Computing Whole School Overview

	Autumn		Spring		Summer	
	A	B	C	D	E	F
Year 7	Communicating Info Using Text		Creating Pictures	Introduction to Presentations	E-Safety – What and Where We Share	Inputs, Processes, and Outputs
Year 8	Communicating Information with Numbers	An Introduction to Binary	Capturing and Editing Digital Images	Computational Thinking (Boolean Theory)	Electronic Communication	Introduction to Databases
Year 9	Writing for Different Audiences (Fact, Opinion, Bias)		Introduction to Spreadsheets	Introduction to Animation	Introduction to Programming	Programming: BeeBots
Year 9 Skills for Life	Writing for Different Audiences (Fact, Opinion, Bias)		Using Excel	Introduction to Animation	Creating Algorithms	Programming: Scratch
Year 10	Exploring Formatting Techniques (ID Cards & Business Cards)		Visual Programming: Coding with BeeBots & Scratch		Handling Data (Responsibilities)	Public Information Systems – Weather Reports
Year 10 Skills for Life	Creating Business Print Media (ID Cards & Business Cards)		Programming: Block Coding - Microbit & Java Script (Blockly Games & Crunchzilla)		Data Query Techniques (Responsibilities)	Public Information Systems – Weather Reports
Year 11	Sharing Information Using Technology		How a Computer Works		Capturing and Editing Digital Photos	Communicating Info Using Text (Personal Statements)
Year 11 Skills for Life	Producing an Information Leaflet		Computer Systems		Capturing and Editing Digital Photos	CV Writing

Key: Information Technology | Digital Citizenship | Computer Science

National Curriculum in England: Computing Programmes of Study

Key Stage 3 pupils should be taught to:	***Specific SCP SoWs that offer these opportunities:***
• design, use and evaluate computational abstractions that model the state and behaviour of real-world problems and physical systems	Year 7, Summer F - Inputs, Processes and Outputs Year 8, Autumn B - An Introduction to Binary Year 8, Spring D - Computational Thinking (Boolean Theory) Year 9, Summer E - Introduction to Programming Year 9, Summer F - Programming: Beebots
• understand several key algorithms that reflect computational thinking [for example, ones for sorting and searching]; use logical reasoning to compare the utility of alternative algorithms for the same problem	
• use 2 or more programming languages, at least one of which is textual, to solve a variety of computational problems; make appropriate use of data structures [for example, lists, tables or arrays]; design and develop modular programs that use procedures or functions	
• understand simple Boolean logic [for example, AND, OR and NOT] and some of its uses in circuits and programming; understand how numbers can be represented in binary, and be able to carry out simple operations on binary numbers [for example, binary addition, and conversion between binary and decimal]	
• understand the hardware and software components that make up computer systems, and how they communicate with one another and with other systems	
• understand how instructions are stored and executed within a computer system; understand how data of various types (including text, sounds and pictures) can be represented and manipulated digitally, in the form of binary digits	
• undertake creative projects that involve selecting, using, and combining multiple applications, preferably across a range of devices, to achieve challenging goals, including collecting and analysing data and meeting the needs of known users	Year 8, Summer E - Electronic Communication Year 8, Summer F - Introduction to Databases Year 9, Spring D - Introduction to Animation
• create, reuse, revise and repurpose digital artefacts for a given audience, with attention to trustworthiness, design and usability	Year 9, Autumn A & B - Writing for Different Audiences (Fact, Opinion, Bias)
• understand a range of ways to use technology safely, respectfully, responsibly and securely, including protecting their online identity and privacy; recognise inappropriate content, contact and conduct, and know how to report concerns	Year 7, Summer E - E-Safety, What and Where We Share Year 8, Summer E - Electronic Communication