



Stapleford Abbotts Primary Academy - Computer Science Curriculum Progression Document KS2

	Year 3	Year 4	Year 5	Year 6
	<p><u>National Curriculum:</u> A high-quality computing education equips pupils to use computational thinking and creativity to understand and change the world. Computing has deep links with mathematics, science, and design and technology, and provides insights into both natural and artificial systems. The core of computing is computer science, in which pupils are taught the principles of information and computation, how digital systems work, and how to put this knowledge to use through programming. Building on this knowledge and understanding, pupils are equipped to use information technology to create programs, systems, and a range of content. Computing also ensures that pupils become digitally literate - able to use, and express themselves and develop their ideas through, information and communication technology - at a level suitable for the future workplace and as active participants in a digital world. Aims The national curriculum for computing aims to ensure that all pupils: can understand and apply the fundamental principles and concepts of computer science, including abstraction, logic, algorithms and data representation, can analyse problems in computational terms, and have repeated practical experience of writing computer programs in order to solve such problems, can evaluate and apply information technology, including new or unfamiliar technologies, analytically to solve problems , are responsible, competent, confident and creative users of information and communication technology.</p>			
Computer Science	<ul style="list-style-type: none"> - Pupils design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts. - Pupils use sequence, selection and repetition in programs; work with variables and various forms of input and output. - Pupils use logical reasoning to explain how some simple 	<ul style="list-style-type: none"> - Pupils design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts. - Pupils use sequence, selection and repetition in programs; work with variables and various forms of input and output. - Pupils use logical reasoning to explain how some simple 	<ul style="list-style-type: none"> - Pupils design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts. - Pupils use sequence, selection and repetition in programs; work with variables and various forms of input and output. - Pupils use logical reasoning to explain how some simple 	<ul style="list-style-type: none"> - Pupils design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts. - Pupils use sequence, selection and repetition in programs; work with variables and various forms of input and output. - Pupils use logical reasoning to explain how some simple



Stapleford Abbots Primary Academy – Computer Science Curriculum Progression Document KS2

	<p>algorithms work and to detect and correct errors in algorithms and programs</p> <p>- Pupils 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.</p>	<p>algorithms work and to detect and correct errors in algorithms and programs</p> <p>- Pupils 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.</p>	<p>algorithms work and to detect and correct errors in algorithms and programs.</p> <p>- Pupils 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.</p>	<p>algorithms work and to detect and correct errors in algorithms and programs.</p> <p>- Pupils 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.</p>
Information Technology	Year 3	Year 4	Year 5	Year 6
	<p>- Pupils use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content.</p> <p>- Pupils 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.</p>	<p>- Pupils use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content.</p> <p>- Pupils 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.</p>	<p>- Pupils use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content.</p> <p>- Pupils 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.</p>	<p>- Pupils use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content.</p> <p>- Pupils 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.</p>
Digital Literacy	Year 3	Year 4	Year 5	Year 6



Stapleford Abbots Primary Academy - Computer Science Curriculum Progression Document KS2

	- Pupils use technology safely, respectfully, and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.	- Pupils use technology safely, respectfully, and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.	- Pupils use technology safely, respectfully, and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.	- Pupils use technology safely, respectfully, and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.
	Year 3	Year 4	Year 5	Year 6
E-Safety	- Pupils use technology safely, respectfully and responsibly. They recognise acceptable/unacceptable behaviour and can identify a range of ways to report concerns about content and contact.	- Pupils use technology safely, respectfully and responsibly. They recognise acceptable/unacceptable behaviour and can identify a range of ways to report concerns about content and contact.	- Pupils use technology safely, respectfully and responsibly. They recognise acceptable/unacceptable behaviour and can identify a range of ways to report concerns about content and contact.	- Pupils use technology safely, respectfully and responsibly. They recognise acceptable/unacceptable behaviour and can identify a range of ways to report concerns about content and contact.