

Computing Progression Skills

EYFS: Take pictures on a camera or ipad, search for information on the internet, playing games on an interactive whiteboard, exploring an old typewriter or other mechanical toys, using beebot, watching a video clip and listening to music.

	Computer Science (Algorithms)			Information Technology (Database)	Digital Literacy (E-safety)	
Year 1	Understand that an algorithm is a set of instructions used to solve a problem or achieve an objective	Understand that an algorithm is a set of instructions used to solve a problem or achieve an objective	Read code one line at a time and make good attempts to envision the bigger picture of the overall effect of the program.	Sort, collate, edit and store simple digital content	Understand what is meant by technology and can identify a variety of examples both in and out of school.	Understand the importance of keeping information, such as their usernames and passwords, private a
Year 2	Explain that an algorithm is a set of instructions to complete a task	Create a simple program that achieves a specific purpose	Identify the parts of a program that respond to specific events and initiate specific actions.	Demonstrate an ability to organise data using	Retrieve relevant, purposeful digital content using a search engine	Know the implications of inappropriate online searches.

	Computer Science				Information Technology	Digital Literacy	
Year 3	Turn a simple real-life situation into an algorithm for a program	Demonstrate the ability to design and code a program that follows a simple sequence	Think of the structure of a program in logical, achievable steps and absorbing some new knowledge of coding structures	List a range of ways that the internet can be used to provide different methods of communication	Carry out simple searches to retrieve digital content	Collect, analyse, evaluate and present data and information using a selection of software	Demonstrate the importance of having a secure password and not sharing this with anyone else.
Year 4	Make more intuitive attempts to debug their own programs	Achieve repetition effects are becoming more logical and are integrated into their program designs.	Think of the structure of a program in logical	Recognise the main component parts of hardware which allow computers to join and form a network	Understand the function, features and layout of a search engine	Make improvements to digital solutions based on feedback.	Explore key concepts relating to online safety
Year 5	Attempt to turn more complex real-life situations into algorithms for a program	Translate algorithms	Think about their code structure in terms of the ability to debug and interpret the code later	Understand the value of computer networks but are also aware of the main dangers	Search with greater complexity for digital content when using a search engine	Make appropriate improvements to digital solutions based on feedback received and can confidently comment on the success of the solution	Have a secure knowledge of common online safety rules and can apply this by demonstrating the safe and respectful use of a few different technologies
Year 6	Turn a more complex programming task into an algorithm	Translate algorithms that include sequence, selection and repetition into code	Interpret a program in parts and can make logical attempts to put the separate parts of a complex algorithm together to explain the program as a whole	Understand and can explain in some depth the difference between the internet and the World Wide Web	Apply filters when searching for digital content	Make clear connections to the audience when designing and creating digital content.	Demonstrate the safe and respectful use of a range of different technologies and online services.