

<u>Computing – KS1</u> <u>Progression of Knowledge and Skills</u>



	Year 1			Year 2			
Term	Autumn	Spring	Summer	Autumn	Spring	Summer	
Topic	All Creatures Great and	Where in the World	Superheroes	All Creatures Great and	Where in the world?	Pioneers	
	Small	Programming animations	Moving a robot	Small Computer systems and	Click and Go Scratch Junior	Robot Algorithms	
	Technology around us		Near and Far	networks			
	Once upon a time	Ready steady grow	Grouping data		You're Bananas	Near and Far	
	Photography	Digital painting		Once Upon a Time Making music	Digital Writing	Pictograms	
Computing overview	Pupils should be taught to: - Understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions - Create and debug simple programs - Use logical reasoning to predict the behaviour of simple programs - Use technology purposefully to create, organise, store, manipulate and retrieve digital content - Recognise common uses of information technology beyond school - 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						
Computer Science (Programming; Data & Information)	I can understand and create algorithms (steps or rules as instructions, e.g. how to make a sandwich)	I can understand and create algorithms I understand that algorithms must be precise	I can place items into groups I can decide on labels for groups	I can enter data into a computer system	I can predict the behaviour of simple programs I can create and run a program (an algorithm or multiple algorithms that can be understood by a computer) I can enter data into a computer system I can use a computer to present data I can find answers to questions by looking at data	I can predict the behaviour of simple programs I can create and run a program (an algorithm or multiple algorithms that can be understood by a computer) I can debug (find and fix a problem) within a simple program I can enter data into a computer system I can use a computer to present data	



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						I can find answers to questions by looking at data I can explain why I should always ask a trusted adult before I share any information about myself online.
Information technology	I can identify examples of technology in the classroom I can use apps or websites to aid my learning I can move a cursor with a mouse or trackpad and click on an icon	I can move a cursor with the trackpad and click on an icon I can save and retrieve work that I have produced (includes auto-save) I can use an app or website to make graphical marks or pictures	I can choose letters on a keyboard to create words I can save and retrieve work that I have produced (includes auto-save	I can identify information technology in the school, home, and beyond I can create rules for using technology safely Understand that digital devices run programs that have been created by humans. I can create audio using digital technology I can edit and adjust audio using digital technology	I can use technology to capture and manipulate (position, re-size, rotate) photos as part of a piece of work I can describe ways in which people might make themselves look different online	
Digital literacy		I can use apps or websites to aid my Learning	I can save and retrieve work that I have produced (includes autosave) I can move a cursor with the trackpad and click on an icon	Understand that emails and other digital communications can be sent and received from various types of digital device. Demonstrate how to navigate a simple webpage to get to information I need (e.g. home, forward, back buttons; links, tabs and sections).	I can save and retrieve work that I have produced (includes autosave) I can move a cursor with the trackpad and click on an icon I can explain why I should always ask a trusted adult before I share any information about myself online.	Type and edit text. Use two-finger scrolling on a touchpad. Use technology to capture and manipulate (position, resize, rotate) photos as part of a piece of work.



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Online safety	Self-image and Identity:	Online bullying:	Health, well-being and	Self-image and Identity:	Online bullying:	Privacy and Security:	
Digital Learning	If something happens	I can describe how to	lifestyle:	I can describe ways in	I can describe how to	I can explain why I	
Cornwall	that makes	behave	I can explain rules to keep us	which people might make	behave	should always ask a trusted	
	me feel sad, worried,	online in ways that do not	safe	themselves look different	online in ways that do not	adult	
Project Evolve	uncomfortable or	upset	when we are using	online.	upset	before I share any	
strands	frightened I can	others	technology		others	information	
	give examples of when		both in and beyond the	Online relationships:	Managing online	about myself online.	
	and how to		home.	I can explain some risks of	information:	Copyright and ownership:	
	speak to an adult I can		Privacy and Security:	communicating online with	I can demonstrate how to	I can recognise that content	
	trust.		I can identify some simple	others.	navigate	on the	
			examples of my personal	I don't know well.	a simple webpage to get to	internet may belong to other	
		Managing online	information (e.g. name,		information I need (e.g.	people.	
	Online reputation:	information:	address,	Online reputation:	home,		
	I can describe what	I can identify devices I	birthday, age, location).	I can explain how	forward, back buttons;		
	information I	could use to		information put online about	links, tabs		
	should not put online	access information on the	Copyright and ownership:	me	and sections).		
	without	internet.	I can name my work so that	can last for a long time.	Health, well-being and		
	asking a trusted adult		others		lifestyle:		
	first.		know it belongs to me.		I can create rules for using		
					technology safely		
Impact/key	Through the above topics, knowledge and skills a Year 1 computer user will:			Through the above topics, knowledge and skills a Year 2 computer use will:			
assessment	- know how to create a series of instructions			- Use a range of instructions			
criteria:	- Know how to plan a journey for a programmable toy			- Test and amend a set of instructions			
	- Create, store and retrieve digital content			- Find errors and amend (debug)			
	- Use a website and a camera			- Write a simple program and test it			
	- Record sound and play it back			- Predict what the outcome of a simple program will be (logical reasoning)			
	- Use technology safely			- Understand that algorithms are used on digital devices			
	- Keep personal information safe			 Understand that programs require precise instructions 			
				- Organise, retrieve and manipulate digital content			
				- Navigate the web to complete simple searches			
				- Use technology respectfully			
				- Know where to go for help if they are concerned			
				 Know how technology is used in school and outside of school 			