

Long Term Plan for Computing (2023-2024)
[Curriculum teaching resources \(teachcomputing.org\)](https://teachcomputing.org)

		Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Unit Summaries and LTP		Computing systems and networks	Creating Media	Programming A	Data and Information	Creating Media	Programming B
Threshold Concepts		Connect	Communicate	Code	Collect	Communicate	Code
Fir – Y 1		Technology around us (1.1) Recognising technology in school and using it responsibly.	Digital painting (1.2) Choosing appropriate tools in a program to create art, and making comparisons with working non-digittally.	Moving a robot (1.3) Writing short algorithms and programs for floor robots, and predicting program outcomes.	Grouping data (1.4) Exploring object labels, then using them to sort and group objects by properties.	Grouping data (1.5) Exploring object labels, then using them to sort and group objects by properties.	Grouping data (1.6) Exploring object labels, then using them to sort and group objects by properties.
Elm – Y2/3	Year A	Y2s - Information technology around us (2.1) Identifying IT and how its responsible use improves our world in school and beyond.	Y3s - Connecting computers (3.1) Identifying that digital devices have inputs, processes, and outputs, and how devices can be connected to make networks.	Robot algorithms (2.3) Creating and debugging programs, and using logical reasoning to make predictions.	Branching databases (3.1) Building and using branching databases to group objects using yes/no questions.	Y2s -Making music (2.5) Using a computer as a tool to explore rhythms and melodies, before creating a musical composition. Y3s - Desktop publishing (3.5)	Sequencing sounds (3.3) Creating sequences in a block-based programming language to make music.
	Year B	Digital photography (2.2) Capturing and changing digital photographs for different purposes	Stop-frame (3.2) animation Capturing and editing digital still images to produce a stop-frame animation that tells a story	Programming quizzes (2.6) Designing algorithms and programs that use events to trigger sequences of code to make an interactive quiz.	Pictograms (2.3) Collecting data in tally charts and using attributes to organise and present data on a computer.	Creating documents by modifying text, images, and page layouts for a specified purpose	Events and actions in programs(3.6) Writing algorithms and programs that use a range of events to trigger sequences of actions.

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Ash – 3/4	Year A 23-24	The internet (4.1) Recognising the internet as a network of networks including the WWW, and why we should evaluate online content.	Audio editing (4.2) Capturing and editing audio to produce a podcast, ensuring that copyright is considered	Sequencing sounds (3.3) Creating sequences in a block-based programming language to make music.	Branching databases (3.4) Use yes/no questions to gain an understanding of what attributes are and how to use them to sort groups of objects. Create on-screen branching databases..	Photo editing (4.5) Manipulating digital images, and reflecting on the impact of changes and whether the required purpose is fulfilled.	Repetition in shapes (4.6) Using a text-based programming language to explore count-controlled loops when drawing shapes.
	Year B	Connecting computers (3.1) Identifying that digital devices have inputs, processes, and outputs, and how devices can be connected to make networks.	Stop-frame (3.2) animation Capturing and editing digital still images to produce a stop-frame animation that tells a story	Repetition in shapes (4.3) Using a text-based programming language to explore count-controlled loops when drawing shapes.	Data logging (4.4) Recognising how and why data is collected over time, before using data loggers to carry out an investigation	Desktop publishing (3.5) Creating documents by modifying text, images, and page layouts for a specified purpose	Events and actions in programs (3.6) Writing algorithms and programs that use a range of events to trigger sequences of actions.
Oak – Y5/6	Year A	Internet communication (6.1) Recognising how the WWW can be used to communicate and be searched to find information	Webpage creation (6.2) Designing and creating webpages, giving consideration to copyright, aesthetics, and navigation.	Variables in games (6.3) Exploring variables when designing and coding a game.	Introduction to spreadsheets (6.4) Answering questions by using spreadsheets to organise and calculate data.	3D modelling (6.5) Planning, developing, and evaluating 3D computer models of physical objects.	Sensing (6.6) Designing and coding a project that captures inputs from a physical device
	Year B	Sharing information (5.1) Identifying and exploring how information is shared between digital systems.	Video editing (5.2) Planning, capturing, and editing video to produce a short film.	Selection in physical computing (5.3) Exploring conditions and selection using a programmable microcontroller.	Flat-file databases (5.4) Using a database to order data and create charts to answer questions	Vector drawing (5.5) Creating images in a drawing program by using layers and groups of objects.	Selection in quizzes (5.6) Exploring selection in programming to design and code an interactive quiz.

Decisions made:

Year 1 stand alone linking to EYFS where applicable

Year 2/3 – Some units can be delivered jointly to Y2 and 3 as they will still meet NC requirements. Others will need to be taught separately to Y2 and Y3. Programming A and B are sequence as they are because they have little prior knowledge and this gives the balance of Y2 and Year 3 programming across the year. This enables the children to build on previous learning.

Y4/5/6 – Programming units have been kept within the same year as they progress from each other.