SOMERVILLE PRIMARY SCHOOL COMPUTING
NATIONAL CURRICULUM COVERAGE

	AUTUMN	SPRING	SUMMER
YEAR 1	**DIGITAL LITERACY** **How do I use technology safely and responsibly?** -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.	**INFORMATION TECHNOLOGY - ANIMATION** **Can I animate a story book with sound?** -Use technology purposefully to create, organise, store, manipulate and retrieve digital content	**DIGITAL LITERACY** **What is technology and how has it changed?** -Recognise common uses of information technology beyond school
	COMPUTER SCIENCE **Can I read and use block coding?** Use technology purposefully to create, organise, store, manipulate and retrieve digital content. Create and debug simple programs Understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions. Use logical reasoning to predict the behaviour of simple programs.	**INFORMATION TECHNOLOGY - DATA** **How can data be represented?** -Use technology purposefully to create, organise, store, manipulate and retrieve digital content	**COMPUTER SCIENCE** **Can I use direction keys to make a simple program?** -Create and debug simple programs -Understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions. -Use logical reasoning to predict the behaviour of simple programs.

YEAR 2	**DIGITAL LITERACY** **How do I use technology safely and responsibly?** -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.	**INFORMATION TECHNOLOGY - MULTIMEDIA** **How should I present my ideas?** -Use technology purposefully to create, organise, store, manipulate and retrieve digital content	**INFORMATION TECHNOLOGY - DATA** **How is technology used around the world?** -Recognise common uses of information technology beyond school
	COMPUTER SCIENCE **Can I create my own program that tells a story?** -Create and debug simple programs Use logical reasoning to predict the behaviour of simple programs.	**INFORMATION TECHNOLOGY - DATA** **How can data be represented?** -Use technology purposefully to create, organise, store, manipulate and retrieve digital content	**COMPUTER SCIENCE** **Can I create my own program and debug it?** -Create and debug simple programs -Understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions. -Use logical reasoning to predict the behaviour of simple programs.
YEAR 3	**DIGITAL LITERACY** **How do I use technology safely and responsibly?** Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.	**INFORMATION TECHNOLOGY – MEDIA** **What is desktop publishing?** -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	**INFORMATION TECHNOLOGY - DATA** **Can I use formulas in Microsoft Excel?** -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.

	COMPUTER SCIENCE **Can I use more than one output to control a lighthouse?** -Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts -Use sequence, selection, and repetition in programs; work with variables and various forms of input and output.	**INFORMATION TECHNOLOGY - MULTIMEDIA** **Can I create my own animation?** -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.	**COMPUTER SCIENCE** **Can I create my own program using conditions?** -Design, write and debug programs that accomplish specific goals. -Use sequence, selection, and repetition in programs; work with variables and various forms of input and output. -Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs.
YEAR 4	**DIGITAL LITERACY** **How do I use technology safely and responsibly?** -Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact·	**INFORMATION TECHNOLOGY - MULTIMEDIA** **What is CAD and how do I use it?** -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.	**DIGITAL LITERACY** **How are computers connected?** -Understand computer networks, including the Internet; how they can provide multiple services, such as the World Wide Web; and the opportunities they offer for communication and collaboration.
	COMPUTER SCIENCE **Can I control a game using a flowchart?** -Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts -Use sequence, selection, and repetition in programs; work with variables and various forms of input and output	**INFORMATION TECHNOLOGY AND COMPUTER SCIENCE** **How do I know if information and images are reliable?** -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	**COMPUTER SCIENCE** **Can I create a game using variables?** -Design, write and debug programs that accomplish specific goals. -Use sequence, selection, and repetition in programs; work with variables and various forms of input and output. -Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs.

		a range of programs, systems, and content that accomplish given goals, including collecting, analysing, evaluating, and presenting data and information -Use technology safely, respectfully, and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact	
YEAR 5	**DIGITAL LITERACY** **How do I use technology safely and responsibly?** -Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.	**INFORMATION TECHNOLOGY - MULTIMEDIA** **Can I design my own app?** -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.	**DIGITAL LITERACY** **Can I write a blog?** -Understand computer networks, including the Internet; how they can provide multiple services, such as the World Wide Web; and the opportunities they offer for communication and collaboration.
	COMPUTER SCIENCE **Can I control moving toys using subroutines and multiple outputs?** -Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts -Use sequence, selection, and repetition in programs; work with variables and various forms of input and output.	**INFORMATION TECHNOLOGY - DATA** **Can I present my findings from a real-life database?** -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	**COMPUTER SCIENCE** Can I use a micro:bit as a counting device? -Design, write and debug programs that accomplish specific goals, **including controlling or simulating physical systems**; solve problems by decomposing them into smaller parts -Use sequence, selection, and repetition in programs; work with variables and various forms of input and output. -Use logical reasoning to explain how some simple

		collecting, analysing, evaluating and presenting data and information.	algorithms work and to detect and correct errors in algorithms and programs.
YEAR 6	**DIGITAL LITERACY** **How do I use technology safely and responsibly?** -Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact	**INFORMATION TECHNOLOGY - DATA** **Can I solve problems using excel?** -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.	**DIGITAL LITERACY** **How is data transmitted across networks?** -Understand computer networks, including the Internet; how they can provide multiple services, such as the World Wide Web; and the opportunities they offer for communication and collaboration.
	COMPUTER SCIENCE **Can I use a micro: bit as a step counter?** -Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts -Use sequence, selection, and repetition in programs; work with variables and various forms of input and output. -Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs.		**COMPUTER SCIENCE** **Can I use conditional statements to control a train simulation?** -Design, write and debug programs that accomplish specific goals, **including controlling or simulating physical systems**; solve problems by decomposing them into smaller parts. -Use sequence, selection, and repetition in programs; work with variables and various forms of input and output. -Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs·