



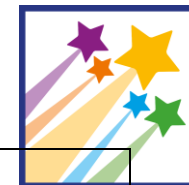
KSI National Curriculum Objectives

<p><i>Computer Science</i></p> <p><i>(computational thinking, programming/coding)</i></p>	<p><i>Information Technology</i></p> <p><i>(applying to the real world, wide range of apps and software)</i></p>	<p><i>Digital Literacy</i></p> <p><i>(use and express themselves safely online)</i></p>
<p><i>A- understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions</i></p>		
<p><i>B- create and debug simple programs</i></p>		
<p><i>C- use logical reasoning to predict the behaviour of simple programs</i></p>		
<p><i>D- use technology purposefully to create, organise, store, manipulate and retrieve digital content</i></p>		
<p><i>E- recognise common uses of information technology beyond school</i></p>		
<p><i>F- 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</i></p>		



Long Term Plan - Key Stage 1

Year		Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
1	CS	Technology around Us - (keyboards needed)		Moving a robot	Introduction to animation		
	IT		Grouping Data			Digital Painting	Digital Writing
	DL	Privacy and Security G Harmony AUP	Online Relationships DG Online Reputation G (PSHE)	Online Bullying (PSHE) G Self-image and Identity G	Health, Wellbeing and Lifestyle G	Managing Online Information EG	Copyright and Ownership G
2	CS	Information Technology around us		Robot Algorithms	Quizzes		
	IT		Pictograms - iPad, Pic Collage.			Digital Photographs - iPad/Seesaw	Making Music
	DL	Privacy and Security G Harmony AUP	Online Relationships DG Online Reputation G (PSHE)	Online Bullying (PSHE) G Self-image and Identity G	Health, Wellbeing and Lifestyle G	Managing Online Information EG	Copyright and Ownership G



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)
<p>A - design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts</p>		
<p>B - use sequence, selection, and repetition in programs; work with variables and various forms of input and output</p>		
<p>C - use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs</p>		
<p>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</p>		
<p>E - use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content</p>		
<p>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</p>		
<p>G - use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact</p>		





Long Term Overview - Lower Key Stage 2

Year		Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
3	CS	Connecting Computers		Sequence in Music	Events and Action		
	IT		Branching Databases - science			Desktop Publishing	Stop Frame Animation - Romans
	DL	Privacy and Security G Harmony 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
4	CS	The Internet		Repetition in shapes - Logotacular	Repetition in games		
	IT		Data Logging- Science Google science journal- Aurdino iPad App			Audio editing - Garage band	Photo editing - paintnet iPad -green screen
	DL	Privacy and Security G Harmony 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



Long Term Overview - Upper Key Stage 2

Year		Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
5	CS	Sharing Information		Data handling Micro:Bits	Chatbot selection		
	IT		Flat file databases			3D Modelling	Video Editing - iMovie
	DL	Privacy and Security G Harmony 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	Communication - Seesaw/Padlet		Sensing using Micro:Bits			
	IT		Spreadsheets - excel / numbers			AR and Video Editing for school production	Web page design
	DL	Privacy and Security G Harmony 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

Key Vocabulary

Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Technology	Information	Internet	Browser	Communication	Spreadsheets
Desktop	Technology (IT)	Website	Web server	Informed Choices	Complex
Computer	Console	Online / Offline	Website	Virus Threats	Searches
Laptop	Printer	Private Information	World Wide Web	Blogs	Commands
IPad / Tablet	Device	Email	Wired	Vlogs	Cell
Mouse /Keyboard	Responsible-use	Secure Passwords	Wireless	Messaging	Problem Solving
Trackpad	Pictogram	Digital Footprint	Router	Edit	Computational
Grouping	Counting	Gaming	URL	Type	Thinking
Comparing	Comparing	Blogs	HTML	Program	Generate
Robot	Data	Equipment	Software	Code	Process
Directions	Attribute	Movement	WAN	Commands	Store
Program	Robot	Patterns	IP address	Modification	Present
Instructions	Instructions	Program	ISP	Collaboration	Information
Buttons	Algorithms	Algorithm	LAN	Searching	Plausibility
Routes	Prediction	Sequence	Network	Strategies	Appropriate Data
Commands	Debugging	Debug	Internet	Algorithm	LED
Scratch Jr.	Route	Programming	Programming	Evaluation	Algorithm
Blocks	Obstacle	Screen /Mouse	Commands	Sequence	Micro: Bit
Sprite	Quiz	/Keyboard	Sensors	Digital content	Sensing
Bugs	Scratch Jr.	Images	Audio	Micro: Bit	Tinker Cad
Testing	Program	Animation	Editing	Variables	Modelling
Digital Painting	Movement/Sound/	Multimedia	Effects	Input	3D/2D
Software	Recording Blocks	Alignment	Multimedia	Output	Collaborative
Tools	Photograph	Information Sources	Podcast	Repetition	CSS (Cascading
Brush	Landscape	School Network	Digital Content	Selection	Style Sheets)
Fill	Portrait	Data Collection	Creating /	Collaborate	Decomposition
Eraser	Upload	Database	Modifying	Collect	Evaluation
Touch Typing	Lighting	Construct	Movement	Sort	Simulate
Text	Effects	Contribute	Patterns	Organise	Repetition
Toolbar	Angle	Input	Program	Data Collection	Selection
Font	Real / Fake	Output	Algorithm	Database	Database
	Photo Editing	Variables	Sequence	Construct	Construct
	Digital Music	Sprite	Debug	Contribute	Contribute
	Rhythm/ Pattern/		Programming		Input
	Notes/ Tempo				
	Sequence				





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