YEAR 6

	EYFS	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6
Data and information - Spreadsheets	**The three Prime ELGS of Communication and Language, PSED and Physical Development provide the foundations of which all other learning is built upon.** **No Specific ELG links.**	To be introduced to data and information and understand that labelling, grouping and searching are important aspects of data.	To begin to understand what the term 'data' means and how data can be collected in the form of a tally chart.	To develop understanding of what a 'branching database' is and how to create one.	To consider how and why data is collected over time. To collect and access data collated over a period of time, looking at data points, sets and logging intervals to review and analyse.	To look at how a flat-file database can be used to organise data in records. To create graphs and charts from data to help solve problems.	To organise data in columns and rows to create their own data set on a spreadsheet. To understand the importance of formatting data to support calculations. To learn how to apply formulas to a data set to produce calculated data.

Data and information - Spreadsheets

COMPOSITES

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

National curriculum maths links

Number – addition, subtraction, multiplication, and division:
Solve problems involving addition, subtraction, multiplication, and division

Statistics:
Interpret and construct pie charts and line graphs, and use these to solve problems
Calculate and interpret the mean as an average

COMPONENTS

	1	2	3	4	5	6	End Point
	How do you create a data set in a spreadsheet?	**Can I build a data set in a spreadsheet?**	**Can I explain that formulas can be used to produce calculated data?**	**How do I apply formulas to data?**	**Can I create a spreadsheet to plan an event?**	**Can I choose suitable ways to present data?**	**This unit progresses students' knowledge and understanding of data, and teaches them how to organise and modify data within**

							spreadsheets. Specifically, learners will have experienced data in tables and charts in the Y4 data logging and Y5 branching database units.
CONCEPTS **Link to concept map**	Data and information Spreadsheets Information Technology Computer Science	Data and information Spreadsheets Information Technology Computer Science	Data and information Spreadsheets Information Technology Computer Science	Data and information Spreadsheets Information Technology Computer Science	Data and information Spreadsheets Information Technology Computer Science	Data and information Spreadsheets Information Technology Computer Science	
SKILLS	Collect data Enter data into a spreadsheet	Choose an appropriate format for a cell Apply an appropriate format to a cell	Construct a formula in a spreadsheet	Calculate data using different operations Create a formula which includes a range of cells Apply a formula to multiple cells by duplicating it	Use a spreadsheet to answer questions Apply a formula to calculate the data I need to answer questions	Produce a chart Use a chart to show the answer to questions	Pupils will organise data into columns and rows to create their own data set. Pupils will use spreadsheets to plan an event and answer questions using taught skills. Pupils will create charts, and evaluate their results in comparison to questions asked.
KNOWLEDGE	Suggest how to structure my data	Explain what an item of data is	Explain which data types can be used in calculations Identify that changing inputs changes outputs	Explain why data should be organised	Explain why data should be organised	Suggest when to use a table or chart	Pupils will know the importance of formatting data to support calculations, while also being introduced to formulas and will begin to understand how they can be

							used to produce calculated data. Pupils will know how to apply formulas that include a range of cells, and apply formulas to multiple cells by duplicating them.
LESSON LINK	4 - Data and information – Spreadsheets	4 - Data and information – Spreadsheets	4 - Data and information – Spreadsheets	4 - Data and information – Spreadsheets	4 - Data and information – Spreadsheets	4 - Data and information – Spreadsheets	
PROGRESSIVE VOCABULARY	data, collecting, table, structure, spreadsheet	cell, cell reference, data item, format	formula, calculation, data, spreadsheet, input, output, cells, cell reference	data, calculate, operation, formula, cell, range, duplicate, sigma	propose, question, data set, data, organised, formula	chart, evaluate, results, comparison, questions, software, tools, data	Children will be able to understand, articulate and use the vocabulary
CURRICULUM EXPERIENCES					Spreadsheet Creation		
END POINT	Pupils will collect and organise data in a format of their choice. They will then explore how data can be structured in a table. Finally, they will input data into a spreadsheet.	Pupils will develop their understanding of the structure of a spreadsheet. They will be introduced to cell references, data items, and the concept of formatting cells. Pupils will see data items formatted in different ways. They will then choose formats for data items before they apply formats in their own spreadsheets.	Pupils will begin to use formulas to produce calculated data. They will understand that the type of data in a cell is important (e.g. numbers can be used in calculations whereas words cannot). The children will create formulas to use in a spreadsheet using cell references and identify that changing inputs will change the output of the calculation.	Pupils will calculate data using the operations of multiplication, subtraction, division, and addition. They will use these operations to create formulas in a spreadsheet. The children will then begin to understand the importance of creating formulas that include a range of cells and the advantage of duplicating in order to apply formulas to multiple cells.	Pupils will plan and calculate the cost of an event using a spreadsheet. They will use a predefined list to choose what they would like to include in their event, and use their spreadsheet to answer questions on the data they have selected. They will be reminded of the importance of organising data and will then create a spreadsheet using formulas to work out costs for their event.	Pupils will gain skills to create charts in Google Sheets. They will evaluate the results from their charts to answer questions. Finally, they will show they understand that there are different software tools available within spreadsheet applications to present data.	
