Computing Skills Progression

	EYFS	Key Stage 1	Lower Key Stage 2	Upper Key Stage 2
Computing systems and networks	✓	✓ identify technology ✓ identify a computer and its main parts ✓ use a mouse in different ways ✓ use a keyboard to type on a computer ✓ use the keyboard to edit text ✓ create rules for using technology responsibly	✓ explain how digital devices function ✓ identify input and output devices ✓ recognise how digital devices can change the way we work ✓ explain how a computer network can be used to share information ✓ explore how digital devices can be connected ✓ recognise the physical components of a network	✓ explain that computers can be connected together to form systems ✓ recognise the role of computer systems in our lives ✓ experiment with search engines ✓ describe how search engines select results ✓ explain how search results are ranked ✓ recognise why the order of results is important, and to whom
Creating media	✓	✓ describe what different freehand tools do ✓ use the shape tool and the line tools ✓ make careful choices when painting a digital picture ✓ explain why I chose the tools I used ✓ use a computer on my own to paint a picture ✓ compare painting a picture on a computer and on paper	✓ explain that animation is a sequence of drawings or photographs ✓ relate animated movement with a sequence of images ✓ plan an animation ✓ identify the need to work consistently and carefully ✓ review and improve an animation ✓ evaluate the impact of adding other media to an animation	✓ explain what makes a video effective ✓ identify digital devices that can record video ✓ capture video using a range of techniques ✓ create a storyboard ✓ identify that video can be improved through reshooting and editing ✓ consider the impact of the choices made when making and sharing a video

Programming A	✓	✓ explain what a given command will do ✓ act out a given word ✓ combine forwards and backwards commands to make a sequence ✓ combine four direction commands to make sequences ✓ plan a simple program ✓ find more than one solution to a problem	✓ explore a new programming environment ✓ identify that commands have an outcome ✓ explain that a program has a start ✓ recognise that a sequence of commands can have an order ✓ change the appearance of my project ✓ create a project from a task description	✓ control a simple circuit connected to a computer ✓ write a program that includes count-controlled loops ✓ explain that a loop can stop when a condition is met ✓ explain that a loop can be used to repeatedly check whether a condition has been met ✓ design a physical project that includes selection ✓ create a program that controls a physical computing project
Data and information		✓ label objects ✓ identify that objects can be counted ✓ describe objects in different ways ✓ count objects with the same properties ✓ compare groups of objects ✓ answer questions about groups of objects	✓ create questions with yes/no answers ✓ identify the attributes needed to collect data about an object ✓ create a branching database ✓ explain why it is helpful for a database to be well structured ✓ plan the structure of a branching database ✓ independently create an identification tool	✓ use a form to record information ✓ compare paper and computer-based databases ✓ outline how you can answer questions by grouping and then sorting data ✓ explain that tools can be used to select specific data ✓ explain that computer programs can be used to compare data visually ✓ use a real-world database to answer questions
Creating media	✓	✓ use a computer to write ✓ add and remove text on a computer ✓ identify that the look of text can be changed on a computer ✓ make careful choices when changing text ✓ explain why I used the tools that I chose ✓ compare typing on a computer to writing on paper	✓ recognise how text and images convey information ✓ recognise that text and layout can be edited ✓ choose appropriate page settings ✓ add content to a desktop publishing publication ✓ consider how different layouts can suit different purposes ✓ consider the benefits of desktop publishing	✓ identify that drawing tools can be used to produce different outcomes ✓ create a vector drawing by combining shapes ✓ use tools to achieve a desired effect ✓ recognise that vector drawings consist of layers ✓ group objects to make them easier to work with ✓ apply what I have learned about vector drawings

Programming B	✓	✓ choose a command for a given purpose ✓ show that a series of commands can be joined together ✓ identify the effect of changing a value ✓ explain that each sprite has its own instructions ✓ design the parts of a project ✓ use my algorithm to create a program	✓ explain how a sprite moves in an existing project ✓ create a program to move a sprite in four directions ✓ adapt a program to a new context ✓ develop my program by adding features ✓ identify and fix bugs in a program ✓ design and create a maze-based challenge	✓ explain how selection is used in computer programs ✓ relate that a conditional statement connects a condition to an outcome ✓ explain how selection directs the flow of a program ✓ design a program which uses selection ✓ create a program which uses selection ✓ evaluate my program