

# UNIT OVERVIEW & LEARNING JOURNEY

## YEAR 7 – COMPUTING: TERM 2 (2<sup>nd</sup> half term)



### MODELLING DATA – SPREADSHEETS

Welcome, future data experts! Get ready to master one of the most powerful digital tools—the spreadsheet! In this exciting journey, you'll learn how to structure, calculate, analyze, and visualize data to solve real-world problems. This unit is designed to take you from having very little knowledge of spreadsheets to being able to confidently model data.

You'll develop skills in everything from basic formulas to powerful functions like COUNTIF. These skills aren't just for Computing class; they will be useful in other subject areas too.

#### Your digital power-up – What you'll learn and achieve:

Here's a look at what you already know, the exciting new skills you'll gain, and where your digital modelling journey can take you!

What I already know: My digital superpowers from before	New adventures this term: What we'll learn	Where we're heading next: Your future digital journey
How to use digital devices	Identify columns, rows, cells, and cell references	Develop advanced skills in data analysis
Basic word processing skills	Use a range of formatting techniques in a spreadsheet	Become proficient in using functions to solve complex problems
	Use basic formulas (+, -, *, /) with cell references	Use computational abstractions to model real-world problems
	Use the autofill tool to replicate cell data	Undertake creative projects involving collecting and analysing data
	Explain the difference between data and information	Confidently use spreadsheets in other subject areas
	Use the functions SUM, COUNTA, MAX, and MIN	Continue on your digital journey to master modelling and computation
	Create appropriate charts in a spreadsheet	
	Use the functions AVERAGE, COUNTIF, and IF	
	Use a spreadsheet to sort and filter data	
	Use conditional formatting in a spreadsheet	



## Weekly missions: Developing your digital voice

Lesson 1: Getting to Know a Spreadsheet - Navigate, define, and format data cells			
Skills:		Key words:	
<ul style="list-style-type: none"> <li>Identify columns, rows, cells, and cell references in a spreadsheet</li> <li>Use formatting techniques in a spreadsheet</li> </ul>		Data   Cell   Cell reference   Row   Column   Range   Select	
RAG rate your confidence with this lesson		☹	☺
Lesson 2: Quick Calculations - Use formulas and automation to generate results			
Skills:		Key words:	
<ul style="list-style-type: none"> <li>Use basic formulas with cell references to perform calculations (+, -, *, /)</li> <li>Use the autofill tool to replicate cell data and quickly populate results</li> </ul>		Drag handle   Autofill   Formula   Cell reference	
RAG rate your confidence with this lesson		☹	☺
Lesson 3: Collecting Data - Understand the source and nature of the data you use			
Skills:		Key words:	
<ul style="list-style-type: none"> <li>Explain the difference between data and information</li> <li>Explain the difference between primary and secondary sources of data</li> <li>Collect data by designing a survey of your own</li> </ul>		Data   Information   Source   primary source   Secondary source	
RAG rate your confidence with this lesson		☹	☺
Lesson 4: Become a Data Master! - Use powerful functions to analyze ranges of data			
Skills:		Key words:	
<ul style="list-style-type: none"> <li>Use the functions SUM, COUNTA, MAX, and MIN to analyze data in a range</li> <li>Analyse data to quickly calculate totals, highest, and lowest values</li> <li>Create appropriate charts (graphs) from data</li> </ul>		Chart   Pie chart   Bar chart   Series   Axis / Axes   Labels   Headers   Function   Maximum   Minimum	
RAG rate your confidence with this lesson		☹	☺
Lesson 5: Level Up Your Data Skills! - Filter, sort, and apply complex conditional logic			
Skills:		Key words:	
<ul style="list-style-type: none"> <li>Use the functions AVERAGE, COUNTIF, and IF</li> <li>Use a spreadsheet to sort and filter data</li> <li>Analyse data using these advanced tools on a larger data set</li> </ul>		Header   Filter   Average   Criterion / Criteria   Condition   Conditional formatting	
RAG rate your confidence with this lesson		☹	☺
Lesson 6: Assessment - Apply visual rules and complete your unit assessment			
Skills:		Key words:	
<ul style="list-style-type: none"> <li>Use conditional formatting to automatically change a cell's appearance based on rule</li> <li>Apply all of the spreadsheet skills covered in this unit</li> <li>Combine a range of tools to answer given questions</li> <li><b>Get ready for your teacher to celebrate your amazing skills!</b></li> </ul>		Conditional formatting   Summative	
RAG rate your confidence with this lesson		☹	☺



Ad Astra

★ SINCERE ★ THOUGHTFUL ★ ASPIRATIONAL ★ RESILIENT ★ SOLIDARITY ★

STARS