



Year 8 - IT & Computing - Curriculum – 2024-2025

	Autumn Term		Spring Term		Summer Term	
	1	2	1	2	1	2
Key Concepts	Cyber Security & Digital Safety	Computational thinking in Scratch	Video Production	Small Basic Programming	Website development	Computer Architecture, System Software, Network Management and Binary Data
Knowledge & Understanding (National Curriculum) <i>Skills are across the whole year.</i>	<p>In Year 8 students will begin to further develop their skills in 3 main areas: Digital Literacy, IT and Computer Science. Students get to further experiment with different skills so they begin to further develop their knowledge and understanding in all the key areas. Students start to get a better understanding of the basic functions of a computer system and how they function. Year 8 students start to expand even further on some topics introduced in year 7 to get a better more in depth understanding of our subject. Students learn how legislation works with computers and using digital data and there is even more emphasis on students being aware of how to keep safe using a range of online tools. Students start to delve further into programming by making computer programs and developing their own game in Scratch programming. Students will also develop their creative digital skills too by developing a range of video products. Students develop their programming skills with text based programming. Students also get a chance to learn more about the internet and how they can represent themselves in a digital environment by developing their own website. Computing theory skills are developed even further looking at the architecture of specific hardware components and their role within a computer system. Students will also develop an even better understanding of binary data and its use within a computer system. Students are taught the key principles of how digital systems work, computation and programming. Pupils will become experienced in analysing problems in computational terms, and have repeated practical experience of writing computer programs in order to solve problems. Students will build on this knowledge to create a range of systems. Pupils will become digitally literate. Students will learn a wide range of problem solving skills, programming skills, collaboration, creativity and all skills are taught in a sequential manner to support independence in assessments.</p>					



Skills	R <i>Develop RESILIENCE</i>	★ <i>Students need to tackle sensitive real world topics such as staying safe online and cyberbullying. Irrespective of how sensitive and tough the students are learning, students will learn from these experiences.</i>
	A <i>Possess AMBITION</i>	★ <i>Students should show a desire to always improve based on constructive feedback and look to participate in group discussions and problem solving computational thinking activities. Students should show a desire to always improve their creative digital skills.</i>
	I <i>Demonstrate INTEGRITY</i>	★ <i>Demonstrating and upholding strong moral and ethical values when learning specific topics throughout the year.</i>
	S <i>Embed Self-Discovery</i>	★ <i>Students have to reflect on topical issues such as digital threats and issues. Students should be open to developing personal opinions and feelings, being mature enough to discuss in a group environment.</i>
	E <i>Display EMPATHY</i>	★ <i>Students need to listen to other people's views, experiences and opinions and be prepared to listen and understand differing viewpoints in order to develop their own personal opinion.</i>
Curriculum Links	<ul style="list-style-type: none"> Digital safety builds on e-safety knowledge and understanding from the year 7 unit of work. Digital safety skills developments links in with PSHE helping students to stay safe. Programming skills are further built on from introduction to programming in year 7 with Micro Bits. Skills are further developed in visual and text based programming ready for further skills development to 	



	<p>access computing courses. Students build on digital IT skills learned in year 7 such as graphics to help them further develop their knowledge and skills in areas such as web development and video production.</p>
<p>Assessment</p>	<ul style="list-style-type: none"> ● Written Text - Unit 1 final checkpoint <ul style="list-style-type: none"> ○ Unit checkpoint - Social media ● Programming Assessment - Unit 2 final checkpoint <ul style="list-style-type: none"> ○ Unit checkpoint - Variables ● Practical Assessment - Unit 3 final checkpoint <ul style="list-style-type: none"> ○ Unit checkpoint - Assets ● Written Test Assessment - Unit 4 final checkpoint <ul style="list-style-type: none"> ○ Unit checkpoint - Selection ● Practical Assessment - Unit 5 final checkpoint <ul style="list-style-type: none"> ○ Unit checkpoint - Master pages ● Written Test Assessment - Unit 6 final checkpoint <ul style="list-style-type: none"> ○ Unit checkpoint - Software
<p>Aspirations & Careers</p>	<ul style="list-style-type: none"> ● Students recognise that the digital sector is a major source of employment in the UK where digital skills span across multiple industries, where almost all jobs in the UK require good levels of digital literacy. Students can pursue a career in computing, the digital sector, university, sixth form or apprenticeship with good digital skills.