



Computing

Year 6

Term 4

Using Data: Spreadsheets

Key Question: What is a spreadsheet and how can it be used to handle data?

National Curriculum Objectives:

- Select, use, and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems, and content that accomplish given goals, including collecting, analysing, evaluating, and presenting data and information

Vocabulary

Data, collecting, table, structure, spreadsheet, cell, cells, cell reference, data item, format, formula, calculation, calculate, input, output, operation, range, duplicate, sigma, data set, chart, evaluate, results, comparison, software, tools.

Prior Learning:

- This unit progresses learner's knowledge and understanding of data, and teaches them how to organise and modify data within spreadsheets. Learners will have experienced data in tables and charts in the Y4 data logging and Y5 branching database units. They will have used these data handling techniques to enter, select and sort data to answer questions.

End Point:

Learners will use spreadsheets to plan an event and answer questions. They will create charts, and evaluate their results in comparison to questions asked.

Complete assessment task to demonstrate understanding from the unit.

Safe and Responsible Use:

use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.

Digital Literacy Skills:

- Use click and drag to select and copy
- To save, retrieve and print files,

Knowledge:

I know:

- that questions can be answered using spreadsheet data
- what an item of data is in a spreadsheet
- that the data type determines how a spreadsheet can process the data
- that there are different software tools to work with data
- that formulas can be used to produce calculated data
- that changing inputs changes outputs when using formulas.
- which data types can be used in calculations
- why data should be organised in a spreadsheet
- that cells can be linked
- that a cell's value automatically updates when the value in a linked cell is changed

Skills:

I can:

- collect data and enter data into a spreadsheet
- identify questions that can be answered using spreadsheet data
- choose and apply an appropriate format for a cell
- calculate data using a formula for each operation
- apply a formula to multiple cells by duplicating it
- use functions to create new data
- use existing cells within a formula
- choose suitable ways to present spreadsheet data (using charts)
- evaluate results in comparison to the question asked

Cross Curricular Links:

Maths:

- Solve problems involving addition, subtraction, multiplication, and division
- Interpret and construct pie charts and line graphs, and use these to solve problems
- Calculate and interpret the mean as an average

Oracy:

- Set up an 'event planner' board meeting at the end of the unit for the children to present their event plan and budget to the board for approval.

Key Questions:

1. How do you know if a website protects your private information?
2. How can data be collected and recorded?
3. How is a data set created in a spreadsheet?
4. What is a spreadsheet formula?
5. How are formulas and functions used in spreadsheets?
6. How can a spreadsheet be used in a real-life context?
7. How can data in a spreadsheet be presented?