

Culcheth High School Key Stage 4 Curriculum Map 2023 - 2024

Subject: Computer Science Year 10

Exam Board: OCR Computer Science (9-1) J277



**CULCHETH
HIGH SCHOOL**
THE BEST THAT WE CAN BE

	Autumn Term 1	Autumn Term 2	Spring Term 1	Spring Term 2	Spring Term 1	Summer Term 2
Key Concepts	<ul style="list-style-type: none"> Introduction to computational thinking 	<ul style="list-style-type: none"> Introduction to computing architecture, primary and secondary storage 	<ul style="list-style-type: none"> Data representation 	<ul style="list-style-type: none"> Advanced programming techniques 	<ul style="list-style-type: none"> Operating systems & utility software 	<ul style="list-style-type: none"> Programming languages, IDE's, defensive design techniques & NEA preparation and completion
Themes	<ul style="list-style-type: none"> Algorithms, computational thinking and problem solving with sequencing, selection and iteration 	<ul style="list-style-type: none"> System architecture, basic hardware components (CPU, memory and storage) & embedded systems 	<ul style="list-style-type: none"> Binary and Hexadecimal notation, images, characters, sound and compression 	<ul style="list-style-type: none"> Functions and procedures, 1 & 2D arrays, reading and writing to files 	<ul style="list-style-type: none"> Main components and functions of the operating systems and utility software as well as investigations into the impact of computing on society 	<ul style="list-style-type: none"> Computational thinking: analysing, designing, implementing, testing and evaluating problems
Writing whole school literacy focus	<ul style="list-style-type: none"> OCR reference language Academic and subject word of the day 	<ul style="list-style-type: none"> Exam technique and key term recognition Academic and subject word of the day 	<ul style="list-style-type: none"> Exam technique and key term recognition Academic and subject word of the day 	<ul style="list-style-type: none"> Exam technique and key term recognition Academic and Subject word of the day 	<ul style="list-style-type: none"> Exam technique and key term recognition Academic and subject word of the day 	<ul style="list-style-type: none"> Exam technique and key term recognition Academic and subject word of the day
Spiritual, Moral, Social and Cultural theme (SMSC)	<ul style="list-style-type: none"> Problem-solving and working as part of a team 	<ul style="list-style-type: none"> Personal organisation and 	<ul style="list-style-type: none"> Personal organisation 	<ul style="list-style-type: none"> Problem-solving and ethical programming 	<ul style="list-style-type: none"> Ethical programming Data security 	<ul style="list-style-type: none"> Planning & considering others

Fundamental British Values		<ul style="list-style-type: none"> financial modelling Risk avoidance 			<ul style="list-style-type: none"> Digital divide Moral and social obligations for computer users 	
Key Assessment Foci, suggested Assessments and Feedback week	<ul style="list-style-type: none"> Practical assessments QMA 	<ul style="list-style-type: none"> Practical assessments QMA 	<ul style="list-style-type: none"> Practical assessments and QMA 	<ul style="list-style-type: none"> Practical assessments and QMA 	<ul style="list-style-type: none"> Practical assessments and QMA 	<ul style="list-style-type: none"> Non-examined assessment & QMA
Special Events						
Possible Visits						<ul style="list-style-type: none"> Science and Industry Museum London
CEIAG - Possible Employer Engagement Activities	<ul style="list-style-type: none"> Problem-solving and organisation 	<ul style="list-style-type: none"> Communication and working under pressure 	<ul style="list-style-type: none"> Problem-solving, perseverance and motivation 	<ul style="list-style-type: none"> Problem-solving and teamwork 	<ul style="list-style-type: none"> Organisation, working under pressure 	<ul style="list-style-type: none"> Problem-solving and organisation