

Skills Ladder

KEY STAGE ONE	KEY STAGE TWO
 C1 Recognise and understand that algorithms are implemented as programs on digital devices, executing by following precise and unambiguous instructions C2 Create and debug simple programs C3 Use logical reasoning to predict the behaviour of simple programs 	 C4 Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems C5 Solve problems by decomposing them into smaller parts C6 Use sequence, selection, and repetition in programs C7 Work with variables and various forms of input and output C8 Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs C9 Understand computer networks including the internet, recognising how they can provide multiple services, such as the world-wide web





Skills Ladder

YEAR ONE / TWO		
INVESTIGATION	Ict1 Explore digital resources by using hyperlinks and simple menus Ict2 Use the internet and other digital sources to find out about significant issues, events and people and explore real and imaginary locations	
OBSERVATION	Ict3 Collect, sort, record and represent information to inform investigations and designs Ict4 Draw conclusions from data collected Ict5 Identify common uses of information technology beyond school	
APPLICATION	Ict6 Give instructions to make things happen using programmable devices Ict7 Use technology purposefully to create, capture, organise, store, manipulate, retrieve and present digital content Ict8 Try alternatives using a range of tools and techniques to alter text, images and sounds Ict9 Combine written text with graphics, tables, sound and images and present work appropriately Ict10 Use ICT to communicate with unknown audiences Ict12 Plan, discuss and review work developed using ICT in order to improve it Ict13 Use technology safely and respectfully, keeping personal information private Ict14 Identify when and where to go for help and support when they have concerns about material on the internet	



Skills Ladder

	YEAR THREE / FOUR
INVESTIGATION	 Ict15 Use ICT to explore a range of number patterns and models including changing values and asking "what if?" questions Ict16 Use ICT to explore alternative ideas in order to refine and improve outcomes and performances Ict17 Explore alternative approaches to develop and refine work Ict18 Save and use stored information to follow lines of enquiry
OBSERVATION	Ict19 Identify how ICT can be used to collect and structure information, including the use of surveys, so that it can be searched and analysed Ict20 Identify the opportunities computer networks offer for communication and collaboration Ict21 Verify the accuracy and reliability of the information found, distinguishing between fact and opinion
APPLICATION	Ict22 Use key words to search for and select appropriate information from the internet and other digital sources Ict23 Capture, record and analyse data using sensors in order to support observations and investigations Ict24 Refine sequences of instructions to control events or make things happen using ICT Ict25 Use a variety of ICT tools to create, refine and present work in a variety of ways Ict26 Use ICT to exchange ideas and collaborate with others remotely Ict27 Use features of layout, presentation and organisation in print and on screen Ict29 Use editing skills for visual effects



Skills Ladder

	YEAR FIVE / SIX
INVESTIGATION	Ict30 Use ICT to explore and develop simple models by changing variables and simple formulae Ict31 Use ICT to create and refine sequences of instructions to explore problems and make controllable systems
OBSERVATION	Ict32 Answer questions by using ICT to identify, collect, store, analyse and present information Ict33 Verify the accuracy and reliability of the information found online, detect bias and distinguish evidence from opinion Ict34 Analyse, describe and discuss the effectiveness of their work with ICT Ict35 Identify a range of ways to report concerns and inappropriate behaviour
APPLICATION	 Ict36 Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content Ict37 Represent data from analysis in appropriate ways, including the use of graphs Ict38 Use a variety of ICT tools to create, develop and refine presentations and performances, integrating effects to enhance outcomes Ict39 Select, use and combine a variety of software (including internet services) on a range of digital devices to accomplish given goals, including collecting, analysing, evaluating and presenting data and information Ict40 Organise and adjust communication according to the needs of the audience and the technology, including taking account of the quality and content of the communication Ict41 Use a variety of ICT tools to create, refine and present work in a variety of digital and printed formats using appropriate forms and conventions Ict42 Use ICT safely, respectfully and responsibly, managing risk and showing awareness of other users