

Key Stage 3 Curriculum Map

Term	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
	Introduction to school systems and staying safe online	Computational Thinking	Computational Thinking	Physical Computing	Physical Computing	Scratch
Year 7	Basics of Microsoft Office 365. This includes using email, Word and Teams. They will also learn about some basics of online safety and how to behave responsibly online.	Introduction to computational thinking. They will learn how about how to represent algorithms as flowcharts and to program using Flowol.	Continuing with computational thinking module.	Introduction to physical computing. Students will start by learning about input and output devices and then the hardware that makes up computer systems. The students will use the internet to source parts to build computers of two different specifications. They will then learn about how and why networks are created by hardware.	Continuing with physical computing module.	Introduction to constructs of assignment, selection and iteration in Scratch programming



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	Introduction to Networks	Python and EduBlock	Image Manipulation	User Interfaces	Excel	Online Safety and Cyberbullying
Year 8	Introduction to the concept of networking, developing students understanding of internet safety. The context of the unit will be centred around setting up a network, using networked applications and reflecting on online safety. Learning the basics of networks and topologies, digital footprint, staying protected online, encryption and legal, moral and ethical issues related to networking.	Introduction to programming in Python. Starting with the basics of variable assignment, then moving into selection and iteration. Representation of arrays as lists and how to work with the lists. How to use randomisation in programming. Introduction to programming in EduBlock. Starting with the basics of variable assignment and moving into selection and iteration.	Investigating how to use a variety of applications to manipulate images and text to design magazine covers. Introduction to Photoshop and Fireworks, as well as the Copyright, Designs and Patent Act. This unit of work fits into the 'Information Technology' strand of the Computer Science Curriculum.	Introduction to the user interface and how they are designed for different target audiences. Students will design their own user interfaces for a specific purpose.	Learning the basics of spreadsheets using Excel. Learning to apply formulas, functions and formatting techniques. They will use these skills to create a dashboard.	The purpose of this unit is to expose students to how cyber bullying affects individuals. Students will learn about project planning tools such as mood boards and storyboards. They will then apply all knowledge filming and editing a short video.



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	Emerging Technology	HTML	Python	Cyber Security	Technology in Sport	Software Development Cycle
Year 9	Introduction to how advances in technology are shaping our lives. They will look at technology that is currently being used in addition to investigating technology which is in development. This is a discussion led unit of work and is designed to engage the pupils and create interest in emerging technology.	Introduction to creating a mini website with HTML using notepad. Students will learn about how to design a useful website and format it to make it interesting and useful to the target audience. Students will create a website with a minimum of 3 pages which are linked together with hyperlinks	Students to further develop their programming knowledge and skills in Python. Students will take on a variety of tasks and create more advanced programs.	Introducing students to the importance of cyber security. They will learn about the development of cyber security along with some methods that are used. Students will learn about social engineering and malicious code.	Introducing students to how sport is developing to use increasing levels of technology. Initial lessons will investigate how technology is used in health, fan engagement and rule making. The unit then gives students the opportunity to apply some of this knowledge through filming sporting activity and then editing the film.	Students will design and create an education game using a programming environment such as Scratch or Python. Students will go through the development process of conceptualising the game idea and its purpose, the design of the game elements and then the implementation of it. Upon completion, students will need to produce a user guide for the game.