

# Computing Skills Progression

	KS1	LKS2	UKS2
Computer Science	I understand what algorithms are and how they are implemented as programs on digital devices.	I can design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems.	I can design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems.
	I understand that programs execute by following precise and unambiguous instructions.	I can solve problems by decomposing them into smaller parts.	I can solve problems by decomposing them into smaller parts.
	I can create a simple program.	I can experiment with various coding structures e.g. selection ('if' statements), repetition (repeat commands and timers) and variables.	I can use sequence, selection and repetition in programs; work with variables and various forms of input and output.
	I can debug a simple program.	I can identify errors in more complex code.	I can test and debug my program, using logical methods to identify the cause of any bug.
	I can use logical reasoning to predict the behaviour of simple programs.	I can use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs.	I can use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs.
		I can list a range of ways the internet can be used for communication and use some of these methods e.g. email.	I can select the most appropriate form of online communications contingent on audience and digital content, e.g. email, blog etc.
		I recognise the main components of hardware which allow computers to join and form a network.	I understand the value of computer networks but also the main dangers. I know what personal information is and can explain how this can be kept safe.
			I understand and can explain the difference between the internet and the World Wide Web.
Information Technology	I can use a range of technology purposefully to create, organise and store simple digital content e.g. name and save my work, follow simple instructions to access online resources, organise data using a simple database etc.	I can carry out simple searches to retrieve digital content. I understand that to do this I am connecting to the internet.	I can search with greater complexity for digital content when using a search engine e.g. applying a filter. I can explain in some detail how credible a webpage is and the information it contains.
	I can use a range of technology purposefully to retrieve and manipulate digital content e.g. finding, editing and resaving my work.	I can create purposeful content to attach to emails or share with my community e.g. digital display boards.	I can collaboratively create content and solutions using digital features within software. I can use several ways of sharing digital content, e.g. email, blog, digital display boards etc.
	I can use a range of media in my digital content e.g. photos, text and sound.	I can collect, analyse, evaluate and present data and information using a selection of software. I can consider what software is most appropriate for a given task.	I can make appropriate improvements to digital solutions based on feedback received and can objectively review solutions from others.
Digital Literacy	I recognise common uses of information technology beyond school.		
	I know the importance of keeping my personal information private.	I know the importance of using secure passwords and can explain the implications of failure to keep my password safe.	I can relate appropriate online behaviour to my right to personal privacy and mental wellbeing of myself and others.
	I know where to go for help when I have concerns about content or contact on the internet or other online technologies.	I understand the importance of conduct when using communication tools and can recognise acceptable / unacceptable behaviour. I know a number of ways to report unacceptable content and contact	I have a secure knowledge of online safety rules and can apply this by demonstrating safe and respectful use of different technologies.