

Computer Science – Year 8

Calendar	Topic	Assessment	Sequencing and Coherence concepts - themes - skills	Literacy reading - vocabulary - oracy - writing		
Autumn Half Term 1	 Unit 1 Cyber Crime: Scams Computer Misuse Protecting Data Copyright Health and Safety 	Whole School Exam window on unit topics with feedback from the exam. Next steps time to review knowledge gaps.	Checks pupils understanding and keeps them safe at the start of the year linking to Y7 Units 1 and 4. NC threads: Impact of tech Safety and security	Knowledge organisers including glossaries Oracy opportunities within discussions Reading task given at the end of the unit.		
Autumn Half Term 2	 Unit 2 Intro to Python: Strings and Variables Data types Selection Writing Algorithms While Loops 		Skills unit developing Programming in text-based platform Safety online linking to Y7 Units 1 and 4 and Y8 unit 1 NC threads: Programming Data and Information Impact of tech Safety and security	Knowledge organisers including glossaries Oracy opportunities within discussions Reading task given at the end of the unit.		
Spring Half Term 3	BEBRAS Challenge	The Bebras Challenge introduces computational thinking to students worldwide. Each participant has 45 minutes to tackle a series of interactive tasks, designed to encourage logical thinking and problem-solving skills appropriate for their age group. Students don't need to excel in maths or computing to take print the Bebras Challenge. The tasks are designed to allow every student the opportunity to showcase their potential.				
	Unit 3 HTML & Website Development HTML CSS Design Development Web Forms	Assessment with a final pupil created portfolio. The assessment looks at skills used and gives a BCDM level for pupils and allows pupils to self-evaluate.	Undertake a creative project in HTML/CSS that involves selecting, using, and combining multiple applications, preferably across a range of devices, to achieve challenging goals, including collecting and analysing data and meeting the needs of known users. NC Thread: Creating Media Computer systems Design and Development	Knowledge organisers including glossaries Oracy opportunities within discussions, paired design work to develop problem solving skills.		

Spring Half Term 4	Unit 4 Spreadsheet Modelling	Assessment is of the final spreadsheet solution	A practical, skills-based unit covering the principles of creating and formatting basic spreadsheets to produce and use simple computer models. Design, use and evaluate computational abstractions that model the state and behaviour of real-world problems and physical systems. NC Thread: Data and Information Impact of tech Safety and security Effective Use of Tools	Knowledge organisers including glossaries Oracy opportunities within discussions, paired design work to develop problem solving skills.
Summer Half Term 5	Unit 4 Privacy and Security: • Keep data safe online • Personal Privacy	Full end of year Assessment covering all units covered so far in the year. Marks will be issued with Next steps feedback	Safe use of personal data while online – looking at what data to share or not share and the consequences, looking at tools and setting and reporting. As pupils increase their online presence, we cover privacy and personal data sharing and the methods to stay safe. NC Thread: Impact of technology Safety and Security	Knowledge organisers including glossaries Oracy opportunities within discussions Reading task given at the end of the unit.
Summer Half Term 6	Python Challenge! • Python basics		Skills development - Programming in text-based platform	Knowledge organisers including glossaries Oracy opportunities within discussions, paired design work to develop problem solving skills.