

CfE Third Level Maths & Numeracy

Project: Using a Spreadsheet 1

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

Data is a collection of information which can be organised into graphs or charts. In these spreadsheet projects, you will develop skills which will allow you to produce spreadsheets, use spreadsheets to perform calculations and produce graphs and display data in an appropriate format. You will need access to an online spreadsheet facility, such as Google Sheets or Microsoft Excel. The instructions given in this project will be based on Google Sheets, which is accessible on any computer or mobile device.

Task 1: Create a frequency table

In this task, you will create your own version of the frequency table shown below as a digital resource. If you are already familiar with entering information into a spreadsheet and formatting cells, you may skip this task and move directly onto **task 2**. (A digital version of the spreadsheet is available **here**).

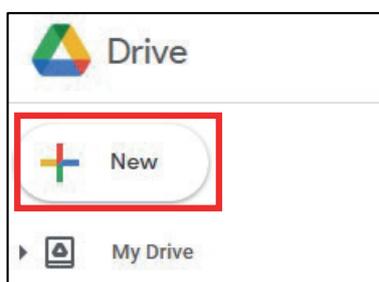
Frequency refers to the number of times an event occurs. A frequency table shows the number of times each event occurs.

The frequency table shows the results of a survey where a group of 11 to 18-year-olds were asked which social media platform they used most.

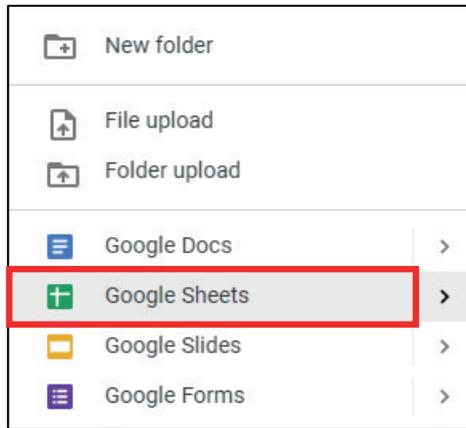
Social Media Platform	Number of People
Snapchat	208
Instagram	187
Facebook	15
TikTok	251
Twitter	39
None	24

(a) Create a new spreadsheet:

- Open your Google Drive and click on the '+ New' icon at the left-hand side



- Scroll down and select 'Google Sheets' to open a new Google Sheets file



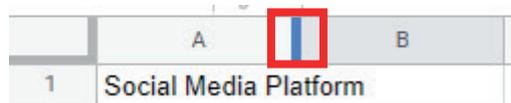
- Click the box that reads Untitled spreadsheet, type Using a Spreadsheet Task 1 and press **ENTER** on your keyboard. This will automatically rename the file in your drive. (Every time you type something into a cell, you should press the **ENTER** key on your keyboard).



NB: Google Sheets will automatically save your changes as you go. If you wish to undo the last change you made, simply press **CTRL-Z** on your keyboard.

(b) Enter the frequency table data:

- Click on cell *A1* and type the heading *Social Media Platform*. Press **ENTER**.
- Double click on the line between the top of columns *A* and *B*. This will adjust the width of column *A* to fit the heading. You can also click and drag the line to resize to any size.



- Click on cell *B1* and type the heading Number of People. Press **ENTER**.
- Double click on the line between the top of columns *B* and *C* to adjust the width of column *B*.
- Click on cell *A2* and type Snapchat. Press **ENTER**.
- Click on cell *A3* and continue the process of entering the name of each platform from the table on page 1 into column *A*.
- When you have typed in the final entry in column *A*, *None* in cell *A7*, click on cell *B2*, type 208 and press **ENTER**.
- Click on cell *B3* and continue the process of entering the number of people who selected each social media platform into column *B*.

(c) Format the frequency table:

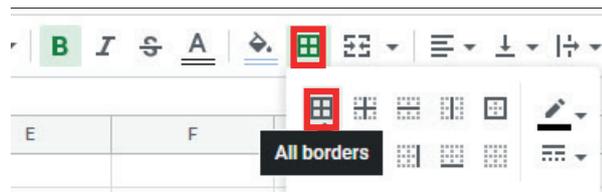
- Click on cell *A1*. Hold the cursor on *A1* and drag the cursor across cell *B1*. This will highlight both cells.
- To change the colour of cells *A1* and *B1* to a colour of your choice, click on the 'Fill colour' icon on the task bar and select a colour.



- Whilst cells A1 and B1 are still highlighted, select the 'Bold' icon in the task bar. You may have to readjust your column width again.



- Click on cell A1. Hold the cursor on A1 and drag the cursor across column B to cell B7. This will highlight the whole frequency table.
- Click on the 'Borders' icon in the task bar and select 'All borders'. This will add a box around every cell.



(d) Additional task:

Once you have entered the frequency table, take some time to explore the options in the task toolbar. You may choose to change the font type and/or size, or to centre the numerical values. Remember to use **CTRL-Z** to undo any changes you do not wish to keep.

(e) Extension:

Go to page 224-228 of the CfE Third Level textbook and select some of the frequency tables shown in these pages and try to reproduce them in Google Sheets. You can either draw these on the same sheet as your existing frequency table, or on a new tab within the document by clicking the '+' button at the bottom of the page.

You you have produced the table, experiment with the format and design of the table.