





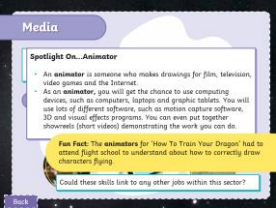


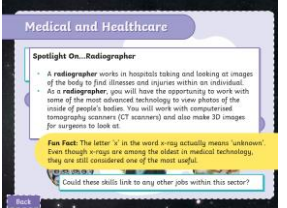





















TEACH COMPUTING OVERVIEW OF UNITS




Cycle A: 2025-26

Cycle B: 2026-27

EYFS	Understanding the World (Technology) <ul style="list-style-type: none">• 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					
	BAREFOOT COMPUTING UNITS					
	Technology in the Classroom Exploring different technology in the classroom and how they are connected.	<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: <ul style="list-style-type: none">• Collaborating,• Creating,• Tinkering,• Logic,• Persevering,•Patterns decomposition,Algorithms,• Abstraction	<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: <ul style="list-style-type: none">• Algorithms• Collaboration• Persevering• Creating Pattern• Logical Reasoning• Tinkering• Abstraction	<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: <ul style="list-style-type: none">• Collaborating,• Creating,• Tinkering,• Logic,• Persevering,• Patterns, decomposition,Algorithms,• Abstraction	<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.	<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: <ul style="list-style-type: none">• Abstraction,• Tinkering,• Persevering,• Patterns,• Logic,• Decomposition,Collaborating,Algorithms

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	
	<u>Connecting computers (3.1)</u> Identifying that digital devices have inputs, processes, and outputs, and how devices can be connected to make networks	<u>The internet (4.1)</u> Recognising the internet as a network of networks including the WWW, and why we should evaluate online content.	<u>Sequencing sounds (3.3)</u> Creating sequences in a block-based programming language to make music.	<u>Repetition in shapes (4.3)</u> Using a text-based programming language to explore count-controlled loops when drawing shapes	<u>Desktop publishing (3.5)</u> Creating documents by modifying text, images, and page layouts for a specified purpose.	<u>Photo editing (4.5)</u> Manipulating digital images, and reflecting on the impact of changes and whether the required purpose is fulfilled.
CAREERS AND NOTABLE PEOPLE	 Network Engineer <small>Let's discover the world of networks, where you can connect, test, work and learn with the web!</small>  Career Title: Network Engineer What They Do: Set up, administer, maintain, and upgrade networks. Skills Required: Problem-solving, network security, hardware knowledge. Wage: £30,000 - £60,000 annually.	<u>Sir Tim Berners-Lee</u> 	<u>Delia Derbyshire</u> 	 Software Engineer <small>Let's discover the world of software, where you can create, test, work and learn with the web!</small>  Career Title: Software Engineer What They Do: Develop software programs and applications. They make all the applications on our digital devices. Skills Required: Programming, problem-solving, software testing. Wage: £35,000 - £70,000 annually.	 Digital Marketing Specialist <small>Let's discover the world of digital marketing, where you can create, test, work and learn with the web!</small>  Career Title: Digital Marketing Specialist What They Do: Use online platforms to promote products and services. Skills Required: Creativity, analytical skills, and social media knowledge. Wage: £25,000 - £50,000 annually.	 AR Creator <small>Let's discover the world of augmented reality, where you can create, test, work and learn with the web!</small>  Career Title: AR Creator What They Do: Design and build augmented reality applications for various industries, including gaming, marketing, and education. Skills Required: Programming, graphic design, AR software. Wage: £35,000 - £70,000 annually.
CLASS 2: YEAR 3/4 CYCLE B	DATA AND INFORMATION		PROGAMMING		CREATING MEDIA	
	<u>Branching databases (3.4)</u> Building and using branching databases to group objects using yes/no questions.	<u>Data logging (4.4)</u> Recognising how and why data is collected over time, before using data loggers to carry out an investigation	<u>Events and actions in programs (3.6)</u> Writing algorithms and programs that use a range of events to trigger sequences of actions.	<u>Repetition in games (4.6)</u> Using a block-based programming language to explore count-controlled and infinite loops when creating a game	<u>Stop-frame animation (3.2)</u> Capturing and editing digital still images to produce a stop-frame animation that tells a story.	<u>Audio production (4.2)</u> Capturing and editing audio to produce a podcast, ensuring that copyright is considered.
CAREERS AND NOTABLE PEOPLE	 Data Scientist <small>Let's discover the world of data science, where you can create, test, work and learn with the web!</small>  Career Title: Data Scientist What They Do: Analyse and interpret complex digital data to help companies make decisions. Skills Required: Statistics, programming, data visualisation. Wage: £40,000 - £90,000 annually.	<u>Data Analyst</u> 	<u>Margaret Hamilton</u> 	 Mobile App Developer <small>Let's discover the world of mobile app development, where you can create, test, work and learn with the web!</small>  Career Title: Mobile App Developer What They Do: Design and create applications for mobile devices. Skills Required: Coding, UX/UI design, cross-platform development. Wage: £30,000 - £60,000 annually.	 Digital Animator <small>Let's discover the world of digital animation, where you can create, test, work and learn with the web!</small>  Career Title: Digital Animator What They Do: Create animations for movies, TV shows, and video games. Skills Required: Animation software, creativity, storytelling. Wage: £20,000 - £50,000 annually, varies with experience and industry.	 Podcaster <small>Let's discover the world of podcasting, where you can create, test, work and learn with the web!</small>  Career Title: Podcaster What They Do: Podcasters create and distribute audio content on various topics, such as news, education, entertainment, and more. They research topics, interview guests, record episodes, and edit audio content for their audience. Podcasters often engage with their listeners through social media and live events. Skills Required: Excellent communication skills, audio editing, content creation, social media marketing, and storytelling. Wage: Variable. Income can come from sponsorships, advertisements, listener donations, and merchandise. Many podcasters start as a hobby with the potential to grow into a full-time income.

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	 <p>Career Title: SEO Specialist</p> <p>What They Do: Optimise websites to rank higher in search engine results. We help you find things on Google!</p> <p>Skills Required: Analytical skills, SEO tools, content marketing.</p> <p>Wage: £25,000 - £50,000 annually.</p>	Radia Perlman 	 <p>Career Title: Robotics Engineer</p> <p>What They Do: Design and build robots that can perform various tasks.</p> <p>Skills Required: Engineering, programming, mechanical design, creativity.</p> <p>Wage: £35,000 - £70,000 annually.</p>	 <p>Career Title: Video Game Designer</p> <p>What They Do: Create and design video games, including the story, characters, and gameplay.</p> <p>Skills Required: Creativity, programming, graphic design, teamwork.</p> <p>Wage: £40,000 - £60,000 annually.</p>	 <p>Career Title: Graphic designers and vector graphics</p> <p>What They Do: Create and upload videos on YouTube to entertain, inform, or educate their audience.</p> <p>Skills Required: Video production, creativity, social media marketing.</p> <p>Wage: Variable; depends on viewership, ads, sponsorships, and merchandise sales.</p>	 <p>Career Title: YouTuber</p> <p>What They Do: Create and upload videos on YouTube to entertain, inform, or educate their audience.</p> <p>Skills Required: Video production, creativity, social media marketing.</p> <p>Wage: Variable; depends on viewership, ads, sponsorships, and merchandise sales.</p>
CLASS 3: YEAR 5/6 CYCLE B	DATA AND INFORMATION		PROGRAMMING		CREATING MEDIA	
	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	 <p>Career Title: Cybersecurity Analyst</p> <p>What They Do: Protect computer systems and networks from cyber threats. They help catch the scammers and cyber-villains.</p> <p>Skills Required: Problem-solving, attention to detail, understanding of hacking.</p> <p>Wage: £50,000 - £70,000 annually.</p>	Event Planner 	Alan Turing 	Katherine Johnson 	 <p>Career Title: Web Developer</p> <p>What They Do: Build and maintain websites and web applications. They make the web work and look great. They build websites like YouTube.</p> <p>Skills Required: Coding (HTML, CSS, JavaScript), design, SEO.</p> <p>Wage: £25,000 - £50,000 annually.</p>	 <p>Career Title: Design using 3D modelling</p> <p>What They Do: Architects design buildings. They can use 3D modelling software to create their designs.</p> <p>Skills Required: 3D modelling software, architectural knowledge.</p> <p>Wage: Variable; depends on experience and location.</p>

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.