Computer Science and Media Curriculum Long Term Planning

		Term 1		Term 2		Term 3	
Year 7	Big Idea	Am I safe online when using the internet?	What is data and how do computers store it?	What are algorithms and flowcharts?	Do I understand computer hardware and software?	Can I program a Micro:bit computer?	Can I digitally manipulate a photo in Photoshop?
	Key Knowledge and skills	Intro to Microsoft Teams, E-Mail / SMART rules, staying safe online, cyberbullying and how to report.	Binary conversion, addition, ASCII and encryption.	Sequencing, Selection, Iteration, Big Trak Programming, Debugging and Flowcharts	Input-Process-Output-Storage model, devices, hardware, software. Build main parts of a computer	Sequencing, Selection, Iteration, Debugging - Block based programming	Digital Image manipulation with Photoshop, use of digital camera, greenscreen.
	End Point	Students should know 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.	Students should know how instructions and data are stored within a computer system; understand how data of various types (including text, sounds and pictures) can be represented digitally, in the form of binary digits	Students should know that programs can be depicted graphically by using flowcharts and students should know how to sequence instructions.	Students should know basic hardware and software components that make up computer systems, and how they communicate with one another and with other systems	Pupils should apply block-based programming to solve a variety of computational problems.	Pupils should be taught to create, reuse, revise and repurpose digital artefacts for a given audience, with attention to trustworthiness, design and usability
Year 8	Big Idea	Am I safe online when uploading	Can I program a computer using a textual programming language?	Can I recall Binary and how we use Hexadecimal numbers	How is data collected and analysed?	Can I create your own 3D game in Kodu?	Can I use advanced photoshop skills to

		content to the internet?		to represent larger numbers?			create your own mutant animal?
	Key Knowledge and skills	E-Mail recap, SMART rules recap, staying safe online when uploading content, online reputations, how to report, phishing, social engineering.					
	End Point			POS KS3.6 - Pupils should be taught to 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			
Year 9	Big Idea	How do cybercriminals steal data, disrupt systems, and infiltrate networks?	How do I use Blender to create a 3D animation?	Can I combine input, output, selection and iteration in a text-based programming language?	Can I create a game using Game Maker Studio?	Can I create a spreadsheet using applicable formula?	Do I understand finances?

	Key Knowledge and skills						
	End Point						
Year 10 Computer Science	Big Idea	Unit 1 & 6: Computational Thinking and Programming Unit 2: Data	Unit 1 & 6: Computational Thinking and Programming Unit 2: Data	Unit 1 & 6: Computational Thinking and Programming Unit 3: Computers	Unit 1 & 6: Computational Thinking and Programming Unit 3: Computers	Unit 1 & 6: Computational Thinking and Programming Unit 4: Networks	Unit 1 & 6: Computational Thinking and Programming Unit 4: Networks
	Key Knowledge and skills						
	End Point						
Year 11 Computer Science	Big Idea	Unit 1 & 6: Computational Thinking and Programming Unit 2: Data	Unit 1 & 6: Computational Thinking and Programming Unit 3: Computers	Unit 1 & 6: Computational Thinking and Programming Unit 4: Networks	Unit 1 & 6: Computational Thinking and Programming Unit 5: Issues and Impact		
	Key Knowledge and skills						

	End Point						
Year 10 Media	Big Idea	Understanding Games // Understanding Film	Maze Game // A Day In The Life Of	Media Theory Component 1	Component 1 continued…	Platformer // Advert	Final Game Project // Final Film Project
	Key Knowledge and skills						
	End Point						
Year 11 Media Gaming	Big Idea	Component 2	Component 2 continued…	Component 3	Component 3 continued…	Component 3 completion // Revision Lessons	
	Key Knowledge and skills						
	End Point						