

KS1 National Curriculum for Computing

Pupils should be taught to:

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

- ♣ use technology purposefully to create, organise, store, manipulate and retrieve digital content
- ♣ recognise common uses of information technology beyond school

Digital 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.

Y1	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
	Computer skills Locating, opening, closing, files and folders, programs or apps. Effective use of devices. Use of touch screen (swipe, drag and drop, pinch to enlarge etc.) Use	iAlgorithm Giving and following instructions	iWrite Creating digital text	iSafe Online safety	iProgram Algorithms and programming	iData Introducing data representation

	of keyboard and mouse, identification of purpose of different keys (space, return, delete, num lock etc.) Basic MS Office skills How to use the internet safely and responsibly. Effective use of remote learning software					
Y2	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
	<u>Computer skills</u> Locating, opening, closing, files and folders, programs or apps. Effective use of devices. Use of touch screen (swipe, drag and drop, pinch to enlarge etc.) Use of keyboard and mouse, identification of purpose of different keys (space, return, delete, num lock etc.) Basic MS Office skills How to use the internet safely and responsibly. Effective use of remote learning software	<u>I Do Mail</u> Introduction to email	<u>iAnimate</u> Creating animations	<u>iSafe</u> Online safety	<u>iProgram</u> Algorithms and programming	<u>iPub</u> Creating ebooks and e-audio

KS2 National Curriculum for Computing

Pupils should be taught to:

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.

Y3	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
	iProgram Games and animation development	iSimulate Exploring computer simulations	iNetwork Introducing networks	iSafe Online safety	iData Introducing databases	iPodcast Editing audio
Y4	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
	iProgram Making shapes and navigating mazes	iData Data representation	iMail Working together with email	iSafe Online safety	iAnimate Introduction to animation	iPodcast – missed unit no sound work done Editing audio
Y5	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
	iProgram Designing and developing programs	iDraw Graphical drawing	iCrypto Data and cryptography	iSafe Online safety	iWeb Creating web content	iModel 3D graphical modelling
Y6	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
	iProgram Designing and developing programs	iNetwork Networks, Data and HTML/CSS	iData Introducing spreadsheets	iSafe Online safety	iApp Developing apps	iApp Developing apps