

	Half term 1	Half term 2	Half term 3	Half term 4	Half term 5	Half term 6
<b>Key focus</b>	E-safety		Converting Binary and denary character sets Understanding how to calculate the size of date files: Test and image files		Programming skills	
<b>Key knowledge and skills</b>	Understanding the key safety issues with using the internet.  Understand how different methods to keep safe when using the internet.  Understand the signs that students could spot to identify concerns.  Understand the environmental responsibilities we all have as IT users		Understanding Binary and denary number systems  Understanding the purpose of binary in computer systems  Understanding the process to convert binary into denary  Understanding the process to convert denary numbers into binary  Understanding the term character sets		Understanding how to perform basic mathematical functions in python programming  Understanding the role of the IDE (Integrated Development Environment) and the benefits it gives a programmer  Understand the sequence programming construct  Understanding how to find and correct syntax errors in programming code	
<b>Key words/ vocabulary</b>	Grooming / Cyberbullying / Radicalisation/ Digital footprint / Green IT		Binary / base 2 / base 10 / power of 2 grid / machine code		IDE / Syntax errors / indents / inputs / command words / code	
<b>Assessment method</b>	Question and answering in lessons / End of topic assessments / observations in lesson					
<b>Wider links</b>	Ethical and environmental issues relating to the IT and digital world.		Apply mathematical logic and computational thinking to solve real world problems		Develop and apply mathematical logic and develop programming skills	
<b>Enrichment opportunities</b>			Programming clubs, UK programming challenges			
<b>Careers links</b>	Supporting responsible internet use and reducing negative digital footprints		Software development, computer engineer		Software developer, games designer, computer analyst	