



Long Term Planning: Computing

	Autumn Term 1	Autumn Term 2	Spring Term 1	Spring Term 2	Summer Term 1	Summer Term 2
EYFS	Pupils in Early Years are provided with opportunities to explore technology through role play, taking photos, listening to songs, watching videos linked to topics, using Bee-Bots and discussions about online safety.					
Year 1	Computing Systems and Networks: Improving Mouse Skills Computer systems and networks Internet safety and security	Programming 1: Algorithms Unplugged Programming Computational thinking	Skills Showcase: Rocket to the Moon Computational thinking Data and information	Programming 2: Programming Bee-Bots Programming Coding	Creating Media: Digital Literacy Creating media	Data Handling: Introduction to Data Written and oral expression Data and information
Year 2	Computing Systems and Networks: What is a Computer? Computer systems and networks Internet safety and security	Programming 1: Algorithms and debugging Programming Computational thinking	Computer Systems and Networks 2: Word Processing Computer systems and networks	Programming 2: Programming Scratch Junior Programming Computational thinking Coding	Creating Media: Stop Motion Creating media	Data Handling: International Space Station Written and oral expression Data and information
Year 3	Computing Systems and Networks: Networks and the Internet Computer systems and networks	Programming 1: Programming scratch Programming Computational thinking	Computer Systems and Networks 2: Google or Microsoft Office 365 Computer systems and networks	Computing Systems and Networks 3: Journey Inside a Computer Computer systems and networks	Creating Media: Video Trailers Creating media	Data Handling: Comparison Cards Databases Written and oral expression Data and information



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	Internet safety and security					
Year 4	Computing Systems and Networks: Collaborative Learning Computer systems and networks.	Programming 1: Further Coding with Scratch Programming Computational thinking Coding	Creating media: Website design Google or Microsoft Office 365 Creating media	Skills Showcase: HTML Computational thinking	Programming 2: Computational Thinking Programming Computational thinking Coding	Data Handling: Investigating Weather Computational thinking Internet safety and security Creating media
Year 5	Computing Systems and Networks: Search Engines Computer systems and networks Internet safety and security	Programming 1: Sonic Programming Computational thinking Coding	Data Handling: Mars River 1 Written and oral expression Data and information	Programming 2: Micro:bit Programming Computational thinking Coding	Creating media: Stop Motion Animation Computational thinking Creating media	Skills showcase: Mars River 2 Written and oral expression Creating media
Year 6	Computing Systems and Networks: Bletchley Park Computer systems and networks Internet safety and security	Programming 1: Introduction to Python Programming Computational thinking Coding	Data Handling: Big Data 1 Written and oral expression Data and information	Creating Media: History of Computers Creating media	Data Handling: Big Data 2 Written and oral expression Data and information	Skills Showcase: Inventing a Product Written and oral expression Creating media



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<p>Links to Key Stage 3</p>	<p>By the end of each key stage, pupils are expected to know, apply and understand the matters, skills and processes specified in the relevant programme of study.</p> <p>Pupils should be taught to:</p> <ul style="list-style-type: none">- understand several key algorithms that reflect computational thinking.- understand the hardware and software components that make up computer systems, and how they communicate with one another and with other systems.- understand how instructions are stored and executed within a computer system; understand how data of various types (including text, sounds and pictures) can be represented and manipulated digitally.- undertake creative projects that involve selecting, using, and combining multiple applications, preferably across a range of devices.- create, reuse, revise and repurpose digital artefacts for a given audience, with attention to trustworthiness, design and usability.- understand a range of ways to use technology safely, respectfully, responsibly and securely, including protecting their online identity and privacy; recognise inappropriate content, contact and conduct, and know how to report concerns.
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