

Purple Mash Computing Scheme of Work: Knowledge Organisers

# Unit: 3.3 Spreadsheets

#### **Key Learning**

- To use 2Calculate to collect data and produce a variety of graphs.
- To use the advanced mode of 2Calculate to learn about cell references.
- To use the formula wizard and the formula bar to write formulae.
- To use the tools within 2Calculate to explore number.
- To create a computational model using a spreadsheet.



**Key Resources** 

#### **Key Questions**

Explain how you would collect data to find out children's favourite school subjects. What sort of graph would you create?

Label one column 'Subject' and list the subjects in this column. In the cells to the right put in the number of children who like this subject. Use the chart button to automatically create a chart. A pie chart would be a suitable choice. How can you make a 3 times table machine using the spin tool? Could you use the equals tool to check your answer

Put the spin tool in the left most cell of a row. Type 0 x 3 in the next three cells. Put an equals tool in the next cell in the row. When you spin the spin tool, the question will change. Enter the answer and the equals tool will tell you if it is correct.

### Explain how you would locate a cell in the advanced mode?

Cells in advanced mode have rows labelled with numbers, and columns labelled with letters. So, each cell has a number and letter. For example, A1 or D7.





## Unit: 3.3 Spreadsheets

**Key Vocabulary** 

### Advance mode

A mode of 2Calculate in which the cells have references and can include formulae.

## Bar graph

A chart that uses bars to show quantities or numbers, so they can be easily compared.

#### **Budget**

A set amount of money that someone has available to spend on something. For example, a £100 budget to pay for a party.

## **Cell Address**

Every **cell** has an address. This can be found by reading the **column** letter then **row** number.

#### Columns

Boxes running vertically in a spreadsheet.

#### Data

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

#### Data table

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

#### Equals

This symbol shows that numbers or number sentences either side are equal in value.

## **Equals Tool**

This can be used after the equals sign or instead of a number in a calculation. If you input the correct answer it will disappear.

#### Formula bar

An area of the spreadsheet into which formulae can be entered using the '=' sign to open the formula.

## Formula wizard

The wizard guides the user in creating a variety of formulae for a cell such as calculations, totals, averages, minimum and maximum for the selected cells.

## Line graph

Used to display information which can change over time. For example, temperature at different times of the day.

## **Pie Chart**

A circular chart divided into segments which each represent a part of the total amount.

#### Quiz tool

This can be used after the equals sign or instead of a number in a calculation. If you input the correct answer it will disappear.

#### Range

A collection of selected cells: all the numbers you want to appear in a calculation. For example, A1:A12 includes all the cells from A1 to A12.

#### Rows

Boxes running horizontally in a spreadsheet.

#### Spin Tool

Clicking on this in a cell will increase or decrease the value in the cell to the right by 1.





