Intro into Spreadsheets

Big Ideas

Analysing and Organising Data: A spreadsheet is a grid-based software tool for organizing, analysing, and storing data in rows and columns.

What could you use a spreadsheet for?	If you were organising a party, how can a spreadsheet help?	What type of graph would be best for weather data?

Vocabulary

Information
Data
Cell
Column/row
Spreadsheets
Format
Formula
Accounting
Filter
Software
Tax
Business
Analyse
Interpret
Chart/Graph

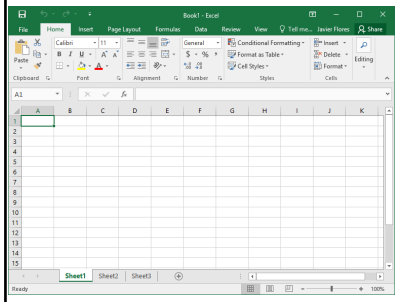
Overview

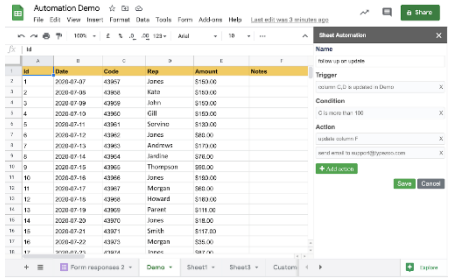
Spreadsheets

Data is raw numbers and figures. **Information** is what we can understand from **analysing data**.

There are lots of different ways that we can collect, log and **interpret data**, including by using **spreadsheets**.

Spreadsheets organise and store data in meaningful ways so that it can be easily accessed and analysed. Computer **spreadsheets** are particularly useful for powerful calculations, graphs and charts.





Spreadsheets

A **spreadsheet** is a computer application that allows users to organise, **analyse** and store **data** in a table. Programs such as Microsoft Excel and Google sheets help users to make spreadsheets.

A **spreadsheet** can be made up of multiple worksheets. They can be reordered and renamed. Each cell has a unique reference, made up of a number (the row) and letter (the column).

Data headings allow data to be stored in a meaningful way.

To select a cell, we click on it. To enter **data**, we double click on it.

Data can be typed directly into a cell or into the formula bar.

By clicking on a column or row, we can sort **information** in different ways (e.g. alphabetically, 0-9, etc).

Formulas

A **formula** can tell a computer which mathematical operation to use for a calculation: add, multiply, divide, or subtract. It also tells the computer which data to use.

+ = add - = subtract * = multiply / = divide

Select your cell. Use cell references to create your formula.

E.g. In D3, you enter the formula =D1*D2. The answer will appear in D3.

Calculations

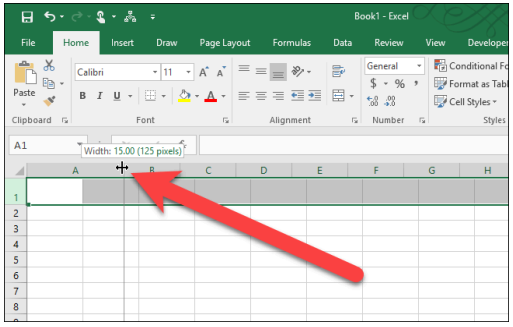
Sometimes there are large amounts of data that require multiple or complex sums. The 'fx' or 'sigma' icons (see below, depending on the program you are using) can help you to find averages (AVERAGE) add many cells together (SUM) and many other calculations.

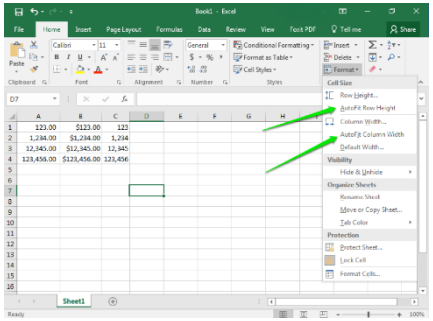
Duplicating

Duplicating allows you to create copies of the same data, without having to type it out multiple times. The copy and paste function (Ctrl+C and then Ctrl+V) can duplicate individual cells. You can duplicate whole worksheets by clicking on the worksheet name and selecting 'move or copy' then tick 'create a copy.'

Formatting

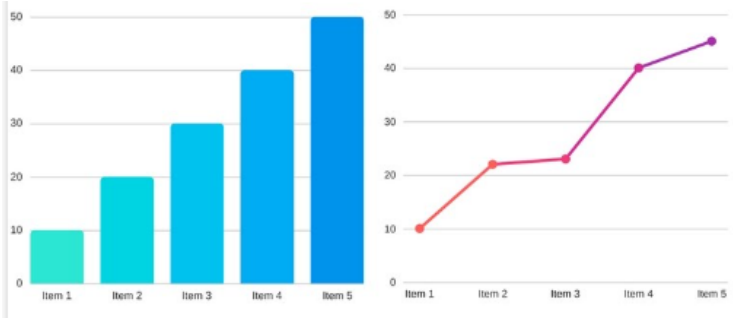
Formatting makes a **spreadsheet** easier to read. Hovering the mouse between two columns/ rows allows the user to drag them to the desired size. Right-clicking on a cell and selecting 'format cells' presents a number of options, including fonts, borders, fill etc.





Charts

Charts and graphs can be created using the data in the spreadsheet. Select the charts icon (see below) and which fields to display in the x-axis and y-axis.



We are learning to:					
Collect data and organise it in a spreadsheet	Identify cells in a spreadsheet and how the data has been formatted	Calculate new data in a spreadsheet using formulas	Use a functions that work with ranges of cells	create a spreadsheet to plan an event	Present data so that it is easier to understand and use
Fact	Spreadsheets are commonly used by individuals and businesses across the world. They are most commonly used for organising and presenting finances, for example budgets and finance reports. Spreadsheets may be used by businesses to look back on past income and expenditure and to forecast future performance. They are also used for calculating taxes and deductions.				