Curriculum Content Map

Subject: Computer Science

Year group: 7

	TERM 1		TERM 2		TERM 3	
Unit title & description	Clear messaging in digital media Combining the use of digital tools and online collaboration to produce media.	Networks - from semaphores to the internet Recognising networking hardware and explaining how networking components are used for communication.	Programming essentials in Scratch - part I Applying the programming constructs of sequence, selection, and iteration in Scratch.	Programming essentials in Scratch - part II Using subroutines to decompose a problem that incorporates lists in Scratch.	Using media - Gaining support for a cause Creating a digital product for a real- world cause.	Modelling data using spreadsheets Sorting and filtering data and using formulas and functions in spreadsheet software.
Sequencing	General introduction to computing and its application to the wider world.	Students would have not studied Networks at KS2. They will be starting new	Some students would have studied the basics at KS2 however, students to be introduced to Algorithms and their component parts (Selection, Sequence and Iteration).		Students would have not studied Using Media at KS2. They will be starting new	Students would have not studied Data Modelling at KS2. They will be starting new
Knowledge	Create, reuse, revise and repurpose digital artefacts for a given audience, with attention to trustworthiness, design and usability	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.	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		Understand the hardware and software components that make up computer systems, and how they communicate with one another and with other systems	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]
Retrieval Practice	Knowledge tests Quick quizzes DO Now recall tasks	Knowledge tests Quick quizzes DO Now recall tasks	Knowledge tests Quick quizzes DO Now recall tasks		Knowledge tests Quick quizzes DO Now recall tasks	Knowledge tests Quick quizzes DO Now recall tasks
Sequencing Skills	Use digital tools to create a campaign	Use the emulator to build their own network.	To be able to demonstrate the basics of programming using Scratch.		Create a digital product using the skills taught	Develop a spreadsheet model using the formulas and functions learnt.
Literacy	Students to be introduced to unit specific terminology	Students to be introduced to unit specific terminology	Students to be introduced to	unit specific terminology	Students to be introduced to unit specific terminology	Students to be introduced to unit specific terminology
Numeracy X ÷	Understand how data of various types (including text, sounds and pictures) can be represented and manipulated digitally, in the form of binary digits	Understand how data of various types (including text, sounds and pictures) can be represented and manipulated digitally, in the form of binary digits	Understand how data of vari sounds and pictures) can be digitally, in the form of binar	represented and manipulated	Understand how data of various types (including text, sounds and pictures) can be represented and manipulated digitally, in the form of binary digits	Understand how data of various types (including text, sounds and pictures) can be represented and manipulated digitally, in the form of binary digits

Enrichment learning		Practical opportunities, which includes working in groups. Possibility of investigation or project work.	Practical opportunities, which includes working in groups. Possibility of investigation or project work.	Practical opportunities, which includes working in groups. Possibility of investigation or project work.	Practical opportunities, which includes working in groups. Possibility of investigation or project work.	Practical opportunities, which includes working in groups. Possibility of investigation or project work.
British values and SMSC		- Online bullying - Online relationships - Privacy and security	- Online bullying - Online relationships - Privacy and security	- Privacy and security	- Privacy and security	- Privacy and security
Character	Ť	Redrafting extended answers allows development of resilience. Working in groups develops confidence. Homework and projects develop independence	Redrafting extended answers allows development of resilience. Working in groups develops confidence. Homework and projects develop independence	Redrafting extended answers allows development of resilience. Working in groups develops confidence. Homework and projects develop independence.	Redrafting extended answers allows development of resilience. Working in groups develops confidence. Homework and projects develop independence	Redrafting extended answers allows development of resilience. Working in groups develops confidence. Homework and projects develop independence
Careers	i ≸≯.	Media Content Creator	Network Engineer Network Specialist Cisco Professional	Games Coder Coder Systems Architect	Social Media Designer	Data Analyst Data Scientist Data Coach
Assessment opportunities	\$ <u>-</u> \$	Keyword spelling and definition tests, AP assessments, extended writing exam questions, homeworks	Keyword spelling and definition tests, AP assessments, extended writing exam questions, homeworks	Code Practice, keyword spelling and definition tests, AP assessments, extended writing exam questions, homeworks	Keyword spelling and definition tests, AP assessments, extended writing exam questions, homeworks	Keyword spelling and definition tests, AP assessments, extended writing exam questions, homeworks
Personalised C for all	Challenge	SEND to focus developing Los: recall, identify, match. Scaffolds to support SEND. HPA to be extended with the exceeding Los	SEND to focus developing Los: recall, identify, match. Scaffolds to support SEND. HPA to be extended with the exceeding Los	SEND to focus developing Los: recall, identify, match. Scaffolds to support SEND. HPA to be extended with the exceeding Los	SEND to focus developing Los: recall, identify, match. Scaffolds to support SEND. HPA to be extended with the exceeding Los	SEND to focus developing Los: recall, identify, match. Scaffolds to support SEND. HPA to be extended with the exceeding Los