Computing knowledge Progression

	Early Years Foundation Stage (EYFS)					

	KS1		KS2			
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Programming	Using Programmable toys	Programming on Screen	Programming an animation	Developing a simple educational game	Develop an interactive game	Making a text based adventure game
Vocabulary	algorithm debug instructions predict programming robot treasure	Algorithm instructions predict problem program robot Scratch sprite	algorithm animation input output program script storyboard	debug input interface output program prototype repetition variable	Algorithm Debugging Code Programming Sprites storyboard	Python Repetition Variable Selection Print Procedure syntax
Software	Programmable toys/ BeeBots	Scratch JR	Scratch	Scratch	Scratch	Python
Computational thinking	Filming the steps of a recipe	Exploring how computer games work	Finding and correcting bugs in programs	Prototyping an interactive toy	Cracking Codes	Mastering algorithms for searching, sorting and mathematics
Vocabulary	algorithm clip edit film instructions recipe robot	algorithm predict rules Scratch test	algorithm bugs debug instruction program script	algorithm debug input interactive output pitch prototype	Binary code Cipher Decrypt Encrypt Morse code Password Security	Algorithm Flowchart Pseudocode Linear search Random search Binary search Selection sort

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				simulation	semaphore	quicksort
Software	Paint/ Movie Maker	Scratch	Scratch	Scratch	Scratch	Scratch
Creativity	Illustrating an eBook	Talking, selecting and editing digital images	Video performance	Producing digital music	Fusing geometry and art	Creating a short television advert
Vocabulary	character eBook edit illustration traditional tale	camera image Picasa pixel portfolio theme	audio close-up editing footage panning shooting video camera zooming	audio composition copyright digital instruments pitch sample sequencing software	Geometric Landscape Op art Sprite Symmetry tessellations	Footage Rough cut Storyboard Advert Creative Commons Video camera Rushes of footage Final cut
Software	Clicker 6 Kar2sh	Microsoft Photos	Microsoft photos	Audicity Rainforest music	Inkscape Scratch	Microsoft photos Textease movies
Computer network	Finding images using the web	Researching a topic	*Making and sharing a short screencast presentation*	Editing and writing HTML	Creating a web page about cyber safety	Exploring computer networks including the internet
Vocabulary	algorithm copyright e-safety mammal permission personal private	Google mind map presentation research search search engine	*vlogging* *search engine* *internet* *presentation* *narration* *Creative Commons* *copyright* *images* *audio* *screencast*	code HTML HTTP (hyper text transfer protocol) hyperlink tag URL web page	Bias e-safety Page Rank Revision history Search engine wiki	Command prompt Internet IP address Packet of data The web Webserver Network Domain Name Service (DNS)

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Software	Textease Web browsers	PowerPoint	PowerPoint	Chrome	Google	
Communication/ Collaboration	Producing a talking book	Communicating clues	Communicating safely on the internet	Producing a wiki	*Sharing experiences and opinions*	Using media and mapping to document a trip
Vocabulary	audio book copyright microphone recording sound effects talking book	address attachment database evidence email fact file header safety	attachment email e-safety spam spoofed link video conference virus	edit information mind map reliable style wiki Wikipedia's Five pillars	*Audience* *Blog* *Blogroll* *Copyright* *Dashboard* *Hyperlinks* *podcast*	Geotagging GPS Route Location Tracklog Smartphone Map metadata
Software	Cartouche/clicker 6	e-mail	Email Office 365	Office 365	*WordPress* *Movie Maker*	Google Maps Google Earth
Productivity	Creating a card electronically	Recording bug hunt data	Collecting and analysing data	Presenting the weather	Creating a virtual space	Creating a year book
Vocabulary	celebrate copyright edit greeting keyboard save type	chart classification key data database photograph tally chart tick chart	chart data graph opinion questions rating scale research survey	chart data-logging forecast graph measurement prediction spreadsheet temperature	3D Animation Gallery Navigation Screencast Sculpture virtual	Desktop publishing (DTP) Magazine Yearbook Collaboration Design Images Typeface layout
Software	Textease Paint/studio	Spreadsheets	Excel	Excel PowerPoint	Trimble SketchUp	Publisher