

Oak Cottage Primary School – Computing LTP 2024-2025

Year Group	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Year 1	Data and information - Grouping data (unit moved) This unit introduces learners to data and information. Labelling, grouping, and searching are important aspects of data and information.	Computer systems and networks – the technology around us Learners will develop their understanding of technology and how it can help them in their everyday lives. <i>Discrete unit.</i>	Creating media - digital writing Learners will develop their understanding of the various aspects of using a computer to create and manipulate text.	Programming A - Moving a robot They will identify what each command for the floor robot does, and use that knowledge to start predicting the outcome of programs. <i>Discrete unit.</i>	Creating media - Digital painting Learners will develop their understanding of a range of tools used for digital painting.	Programming B - Introduction to animation Learners will be introduced to on-screen programming through Scratch Jr. <i>Discrete unit.</i>
Year 2	Computer systems and networks - IT around us Learners will develop their understanding of what information technology (IT) is and will begin to identify examples.	Creating media - Digital photography Learners will learn to recognise that different devices can be used to capture photographs and will gain experience capturing, editing, and improving photos. Finally, they will use this knowledge to recognise that images they see may not be real.	Programming A - Robot algorithms This unit develops learners' understanding of instructions in sequences and the use of logical reasoning to predict outcomes. Learners will use given commands in different orders to investigate how the order affects the outcome.	Creating media - making music In this unit, learners will be using a computer to create music.	Programming B - An introduction to quizzes This unit initially recaps on learning from the Year 1 ScratchJr unit 'Programming B – Programming animations'. Learners begin to understand that sequences of commands have an outcome, and make predictions based on their learning.	Data and information - Pictograms
Year 3	Connecting Computers	Animation	Desktop Publishing Children use Adobe express to create an electronic poster.	Programming A - Sequencing Sounds	Branching Databases (moved order)	Programming B - Events and Actions

Oak Cottage Primary School – Computing LTP 2024-2025

	Children will compare digital and none digital versions of artwork.	Children create a stop motion storyboard and then computer animation using iMotion.		Children use Scratch to sequence sounds by assigning them to keyboard keys. By the end of the unit, they create piano keys and chords. <i>Discrete unit.</i>	The unit involves creating a branching database to classify dinosaurs. <i>Discrete unit.</i>	Children create a simple maze which they have to program a Sprite to move around. By the end of the unit, they will create their own maze and maze background. <i>Discrete unit.</i>
Year 4	Computer systems and networks - The internet Children explore the Internet and ownership of websites. <i>Discrete unit.</i>	Creating media - Audio editing Audio equipment needed - headphones and microphones. <i>Children create a podcast.</i>	Data and information - Data logging Data loggers needed. Children will use the data loggers to collect information over time and manipulate it.	Creating media - Photo editing Children investigate how images can be saved and altered. <i>Discrete unit.</i>	Programming A - Repetition in shape Learners will create programs by planning, modifying, and testing commands to create shapes and patterns. They will use Logo, a text-based programming language. <i>Discrete unit.</i>	Programming B - Repetition in games Scratch teacher account is required. <i>Discrete unit.</i>
Year 5	Creating media – introduction to vector graphics Learners will create vector drawings using a website. They will design labels for the classroom/school.	Data and information - Flat-file databases This unit looks at how a flat-file database can be used to organise data in records. <i>Discrete unit.</i>	Programming B - Selection in quizzes Learners will develop their knowledge of 'selection' by revisiting how 'conditions' can be used in programming, and then learning how the 'if... then... else...' structure can be used to select different outcomes depending on whether a condition is 'true' or 'false'.	Computing systems and networks - Sharing information Learners develop their understanding of computer systems and how information is transferred between systems and devices. <i>Discrete unit.</i>	Creating media - Video editing Learners will learn how to create short videos by working in pairs or groups	Programming B - sensing movement (Yr 6 unit) Children will create a compass and then using this step their own step counter using a Micro: bit. Micro: bit needed. Other projects:

Oak Cottage Primary School – Computing LTP 2024-2025

						Additional Projects for Micro:bit Discrete unit.
Year 6	Computing systems and networks - Communication In this unit, learners explore how data is transferred over the internet. Discrete unit.	Creating media - Web page creation Learners will be introduced to creating websites for a chosen purpose. Software: Google sites – access through Google classroom. Children plan their own websites: In topic, research the history of polar exploration. This research can be used to create a website using G. Sites. Following the topic lesson, children plan out their website in L5 of the lesson series. Then create a website in L6. Children can link external websites or add their own information pages.	Data and information – Spreadsheets Children are introduced to spreadsheets. In L5, children create their own costing for an event.	Creating media - 3D Modelling Learners will develop their knowledge and understanding of using a computer to produce 3D models. Children create a 3D model of an ancient Maya temple. L5 is where they begin to plan their model before creating it in L6. Models will be made using: https://www.tinkercad.com Accounts needed for the children prior to starting the unit. Create a class account using this link: https://www.tinkercad.com/join Children can join using the code. If you need help, follow this link: https://www.tinkercad.com/teach	Programming A - Selection in physical computing In this unit, learners will use physical computing to explore the concept of selection in programming through the use of the Crumble programming environment. Crumble kits needed and other assorted material for construction.	Programming A - Variables in games This unit explores the concept of variables in programming through games in Scratch. From lesson 4 children create/design parts of their own game using Scratch. Discrete unit.

Year Group	Nursery	Reception
Teach computing does not plan for Nursery and Reception. These are suggestions for ways that computing can be incorporated into these year groups. Ideas are collated from Barefoot Computing. Barefoot computing resources See downloaded resource overview – covers the areas of the curriculum and the importance of computation thinking in EYFS. It also has useful tables showing which skills are used in a different area.		

Oak Cottage Primary School – Computing LTP 2024-2025

Autumn 1	This link takes you directly to games you could use. https://www.barefootcomputing.org/earlyyears Some games have links to nursery age children. Physical computing/electronic devices -	This link takes you directly to games you could use. https://www.barefootcomputing.org/earlyyears Physical computing - Use of Beebots. -
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