

Computing Progression Overview

	EYFS (reception)	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Suggested programmes / resources	vocabulary
National curriculum	See EYFS Technology Strands document	<ul style="list-style-type: none"> understand what algorithms are, how they are implemented as programs on digital devices, and that programs execute by following precise and unambiguous instructions create and debug simple programs 		<ul style="list-style-type: none"> design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts use sequence, selection, and repetition in programs; work with variables and various forms of input and output use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs 					
Coding	<ul style="list-style-type: none"> Follow instructions Explore digital toys Beebots 	<ul style="list-style-type: none"> Understand that an algorithm is a set of instructions To be effective the algorithm's instructions need to be precise and step by step. 	<ul style="list-style-type: none"> Understand that algorithms can be implemented as programs on digital devices Understand that programs follow precise and unambiguous instructions Debug (detect and correct errors) simple programs Use logical reasoning to predict the behaviour of simple programs 	<ul style="list-style-type: none"> Write programs that accomplish specific goals Use sequencing in programs Work with various forms of input e.g. pressing a key on keyboard for direction. Work with various forms of output e.g. movement of object or device Control or simulate physical systems e.g. traffic lights 	<ul style="list-style-type: none"> Design and write programs that accomplish specific goals Debug programs that accomplish specific goals Use repetition in programs Use logical reasoning to detect and correct errors in a simple algorithms 	<ul style="list-style-type: none"> Solve problems by decomposing them into smaller parts Use selection in programs Work with variables Use logical reasoning to explain how some simple algorithms work Use logical reasoning to detect and correct errors in programs using more complex algorithms 	<ul style="list-style-type: none"> Apply previous years' knowledge to complete a project Eg Hour of code, scratch, espresso, app design 	Espresso coding Switched on computing Beebots (device & App) Barefoot Computing Tim Bareham – Pool Academy Microbit (Rent free from library) Code combat Scratch Hour of code	Coding Programming De-bugging Algorithms Sequence Repetition Selection Input Output Simulate
National curriculum	See EYFS Technology Strands document	<ul style="list-style-type: none"> use logical reasoning to predict the behaviour of simple programs use technology purposefully to create, organise, store, manipulate and retrieve digital content recognise common uses of information technology beyond school 		<ul style="list-style-type: none"> understand computer networks, including the internet; how they can provide multiple services, such as the World Wide Web, and the opportunities they offer for communication and collaboration use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information 					
Understanding and Using technology	<ul style="list-style-type: none"> Using computers, iPads and tablets 2simple city 	<ul style="list-style-type: none"> Use technology purposefully to: <ul style="list-style-type: none"> create digital content 	<ul style="list-style-type: none"> Use technology purposefully to: <ul style="list-style-type: none"> organise digital content 	<ul style="list-style-type: none"> Use search technologies effectively Select reliable sources 	<ul style="list-style-type: none"> Select, use and combine internet services Select a variety of software to 	<ul style="list-style-type: none"> Appreciate how search results are selected and ranked Select, use and combine software 	<ul style="list-style-type: none"> Understand how external computer networks can provide multiple services, such as 	Microsoft office tools Word Publisher Excel Powerpoint	Network External Software Communication Collaboration Information

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		<ul style="list-style-type: none"> - store (save) digital content - retrieve (load/open) digital content 	<ul style="list-style-type: none"> - manipulate (make changes to) digital content • Recognise common uses of technology inside and outside of school 	<ul style="list-style-type: none"> • Use a variety of allocated software to accomplish given goals • Collect information • Design and create content • Present information 	<p>accomplish given goals</p> <ul style="list-style-type: none"> • Collect data • Present data • Understand the difference between data and information. • Analyse information • Evaluate information 	<p>(on a range of digital devices) to accomplish given goals</p> <ul style="list-style-type: none"> • Analyse data • Evaluate data • Understand the school's computer network 	<p>the World Wide Web</p> <ul style="list-style-type: none"> • Understand the opportunities networks offer for communication and collaboration • Understand how monitoring and filtering tools are used on the school network • Choose appropriate tools to complete a project 	<p>Google docs Sheets and slides Forms</p> <p>2simple 2investigate 2email 2go</p> <p>Photography Piccollage Animation - Pivot animator Storyboard this – comic strip maker</p> <p>Padlet</p> <p>Adobe Spark Green Screen</p>	<p>Data Manipulate</p>
National curriculum	See EYFS Technology Strands document	<ul style="list-style-type: none"> • use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies 	<ul style="list-style-type: none"> • use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact 						
Online safety	<ul style="list-style-type: none"> • Recap of school online safety rules • Safer Internet Day 	<ul style="list-style-type: none"> • Recap of school online safety rules • Gooseberry Planet • Safer Internet Day 						<p>Tree octopus - website Digi duck Smart penguin Childnet safer internet day NSPCC website Think you know – Cyber cafe</p>	