



Year 7 - IT & Computing - Curriculum – 2024-2025

	Autumn Term		Spring Term		Summer Term	
	1	2	1	2	1	2
Key Concepts	E-Safety & Digital Security	Graphics and Presentation	Computer Systems, Software and Networking	BBC Micro Bit Programming Unit	Control Unit	Data Management
Knowledge & Understanding (National Curriculum) <i>Skills are across the whole year.</i>	<p>Year 7 begins with students understanding the fundamentals of staying safe online and the dangers of online, students will gain key knowledge of Digital Safety principles. For example, students learn about the importance of passwords, the dangers of cyberbullying and grooming and the importance of a digital footprint and digital health in the wider world, linking to careers. In year 7 students develop a range of skills that allow them to get a better understanding of different sectors of computing. Students are introduced to key computational techniques such as Abstraction and Decomposition. Students will be introduced to block based and text based programming with BBC Microbits where learners will produce a range of programs using key programming techniques such as Sequence, Selection and Iteration. Students will begin to develop their skills in 3 main areas: Digital Literacy, ICT and Computer Science. Students get to experiment with different skills so they begin to get a better understanding of what path they might prefer. Students start to get a better understanding of the basic functions of a computer system and how they function. Students will also develop their creative digital skills too by developing a range of products from a brief with a focus on graphic editing and the presentation of information on a digital document.</p>					



Skills	R <i>Develop</i> RESILIENCE	★ <i>Students need to tackle sensitive real world topics such as grooming and cyberbullying. Irrespective of how sensitive and tough the students are learning, students will learn from these experiences. Solving and executing step by step instructions to develop an algorithm builds resilience.</i>
	A <i>Possess</i> AMBITION	★ <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.</i>
	I <i>Demonstrate</i> INTEGRITY	★ <i>Demonstrating and upholding strong moral and ethical values when learning specific topics throughout the year.</i>
	S <i>Embed</i> Self-Discovery	★ <i>Students have to reflect on topical issues such as grooming, preventative digital threats issues. such as cyber bullying and students should be open to developing personal opinions and feelings, being mature enough to discuss in a group environment.</i>
	E <i>Display</i> EMPATHY	★ <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>



<p>Curriculum Links</p>	<ul style="list-style-type: none"> ● Gaps in knowledge from Year 6 are addressed and any misconceptions in Digital Safety. Digital safety skills developments links in with PSHE helping students to stay safe. Students will learn the fundamentals of block based programming with BBC Micro Bits and in the Control Unit. Students will learn key computational thinking techniques such as Abstraction and Decomposition and key programming techniques such as sequence, selection and iteration. Students will develop their programming / algorithm skills in Year 8 in Small Basic and Scratch however, building on from the fundamentals taught in Year 7. Learning about variables and binary in the Computer Systems unit, this has cross curricular links with Mathematics when problem solving equations and using applying logic to solve formulas.
<p>Assessment</p>	<ul style="list-style-type: none"> ● Written Text - Unit 1 final checkpoint <ul style="list-style-type: none"> ○ Unit checkpoint - Digital Safety ● Practical Assessment - Unit 2 final checkpoint <ul style="list-style-type: none"> ○ Unit checkpoint - Graphics and Presentation ● Written Test Assessment - Unit 3 final checkpoint <ul style="list-style-type: none"> ○ Unit checkpoint - Computer Systems / Software / Networking ● Programming Assessment - Unit 4 final checkpoint <ul style="list-style-type: none"> ○ Unit checkpoint - Micro Bit Programming ● Programming Assessment - Unit 5 final checkpoint <ul style="list-style-type: none"> ○ Unit checkpoint - Flowchart Algorithms ● Written Test Assessment - Unit 6 final checkpoint <ul style="list-style-type: none"> ○ Unit checkpoint - Databases
<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.