YEAR 9 COMPUTING CURRICULUM PROGRESSION OVERVIEW

Our vision is to provide an ambitious, quality, educational experience for every student attending Huntcliff School, empowering them to achieve excellence and progress to future study, employment or training.
In Computing we cover the full national curriculum.
At KS3 all students participate in projects that provide a solid and practical introduction to the three pillars of Computing: Computer Science, ICT and Digital Literacy. We offer a broad knowledge rich curriculum where students develop declarative and procedural knowledge of the three pillars of progression as they progress through the curriculum.
The core of computing is computer science, in which pupils are taught the principles of information and computation, how digital systems work and how to put this knowledge to use through programming. Building on this knowledge and understanding, pupils are equipped to use information technology to create programs, systems and a range of content. Computing also ensures that pupils become digitally literate – able to use, and express themselves and develop their ideas through, information and communication technology – at a level suitable for the future workplace and as active participants in a digital world.
We intend for all of our students to know more, remember more and to be able to do more.

	Autumn Term 1	Autumn Term 2	Spring Term 1	Spring Term 2	Summer Term 1	Summer Term 2
Topic	**E - Safety**	**Modelling using computers**	**Programming using Python**	**Ethical use of Computers**	**Web Development**	**Networks**
Core Knowledge/ **Threshold Concept**	Cyberbullying – case study – how this can lead to serious harm. Body image and social media. Picture manipulation – the perfect body? On-line extremism. – conspiracies, fake news Terrorism – what makes a terrorist? What do they look like?	Data manipulation and analysis. Excel higher functions and procedures.	Use of Variables Use of selection Use of lists Use of iteration, both count controlled, and condition controlled Complex variables, tuples and string manipulation. Parameter passing in functions and procedures	Ethics, environmental and privacy especially around social media. Cultural considerations, the dilemma's involving the use of AI. Chat GPT and its modern-day influence.	Use HTML to structure web pages and change styling. Create a navigation bar that links pages Insert text Insert images Insert video Insert sound	Wide area and Local area networks. Topologies – Mesh and Star Ethernet and Wi-Fi The difference between the Internet and the WWW. Message and Packet switching including error correction
Why this learning now?	Builds upon learning in Y8 in particular and provides for a significant understanding of harm	Builds upon learning during Y8 where students have previously been exposed to spreadsheets.	Builds upon programming in Y8.	Builds upon learning during Y8 and introduces more complex concepts which often do not have a clear right answer. Provides strong foundation for GCSE study.	Creates understanding of websites, and web design.	Provides an understanding of networks, their topologies and functions. Provides a strong foundation for GCSE study
Assessment Opportunities:	Students will be assessed in accordance to the flight path of skills and knowledge they demonstrate throughout the unit. Students will also be provided feedback in an end of term assessment.	Students will be assessed in accordance to the flight path of skills and knowledge they demonstrate throughout the unit. Students will also be	Students will be assessed in accordance to the flight path of skills and knowledge they demonstrate throughout the unit. Students will also be	Students will be assessed in accordance to the flight path of skills and knowledge they demonstrate throughout the unit. Students will also be provided feedback in an end of term assessment.	Students will be assessed in accordance to the flight path of skills and knowledge they demonstrate throughout the unit. Students will also be	Students will be assessed in accordance to the flight path of skills and knowledge they demonstrate throughout the unit. Students will also be

		provided feedback in an end of term assessment.	provided feedback in an end of term assessment.		provided feedback in an end of term assessment.	provided feedback in an end of term assessment.
Learning at Home	Homework	Homework	Homework	Homework	Homework	Homework
Key Vocabulary	Extremism Terrorism Social media	Functions Analysis	Complex variable Tuples Lists and arrays	Ethics Artificial Intelligence Privacy	HTML CSS navigation	Networks Topology Packet switching
Spiritual, Moral, Social and Cultural concepts covered	Students will be encouraged to develop a sense of enjoyment and fascination in learning about themselves, others and the world around them. Students will develop an understanding of the consequences of behaviour and action in respect to the impact upon others. Students will develop and utilise a range of social skills in different contexts in order to aid their learning.					
Links to careers and the world of work	ICT Technician Network Manager Data Analyst Cyber Security Engineer Graphics Designer Games Designer					