Key Stage 1 National Curriculum for Computing 2024-2025

Pupils should be taught to:

1	understand what algorithms are; how they are implemented as programs on digital devices; and those programs execute by following precise and unambiguous instructions
2	create and debug simple programs
3	use logical reasoning to predict the behaviour of simple programs
4	use technology purposefully to create, organise, store, manipulate and retrieve digital content
5	recognise common uses of information technology
6	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.

COMPUTING CURRICULUM 2022 – 2023
Key Stage 1

Term	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Year 1 Discreet Teaching	**Programming 1** Kapow Lessons Algorithms Unplugged	**Computing Systems and Networks** Technology Around Us NCCE Lessons	**Creating Media** Digital Paintings NCCE Lessons	**Internet Safety** Smartie the Penguin x 2 Lessons Kapow Lessons 1 – 4	**Data Handling:** Kapow Lessons Introduction to data handling	**Programming 2** Moving a Robot (Bee – Bots) NCCE Lessons
NC Coverage	NC1, NC2,	NC 4, NC 5, NC 6	NC 4	NC 6	NC 4, NC 5	NC 1, NC2, NC 3, NC5
Year 2 Discreet Teaching	**Computing Systems and Networks** Logging on to Chrome Books Lesson 1 & 2 – What is IT? Lesson 3 – Tim Berners Lee & WWW **Kapow –** Computer Systems Lessons 3 – 6	**Online Safety:** Digi-duck internet safety x 3 Lessons (Previously in Autumn 1) Kapow Lesson 1: Posting online Kapow Lesson 4: It's my choice Kapow Lesson 5: True or False?	**Digital Literacy:** Using Google Docs as a publishing tool. Links to dragon topic.	**Programming 1** Robot Algorithms Bee Bot NCCE NB: *Earlier lessons may need adapting; planning needs to include more problem solving.*	**Programming 2** KAPOW Scratch Junior	**Creating Media** KAPOW Creating Media – Stop Motion
NC Coverage	NC 4, NC 5, NC 6	NC 6	NC4, NC5	NC 1, NC2, NC 3,NC5	NC 1, NC2, NC 3, NC5	NC 1, NC2, NC 3, NC4

	Key Stage 1 Progression	
	EYFS	**Key Stage 1**
Computer Science Algorithms & Programming	I can make a Bee-bot or similar move. I use a range of control toys and devices I understand that goals can be achieved by following a sequence of steps. I can follow symbol sequence algorithms (PE Cards, jump, step etc) I can make predictions about what a programme will do /do next. I can programme a Bee-bot or similar, one instruction at a time and clear it at the end. I can recognise that there is a problem and say what problem is (plugged or unplugged activities).	I can think of a simple everyday algorithm e.g. make a jam sandwich I can plan a sequence of steps to solve real-world problems. I can read and follow symbol sequence algorithms (PE Cards, jump, step etc) I can create simple sequence algorithms using symbols (e.g. Bee-bot cards) I can recognise that common sequences of instructions or sets of rules can be thought of as algorithms. I can programme (code) a computer using a number of steps in order before pressing the 'run' button. I can identify where in the code or algorithm bug/ problem occurs I can give explanations for what I think a programme will do I can give logical explanations for what I think a programme will do. I can create a simple programme on screen with a particular goal or purpose in mind. I can independently debug any errors in my own code.
Information Technology	I use technology appropriately through role-play. I can recognise some technology that is used at home or school. I can name and use an Ipad with developing control. I can recognise some technology that is used in places such as home and school. I use technology appropriately through role play.	I can use a range of digital devices to create and store content e.g taking a photo, videoing, artwork. I can create original content using digital devices. I can use a range of digital devices to create, store and retrieve content.
Digital literacy **Digital Safety**	I can speak to an adult about what I have seen. I can say if something I find on the internet makes me feel bad.	I can keep myself safe when using digital technology. I can explain what I need to do to keep myself safe. I know that information on the internet can be seen by others. I know what to do if I see disturbing content online at school or home.
Digital Literacy	I can select and use technology for a particular purpose. I can access and use simple activities using touch technology with increasing control.	I can edit my own original digital content using a range of technologies. I can create original content using digital devices.

	I can name some uses of IT beyond school e.g audio books, listening to music, watching films, creating pa	I have a range of strategies for dealing with concerns over content or contact online.