



Key Stage 2 National Curriculum Objectives

Computer Science	Digital Literacy	Information Technology
• Programming • Problem solving • Computational thinking • Computer theory • Logical thinking	Online safety Using IT beyond the school	Searching and Creating content (word processing, presentations, online collaboration, data bases, spread sheets, images, movies)
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		Term 1	Term 2	Term 3	Term 4	Term 5	Term 6
3	CS	<u>Computing systems and networks - Connecting computers</u> D	<u>Creating media - Photo editing</u> A B C		<u>Data and information - Branching databases</u> B F	<u>Programming A - Sequence in music</u> A B C F	<u>Programming B - Events and actions</u> A B C F
	IT		F	<u>Creating media - Desktop publishing</u> B F			
	DL	<u>Privacy and Security</u> G	<u>Online Relationships</u> D G <u>Online Reputation (PSHE)</u> G	<u>Online Bullying (PSHE)</u> G <u>Self image and Identity</u> G	<u>Health, Wellbeing and Lifestyle</u> G	<u>Managing Online Information</u> E G	<u>Copyright and Ownership</u> G
4	CS	<u>Computing systems and networks - The Internet</u> D F	<u>Creating media - Audio editing</u> A B C F	<u>Creating media - Animation</u> A B C F	<u>Data and information - Data logging</u> B F	<u>Programming A - Repetition in shapes</u> A B C F	<u>Programming B - Repetition in games</u> A B C F
	IT		F				
	DL	<u>Privacy and Security</u> G	<u>Online Relationships</u> D G <u>Online Reputation (PSHE)</u> G	<u>Online Bullying (PSHE)</u> G <u>Self image and Identity</u> G	<u>Health, Wellbeing and Lifestyle</u> G	<u>Managing Online Information</u> E G	<u>Copyright and Ownership</u> G

Year		Term 1	Term 2	Term 3	Term 4	Term 5	Term 6
5	CS	<u>Computing systems and networks -</u> <u>Sharing information</u> D F	<u>Creating media -</u> <u>Vector drawing</u> A B C F	<u>Creating media -</u> <u>Video editing</u> A B C F	<u>Data and information - Flat-file databases</u> B F	<u>Programming A - Selection in physical computing</u> A B C F	<u>Programming B - Selection in quizzes</u> A B C F
	IT						
	DL	<u>Privacy and Security</u> G	<u>Online Relationships</u> DG <u>Online Reputation (PSHE)</u> G	<u>Online Bullying (PSHE)</u> G <u>Self image and Identity</u> G	<u>Health, Wellbeing and Lifestyle</u> G	<u>Managing Online Information</u> EG	<u>Copyright and Ownership</u> G
6	CS	<u>Computing systems and networks -</u> <u>Communication</u> D F	<u>Creating media - 3D Modelling</u> A B C F	<u>Creating media - Web page creation</u> A B C D E F	<u>Data and information - Spreadsheets</u> B F	<u>Programming A - Variables in games</u> A B C F	<u>Programming B - Sensing</u> A B C F
	IT						
	DL	<u>Privacy and Security</u> G	<u>Online Relationships</u> DG <u>Online Reputation (PSHE)</u> G	<u>Online Bullying (PSHE)</u> G <u>Self image and Identity</u> G	<u>Health, Wellbeing and Lifestyle</u> G	<u>Managing Online Information</u> EG	<u>Copyright and Ownership</u> G

Year Group	Strand	Required Apps/Programmes
3	<u>Computing systems and networks - Connecting computers</u>	A computer or tablet with a basic graphics program, e.g. Microsoft Paint (Windows), JS Paint jspaint.app (online), PaintZ paintz.app (online), Brushes Redux (free app for iOS devices, downloadable from the Apple App Store)
	<u>Creating media - Animation</u>	iMotion app (iPads) iMovie app (iPads)
	<u>Creating media - Desktop publishing</u>	Adobe Spark
	<u>Data and information - Branching databases</u>	J2data: Branch - https://www.j2e.com/help/videos/datags3 Pictogram - https://www.j2e.com/help/videos/ks1datavideo1
	<u>Programming A - Sequence in music</u>	Scratch
	<u>Programming B - Events and actions</u>	Scratch (chromebooks required)
4	<u>Computing systems and networks - The Internet</u>	Traceroute (G-Suite) Chrome Music Lab
	<u>Creating media - Audio editing</u>	Audacity

	<u>Creating media - Photo editing</u>	Paint.net
	<u>Data and information - Data logging</u>	Google Science Journal
	<u>Programming A - Repetition in shapes</u>	Logo
	<u>Programming B - Repetition in games</u>	Scratch
5	<u>Computing systems and networks - Sharing information</u>	Google Slides Scratch
	<u>Creating media - Vector drawing</u>	Google Drawings
	<u>Creating media - Video editing</u>	Windows Movie Maker
	<u>Data and information - Flat-file databases</u>	J2data Sample Databases
	<u>Programming A - Selection in physical computing</u>	Crumble starter kits and devices running Crumble software
	<u>Programming B - Selection in quizzes</u>	Scratch
6	<u>Computing systems and networks - Communication</u>	
	<u>Creating media - 3D Modelling</u>	Tinkercad
	<u>Creating media - Web page creation</u>	Google Sites
	<u>Data and information - Spreadsheets</u>	Google Sheets
	<u>Programming A - Variables in games</u>	Scratch
	<u>Programming B - Sensing</u>	Micro:bit kits

