

**By the end of Early Years:** -Children recognise that a range of technology is used in places such as homes and schools.  
Children select and use technology for a particular purpose.

By the end of KSI	By the end of KS2 (lower)
<ul style="list-style-type: none"> <li>• Understand what algorithms are; how they are implemented as programmes on digital devices: and that programs execute by following precise and unambiguous instructions.</li> <li>• Create and debug simple systems</li> <li>• Use logical reasoning to predict the behaviour of simple programs</li> <li>• Recognise common uses of information technology beyond school</li> <li>• Use technology purposefully to create, organise, store, manipulate and retrieve digital content</li> <li>• 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.</li> </ul>	<ul style="list-style-type: none"> <li>• Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts</li> <li>• Use sequence, selection and repetition in programs; work with variables and various forms of input and output</li> <li>• Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs</li> <li>• Understand computer networks including the Internet; how they can provide multiple services, such as the worldwide web; and the opportunities they offer for communication and collaboration</li> <li>• Use search technologies effectively, appreciate how results are selected and ranked, and to be discerning in evaluating digital content.</li> <li>• Select, use and combine a variety of software 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.</li> <li>• Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.</li> </ul>

Contexts	Year 1	Year 2	Year 3	Year 4
<b>Programming</b>	Using programmable toys	Programming on screen	Programming an animation	Developing a simple educational game
<b>Computational thinking</b>	Filming the steps of a recipe	Exploring how computer games work	Finding and correcting bugs in programs	Prototyping an interactive toy
<b>Creativity</b>	Illustrating an eBook	Taking better photos	Videoring performance	Producing digital music
<b>Computer networks</b>	Finding images using the web	Researching a topic	Making and sharing a short screencast presentation	Editing and writing HTML
<b>Communication/Collaboration</b>	Producing a talking book	Collecting clues – emails	Communicating safely on the internet	Producing a wiki
<b>Productivity</b>	Creating a card digitally	Collecting data about bugs	Collecting and analysing data	Presenting the weather