Intent   Create competent and aware computer users in an ever developing digital world

Threads | Programming Skills | | Computing Theory | | Research |

Term 1

	1	2	3	4	5	6	7	HT	HT	1	2	3	4	5	6	7
YR7	CPU, Memory & Storage (5,6)*										BEBRAS (1)*		E-Safety - Web Awareness (9)			
YR8	Computer Systems (5,6)*										BEBRAS (1)*		E-Safety - Scenario (9)			
YR9	Boolean, Binary & Hex (4)*										BEBRAS (1)*		E-Safety - Scenario (9)			

Term 2

	1	2	3	4	5	6	HT	1	2	3	4	5	6
YR7	Scratch (3)*							Scratch Projects (3)					
YR8	Intro to Python & Algorithms (1,2,3)*							Affinity Designer Projects (7,8)*					
YR9	CS Theory (CPU, Memory, Storage)*							CS Theory - Software (OS, Utility, Application)*					

Term 3

	1	2	3	4	5	6	HT	1	2	3	4	5	6	7	8
YR7	Computational Thinking (1)*							HTML (3)							
YR8	CS Theory - Software (Application and OS)							MakeCode Arcade (1,2,3)							
YR9	Advanced Python (1,2,3)							Comp Thinking		Search & Sort		Legislation		Networks	

National Curriculum

1	design, use and evaluate computational abstractions that model the state and behaviour of real-world problems and physical systems
2	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
3	use two 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
4	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]
5	understand the hardware and software components that make up computer systems, and how they communicate with one another and with other systems
6	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
7	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
8	create, re-use, revise and re-purpose digital artefacts for a given audience, with attention to trustworthiness, design and usability
9	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