

CfE Second Level Maths & Numeracy

Project: Using a Spreadsheet 2 – Drawing Graphs Using Technology

I can display data in a clear way using a suitable scale, by choosing appropriately from an extended range of tables, charts, diagrams and graphs, making effective use of technology.

MTH 2-21a / 3-21a

We may need to draw a variety of graphs using a pencil, ruler, compasses and protractor for school purposes, but in many cases, graphs are produced digitally. When we see graphical information on the TV or internet, this has normally been produced using computer software and, very possibly, a spreadsheet.

In this project, we will extend our knowledge and use of spreadsheets to produce a range of graphs.

Task 1: Produce a Pie Chart

(a) Open the spreadsheet:

In **Using a Spreadsheet 1**, we learned how to produce a frequency table using spreadsheets. We created a spreadsheet titled *Favourite Restuarant*. Open that spreadsheet.

Favourite Restaurant	Number of People
McDonald's	304
KFC	215
Pizza Hut	87
Nando's	231
Five Guys	185
Burger King	115

If you are unable to find the spreadsheet, type *Favourite Restuarant* where it says:

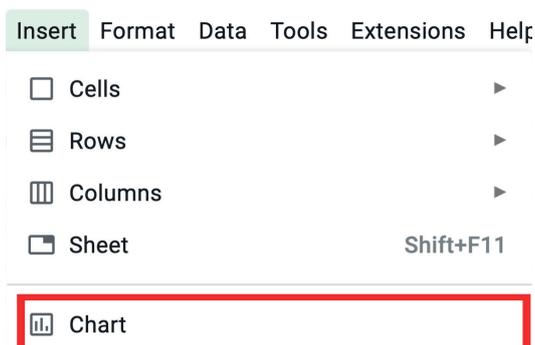
Search in Drive

(b) Produce a pie chart:

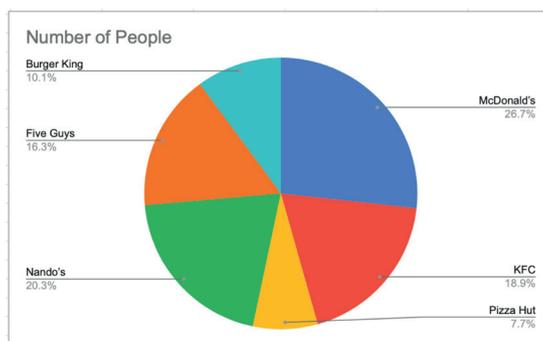
- Select the frequency table by clicking and dragging the mouse from the top left cell, A1, to the bottom right cell, B7. It should now be blue.

1	Favrouite Restaurant	Number of People
2	McDonald's	304
3	KFC	215
4	Pizza Hut	87
5	Nando's	231
6	Five Guys	185
7	Burger King	115

- Select the *Insert* menu and click *Chart*.



Your graph should now look like the one below:



(c) Change the graph title:

Now that we have a pie chart, we need a suitable title.

- Double click the title of the graph where it says *Number of People*.
- On the *Chart Editor* menu on the right hand side of the page under *Title Text* type *Favourite Restaurant*.

(d) Experiment with the graph appearance:

There are lots of ways to change the appearance of the graph, but before we experiment, let us make a copy.

- Click on the graph to select it, then go to the *Edit* menu and select *Copy* then *Paste*.

You should now have two versions of the same graph.

- Keep one graph as it is. Double click on the other graph and select *Customise* from the chart editor menu.
- Spend some time changing the appearance of this graph using the different options within the menu.

Task 2: Produce a Bar Graph

Repeat each of the steps above, but this time after *Insert Chart* in step (b), change the chart type to *Bar Chart*.

Task 3: Produce a Bar Graph

(e) Additional task:

Once you have successfully produced pie charts and bar graphs from the data, go to chapter 23 of the CfE Second Level Maths & Numeracy textbook and select at least three further graphs from the chapter to produce digitally. Make sure each of the graphs are different and one of them is a line graph from Exercise 23.3.

Record the exercise and question number in a cell above each frequency table to identify which questions you have completed.