What should I already know?

- Introduce 2Calculate. Spreadsheet navigation. Adding images.
- What is data? Representing data.
- Copying and pasting. Totalling tools. Addition. Table layout . Block graph
- Ways to represent data. Pictograms (2Count). Binary trees (2Question). Databases (2Investigate).
- Pie charts and Bar graphs. Boolean comparison tools (< = >). Spin tool. Advanced mode. Cell references.
- Data representation in 2Graph. Use software to investigate data.
- Converting measures. Count tool. Formulae. Variables in formulae. Event planning.
- Data representation in 2Investigate.. Creating and interrogating data. Use of filter, sort and search.
- Spreadsheets for computational models • Probability using random functionality • Budgeting • Event planning
- Use of 2Dos, saving, opening and editing work , sharing work, copying and pasting, mouse, keyboard and device skills..

What will I know by the end of the unit?

What is a Spreadsheet?
- You know some uses of a spreadsheet tool. • You will navigate around a spreadsheet using cell references. • You will enter data into cells. • You understand new vocabulary relating to spreadsheets: cells, columns, rows, cell names, sheets, workbook

How do I use some basic data formulae in Excel?
- You will use a spreadsheet to carry out basic calculations including addition, subtraction, multiplication and division formulae. • You will use the series fill function. • You recognise how using formulae allows the data to change and the calculations to update automatically.

How will I use a spreadsheet to model a situation?
- You will use a spreadsheet to model a situation. • You will use a spreadsheet to solve a problem. • You will use the SUM function

How will I demonstrate how Excel will make complex data clear by manipulating the way it is presented?
- • You will use a variety of methods including flash fill, convert text to tables and splitting cells for organising and presenting their data in a spreadsheet. • You know what is meant by a delimiter. • You understand how to sort data.

How do I use advanced Formulae and Big Data?
- You know how to incorporate formulae for percentages, averages, max and min into their spreadsheets. • You gain familiarity with range notation. • You know some shortcuts that help to make data meaningful. • You begin to develop a critical eye when it comes to the conclusions that will be made from data.

How will I create a variety of graphs in Excel?
- • You know that there are ways to represent their data graphically and that spreadsheets will make the process of representing data easier You gain an understanding of how a graphical representation will make data easier to interpret. • You make a variety of charts using Sheets. • You illustrate their data using sparklines and data bars.

How will I use a Spreadsheet to Plan a Cake Sale ?
- You will understand how a spreadsheet will be used to plan an event. • You understand the advantages of using formulae when data is subject to change. • You have modelled a real-life situation using a spreadsheet

How can I use a Spreadsheet to Solve Problems?
- To apply all new spreadsheet skills to solving problems and presenting data. • To explore printing spreadsheets.

Key Vocabulary

- **Auto fit** A function of a spreadsheet that alters column widths to fit data.
- **Row** Horizontal, numbered reference points for the cells in a spreadsheet.
- **Column** Vertical, lettered reference points for the cells in a spreadsheet.
- **Cell** An individual section of a spreadsheet grid. It contains data or calculations.
- **Cell Reference** Each cell has a cell reference that shows its position. The cell reference is displayed in the box on the top left
- **Chart** (not on tablet version). A diagram that represents data. Charts include graphs and other diagrams such as pie charts or flowcharts.
- **Conditional formatting** When a cell or cells are formatted in a specific way depending upon the values in the cell or cells.
- **Data** A collection of information, especially facts or numbers, obtained by observation, questions or measurement to be analysed and used to help decision-making.
- **Delimiter** A character that separates each piece of data.
- **Formula(e)** A group of letters, numbers, or other symbols which represent a mathematical rule. It allows a spreadsheet to carry out calculations.
- **Formula Bar** An area of the spreadsheet into which formulae can be entered using the '=' sign to open the formula.
- **Graph** A diagram that represents data there are specific layouts for graphs including bar graphs and line graphs.
- **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.
- **Computational Model** Creating or using a simulation (a model) of a real-life situation, on a computer.
- **Horizontal axis** The x-axis of a graph is called the horizontal axis.
- **Spreadsheet** A software tool used for organising information and performing calculations on the data. A spreadsheet workbook file is organised into sheets.
- **Text Wrapping** This displays the cells contents on multiple lines rather than one long line, allowing all the contents to be shown.
- **Vertical axis** The y-axis of a graph is called the vertical axis

Key Questions

- What is a spreadsheet used for?

Spreadsheets are used to display, organise and interpret information. They are easy to manipulate and carry out useful calculations quickly

- How do you carry out a multiplication calculation?

Within the formula bar for the cell, you will need to write = then the cells you want to multiply using the operator *. For example, =A1*B1 will show the answer of A1 multiplied by B1. You can change the contents of A1 or B1 and this will change your answer.

- How does using the SUM function save time?

Using the SUM function allows you to add together the total of many cells without having to write them

Purple Mash Resources

- Microsoft Excel