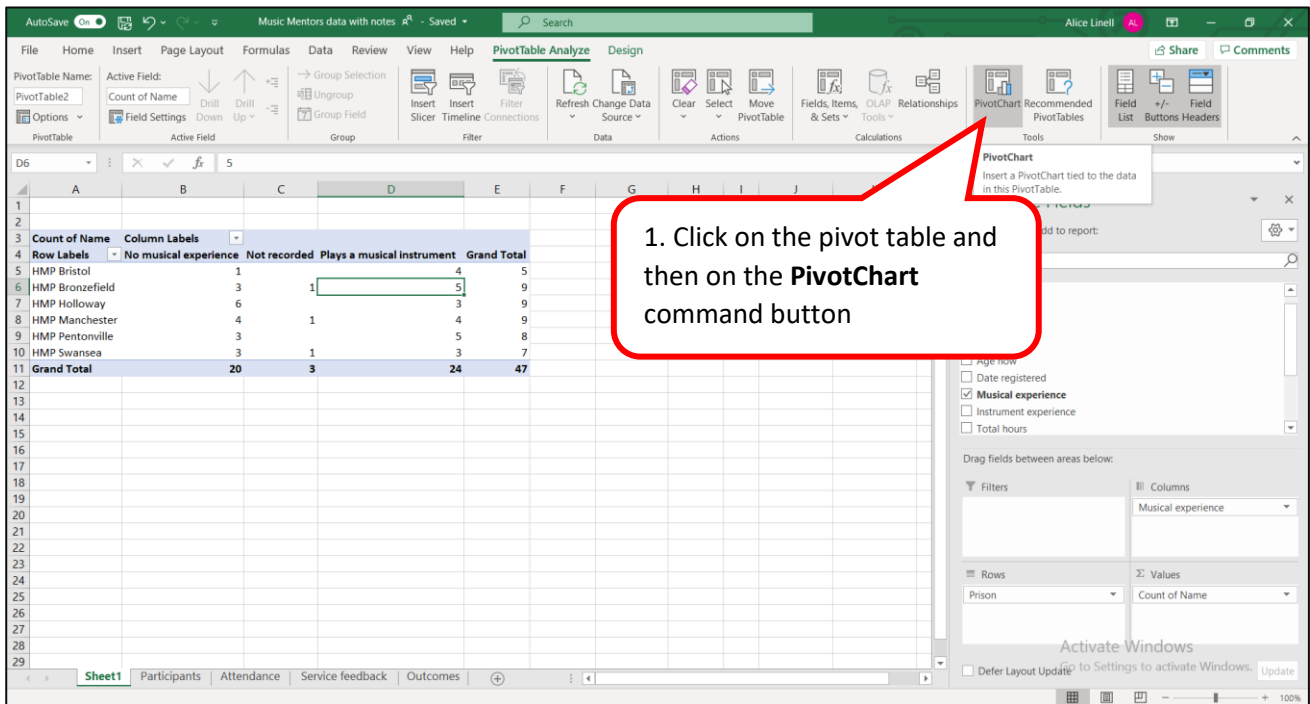


## 41. Recommended Pivot Tables

A short cut to creating pivot tables can be to use the recommended Pivot table function.



## 42. Pivot table charts

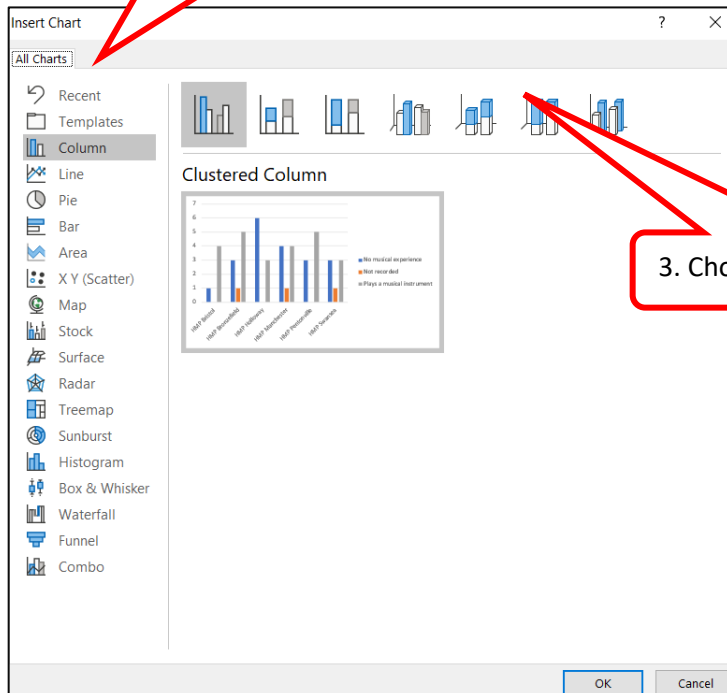


The screenshot shows the Excel interface with a PivotTable named 'PivotTable2' on the 'Sheet1' tab. The PivotTable data is as follows:

Count of Name	Column Labels	No musical experience	Not recorded	Plays a musical instrument	Grand Total
HMP Bristol		1		4	5
HMP Bronzefield		3	1		9
HMP Holloway		6		3	9
HMP Manchester		4	1	4	9
HMP Pentonville		3		5	8
HMP Swansea		3	1	3	7
<b>Grand Total</b>		<b>20</b>	<b>3</b>	<b>24</b>	<b>47</b>

The 'PivotTable Tools' ribbon is visible, with the 'PivotChart' button highlighted. A red callout box points to this button with the text: "1. Click on the pivot table and then on the **PivotChart** command button".

2. Choose the chart type



The 'Insert Chart' dialog box is open, showing the 'All Charts' tab. The 'Clustered Column' chart type is selected. A red callout box points to the 'Clustered Column' chart type with the text: "2. Choose the chart type".

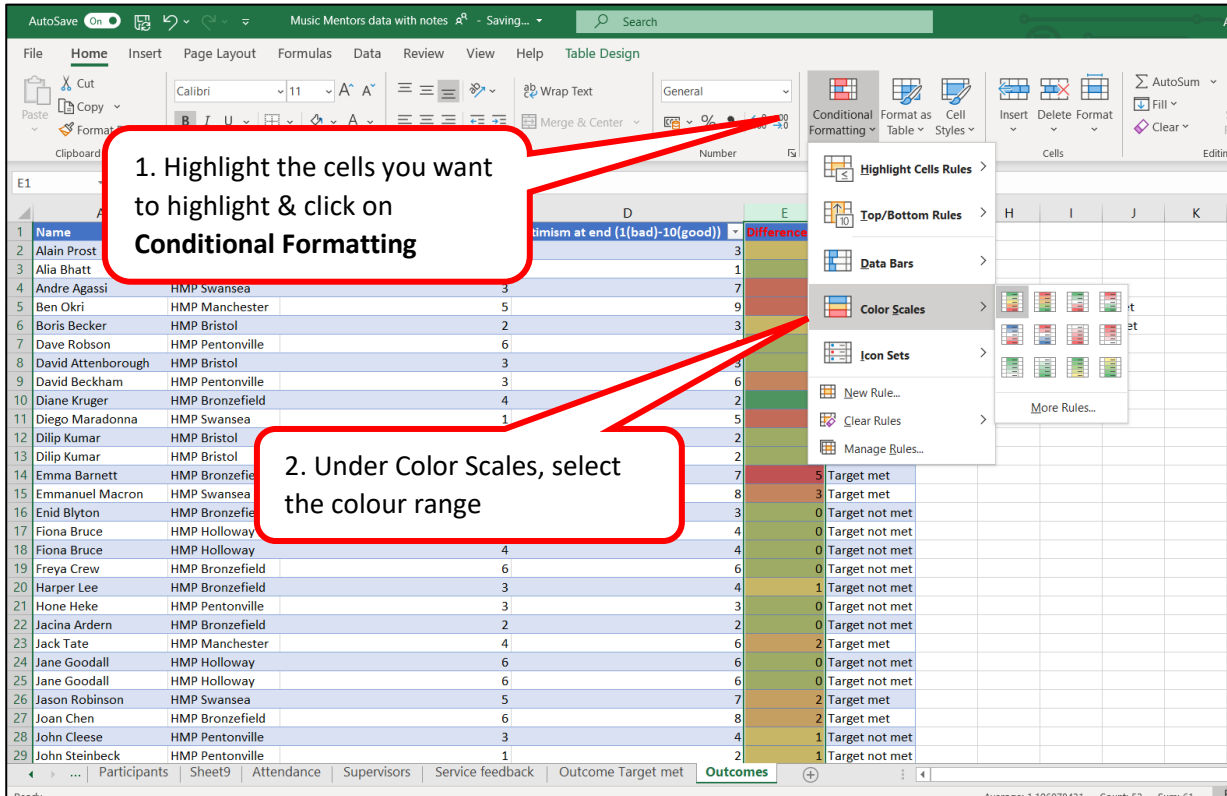
Below the chart type selection, a preview of the 'Clustered Column' chart is shown. A red callout box points to the preview with the text: "3. Choose the chart format".



## Presenting your findings

### 43. Conditional Formatting

#### Colour scales

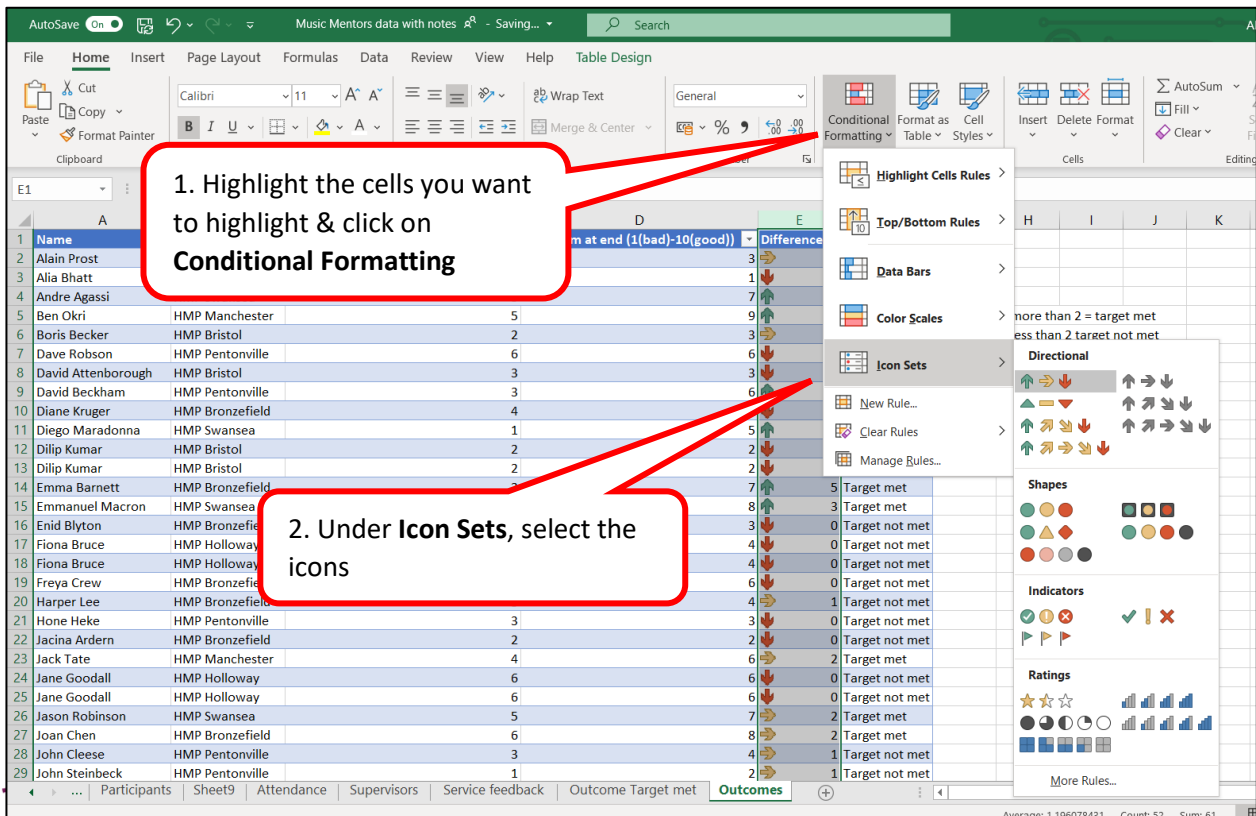


1. Highlight the cells you want to highlight & click on **Conditional Formatting**

2. Under **Color Scales**, select the colour range

Name	HMP	Score	Difference
Alain Prost		3	3
Alia Bhatt		1	1
Andre Agassi	HMP Swansea	3	7
Ben Okri	HMP Manchester	5	9
Boris Becker	HMP Bristol	2	3
Dave Robson	HMP Pentonville	6	6
David Attenborough	HMP Bristol	3	3
David Beckham	HMP Pentonville	3	6
Diane Kruger	HMP Bronzefield	4	2
Diego Maradona	HMP Swansea	1	5
Dilip Kumar	HMP Bristol	2	2
Dilip Kumar	HMP Bristol	2	2
Emma Barnett	HMP Bronzefield	7	5
Emmanuel Macron	HMP Swansea	8	3
Enid Blyton	HMP Bronzefield	0	0
Fiona Bruce	HMP Holloway	4	0
Fiona Bruce	HMP Holloway	4	0
Freya Crew	HMP Bronzefield	6	0
Harper Lee	HMP Bronzefield	3	1
Hone Heke	HMP Pentonville	3	0
Jacina Arden	HMP Bronzefield	2	0
Jack Tate	HMP Manchester	4	2
Jane Goodall	HMP Holloway	6	0
Jane Goodall	HMP Holloway	6	0
Jason Robinson	HMP Swansea	5	2
Joan Chen	HMP Bronzefield	6	2
John Cleese	HMP Pentonville	3	1
John Steinbeck	HMP Pentonville	1	2

#### Icon sets

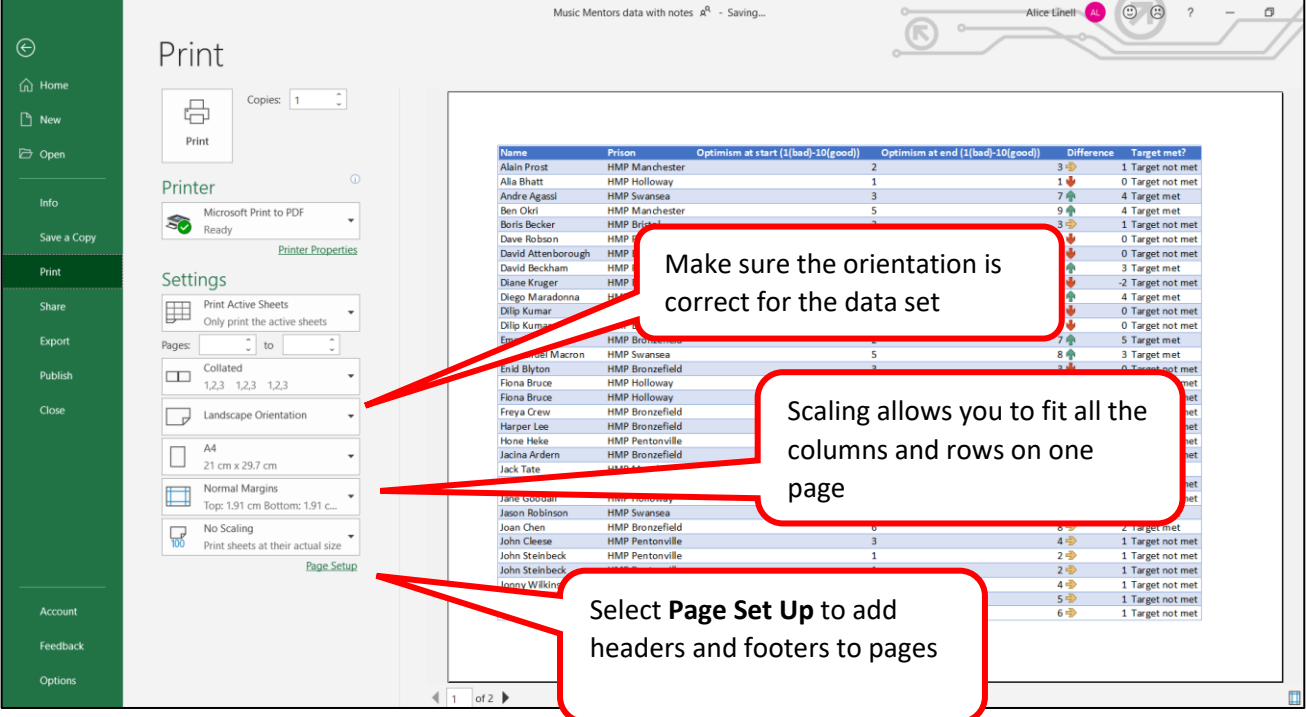


1. Highlight the cells you want to highlight & click on **Conditional Formatting**

2. Under **Icon Sets**, select the icons

Name	HMP	Score	Difference
Alain Prost		3	3
Alia Bhatt		1	1
Andre Agassi	HMP Swansea	3	7
Ben Okri	HMP Manchester	5	9
Boris Becker	HMP Bristol	2	3
Dave Robson	HMP Pentonville	6	6
David Attenborough	HMP Bristol	3	3
David Beckham	HMP Pentonville	3	6
Diane Kruger	HMP Bronzefield	4	2
Diego Maradona	HMP Swansea	1	5
Dilip Kumar	HMP Bristol	2	2
Dilip Kumar	HMP Bristol	2	2
Emma Barnett	HMP Bronzefield	7	5
Emmanuel Macron	HMP Swansea	8	3
Enid Blyton	HMP Bronzefield	0	0
Fiona Bruce	HMP Holloway	4	0
Fiona Bruce	HMP Holloway	4	0
Freya Crew	HMP Bronzefield	6	0
Harper Lee	HMP Bronzefield	3	1
Hone Heke	HMP Pentonville	3	0
Jacina Arden	HMP Bronzefield	2	0
Jack Tate	HMP Manchester	4	2
Jane Goodall	HMP Holloway	6	0
Jane Goodall	HMP Holloway	6	0
Jason Robinson	HMP Swansea	5	2
Joan Chen	HMP Bronzefield	6	2
John Cleese	HMP Pentonville	3	1
John Steinbeck	HMP Pentonville	1	2





**Print**

Copies: 1

**Printer**

Microsoft Print to PDF  
Ready

**Settings**

Print Active Sheets  
Only print the active sheets

Pages: 1 to 1

Collated  
1,2,3 1,2,3 1,2,3

Landscape Orientation

A4  
21 cm x 29.7 cm

Normal Margins  
Top: 1.91 cm Bottom: 1.91 cm

No Scaling  
Print sheets at their actual size

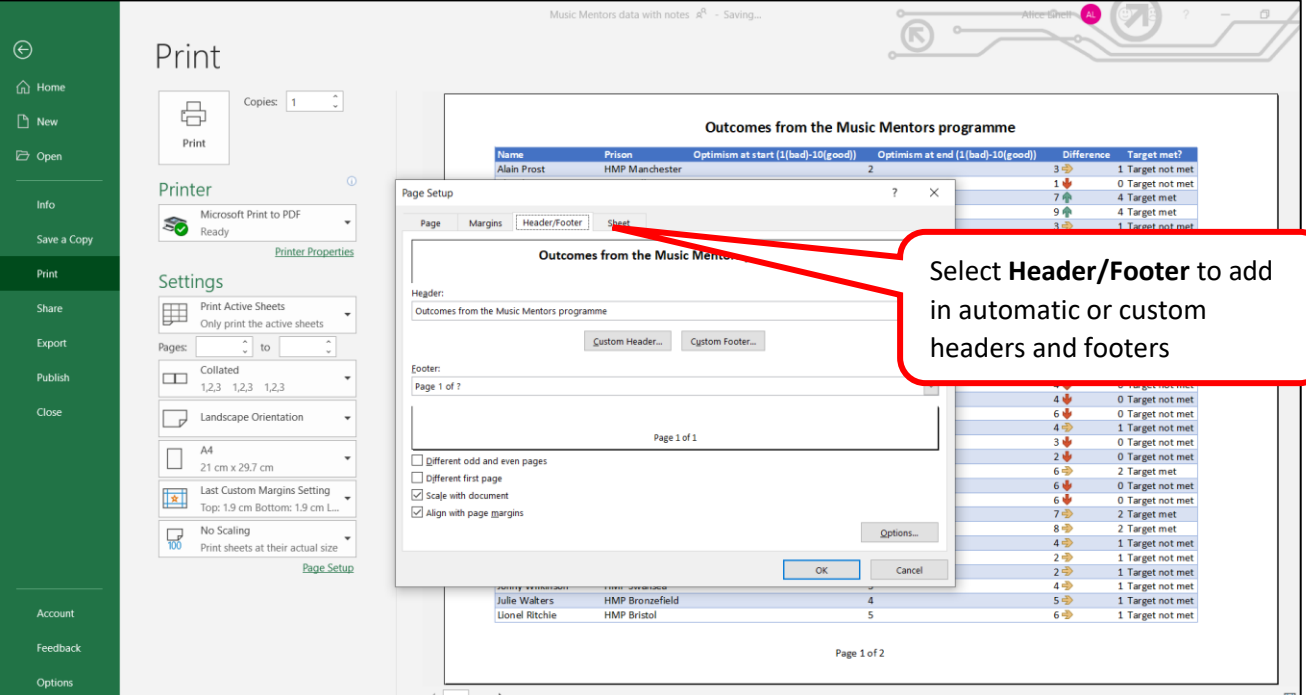
**Page Setup**

**Make sure the orientation is correct for the data set**

**Scaling allows you to fit all the columns and rows on one page**

**Select Page Set Up to add headers and footers to pages**

Name	Prison	Optimism at start (1(bad)-10(good))	Optimism at end (1(bad)-10(good))	Difference	Target met?
Alain Prost	HMP Manchester	2	3	1	Target not met
Alia Bhatt	HMP Holloway	1	1	0	Target not met
Andre Agassi	HMP Swansea	3	7	4	Target met
Ben Okri	HMP Manchester	5	9	4	Target met
Boris Becker	HMP Bristol	1	3	2	Target not met
Dave Robson	HMP	1	0	1	Target not met
David Attenborough	HMP	1	0	1	Target not met
David Beckham	HMP	1	0	1	Target not met
Diana Kruger	HMP	1	0	1	Target not met
Diego Maradona	HMP	1	0	1	Target not met
Dilip Kumar	HMP	1	0	1	Target not met
Emmanuel Macron	HMP Swansea	5	8	3	Target met
Enid Blyton	HMP Bronzefield	1	1	0	Target not met
Fiona Bruce	HMP Holloway	1	1	0	Target not met
Freya Crew	HMP Bronzefield	1	1	0	Target not met
Harper Lee	HMP Bronzefield	1	1	0	Target not met
Hone Heke	HMP Pentonville	1	1	0	Target not met
Jacina Ardern	HMP Bronzefield	1	1	0	Target not met
Jack Tate	HMP	1	1	0	Target not met
Jane Goodall	HMP Holloway	1	1	0	Target not met
Jason Robinson	HMP Swansea	1	1	0	Target not met
Joan Chen	HMP Bronzefield	1	1	0	Target not met
John Cleese	HMP Pentonville	1	1	0	Target not met
John Steinbeck	HMP Pentonville	1	1	0	Target not met
John Steinbeck	HMP Pentonville	1	1	0	Target not met
Loony Wilkins	HMP	1	1	0	Target not met



**Print**

Copies: 1

**Printer**

Microsoft Print to PDF  
Ready

**Settings**

Print Active Sheets  
Only print the active sheets

Pages: 1 to 1

Collated  
1,2,3 1,2,3 1,2,3

Landscape Orientation

A4  
21 cm x 29.7 cm

Last Custom Margins Setting  
Top: 1.9 cm Bottom: 1.9 cm

No Scaling  
Print sheets at their actual size

**Page Setup**

**Header/Footer**

Header:  
Outcomes from the Music Mentors programme

Footer:  
Page 1 of 1

**Select Header/Footer to add in automatic or custom headers and footers**

Name	Prison	Optimism at start (1(bad)-10(good))	Optimism at end (1(bad)-10(good))	Difference	Target met?
Alain Prost	HMP Manchester	2	3	1	Target not met
Alia Bhatt	HMP Holloway	1	1	0	Target not met
Andre Agassi	HMP Swansea	3	7	4	Target met
Ben Okri	HMP Manchester	5	9	4	Target met
Boris Becker	HMP Bristol	1	3	2	Target not met
Dave Robson	HMP	1	0	1	Target not met
David Attenborough	HMP	1	0	1	Target not met
David Beckham	HMP	1	0	1	Target not met
Diana Kruger	HMP	1	0	1	Target not met
Diego Maradona	HMP	1	0	1	Target not met
Dilip Kumar	HMP	1	0	1	Target not met
Emmanuel Macron	HMP Swansea	5	8	3	Target met
Enid Blyton	HMP Bronzefield	1	1	0	Target not met
Fiona Bruce	HMP Holloway	1	1	0	Target not met
Freya Crew	HMP Bronzefield	1	1	0	Target not met
Harper Lee	HMP Bronzefield	1	1	0	Target not met
Hone Heke	HMP Pentonville	1	1	0	Target not met
Jacina Ardern	HMP Bronzefield	1	1	0	Target not met
Jack Tate	HMP	1	1	0	Target not met
Jane Goodall	HMP Holloway	1	1	0	Target not met
Jason Robinson	HMP Swansea	1	1	0	Target not met
Joan Chen	HMP Bronzefield	1	1	0	Target not met
John Cleese	HMP Pentonville	1	1	0	Target not met
John Steinbeck	HMP Pentonville	1	1	0	Target not met
John Steinbeck	HMP Pentonville	1	1	0	Target not met
Loony Wilkins	HMP	1	1	0	Target not met

