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	Computing systems and networks – Connecting computers D	Creating media – Animation A B C F	Creating media – Desktop publishing B F	Data and information – Branching databases B F	Programming A – Sequence in music A B C F	Programming B – Events and actions A B C F
	IT						
	DL	Privacy and Security G School AUP	Online Relationships D G Online Reputation (PSHE) G	Online Bullying (PSHE) G Self image and Identity G	Health, Wellbeing and Lifestyle G	Managing Online Information E G	Copyright and Ownership G
4	CS	Computing systems and networks – The Internet D F	Creating media – Audio editing A B C F	Creating media – Photo editing A B C F	Data and information – Data logging B F	Programming A – Repetition in shapes A B C F	Programming B – Repetition in games A B C F
	IT						
	DL	Privacy and Security G School AUP	Online Relationships DG Online Reputation (PSHE) G	Online Bullying (PSHE) G Self image and Identity G	Health, Wellbeing and Lifestyle G	Managing Online Information EG	Copyright and Ownership G

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

Year Group	Strand	Required Apps/Programmes
3	**Computing systems and networks – Connecting computers**	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)
	Creating media – Animation	iMotion app (iPads) iMovie app (IPads)
	Creating media – Desktop publishing	Adobe Spark
	Data and information – Branching databases	J2data: Branch - https://www.j2e.com/help/videos/datags3 Pictogram - https://www.j2e.com/help/videos/ks1datavideo1
	Programming A – Sequence in music	Scratch
	Programming B – Events and actions	Scratch (chromebooks required)
4	**Computing systems and networks – The Internet**	Traceroute (G-Suite) Chrome Music Lab
	Creating media – Audio editing	Audacity
	Creating media – Photo editing	Paint.net

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