



Trust for London

Tackling poverty and inequality

Analysing your survey data – Advanced

What we'll be covering

- ✓ Excel analysis – pivot tables & charts refresher
- ✓ Multi select multiple choice questions
 - ✓ Total row, Text Filter, CountIf
 - ✓ Power Query / Get Transform
- ✓ Coding free text responses
- ✓ Xlookup
- ✓ Power Query
 - ✓ Connect & Append



Multiple Select Multiple Choice questions

Survey Music Mentors

Hi Alice, when you submit this form, the owner will be able to see your name and email address.

1. Which instrument would you like to learn?

☐ Saxophone

☐ Electric Keyboard

☐ Drums

☐ Guitar

☐ Bass

☐ Other

Submit

Music Mentors Survey for Bitesize 4

1. Which Instrument would you like to learn

☐ Saxophone

☐ Electric Keyboard

☐ Guitar

☐ Bass

☐ Drums

DONE

Powered by

SurveyMonkey

See how easy it is to [create a survey](#).

Which instrument would you like to learn?

Saxaphone;Drums;Bass;

Electric Keyboard;Drums;

Drums;

Saxaphone;

Electric Keyboard;

Bass;

Drums;Saxaphone;

Drums;Electric Keybo

Bass;Harmonica;

Saxaphone;Trumpet;

Electric Keyboard;

Drums;

Electric Keyboard;Dru

Saxaphone;Electric K

Electric Keyboard;Dru

Electric Keyboard;

Electric Keyboard;Dru

Saxaphone;Electric K

Which Instrument would you like to learn				
Saxaphone	Electric Keyboard	Guitar	Bass	Drums
	Electric Keyboard	Guitar	Bass	
Saxaphone	Electric Keyboard			Drums
		Guitar	Bass	
	Electric Keyboard	Guitar		Drums
Saxaphone		Guitar		
	Electric Keyboard		Bass	
	Electric Keyboard			Drums
		Guitar	Bass	Drums
Saxaphone	Electric Keyboard			Drums
		Guitar	Bass	
	Electric Keyboard	Guitar		Drums
Saxaphone				
	Electric Keyboard		Bass	
	Electric Keyboard			Drums
	Electric Keyboard			



Multiple choice exports

- ✓ Microsoft Forms & Google Forms return multiple options selected in one column, separated by semi colons & commas respectively
- ✓ Survey Monkey returns multiple options across consecutive columns

Which instrument would you like to learn?
Saxaphone;Drums;Bass;
Electric Keyboard;Drums;
Drums;
Saxaphone;
Electric Keyboard;
Bass;
Drums;Saxaphone;
Drums;Electric Keyboard;
Bass;Harmonica;
Saxaphone;Trumpet;
Electric Keyboard;
Drums;
Electric Keyboard;Drums;Guitar;
Saxaphone;Electric Keyboard;Drums;
Electric Keyboard;Drums;Guitar;
Bass;Guitar;

Which Instrument would you like to learn				
Saxaphone	Electric Keyboard	Guitar	Bass	Drums
	Electric Keyboard	Guitar	Bass	
Saxaphone	Electric Keyboard			Drums
		Guitar	Bass	
	Electric Keyboard	Guitar		Drums
Saxaphone		Guitar		
	Electric Keyboard		Bass	
	Electric Keyboard			Drums
		Guitar	Bass	Drums
Saxaphone	Electric Keyboard			Drums
		Guitar	Bass	
	Electric Keyboard	Guitar		Drums
Saxaphone				
	Electric Keyboard		Bass	
	Electric Keyboard			Drums
	Electric Keyboard			

Counting up numbers for each option

✓ Convert to a Table

✓ Add Total row and select Count

Which Instrument would you like to learn				
Saxaphone	Electric Keyboard	Guitar	Bass	Drums
	Electric Keyboard	Guitar	Bass	
Saxaphone	Electric Keyboard			Drums
		Guitar	Bass	
	Electric Keyboard	Guitar		Drums
Saxaphone		Guitar		
	Electric Keyboard		Bass	
	Electric Keyboard			Drums
		Guitar	Bass	Drums
Saxaphone	Electric Keyboard			Drums
		Guitar	Bass	
	Electric Keyboard	Guitar		Drums
Saxaphone				
	Electric Keyboard		Bass	
	Electric Keyboard			Drums
	Electric Keyboard			



Counting up numbers for each option

✓ Use Text filtering

Or

✓ Use CountIF formula

=Countif(Column range, "*Drums*")

Which instrument would you like to learn?
Saxaphone;Drums;Bass;
Electric Keyboard;Drums;
Drums;
Saxaphone;
Electric Keyboard;
Bass;
Drums;Saxaphone;
Drums;Electric Keyboard;
Bass;Harmonica;
Saxaphone;Trumpet;
Electric Keyboard;
Drums;
Electric Keyboard;Drums;Guitar;
Saxaphone;Electric Keyboard;Drums;
Electric Keyboard;Drums;Guitar;
Bass;Guitar;
Bass;
Electric Keyboard;
Electric Keyboard;Drums;
Saxaphone;Electric Keyboard;Drums;



Get & Transform data

✓ The Power Query Editor in Excel has been rebranded **Get & Transform** data in 2016 and later versions

✓ If you're working with Excel 2010 or Excel 2013, you need to download and install the Power Query add-in.

<https://www.microsoft.com/en-us/download/details.aspx?id=39379>

But please note Microsoft are no longer updating this add-in so ideally you should upgrade.



What is a query & how do they work

A Microsoft Query is an **SQL SELECT Statement** which allows you to retrieve & transform data from different Excel worksheets and work books. You need to provide answers to the following questions to create a query:

- ✓ Where is that data located?
- ✓ What steps do you want to take to transform it?
- ✓ Where do you want to store the results?



1. Conduct a survey

Survey Music Mentors

Hi Alice, when you submit this form, the owner will be able to see your name and email address.

1. Which instrument would you like to learn?

☐ Saxophone

☐ Electric Keyboard

☐ Drums

☐ Guitar

☐ Bass

Submit

2. Export to Excel

Prison ID	Prison	Which instrument would you like to learn?			
HMP1234	HMP Belmarsh	Saxophone;Drums;Bass;	Bass	Drums	
HMP1235	HMP Belmarsh	Electric Keyboard;Drums;	Bass	Drums	
HMP1236	HMP Belmarsh	Drums;	Bass	Drums	
HMP1237	HMP Belmarsh	Saxophone;	Bass	Drums	
HMP1238	HMP Belmarsh	Electric Keyboard;	Bass	Drums	
HMP1239	HMP Belmarsh	Drums;Saxophone;	Bass	Drums	
HMP1240	HMP Belmarsh	Drums;Electric Keyboard;	Bass	Drums	
HMP1241	HMP Belmarsh	Bass;Harmonica;	Bass	Drums	
HMP1242	HMP Belmarsh	Saxophone;Trumpet;	Bass	Drums	
HMP1243	HMP Belmarsh	Electric Keyboard;	Bass	Drums	
HMP1244	HMP Belmarsh	Drums;	Bass	Drums	
HMP1245	HMP Belmarsh	Electric Keyboard;Drums;Guitar;	Bass	Drums	
HMP1246	HMP Belmarsh	Saxophone;Electric Keyboard;Drums;	Bass	Drums	
HMP1247	HMP Belmarsh	Electric Keyboard;Drums;Guitar;	Bass	Drums	
HMP1248	HMP Belmarsh	Bass;Guitar;	Bass	Drums	
HMP1249	HMP Belmarsh	Bass;	Bass	Drums	
HMP1250	HMP Belmarsh	Electric Keyboard;	Bass	Drums	
HMP1251	HMP Belmarsh	Saxophone;Electric Keyboard;Drums;	Bass	Drums	
HMP1252	HMP Belmarsh	Guitar;Bass;	Bass	Drums	
HMP1253	HMP Belmarsh	Electric Keyboard;Guitar;	Bass	Drums	
HMP1254	HMP Belmarsh	Electric Keyboard;	Bass	Drums	
HMP1255	HMP Belmarsh	Electric Keyboard;	Bass	Drums	
HMP1256	HMP Belmarsh	Guitar;Violin;	Bass	Drums	
HMP1257	HMP Belmarsh	Drums;	Bass	Drums	
HMP1258	HMP Belmarsh	Electric Keyboard;Saxophone;	Bass	Drums	
HMP1259	HMP Belmarsh	Electric Keyboard;Drums;	Bass	Drums	
HMP1260	HMP Belmarsh	Saxophone;	Bass	Drums	
HMP1261	HMP Belmarsh	Saxophone;Electric Keyboard;	Bass	Drums	
HMP1262	HMP Belmarsh	Saxophone	Bass	Drums	
HMP1263	HMP Belmarsh		Bass	Drums	
HMP1264	HMP Belmarsh		Bass	Drums	
HMP1265	HMP Belmarsh		Bass	Drums	
HMP1266	HMP Belmarsh		Bass	Drums	
HMP1267	HMP Belmarsh		Bass	Drums	
HMP1268	HMP Belmarsh		Bass	Drums	
HMP1269	HMP Belmarsh		Bass	Drums	
HMP1270	HMP Belmarsh		Bass	Drums	
HMP1271	HMP Belmarsh		Bass	Drums	
HMP1272	HMP Belmarsh		Bass	Drums	
HMP1273	HMP Belmarsh		Bass	Drums	
HMP1274	HMP Belmarsh		Bass	Drums	
HMP1275	HMP Belmarsh		Bass	Drums	
HMP1276	HMP Belmarsh		Bass	Drums	
HMP1277	HMP Belmarsh		Bass	Drums	
HMP1278	HMP Belmarsh		Bass	Drums	
HMP1279	HMP Belmarsh		Bass	Drums	
HMP1280	HMP Belmarsh		Bass	Drums	
HMP1281	HMP Belmarsh		Bass	Drums	
HMP1282	HMP Belmarsh		Bass	Drums	
HMP1283	HMP Belmarsh		Bass	Drums	
HMP1284	HMP Belmarsh		Bass	Drums	
HMP1285	HMP Belmarsh		Bass	Drums	
HMP1286	HMP Belmarsh		Bass	Drums	
HMP1287	HMP Belmarsh		Bass	Drums	
HMP1288	HMP Belmarsh		Bass	Drums	
HMP1289	HMP Belmarsh		Bass	Drums	
HMP1290	HMP Belmarsh		Bass	Drums	
HMP1291	HMP Belmarsh		Bass	Drums	
HMP1292	HMP Belmarsh		Bass	Drums	
HMP1293	HMP Belmarsh		Bass	Drums	
HMP1294	HMP Belmarsh		Bass	Drums	
HMP1295	HMP Belmarsh		Bass	Drums	
HMP1296	HMP Belmarsh		Bass	Drums	
HMP1297	HMP Belmarsh		Bass	Drums	
HMP1298	HMP Belmarsh		Bass	Drums	
HMP1299	HMP Belmarsh		Bass	Drums	
HMP1300	HMP Belmarsh		Bass	Drums	

3. Unpivot the data

Table2 (2) - Power Query Editor

File Home Transform Add Column View

Group By Use First Row as Headers Count Rows Transpose Reverse Rows Detect Data Type Fill Rename Pivot Column Convert to List

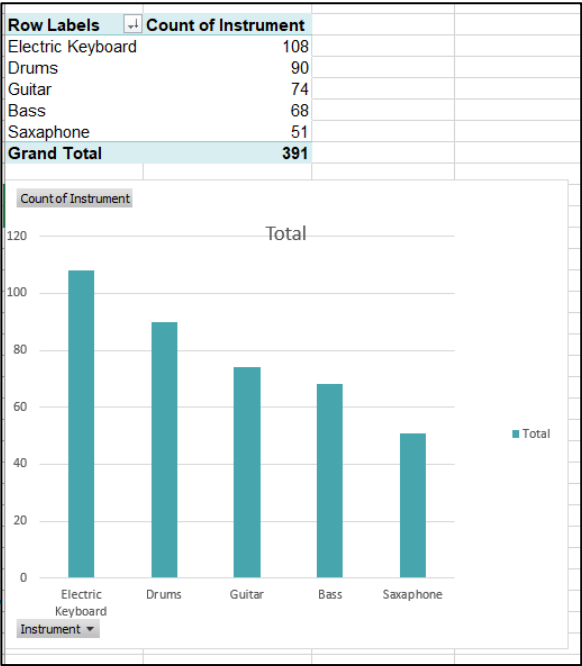
Table

Any Column

Table.TransformColumnTypes(Source,{{"Prison ID",type text}, {"Pri

Prison ID	Prison	Value
HMP1234	HMP Belmarsh	Electric Keyboard
HMP1234	HMP Belmarsh	Guitar
HMP1234	HMP Belmarsh	Bass
HMP1235	HMP Belmarsh	Saxophone
HMP1235	HMP Belmarsh	Electric Keyboard
HMP1235	HMP Belmarsh	Drums
HMP1236	HMP Belmarsh	Guitar
HMP1236	HMP Belmarsh	Bass
HMP1237	HMP Belmarsh	Electric Keyboard
HMP1237	HMP Belmarsh	Drums
HMP1238	HMP Belmarsh	Saxophone
HMP1238	HMP Belmarsh	Guitar
HMP1239	HMP Belmarsh	Bass
HMP1240	HMP Belmarsh	Electric Keyboard
HMP1240	HMP Belmarsh	Bass
HMP1241	HMP Belmarsh	Electric Keyboard
HMP1241	HMP Belmarsh	Drums
HMP1241	HMP Belmarsh	Bass
HMP1242	HMP Belmarsh	Electric Keyboard
HMP1242	HMP Belmarsh	Drums
HMP1243	HMP Belmarsh	Electric Keyboard
HMP1243	HMP Belmarsh	Drums
HMP1244	HMP Belmarsh	Electric Keyboard
HMP1244	HMP Belmarsh	Drums
HMP1245	HMP Belmarsh	Electric Keyboard
HMP1245	HMP Belmarsh	Drums
HMP1246	HMP Belmarsh	Electric Keyboard
HMP1246	HMP Belmarsh	Drums
HMP1247	HMP Belmarsh	Electric Keyboard
HMP1247	HMP Belmarsh	Drums
HMP1248	HMP Belmarsh	Electric Keyboard
HMP1248	HMP Belmarsh	Drums
HMP1249	HMP Belmarsh	Electric Keyboard
HMP1249	HMP Belmarsh	Drums
HMP1250	HMP Belmarsh	Electric Keyboard
HMP1250	HMP Belmarsh	Drums
HMP1251	HMP Belmarsh	Electric Keyboard
HMP1251	HMP Belmarsh	Drums
HMP1252	HMP Belmarsh	Electric Keyboard
HMP1252	HMP Belmarsh	Drums
HMP1253	HMP Belmarsh	Electric Keyboard
HMP1253	HMP Belmarsh	Drums
HMP1254	HMP Belmarsh	Electric Keyboard
HMP1254	HMP Belmarsh	Drums
HMP1255	HMP Belmarsh	Electric Keyboard
HMP1255	HMP Belmarsh	Drums
HMP1256	HMP Belmarsh	Electric Keyboard
HMP1256	HMP Belmarsh	Drums
HMP1257	HMP Belmarsh	Electric Keyboard
HMP1257	HMP Belmarsh	Drums
HMP1258	HMP Belmarsh	Electric Keyboard
HMP1258	HMP Belmarsh	Drums
HMP1259	HMP Belmarsh	Electric Keyboard
HMP1259	HMP Belmarsh	Drums
HMP1260	HMP Belmarsh	Electric Keyboard
HMP1260	HMP Belmarsh	Drums
HMP1261	HMP Belmarsh	Electric Keyboard
HMP1261	HMP Belmarsh	Drums
HMP1262	HMP Belmarsh	Electric Keyboard
HMP1262	HMP Belmarsh	Drums
HMP1263	HMP Belmarsh	Electric Keyboard
HMP1263	HMP Belmarsh	Drums
HMP1264	HMP Belmarsh	Electric Keyboard
HMP1264	HMP Belmarsh	Drums
HMP1265	HMP Belmarsh	Electric Keyboard
HMP1265	HMP Belmarsh	Drums
HMP1266	HMP Belmarsh	Electric Keyboard
HMP1266	HMP Belmarsh	Drums
HMP1267	HMP Belmarsh	Electric Keyboard
HMP1267	HMP Belmarsh	Drums
HMP1268	HMP Belmarsh	Electric Keyboard
HMP1268	HMP Belmarsh	Drums
HMP1269	HMP Belmarsh	Electric Keyboard
HMP1269	HMP Belmarsh	Drums
HMP1270	HMP Belmarsh	Electric Keyboard
HMP1270	HMP Belmarsh	Drums
HMP1271	HMP Belmarsh	Electric Keyboard
HMP1271	HMP Belmarsh	Drums
HMP1272	HMP Belmarsh	Electric Keyboard
HMP1272	HMP Belmarsh	Drums
HMP1273	HMP Belmarsh	Electric Keyboard
HMP1273	HMP Belmarsh	Drums
HMP1274	HMP Belmarsh	Electric Keyboard
HMP1274	HMP Belmarsh	Drums
HMP1275	HMP Belmarsh	Electric Keyboard
HMP1275	HMP Belmarsh	Drums
HMP1276	HMP Belmarsh	Electric Keyboard
HMP1276	HMP Belmarsh	Drums
HMP1277	HMP Belmarsh	Electric Keyboard
HMP1277	HMP Belmarsh	Drums
HMP1278	HMP Belmarsh	Electric Keyboard
HMP1278	HMP Belmarsh	Drums
HMP1279	HMP Belmarsh	Electric Keyboard
HMP1279	HMP Belmarsh	Drums
HMP1280	HMP Belmarsh	Electric Keyboard
HMP1280	HMP Belmarsh	Drums
HMP1281	HMP Belmarsh	Electric Keyboard
HMP1281	HMP Belmarsh	Drums
HMP1282	HMP Belmarsh	Electric Keyboard
HMP1282	HMP Belmarsh	Drums
HMP1283	HMP Belmarsh	Electric Keyboard
HMP1283	HMP Belmarsh	Drums
HMP1284	HMP Belmarsh	Electric Keyboard
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HMP1285	HMP Belmarsh	Electric Keyboard
HMP1285	HMP Belmarsh	Drums
HMP1286	HMP Belmarsh	Electric Keyboard
HMP1286	HMP Belmarsh	Drums
HMP1287	HMP Belmarsh	Electric Keyboard
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HMP1292	HMP Belmarsh	Electric Keyboard
HMP1292	HMP Belmarsh	Drums
HMP1293	HMP Belmarsh	Electric Keyboard
HMP1293	HMP Belmarsh	Drums
HMP1294	HMP Belmarsh	Electric Keyboard
HMP1294	HMP Belmarsh	Drums
HMP1295	HMP Belmarsh	Electric Keyboard
HMP1295	HMP Belmarsh	Drums
HMP1296	HMP Belmarsh	Electric Keyboard
HMP1296	HMP Belmarsh	Drums
HMP1297	HMP Belmarsh	Electric Keyboard
HMP1297	HMP Belmarsh	Drums
HMP1298	HMP Belmarsh	Electric Keyboard
HMP1298	HMP Belmarsh	Drums
HMP1299	HMP Belmarsh	Electric Keyboard
HMP1299	HMP Belmarsh	Drums
HMP1300	HMP Belmarsh	Electric Keyboard
HMP1300	HMP Belmarsh	Drums

4. Create a Pivot table & chart



Unpivot Data – Method 1

Music Mentors Survey for Bitesize 4

1. Which Instrument would you like to learn

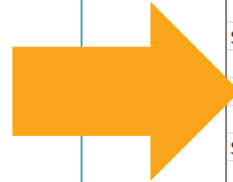
☐ Saxophone ☐ Bass

☐ Electric Keyboard ☐ Drums

☐ Guitar

DONE

Powered by
SurveyMonkey
See how easy it is to [create a survey](#).



Which Instrument would you like to learn				
Saxophone	Electric Keyboard	Guitar	Bass	Drums
Saxophone	Electric Keyboard	Guitar	Bass	Drums
		Guitar	Bass	
Saxophone	Electric Keyboard	Guitar		Drums
	Electric Keyboard		Bass	
Saxophone				
Saxophone				
Saxophone				



AutoSave On

Size 4 Participants data - Test - Saved

File Home Insert Page Layout Formulas Data Review View Help

Get Data From Text/CSV From Web From Table/Range

Queries & Connections

Get & Transform Data

Organization Stocks

Data Types

1	Prison ID	Prison	Instrument	D	E	F	G	H
2	HMP1234	HMP Belmarsh	Electric Keyboard					
3	HMP1234	HMP Belmarsh	Guitar					
4	HMP1234	HMP Belmarsh	Bass					
5	HMP1235	HMP Belmarsh	Saxophone					
6	HMP1235	HMP Belmarsh	Electric Keyboard					
7	HMP1235	HMP Belmarsh	Drums					
8	HMP1236	HMP Belmarsh	Guitar					
9	HMP1236	HMP Belmarsh	Bass					
10	HMP1237	HMP Belmarsh	Electric Keyboard					
11	HMP1237	HMP Belmarsh	Guitar					
12	HMP1237	HMP Belmarsh	Drums					
13	HMP1238	HMP Belmarsh	Saxophone					
14	HMP1238	HMP Belmarsh	Guitar					
15	HMP1239	HMP Bronzefield	Electric Keyboard					
16	HMP1239	HMP Bronzefield	Bass					
17	HMP1240	HMP Bronzefield	Electric Keyboard					
18	HMP1240	HMP Bronzefield	Drums					
19	HMP1241	HMP Bronzefield	Guitar					
20	HMP1241	HMP Bronzefield	Bass					
21	HMP1241	HMP Bronzefield	Drums					
22	HMP1242	HMP Bronzefield	Saxophone					
23	HMP1242	HMP Bronzefield	Electric Keyboard					
24	HMP1242	HMP Bronzefield	Drums					

Summary Attendance Survey Results Multiple choice 1 Instruments by Prison Unpivot data 2

✓ How to unpivot data from multiple columns



Unpivot data – Method 1 (tabular data)

- ✓ On the Multiple Choice 1 sheet, make the data into a table & name it "Multiplechoice1" (Ctrl +T)
- ✓ Open the Power Query Editor (Data tab – Get Data – From Table/Range button)
- ✓ Unpivot the data (Highlight the columns to unpivot using the shift key–Transform tab–Unpivot data button)
- ✓ Remove the Attributes column (Right mouse click – Remove)
- ✓ Rename the Values column "Instrument" (Right mouse click–Rename)
- ✓ Upload & Close the query (Home tab – Upload and Close)
- ✓ Rename the results worksheet "Unpivoted data 1"

Which Instrument would you like to learn?

Saxophone	Electric Keyboard	Guitar	Bass	Drums
	Electric Keyboard	Guitar	Bass	
Saxophone	Electric Keyboard		Bass	Drums
	Electric Keyboard	Guitar		Drums
Saxophone				
	Electric Keyboard		Bass	

The screenshot shows an Excel spreadsheet with the following data:

Prison ID	Prison	Instrument
HMP1234	HMP Belmarsh	Electric Keyboard
HMP1234	HMP Belmarsh	Guitar
HMP1234	HMP Belmarsh	Bass
HMP1235	HMP Belmarsh	Saxophone
HMP1235	HMP Belmarsh	Electric Keyboard
HMP1235	HMP Belmarsh	Drums
HMP1236	HMP Belmarsh	Guitar
HMP1236	HMP Belmarsh	Bass
HMP1237	HMP Belmarsh	Electric Keyboard
HMP1237	HMP Belmarsh	Guitar
HMP1237	HMP Belmarsh	Drums
HMP1238	HMP Belmarsh	Saxophone
HMP1238	HMP Belmarsh	Guitar
HMP1239	HMP Bronzefield	Electric Keyboard
HMP1239	HMP Bronzefield	Bass
HMP1240	HMP Bronzefield	Electric Keyboard
HMP1240	HMP Bronzefield	Drums
HMP1241	HMP Bronzefield	Guitar
HMP1241	HMP Bronzefield	Bass
HMP1241	HMP Bronzefield	Drums
HMP1242	HMP Bronzefield	Saxophone
HMP1242	HMP Bronzefield	Electric Keyboard
HMP1242	HMP Bronzefield	Drums

Unpivot data 2



Unpivot Data – Method 2 (delimited)

Survey Music Mentors

Hi Alice, when you submit this form, the owner will be able to see your name and email address.

1. Which instrument would you like to learn?

☐ Saxophone

☐ Electric Keyboard

☐ Drums

☐ Guitar

☐ Bass


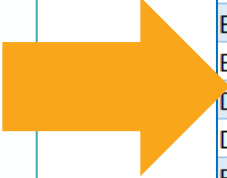
☐ Other

Submit

✓ How to unpivot data from multiple columns

Which instrument would you like to learn?

Saxophone;Drums;Bass;
Electric Keyboard;Drums;
Drums;
Saxophone;
Electric Keyboard;
Bass;
Drums;Sax
Drums;Elec
Bass;Harm
Saxophone
Electric Key
Drums;
Electric Key
Saxophone
Electric Key
Bass;Guitar
Bass;
Electric Key
Electric Key
Saxophone



Prison ID	Prison	Instrument
HMP1234	HMP Belmarsh	Electric Keyboard
HMP1234	HMP Belmarsh	Guitar
HMP1234	HMP Belmarsh	Bass
HMP1235	HMP Belmarsh	Saxophone
HMP1235	HMP Belmarsh	Electric Keyboard
HMP1235	HMP Belmarsh	Drums
HMP1236	HMP Belmarsh	Guitar
HMP1236	HMP Belmarsh	Bass
HMP1237	HMP Belmarsh	Electric Keyboard
HMP1237	HMP Belmarsh	Guitar
HMP1237	HMP Belmarsh	Drums
HMP1238	HMP Belmarsh	Saxophone
HMP1238	HMP Belmarsh	Guitar
HMP1239	HMP Bronzefield	Electric Keyboard
HMP1239	HMP Bronzefield	Bass
HMP1240	HMP Bronzefield	Electric Keyboard
HMP1240	HMP Bronzefield	Drums
HMP1241	HMP Bronzefield	Guitar
HMP1241	HMP Bronzefield	Bass
HMP1241	HMP Bronzefield	Drums
HMP1242	HMP Bronzefield	Saxophone
HMP1242	HMP Bronzefield	Electric Keyboard
HMP1242	HMP Bronzefield	Drums



Unpivot data – Method 2 (delimited)

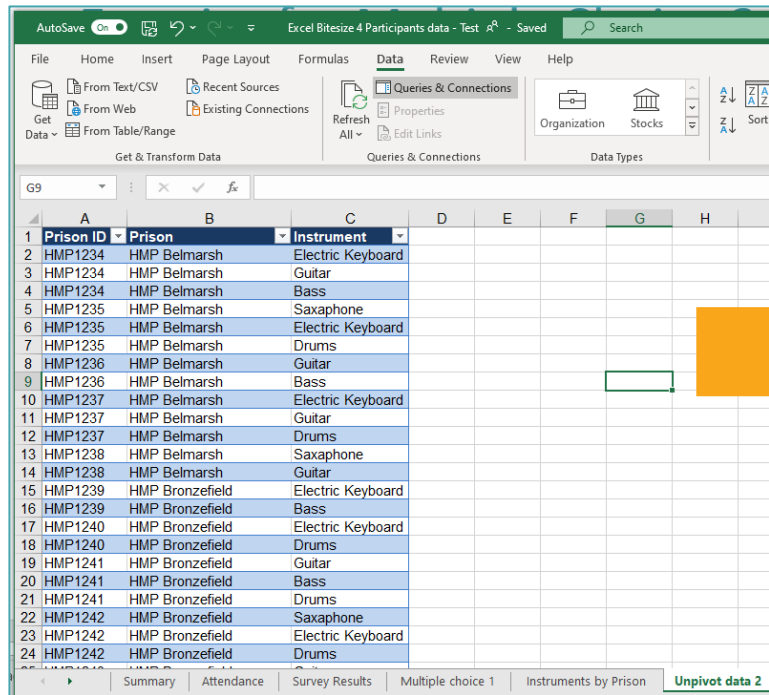
- ✓ Go to the **Multiple Choice 2** worksheet
- ✓ Rename the Table “Unpivotdata2”
- ✓ Open the Power Query Editor (Data tab – From Table/Range button)
- ✓ Split the data in the column (Home tab- Select column – Split Column button-select ; as delineator)
- ✓ Unpivot the data (Highlight the columns to unpivot using the shift key-Transform tab-Unpivot data button)
- ✓ Remove the Attributes column (Right mouse click – Remove)
- ✓ Rename the Values column “Instrument” (Right mouse click-Rename)
- ✓ Filter out the blank rows (Filter on Values column – deselect blanks)
- ✓ Upload & Close the Query (Home tab – Upload and Close)
- ✓ Rename the results worksheet “Unpivoted data 2”

The screenshot displays the Power Query Editor interface. On the left, a preview of the source data is shown as a delimited text table. An orange arrow points from this preview to the main editor window. The editor window shows the 'Data' tab with the 'Queries & Connections' pane on the right. The main grid displays the transformed data with columns A, B, and C. Column A is labeled 'Prison ID' and contains IDs like HMP1234. Column B is labeled 'Prison' and contains names like 'HMP Belmarsh'. Column C is labeled 'Instrument' and contains instrument names like 'Electric Keyboard', 'Guitar', 'Bass', 'Saxophone', and 'Drums'. The bottom status bar indicates the current query is 'Unpivot data 2'.

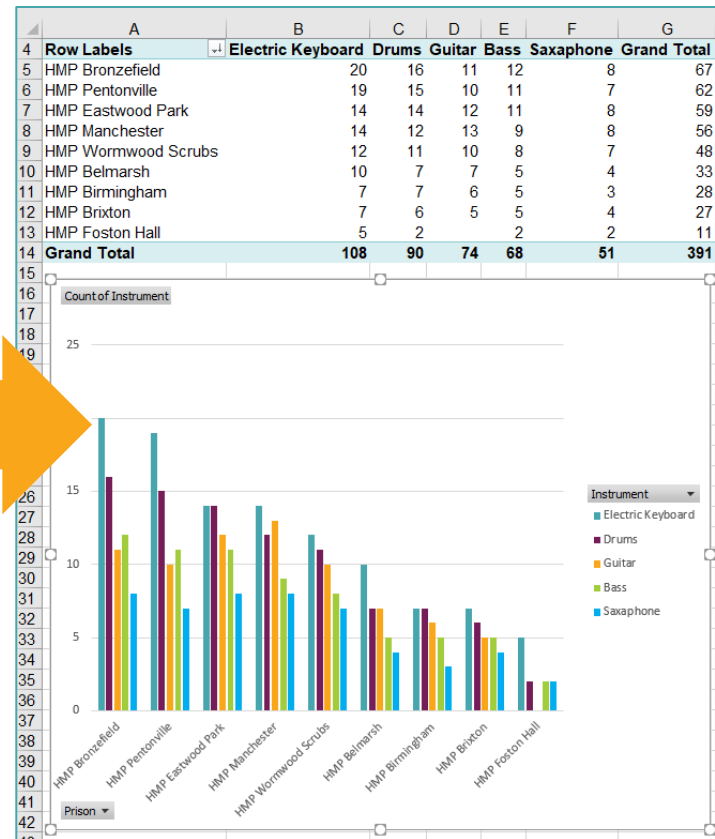
Prison ID	Prison	Instrument
HMP1234	HMP Belmarsh	Electric Keyboard
HMP1234	HMP Belmarsh	Guitar
HMP1234	HMP Belmarsh	Bass
HMP1235	HMP Belmarsh	Saxophone
HMP1235	HMP Belmarsh	Electric Keyboard
HMP1235	HMP Belmarsh	Drums
HMP1236	HMP Belmarsh	Guitar
HMP1236	HMP Belmarsh	Bass
HMP1237	HMP Belmarsh	Electric Keyboard
HMP1237	HMP Belmarsh	Guitar
HMP1237	HMP Belmarsh	Drums
HMP1238	HMP Belmarsh	Saxophone
HMP1238	HMP Belmarsh	Guitar
HMP1239	HMP Bronzefield	Electric Keyboard
HMP1239	HMP Bronzefield	Bass
HMP1240	HMP Bronzefield	Electric Keyboard
HMP1240	HMP Bronzefield	Drums
HMP1241	HMP Bronzefield	Guitar
HMP1241	HMP Bronzefield	Bass
HMP1241	HMP Bronzefield	Drums
HMP1242	HMP Bronzefield	Saxophone
HMP1242	HMP Bronzefield	Electric Keyboard
HMP1242	HMP Bronzefield	Drums



Creating a Pivot table & Column chart

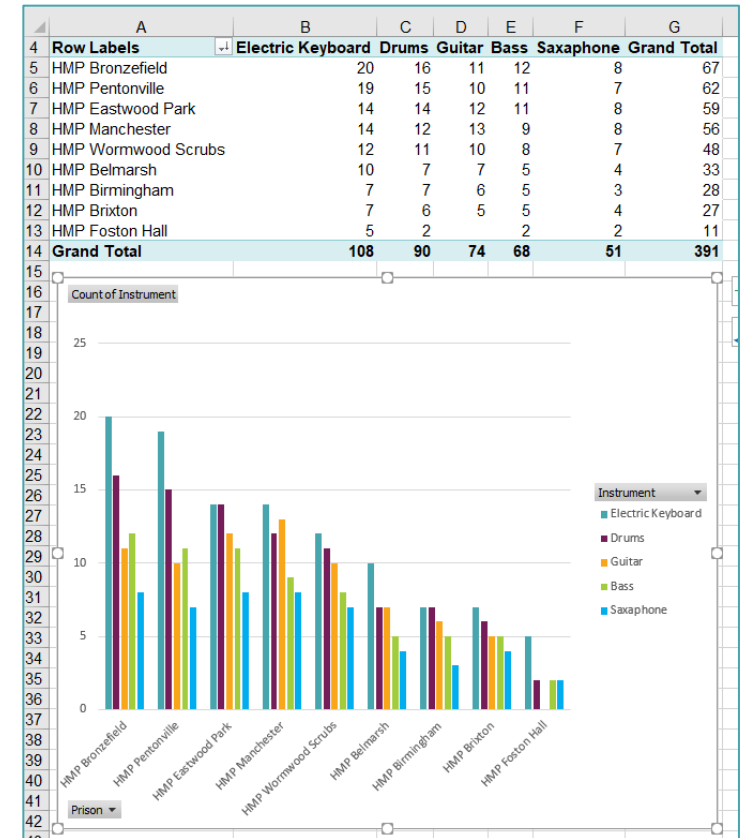


Prison ID	Prison	Instrument
HMP1234	HMP Belmarsh	Electric Keyboard
HMP1234	HMP Belmarsh	Guitar
HMP1234	HMP Belmarsh	Bass
HMP1235	HMP Belmarsh	Saxophone
HMP1235	HMP Belmarsh	Electric Keyboard
HMP1235	HMP Belmarsh	Drums
HMP1236	HMP Belmarsh	Guitar
HMP1236	HMP Belmarsh	Bass
HMP1237	HMP Belmarsh	Electric Keyboard
HMP1237	HMP Belmarsh	Guitar
HMP1237	HMP Belmarsh	Drums
HMP1238	HMP Belmarsh	Saxophone
HMP1238	HMP Belmarsh	Guitar
HMP1239	HMP Bronzefield	Electric Keyboard
HMP1239	HMP Bronzefield	Bass
HMP1240	HMP Bronzefield	Electric Keyboard
HMP1240	HMP Bronzefield	Drums
HMP1241	HMP Bronzefield	Guitar
HMP1241	HMP Bronzefield	Bass
HMP1241	HMP Bronzefield	Drums
HMP1242	HMP Bronzefield	Saxophone
HMP1242	HMP Bronzefield	Electric Keyboard
HMP1242	HMP Bronzefield	Drums



Pivot table & Column chart

- ✓ Create a Pivot table in the **Unpivot data 1** worksheet (Click in the Table, Insert menu – Pivot table)
- ✓ Rename the worksheet “Instruments”
- ✓ Add Instrument to the Rows & Prison ID to the Values field areas
- ✓ Add a chart (Click in the Pivot Table, PivotTable Analyse menu-Pivot Chart)
- ✓ Sort the results by size (Arrow next to row column, More sort options – Descending – Count of Prison ID)
- ✓ Add Prison to the Columns field area
- ✓ Switch Instruments and Prisons between row and column (Pivot Table Design tab – Switch Row/Column)
- ✓ Sort the Prisons column by size (Arrow next to column header, More sort options-Descending-Count of Prison ID)
- ✓ Resize & move the chart to where you want it on the page (Click and drag on the corner to change the size)



Analysing Open Ended Questions

- ✓ Add a text box to your sheet to record notes
- ✓ Identify the key recurring themes
- ✓ Assign a numerical code to each theme e.g.1 = Instrument choice/availability
- ✓ Go through all the answers assigning codes to each answer
- ✓ Add your coding to the text box so you can refer to it



Open text questions

✓ How to code open or free text answers for analysis

What do you think would improve the sessions?
More instruments
Less people in the group, the mentors don't have enough time to spend with everyone
More drums & better heating in the winter & sessions at the weekend
Too much noise from the courtyard
Longer sessions
My welfare officer told me I couldn't attend them anymore
Weekly sessions, once a month isn't enough
The room we practice in is next to the rubbish bins, in summer it stinks and the keyboard is noisy
More choice of instruments & a mentor who knows how to play drums
We need a piano!
The heating has broken again & could we get drums?
Why are there only 2 mentors? They are always busy with the beginners and never with the others
Freezing cold room - can you get the heating fixed
We should do a show in the school holidays so my kids can attend

What would improve the sessions?

1 = Number/availability of Instruments

2 = Number/suitability/training of mentors

3 = Length/frequency of sessions

4 = Rehearsal space

5 = Number/timing of performances

6= Other



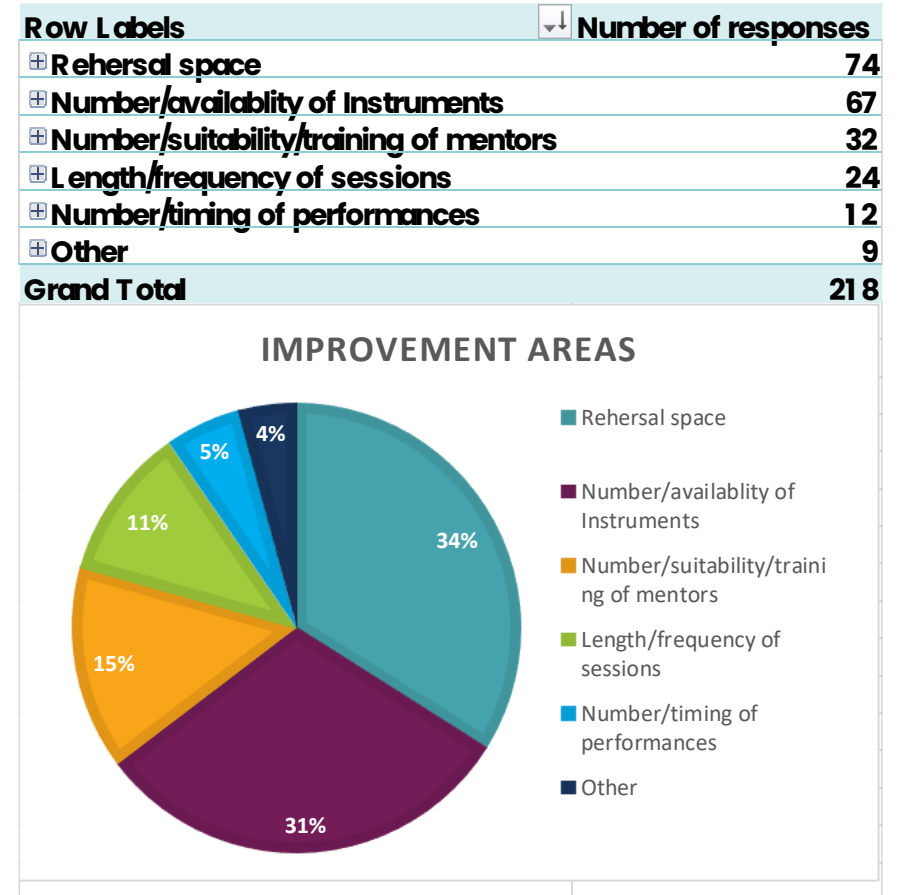
Open text questions (part 1)

- ✓ Put the data in the **Survey Results** tab into a Table & name it "OpenTextQuestions"
- ✓ Open the Power Query Editor (Data tab – From Table/Range button)
- ✓ Select the columns to include in the query results: Prison ID, Prison, What do you think would improve the sessions?, Improvement areas (Home tab – Choose Columns – Select)
- ✓ Split the data in the Improvement Area column (Transform tab-Split Column button-By Number of characters)
- ✓ Unpivot the data (Highlight the columns to unpivot-Transform tab-Unpivot data button)
- ✓ Remove the Attributes column (Right mouse click in the column header– Remove)
- ✓ Rename the Values column "Improvement areas" (Right mouse click in the column header – Rename)
- ✓ Upload & Close the Query (Home tab – Upload and Close)
- ✓ Use Find & Replace to replace the number codes with text (copy the text box from the survey sheet to make it quicker)



Creating a Pivot table & Pie chart(part 2)

- ✓ Create a Pivot table in the **Unpivoted data 3** worksheet (Click in the Table, Insert menu – Pivot table)
- ✓ Rename the new worksheet “Improvement areas”
- ✓ Add **Improvement Area** to the Rows & **Prison ID** to the Values field areas
- ✓ Add **What do you think would improve the sessions?** To the Rows under **Improvement Areas**
- ✓ Use the + and – on the Row to show/hide rows
- ✓ Sort the Pivot chart by number of people per row (Arrow next to row column, More sort options – Descending – Count of Prison ID)
- ✓ Add a pie chart (Click in the Pivot Table, PivotTable Analyse menu-Pivot Chart)
- ✓ Format the pie chart to show percentages (Click on pie chart, Design tab-select a format with percentages)
- ✓ Remove the field **Count of Prison ID** (Right click on the field in the chart – Remove)
- ✓ Hide all field buttons (Right click on a field in the chart – Select Hide All Field buttons)
- ✓ Rename the chart (Double click into the Title to type in a new heading)



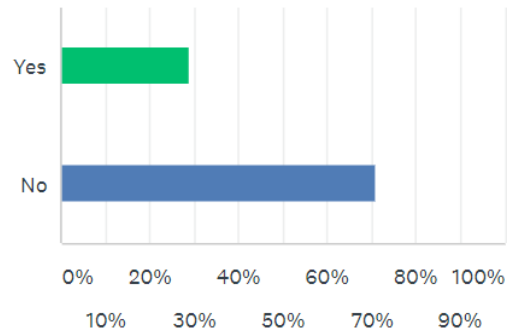
Instant analysis & build a dashboard

Impact Aloud 2020 Evaluation

Impact Aloud 2020 Evaluation

Have you been to one of our Impact ...

Answered: 45 Skipped: 0



Impact Aloud 2020 Evaluation

🔍 (0)

What were your highlights of the day?

Answered: 38 Skipped: 7

“Really loved the entire day! The impact assessment and 2 storytelling sessions were the 3 I attended. I found your facilitators friendly and welcoming. Lots of people know each other but I didn't and was made to feel very welcome I forgot to save the chat!! Could that be shared as well?”

← PREV

21 of 38

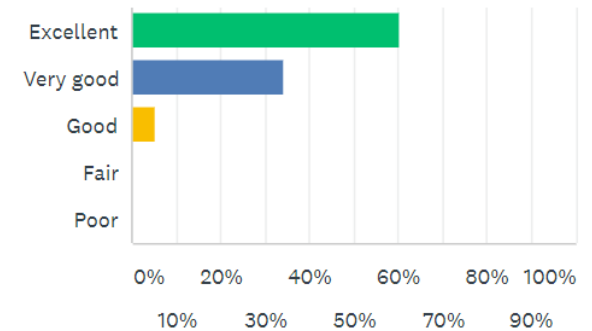
NEXT →

Impact Aloud 2020 Evaluation

🔍 (0)

How would you rate Impact Aloud 20...

Answered: 38 Skipped: 7



Impact Aloud 2020 Evaluation

🔍 (0)



Present survey headline results in engaging ways

There are some
additional tools
that can help

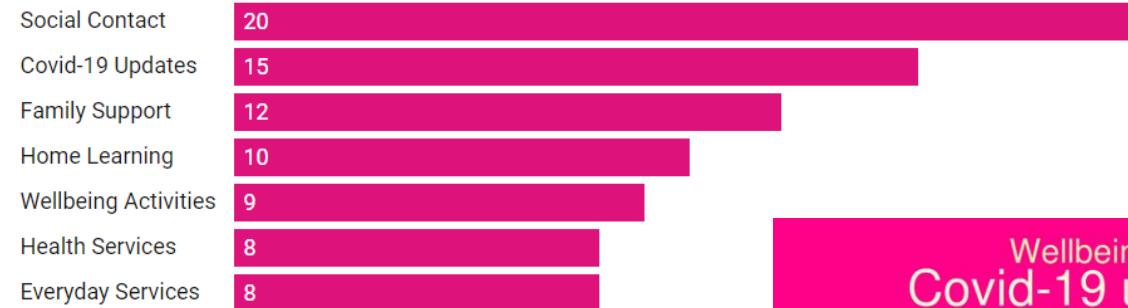
Datawrapper



Word
It Out

What are digitally excluded people missing out on?

■ No of times coded



[Download image](#) • Created with [Datawrapper](#)



**3 out of 5 people are
missing social contact**



Bringing data together with Power Query

Part 1: Creating connection queries

- ❑ Create a query for Prison 1 : Belmarsh (Data tab – From data from Table/range)
- ❑ Close and Load to Connection (Home menu – Close & load to – connection only)
- ❑ Repeat for prisons 2 & 3



Bringing data together with Power Query

Part 2: Appending queries

- ❑ Launch the Power Query Editor (Data tab – Get data – Launch Power Query Editor)
- ❑ Create an Append query (Home tab, select **Append query** as new, select all the tables, click on **Add**, rename the query to **All participants**, then **Close and Load** the query to create a new worksheet)



Bringing data together with Power Query

Part 3: Adding data and refreshing queries

- ❑ Add a row to any of your 3 prison's worksheet for a new participant
- ❑ Refresh your query (Data tab – Refresh All)



About Superhighways....

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- ✓ Training brochure
- ✓ Websites
- ✓ Digital, data & tech strategy
- ✓ Digital inclusion
- ✓ Digital / data consultancy
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Thanks for listening



Kate White

info@superhighways.org.uk
www.superhighways.org.uk