

HIGH LITTLETON CHURCH OF ENGLAND PRIMARY SCHOOL
COMPUTING MEDIUM TERM PLAN TERM 4
2023-2024

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7
Hedgehog (Y1)	<p>Label and match Learners will begin to understand that objects have many different labels that can be used to put them into groups. They will name different objects and begin to experiment with placing them into different groups. Learners will also label a group of objects, and begin to understand that an object can fit into more than one group depending on the context.</p>	<p>Group and count Learners will begin to think about grouping objects based on what the objects are. They will demonstrate the ability to count a small number of objects before they group them, and will then begin to show that they can count groups of objects with the same label. Learners will also begin to learn that computers are not intelligent, and require input from humans to perform tasks.</p>	<p>Describe an object Learners will begin to understand that objects can be described in many different ways. They will identify the properties of objects and begin to understand that properties can be used to group objects; for example, objects can be grouped by colour or size. Finally, learners will demonstrate their ability to find objects with similar properties and begin to understand the reason that we need to give labels to images on a computer.</p>	<p>Making different groups Learners will classify objects based on their properties. They will group objects that have similar properties, and will be able to explain how they have grouped these. Learners will begin to group a number of the same objects in different ways, and will demonstrate their ability to count these different groups.</p>	<p>Comparing groups Learners will choose how they want to group different objects by properties. They will begin to compare and describe groups of objects, then they will record the number of objects in each group.</p>	<p>Answering questions Learners will decide how to group objects to answer questions. They will compare their groups by thinking about how they are similar or different, and they will record what they find. They will then share what they have found with their peers.</p>	POP task
Fox (Y2)	<p>Counting and comparing During this lesson learners will begin to understand the importance of organising data effectively for counting and comparing. They will create their own</p>	<p>Enter the data During this lesson learners will become familiar with the term 'pictogram'. They will create pictograms manually and then progress to creating</p>	<p>Creating pictograms During this lesson learners will think about the importance of effective data collection and will</p>	<p>What is an attribute? During this lesson learners will think about ways in which objects can be grouped by attribute. They will then tally objects using a</p>	<p>Comparing people During this lesson learners will understand that people can be described by attributes. They will practise using</p>	<p>Presenting information During this lesson learners will understand that there are other ways to present data than using</p>	POP task

	<p>tally charts to organise data, and represent the tally count as a total. Finally, they will answer questions comparing totals in tally charts using vocabulary such as 'more than' and 'less than'.</p>	<p>them using a computer. Learners will begin to understand the advantages of using computers rather than manual methods to create pictograms, and use this to answer simple questions.</p>	<p>consider the benefits of different data collection methods: why, for example, we would use a pictogram to display the data collected. They will collect data to create a tally chart and use this to make a pictogram on a computer. Learners will explain what their finished pictogram shows by writing a range of statements to describe this.</p>	<p>common attribute and present the data in the form of a pictogram. Learners will answer questions based on their pictograms using mathematical vocabulary such as 'more than'/'less than' and 'most'/'least'.</p>	<p>attributes to describe images of people and the other learners in the class. The learners will collect data needed to organise people using attributes and create a pictogram to show this pictorially. Finally, learners will draw conclusions from their pictograms and share their findings.</p>	<p>tally charts and pictograms. They will use a pre-made tally chart to create a block diagram on their device. Learners will then share their data with a partner and discuss their findings. They will consider whether it is always OK to share data and when it is not OK. They will know that it is alright to say no if someone asks for their data, and how to report their concerns.</p>	
<p>Badger (Y3)</p>	<p>Yes or no questions Learners will start to explore questions with yes/no answers, and how these can be used to identify and compare objects. They will create their own yes/no questions, before using these to split a collection of objects into groups.</p>	<p>Making groups Learners will develop their understanding of using questions with yes/no answers to group objects more than once. They will learn how to arrange objects into a tree structure and will continue to think about which attributes the questions are related to.</p>	<p>Creating a branching database Learners will continue to develop their understanding of ordering objects/images in a branching database structure. They will learn how to use an online database tool to arrange objects into a branching database, and will create their own questions with yes/no answers. Learners will show that their branching database works through testing.</p>	<p>Structuring a branching database Learners will continue to develop their understanding of how to create a well-structured database. They will use attributes to create questions with yes/no answers, and will apply these to given objects. Learners will compare the efficiency of different branching databases, and will be able to explain why questions need to be in a specific order.</p>	<p>Using a branching database Learners will independently plan a branching database by creating a physical representation of one that will identify different types of dinosaur. They will continue to think about the attributes of objects to write questions with yes/no answers, which will enable them to separate a group of objects effectively. Learners will then arrange the questions and objects into a tree</p>	<p>Two ways of presenting information Learners will independently create a branching database to identify different types of dinosaur, based on the paper-based version that they created in Lesson 5. They will then work with a partner to test that their database works, before considering real-world applications for branching databases.</p>	<p>POP task</p>

					structure, before testing the structure.		
Otter (Y4)	<p>Answering questions Learners will consider what data can be collected and how it is collected. They will think about data being collected over time. Learners will also think about questions that can and can't be answered using available data, and reflect on the importance of collecting the right data to answer questions.</p>	<p>Data collection Learners will build on the idea of collecting data over time, and be introduced to the idea of collecting data automatically using computers such as data loggers. They will also be introduced to the concept that computers can capture data from the physical world using input devices called 'sensors'. Learners will establish that sensors can be connected to data loggers, which can automatically collect data while not attached to a computer.</p>	<p>Logging Learners will explore how data loggers work. They will record data at set moments in time and draw parallels with the data points that a data logger captures at regular intervals. Learners will use data loggers away from a computer, then they will connect the loggers to a computer and download the data.</p>	<p>Analysing data Learners will open an existing data file and use software to find out key information. They will analyse a data file which is a five-hour log of hot water cooling to room temperature.</p>	<p>Data for answers Learners will think about questions that can be answered using collected data. They will choose a question to focus on and then plan the data logging process that they need to complete. After learners have completed their plan, they will set up the data loggers to check that their plan will work. This setting up is designed to ensure that the data collection will work, and that learners will have data to use in the next lesson.</p>	<p>Answering my question Learners will access and review the data that they have collected using a data logger. They will then use the data collected to answer the question that they selected in the previous lesson. Learners will also reflect on the benefits of using a data logger.</p>	POP task
Robin (Y5)	<p>Creating a paper-based database Learners will create a paper version of a record card database. Using a card template, they will create a data set, with each learner creating eight to ten cards linked to a theme, e.g. animals. They will complete records for each of the animals in their database and then they will physically sort the cards to answer questions about the data.</p>	<p>Computer databases Learners will use a computer-based database to examine how data can be recorded and viewed. They will learn that a database consists of 'records', and that each record contains 'fields'. In addition, they will order records in different ways and compare this database to the paper database they created in Lesson 1.</p>	<p>Using a database Learners will investigate how records can be grouped, using both the paper record cards created in Lesson 1 and a computer-based database from J2E. They will use 'grouping' and 'sorting' to answer questions about the data.</p>	<p>Using search tools Learners will develop their search techniques to answer questions about the data. They will use advanced techniques to search for more than one field, and will practise doing this through both unplugged methods (without using computers), and using a computer database.</p>	<p>Comparing data visually Learners will consider what makes a useful chart, and how charts can be used to compare data. They will create charts from their data in order to answer questions about it.</p>	<p>Databases in real life The final lesson requires learners to use a real-life database to ask questions and find answers in the context of a flight search based on set parameters. They will take on the role of a travel agent and present their findings, showing how they arrived at their chosen options.</p>	POP task

						Presentations may be given between groups of learners, or by each group to the whole class, depending on the time available.	
Deer (Y6)	<p>What is a spreadsheet? Learners 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.</p>	<p>Modifying spreadsheets Learners 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. Learners will see data items formatted in different ways, they will then choose formats for data items before applying formats in their own spreadsheet.</p>	<p>What's the formula? Learners 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). Learners will create formulas to use in a spreadsheet using cell references and identify that changing inputs will change the output of the calculation.</p>	<p>Calculate and duplicate Learners will calculate data using the operations of multiplication, subtraction, division, and addition. They will use these operations to create formulas in a spreadsheet. Learners 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.</p>	<p>Event planning Learners 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. Learners will be reminded of the importance of organising data and will then create a spreadsheet using formulas to work out costs for their event.</p>	<p>Presenting data Learners will gain skills to create charts in Google Sheets. They will evaluate the results from their charts to answer questions. Finally, learners will show they understand that there are different software tools available within spreadsheet applications to present data.</p>	POP task