

Topic: Computing	Year group	Term
Information Technology - Spreadsheets: Selecting, ranking and evaluating digital content.	Year 6	Spring 2 6 sessions

**Background knowledge**

Twinkl - Year 6 Spreadsheets.

**What should I already know?**

In Year 4, children learned how to present data in tables using a spreadsheet program (eg. Excel).

National Curriculum Objectives / Key Skills	The Journey
<p>To select, use and combine a variety of software (including internet services) on a range of digital devices to accomplish given goals, including collecting, analysing, evaluating and presenting data and information.</p> <p><i>I can select an appropriate program to collect, analyse, evaluate and present data and information knowing there are multiple choices.</i></p>	<ol style="list-style-type: none"><li>1. Children can enter data and formulae into a spreadsheet.</li><li>2. To order and present data based on calculations.</li><li>3. Children will add, edit and calculate data.</li><li>4. To use a spreadsheet to solve problems.</li><li>5. To plan and calculate a spending budget.</li><li>6. To design a spreadsheet for a specific purpose.</li></ol>

## Outcomes

### An overview of what children will know / can do

Working towards: Children will enter text and numbers into a spreadsheet, identify and refer to cells by row and column and begin to enter formulae with the SUM function.

Expected: Children will be able to enter formulae into cells, edit data and discuss the effect on results, use further functions including AVERAGE, MIN and MAX, create graphs and design their own spreadsheet for a specific purpose.

Exceeding: These children will enter and edit text and enter numbers and formulae independently. They will understand the advantages of spreadsheets over comparative manual methods. They will explore further functions. They will select data and create graphs with appropriate formatting. They will design their own spreadsheet for a specific purpose and present it appropriately.

Key Vocabulary	Timeline / Diagrams
<p>Cell - where you type the information on a spreadsheet.</p> <p>Column - information going up and down a spreadsheet.</p> <p>Document - a piece of work on the computer than can be saved or printed.</p> <p>Format - to change the way text and images look.</p> <p>Formula - an input you give to a spreadsheet to make a calculation.</p> <p>Highlight - to select the words you want to change.</p> <p>Insert - to put something in.</p> <p>Keyboard - used for typing.</p> <p>Layout - the design of a page, the way a page looks.</p> <p>Microsoft Excel - a spreadsheet program that helps you make tables.</p> <p>Row - information going across a spreadsheet.</p> <p>Spreadsheet - a page of columns and rows that helps you make tables and charts.</p> <p>Text - the words on the screen.</p>	<p>The 'Timeline / Diagrams' section contains 16 small images, each with a label below it, illustrating various spreadsheet functions and concepts:</p> <ul style="list-style-type: none"> <li><b>spreadsheet</b>: A blank Excel spreadsheet with columns A, B, C and rows 1-8.</li> <li><b>cell</b>: A close-up of a single cell in a spreadsheet.</li> <li><b>row</b>: A spreadsheet with one row highlighted.</li> <li><b>column</b>: A spreadsheet with one column highlighted.</li> <li><b>formula</b>: A blue box with the text <math>=A1+A2</math>.</li> <li><b>formulas</b>: A blue box with the text <math>=A1+A2</math>, <math>=B1+B2</math>, and <math>=C1+C2</math>.</li> <li><b>calculate</b>: A spreadsheet showing a calculation being performed.</li> <li><b>format</b>: A context menu with options like Cut, Copy, Paste, Insert, Delete, Clear Contents, and Format Cells.</li> <li><b>average</b>: A spreadsheet showing an average calculation.</li> <li><b>percent</b>: A spreadsheet showing a percentage calculation.</li> <li><b>edit</b>: A spreadsheet showing a cell being edited.</li> <li><b>insert</b>: A context menu with options like Cut, Copy, Paste, Insert, Delete, Clear Contents, and Format Cells.</li> <li><b>ascending</b>: A 'Sort &amp; Filter' dialog box with 'Sort Smallest to Largest' selected.</li> <li><b>descending</b>: A 'Sort &amp; Filter' dialog box with 'Sort Largest to Smallest' selected.</li> <li><b>sort</b>: A 'Sort &amp; Filter' icon.</li> <li><b>graph</b>: A bar chart showing data.</li> <li><b>budget</b>: A spreadsheet showing a budget table.</li> <li><b>total</b>: A spreadsheet showing a total calculation.</li> <li><b>cumulative</b>: A spreadsheet showing a cumulative calculation.</li> </ul>

### Key people / places

Dan Bricklin invented the computer spreadsheet in 1978-79.

Bob Frankston wrote the VisiCalc (visual calculator) spreadsheet program with Bricklin in 1979.

### Assessment questions / outcomes

Point to draw lines to these places on your spreadsheet - cell, row, column.

What icon do you click to put the numbers in order from smallest to largest?

Tell me a formula to calculate data.

Tell me how a spreadsheet can solve a problem.

What real life thing can a spreadsheet help you organise? (money) Why is that helpful?