Caroline Chisholm School
Ambition Confidence Success
Everyone Every Lesson Every Opportunity

Year 7 Computing Curriculum Rationale

In Year 7 students will focus on a variety of key Computing skills; Programming, Ethics, Computer Systems, and Software Development. Student will use a wide range of different software and develop their digital literacy over the course of the year. Students will enter Year 8 with a good understanding of how computer systems operate, and how they can be programmed to automate and solve problems.

Unit	Core knowledge/skill development	Sequence	Assessment	Literacy, numeracy, PSHE, FBV, other links	ACP and VAA development	Home learning and enrichment
7.1 E-Safety	• Strong passwords • Social Engineering • Social Media • Presentation skills • Creating for a target audience	Builds on students existing understand of staying safe online. Leads to topics on malware and system security at GCSE	End of unit assessment (test) and marked work (presentation)	PSHE Online Safety Ethics and eSafety - impacts of technology on society, digital security	Analysing – critical and logical thinking (deduce, hypothesise, reason, and seek evidence). Connection Finding – Using connections from past experiences to seek generalisations.	Topic based research, audio reflection assignment
7.2 Computer Systems	• Input/Output Devices • Hardware • Software • Programming with blocks	Builds on KS2 programming skills, introducing students to physical computing. Leads to text-based programming in Year 8	End of unit assessment (test) and marked work (programming project)	Numeracy - correct use of units for computing concepts, greater than, less than, Boolean logic.	Analysing – critical and logical thinking (deduce, hypothesise, reason, and seek evidence).	Topic based research, audio reflection assignment
7.3 Project Work (Rocket Car)	• Computer Aided Design • Programming • Project management • Environmental issues	Project management skills leading to GCSE and A Level software development	End of unit assessment (test) and marked work (Design and project documentation)	STEAM - explore links with science, design and technology, the arts and maths	Creating, Fluent thinking– The ability to generate ideas. / Originality – conceiving something entirely new	Topic based research, audio reflection assignment

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7.4 Programming	• Programming with blocks • Sequence • Selection • Iteration • Product design	Builds on KS2 programming skills, introducing students to physical computing. Leads to text-based programming in Year 8	End of unit assessment (test) and marked work (programming project)	Numeracy - correct use of units for computing concepts, greater than, less than, Boolean logic.	Analysing – Precision, the ability to work effectively within the rules of a domain	Topic based research, audio reflection assignment
7.5 Ethical, Moral, Legal, Social and Environmental	• Future Technology; AR/VR/AI/Automation • Video Editing • Group work	Leads to GCSE and A-Level Ethics units. Develops interest in the wider context of Computing.	End of unit assessment (test) and marked work (Presentation of video and content of report)	Literacy - practising disciplinary and academic vocabulary and keywords; researching, reading and interpreting information; writing up and presenting findings	Meta-thinking – Meta-cognition, transferring knowledge from one circumstance to another.	Topic based research, audio reflection assignment
7.6 Project Work	• Input/Output Devices • Hardware • Software • Programming with blocks	End of year project designed to showcase students' skills, and link back to prior learning throughout the year.	End of unit assessment (test) and marked work (Peer assessed project)	STEAM - explore links with science, design and technology, the arts and maths	Linking – Connection finding	Topic based research, audio reflection assignment