



RADDLEBARN PRIMARY SCHOOL PROGRESSION IN COMPUTING



Year Groups Area of Study	Nursery	Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Resources
Computer Science	<p>Understand and follow instructions (eg: movement) and be able to give instructions.</p> <p>Shows skill in making toys work by pressing parts or lifting flaps to achieve effects such as sound, movements or new images.</p>	<p>Recognise that a range of technology is used in places such as homes and schools.</p>	<p>Understand what algorithms are</p> <p>Create simple programs</p>	<p>Understand that algorithms are implemented as programs on digital devices</p> <p>Understand that programs execute by following precise and unambiguous instructions</p> <p>Debug simple programs</p> <p>Use logical reasoning to predict the behaviour of simple programs</p>	<p>Write programs that accomplish specific goals</p> <p>Use sequence in programs</p> <p>Work with various forms of input</p> <p>Work with various forms of output</p>	<p>Design programs that accomplish specific goals</p> <p>Debug programs that accomplish specific goals</p> <p>Use repetition in programs</p> <p>Control or simulate physical systems</p> <p>Use logical reasoning to detect and correct errors in programs</p> <p>Understand how computer networks can provide multiple services, such as the World Wide Web</p> <p>Appreciate how search results are selected</p>	<p>Solve problems by decomposing them into smaller parts</p> <p>Use selection in programs</p> <p>Work with variables</p> <p>Use logical reasoning to explain how some simple algorithms work</p> <p>Use logical reasoning to detect and correct errors in algorithms</p>	<p>Design, write and debug programs that accomplish specific goals; including controlling or simulating physical systems and solving problems by decomposing them to smaller parts</p> <p>Use sequence, selection and repetition in programs; work with variables and various forms of input and output</p> <p>Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs</p> <p>Understand 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</p>	<p>Yearly Purple Mash subscription.</p> <p>Class sets of ipads</p> <p>Beebots</p> <p>Remote controlled cars</p> <p>Beebot app</p> <p>Scratch</p> <p>Desktop Computers</p>
Digital Literacy	Knows to use online technology in	Start to be aware of personal identity	Recognise common uses of	Use technology respectfully -	Use technology responsibly - Safe passwords	Understand the opportunities computer	Understand the opportunities	Use technology safely, respectfully and responsibly; recognise	

	<p>the same room as an adult.</p> <p>Knows to ask for adult support if a problem arises (not to close pop-ups)</p>	<p>through logging on to apps or websites.</p> <p>Knows not to chat online without adult permission.</p>	<p>information technology beyond school</p> <p>Use technology safely - keeping personal information private (& logging in to Purple Mash safely).</p>	<p>internet searches and use of email</p> <p>Keeping personal information private & digital footprints.</p> <p>Identify where to go for help and support when they have concerns about content or contact online.</p>	<p>'Spoof' websites Age restrictions on digital content</p> <p>Identify a range of ways to report concerns about contact.</p>	<p>networks offer for communication</p> <p>Identify a range of ways to report concerns about content</p> <p>Recognise acceptable/unacceptable behaviour – Secure websites, phishing, scam websites, identity theft, risks of free software, malware, viruses, copyright infringements and excessive screen time</p>	<p>computer networks offer for collaboration</p> <p>Be discerning in evaluating digital content – Think critically about what to share online, use the SMART rules, understand image manipulation & referencing sources.</p>	<p>acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.</p> <p>(risks of location sharing, insecure or spoof websites, online identity, online bullying, screen time issues.)</p>	
I.C.T	<p>Knows how to operate simple equipment (ie use IWB / apps to create art)</p> <p>Shows an interest in technological toys with knobs or pulleys (ie use remote controlled cars) , or real objects such as cameras or ipads</p> <p>Knows that information can be retrieved</p>	<p>Recognise that a range of technology is used in places such as homes and schools</p> <p>Select and use technology for particular purposes. (ie use cameras/ipads to take photos/play a game/record a story/create art)</p>	<p>Use technology purposefully to create, store, and retrieve digital content</p>	<p>Use technology purposefully to organise and manipulate digital content</p>	<p>Use search technologies effectively</p> <p>Use a variety of software to accomplish given goals</p> <p>Collect information Design and create content</p> <p>Present information</p>	<p>Select a variety of software to accomplish given goals (Use coding to create a game and a simulation, word processing for reports, stop motion animations & spreadsheets for budgeting and for exploring place value)</p> <p>Select, use and combine internet services (effective internet search and assessing the reliability of content)</p> <p>Collect, analyse, evaluate & present data.</p>	<p>Select, use and combine software on a range of digital devices (create a playable, competitive game, design and write a program that simulates a physical system, use a spreadsheet to plan real life event, create a database, 3D modelling and printing & create and present concept maps.)</p> <p>Design and create systems</p>	<p>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 (Code programs and simulations with increasing complexity and interactivity, create and comment on blogs, create and code a text based adventure, understand how to use software to create quizzes and understand binary.)</p>	<p>Nursery - Talking Tins/Pegs</p> <p>Walkie Talkies</p> <p>Headphones / Easi Ears</p> <p>CD player</p> <p>EYFS Maths Pack</p> <p>Ipad (voice recorders, camera)</p> <p>Apps: Beebot Kodable Bug club TT Rockstar Letterjoin Espresso Monkeydrum Voice recorder Maths age 3-5 Maths age 4-6</p> <p>I movie</p>

	from computers								Audacity Garage band Digital Thermometers
--	---------------------------	--	--	--	--	--	--	--	--