Skills Progression Map: Computing

	Y3	Y4	Y5	Y6	End of KS Expectations
Computer Science	Pupils should be taught to: i. Begin to build understanding of how to design, write and debug algorithms using simple programs that accomplish a goal including controlling or simulating physical systems. ii. Through using logic and reasoning, begin to solve simple problems by breaking them into smaller parts. iii. Learn how to using logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs. iv. Gain confidence in using one step sequence, selection, and repetition in programs working with variables and some forms of input and outputs.	Pupils should be taught to: i. Further build confidence and understanding in applying the fundamental principles and concepts of computer science. This includes designing, writing and debugging simple programmes. ii. Design, write and debug programs that accomplish simple but specific goals, including controlling or simulating physical systems. iii. Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs. Further develop how to solve problems by breaking them into smaller parts. iv. Use sequence, selection, and repetition in programs; work with variables and various forms of input and output.	ls should be taught to: i. Continue to confidently understand and apply the fundamental principles and concepts of computer science, including breaking down and solving problems using logic and reasoning. ii. They should continue to write algorithms and debug more complex programs. iii. Use logical reasoning to explain how some algorithms work and to detect and correct errors in algorithms and programs. Continue to confidently solve problems by breaking them into smaller parts. iv. Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems. v. Use sequence, selection, and repetition in programs; work with variables and various forms of input and output.	Pupils should be taught to: i. Confidently understand and apply the fundamental principles and concepts of computer science, including breaking down and solving problems using logic and reasoning, writing and understanding algorithms and representing data in different ways. ii. Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems. iii. Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs. iv. Use sequence, selection, and repetition in programs; work with variables and various forms of input and output.	

Digital Literacy	Pupils should be taught to: i. Begin to gain experience in selecting, using and combining a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information.	Pupils should be taught to: v. Further develop confidence and experience in selecting, using and combining a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information	Pupils should be taught to: vi. Confidently select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information	Pupils should be taught to: i. Confidently select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information.	use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information
Online Safety	Pupils should be taught to: ii. Learn how to use technology safely, respectfully and responsibly. iii. Learn about what acceptable/unacceptable behaviour online is and apply this to their own lives. iv. identify a range of ways to report concerns about content and contact.	Pupils should be taught to: vi. Learn how to use technology safely, respectfully and responsibly. vii. Learn about what acceptable/unacceptable behaviour online is and apply this to their own lives. viii. Identify a range of ways to report concerns about content and contact.			use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact