

Key Stage 2 National Curriculum Objectives

Computer Science	Information Technology	Digital Literacy
<i>(How computers and computer systems work and how they are designed and programmed)</i>	<i>(the purposeful use of existing programs to develop products and solutions)</i>	<i>(the skills, knowledge and understanding needed in order to participate fully and safely in an increasingly digital world)</i>
A - design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts		
B - use sequence, selection, and repetition in programs; work with variables and various forms of input and output		
C - use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs		
D - 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		
E - use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content		
F - 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		
G - use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact		

Long Term Overview: Year 5/6

Cycle		Term 1	Term 2	Term 3	Term 4	Term 5	Term 6
A	C S	Computer Systems and Networks: (Yr 5) Sharing Information ABDFG		Programming A (Yr 5) Selection in physical computing (requires Crumble boards) ABDF <i>Alternatives available</i>			Programming A: (Yr 5) Variables in games ABDFG
	I T		Creating Media: (Yr 5) Vector drawing F		Data and Information: (Yr 5) Flat file Databases EF	Creating Media: (Yr 6) 3D Modelling FG	
B	C S	Computer Systems and Networks: (Yr 6) Communication ADEF		Programming B: (Yr 5) Selection in Quizzes ABCF			Programming B - (Yr 6) Sensing (variables): Microbit ABDF <i>Alternatives available</i>
	I T		Creating Media: (Yr 5) Video Editing EFG		Creating Media: (Yr 6) Webpage creation EFG	Data and Information: (Yr 6) Spreadsheets F	

Cycle	Unit	Issue	Options
A	Programming A (Crumbles)	No crumbles	<p>Code.org - Course D lessons 10 - 14 and lesson 18 - lessons focus on selection or</p> <p>Microbit - Data handling unit https://microbit.org/lessons/data-handling-unit-summary/ (Microbits needed) OR</p> <p>Barefoot Computing: You're the Cyber Security Expert https://www.barefootcomputing.org/resources/you-re-the-cyber-security-expert (conditions in loops)</p>
A	Programming B	No Micorbits	<p>Lesson adaptations to work with them emulator at https://makecode.microbit.org/</p> <p>https://computing4schools.com/home-learning/</p>
A	Vector Drawing	Not a 'Google School'	<p>Vector drawing = drawing with shapes</p> <p>Microsoft alternatives: Powerpoint or Publisher</p>
B	Webpage Creation	Not a 'Google School'	<p>W3 Schools html building https://www.w3schools.com/html/tryit.asp?filename=tryhtml_basic see tutorials here to support: https://www.w3schools.com/html/</p> <p>Or</p> <p>Code Club - HTML https://projects.raspberrypi.org/en/codeclub</p>

			<p>Or</p> <p>Use ppt/sway or something similar to show links between pages</p> <p>Or Adobe Spark</p>
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