Computing Essential Knowledge and Skills

In year one and year two, the expectation is for the children to be able to use a shared device to ensure that they are given the maximum opportunity to learn the skills for the lesson. Class teachers monitor who is accessing, so all children are able to log on a device or the online learning platform. By the time children reach year 3 and beyond, there is an expectation of independence towards this.

EYFS		
Communication and		
language	Computing in EYFS focuses opportunities for the use of technology to solve problems and produce creative outcomes. Teachers provide possibilities throughout the year for pupils to develop their computational thinking effectively, primarily through their understanding of the world, but also the other Early Learning Goals.	
Understanding the world		
Personal, social and		
emotional development		
Physical development		
Literacy		
Mathematics		
Expressive arts and design		

Year One and Two		
Computer Science	Understand what algorithms are, how they are implemented as programs on digital devices, and that programs execute by following precise and unambiguous instructions. Create and debug simple programs.	
	Use logical reasoning to predict the behaviour of simple programs.	
Information Technology	echnology Use technology purposefully to create, organise, store, manipulate, and retrieve digital content. Recognise common uses of information technology beyond school.	
Use technology safely and respectfully, keeping personal information private; identify wher go for help and support when they have concerns about content or contact on the internet other online technologies.		

Year Three and Four		
Computer Science	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.	
Information Technology	Able to log on to their own device using their own login details and other platforms required. 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. 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.	
Digital Literacy	Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact	

Year Five and Six		
Computer Science	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.	
Information Technology	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. 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.	
Digital Literacy	Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.	