TEACH COMPUTING OVERVIEW OF UNITS

Cycle A: 2025-26 **Cycle B: 2026-27**

<table>
<tr><td rowspan="3">EYFS</td><td colspan="6">Understanding the World (Technology)
Recognise that a range of technology is used in places such as homes and schools
Select and use technology for particular purposes
Understand that you may have to put your name/password into the device to retrieve your own files
Understand that you can connect with others via a device
Experience digital devices with an input/output
Change the output of a device/toy by altering the input
Use the keyboard to enter their own name and print a document
Use the keyboard and mouse to move a character around a game
Experience recording their own voice and hearing the playback
Experience videos of self and ability to re-watch</td></tr>
<tr><td colspan="6">BAREFOOT COMPUTING UNITS</td></tr>
<tr><td>Technology in the Classroom

Exploring different technology in the classroom and how they are connected.</td><td><u>Awesome Autumn</u>

Three Autumn themed activities, in which children explore patterns in Garlands Galore, create a leaf labyrinth and make Pumpkin Soup using computational thinking skills.

Concepts and Approaches:
Collaborating,
Creating,
Tinkering,
Logic,
Persevering,
Patterns decomposition, Algorithms,
Abstraction</td><td><u>People Who Help Us</u>

Three activities based on Barefoot’s everyday superheroes, which have been designed to help children develop their computational thinking skills. Create patterns on a police car, guide a delivery person to their destination and design a uniform for a firefighter!

Concepts and Approaches:
Algorithms
Collaboration
Persevering
Creating Pattern
Logical Reasoning
Tinkering
Abstraction</td><td><u>Winter Warmers</u>

Three winter themed activities in which children follow a sequence of instructions to make a bird feeder in Feed the Birds, logic to make igloos in Let’s Make an Igloo and explore patterns to create scarves in Scarves for Snowmen.

Concepts and Approaches:
Collaborating,
Creating,
Tinkering,
Logic,
Persevering,
Patterns, decomposition, Algorithms,
Abstraction</td><td><u>Digital Art</u>
Using Ipads and laptops to create art work linked to current themes

<u>Digital Stories</u>
Using Ipads and laptops to record stories for sharing.</td><td><u>Super Space</u>

Three space themed activities to develop children’s computational thinking and problem solving skills, including creating algorithms to direct a rocket through space and spotting patterns in pictures of aliens.

Concepts and Approaches:
Abstraction,
Tinkering,
Persevering,
Patterns,
Logic,
Decomposition, Collaborating, Algorithms</td></tr>
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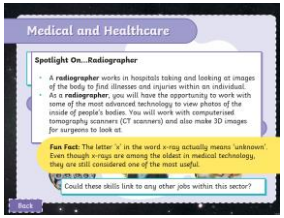
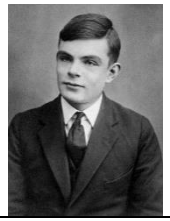
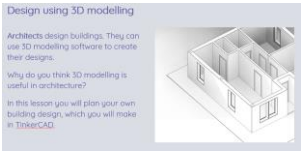
CLASS 1: YEAR 1/2 CYCLE A	**COMPUTING SYSTEMS AND NETWORKS**		**PROGRAMMING**		**CREATING MEDIA**	
	Technology around us (1.1) Recognising technology in school and using it responsibly	Information technology around us (2.1) Identifying IT and how its responsible use improves our world in school and beyond.	Moving a robot (1.3) Writing short algorithms and programs for floor robots, and predicting program outcomes	Robot algorithms (2.3) Creating and debugging programs, and using logical reasoning to make predictions.	Digital writing (1.5) Using a computer to create and format text, before comparing to writing non-digitally.	Digital music (2.5) Using a computer as a tool to explore rhythms and melodies, before creating a musical composition.
CAREERS AND NOTABLE PEOPLE	Hedy Lamarr 	Barefoot Computing Technology Match	Charles Babbage 	Ada Lovelace 	Digital Copyrighter	
CLASS 1: YEAR 1/2 CYCLE B	**DATA AND INFORMATION**		**PROGRAMMING**		**CREATING MEDIA**	
	Grouping data (1.4) Exploring object labels, then using them to sort and group objects by properties.	Pictograms (2.4) Collecting data in tally charts and using attributes to organise and present data on a computer.	Programming animations (1.6) Designing and programming the movement of a character on screen to tell stories.	Programming quizzes (2.6) Designing algorithms and programs that use events to trigger sequences of code to make an interactive quiz.	Digital painting (1.2) Choosing appropriate tools in a program to create art, and making comparisons with working non-digitally.	Digital photography (2.2) Capturing and changing digital photographs for different purposes
CAREERS AND NOTABLE PEOPLE				Grace Hooper 		

CLASS 2: YEAR 3/4 CYCLE A	**COMPUTING SYSTEMS AND NETWORKS**		**PROGRAMMING**		**CREATING MEDIA**	
	Connecting computers (3.1) Identifying that digital devices have inputs, processes, and outputs, and how devices can be connected to make networks	The internet (4.1) Recognising the internet as a network of networks including the WWW, and why we should evaluate online content.	Sequencing sounds (3.3) Creating sequences in a block-based programming language to make music.	Repetition in shapes (4.3) Using a text-based programming language to explore count-controlled loops when drawing shapes	Desktop publishing (3.5) Creating documents by modifying text, images, and page layouts for a specified purpose.	Photo editing (4.5) Manipulating digital images, and reflecting on the impact of changes and whether the required purpose is fulfilled.
CAREERS AND NOTABLE PEOPLE		Sir Tim Berners-Lee 	Delia Derbyshire 			
CLASS 2: YEAR 3/4 CYCLE B	**DATA AND INFORMATION**		**PROGAMMING**		**CREATING MEDIA**	
	Branching databases (3.4) Building and using branching databases to group objects using yes/no questions.	Data logging (4.4) Recognising how and why data is collected over time, before using data loggers to carry out an investigation	Events and actions in programs (3.6) Writing algorithms and programs that use a range of events to trigger sequences of actions.	Repetition in games (4.6) Using a block-based programming language to explore count-controlled and infinite loops when creating a game	Stop-frame animation (3.2) Capturing and editing digital still images to produce a stop-frame animation that tells a story.	Audio production (4.2) Capturing and editing audio to produce a podcast, ensuring that copyright is considered.
CAREERS AND NOTABLE PEOPLE	Data Analyst		Margaret Hamilton 			

CLASS 3: YEAR 5/6 CYCLE A	**COMPUTING SYSTEMS AND NETWORKS**		**PROGRAMMING**		**CREATING MEDIA**	
	Systems and searching (5.1) Recognising IT systems in the world and how some can enable searching on the internet.	Communication and collaboration (6.2) Exploring how data is transferred by working collaboratively online.	Selection in physical computing (5.3) Exploring conditions and selection using a programmable microcontroller.	Variables in games (6.3) Exploring variables when designing and coding a game.	Introduction to vector graphics (5.5) Creating images in a drawing program by using layers and groups of objects	Video production (5.2) Planning, capturing, and editing video to produce a short film.
CAREERS AND NOTABLE PEOPLE		Radia Perlman 				
	DATA AND INFORMATION		**PROGRAMMING**		**CREATING MEDIA**	
CLASS 3: YEAR 5/6 CYCLE B	Flat-file databases (5.4) Using a database to order data and create charts to answer questions.	Introduction to spreadsheets (6.4) Answering questions by using spreadsheets to organise and calculate data.	Selection in quizzes (5.6) Exploring selection in programming to design and code an interactive quiz.	Sensing movement (6.6) Designing and coding a project that captures inputs from a physical device.	Webpage creation (6.2) Designing and creating webpages, giving consideration to copyright, aesthetics, and navigation.	3D modelling (6.5) Planning, developing, and evaluating 3D computer models of physical objects
CAREERS AND NOTABLE PEOPLE		Event Planner	Alan Turing 	Katherine Johnson 		

The Teach Computing curriculum is structured into units for each year group, and each unit is broken down into lessons. Units can generally be taught in any order, with the exception of programming, where concepts and skills rely on prior knowledge and experiences. Lessons must be taught in numerical order.