Key Stage 1 Computing	**Computer Science** Learning how to program and control digital systems	**Computer Literacy** Learning how to use a range of digital systems safely and effectively.	**Information Technology** Using a range of digital devices and systems to support learning, communication and creativity.

Key Stage 1 **Statutory Knowledge & Concepts**	**Suggested resources**
Computer Science Predict the behaviour of simple programs. Create simple programs and algorithms. Debug simple programs. Understand what algorithms are and how they are implemented on digital devices.	Bee-bots Pro-bots Espresso coding Lego/ brio/ other construction toys
Computer Literacy 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. Recognise common uses of information technology beyond school.	CEOP Think You Know https://www.thinkuknow.co.uk/5_7/
Information technology Use technology purposefully to create, organise, store, manipulate and retrieve digital content.	2 Simple Camera/ tablet

Key Stage 1 Information Technology Skills

Create an image using digital software	Enter text using a computer keyboard	Save a document in a specified location on the server	Log on to computer independently	Edit text on screen	Edit and improve an image using paint software	Retrieve previously saved work

Lower Key Stage 2 Computing	**Computer Science** Learning how to program and control digital systems	**Computer Literacy** Learning how to use a range of digital systems safely and effectively.	**Information Technology** Using a range of digital devices and systems to support learning, communication and creativity.

Lower Key Stage 2 **Statutory Knowledge & Concepts**	**Suggested resources**
Computer Science Design, and write a program that accomplishes a specific goal. Debug programs by visualising effects of algorithms and using logical reasoning. Create and debug programs to control or simulate physical environments. Solve problems by decomposing them into smaller parts. Use repetition in programs by creating simple loops.	Pro-bots Lego Wedo Espresso coding Scratch
Computer Literacy Understand computer networks operate through a server. Use search technologies and start to be discerning in evaluating digital content by recognising that some internet content may be unreliable. Use technology safely, respectfully and responsibly. Distinguish between safe and unsafe use of technology. Identify a range of ways to report concerns about content and contact.	CEOP Think You Know https://www.thinkuknow.co.uk/8_10/ Internet Legends Kiddle/ Google (safe search enabled)
Information technology Combine content created using different software *(e.g. pictures and text to make a newsletter).*	Microsoft Word Microsoft Publisher Paint Camera/ tablets

Lower Key Stage 2 Information Technology Skills

Retrieve previously saved work	Change the appearance of text for specific effect	Use spell check to correct errors in text	Combine text and images using word processing or publishing software	Use a range of tools in drawing/ painting software purposefully (fill/ shape/ brush selection)	Collect and present data.	Manage files effectively by creating folders.

Upper Key Stage 2 Computing	**Computer Science** Learning how to program and control digital systems	**Computer Literacy** Learning how to use a range of digital systems safely and effectively.	**Information Technology** Using a range of digital devices and systems to support learning, communication and creativity.

Upper Key Stage 2 **Statutory Knowledge & Concepts**	**Suggested resources**
Computer Science Design, and write a program that accomplishes specific goals. Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs. Create and debug programs to control or simulate physical systems. Solve problems by decomposing them into smaller parts. Use sequence, selection and repetition in programs. Work with variables as part of a computer program. Work with various forms of input and output.	Probot Lego Mindstorms Espresso coding Scratch Kodu App Inventor
Computer Literacy Understand computer networks including the internet and recognise the opportunities they offer for communication and collaboration. Use search technologies effectively showing an appreciation for how results are selected and ranked. Be discerning in evaluating digital content. Use technology safely, respectfully and responsibly, recognising acceptable/ unacceptable behaviour, and identify a range of ways to report concerns about content and contact.	CEOP Think You Know https://www.thinkuknow.co.uk/8_10/ https://www.thinkuknow.co.uk/11_13/ Internet Legends
Information technology Select appropriate software/ digital service/ digital device to complete a particular task. Use a range of devices and software applications. Manipulate a range of digital media (text/ image/ sound/ video) to accomplish given goals. Collect, analyse, evaluate and present data and information using ICT software applications and hardware.	Microsoft Word Microsoft Publisher Microsoft Powerpoint Microsoft Excel Movie Maker Camera/ tablets Weebly or similar web content editor Mail systems

Lower Key Stage 2 Information Technology Skills

Manage files effectively by creating folders and saving files logically.	Use word processor accurately and with increasing speed. Combine text with images or other objects to create a desired effect.	Use software tools to animate and sequence a presentation	Create, manipulate and present digital images	Combine image/ video and sound files to create a movie	Use a spreadsheet to find totals and averages	Use a spreadsheet to sort and rank data