St Mary's Horsforth Computing Knowledge Map

Year 4 | Unit 4.3 Spreadsheets

What should I already know?

- I can use the symbols more than, less than and equal to, to compare values.
- I can use 2Calculate to collect data and produce a variety of graphs.
- I can use the advanced mode of 2Calculate to learn about cell references.

What will I know at the end of the unit?

- I can format cells as currency, percentage, decimal to different decimal places or fraction.
- I know how to use the formula wizard to calculate averages.
- I can combine tools to make spreadsheet activities such as timed times tables tests.
- I can use a spreadsheet to model a real-life situation.
- I know how to add a formula to a cell to automatically make a calculation in that cell.

Key Questions & Images

How would you add a formula so that the cell shows the percentage score for a test?

Click on the cell where you want the percentage score to be displayed then click the formula wizard button. Click on the cell that contains the score. Choose the ÷ operation then click on the cell that shows what the test was out of. Click OK. Click on the answer cell and then the formet cell button. Choose % as the format.

Which tools would you use to create a timed times tables test in 2Calculate?

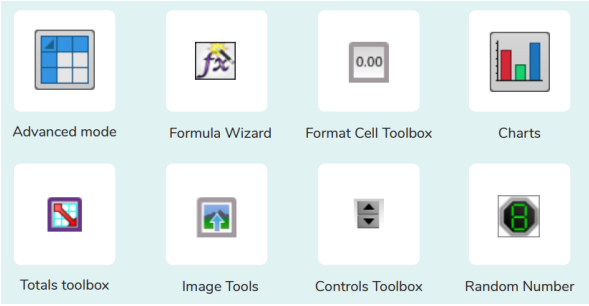
You could use the random tool, the spin tool, the equal tool and the timer tool.

Give an example of the data that could be best represented by a line graph.

Data where both axes will contain continuous data so that you can see trends in the data. Such as ages and heights, time and temperature, years and costs.

Explain what a spreadsheet model of a real-life situation is and what it can be used for?

It represents the data of a situation for example budgeting for a party, working out how big a field needs to be for a certain number of animals, working out how to spend your pocket money over time.



Key Vocabulary & Resources

Data
A collection of information, especially facts or numbers, obtained by observation, questions or measurement to be analysed and used to help decision-making.

Format Cell
The way that data is displayed in a cell. For example using units such as £ or $.

Percentage
'per' 'cent' means number of parts per hundred.

Timer
When placed in the spreadsheet, clicking the timer adds 1 to the value of the cell to its right every second until it is clicked again.

Decimal place
The position of a digit to the right of a decimal point. In 2Calculate, the number of decimal places to be displayed can be chosen.

Formula Wizard
Use the formula wizard or type into the formula bar to create a formula in a cell, this will calculate the value for the cells based upon the value of other cells in the spreadsheet.

Place value
This is the value of each digit within a number. For example 354, the 3 = 3 hundreds, the 5 = 5 tens and the 3 = 3 ones.

Row
Boxes running horizontally in a spreadsheet.

Equals tool
Tests whether the entered calculation in the cells to the left of the tool has the correct answer in the cell to the right of the tool.

Line graph
A line graph is used to display information which can change over time. For example, temperature at different times of the day.

Random Number Tool
This tool, when clicked, will generate a random number.

Spin Tool
This tool changes a number to the right of it by one each time an arrow is pressed.

Average
A number expressing the typical value in a set of data. Also known as the mean. It is calculated by dividing the sum of the values in the set by their number.

Column
Boxes running vertically in a spreadsheet.

Spreadsheet
A computer program that represents data in **cells** in a grid of **rows** and **columns**. Any cell in the grid may contain either data or a **formula** that describes the value to be inserted based on the values in other cells.

Budget
The amount of money available to spend on a project.

Formula
A group of letters, numbers, or other symbols which represents a scientific or mathematical rule. The plural of formula is formulae.

Chart
A diagram that represents data. Charts include graphs and other diagrams such as pie charts or flowcharts.