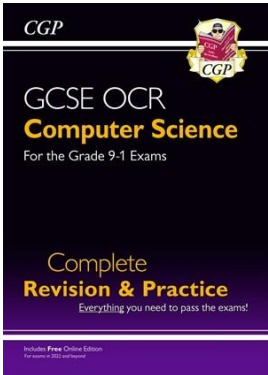
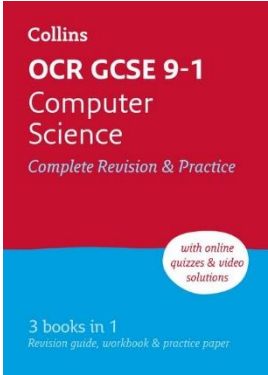
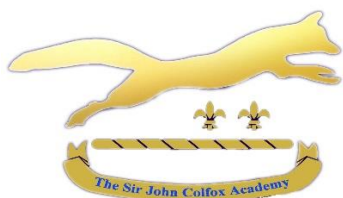


Exam Board	Recommended revision guides	Support available in school
OCR J277	 	<p>Programming support available every Tuesday lunchtime.</p> <p>After school revision sessions every Thursday.</p>



Computer Science

Revision Schedule 2024



Useful online resources	Exam date(s)
Teach-ICT (Username: dt63dt, Password: kilobyte8) Computer Science UK Craig 'n' Dave Videos Seneca Learning Smart Revise eRevision BBC Bitesize GCSE Computer Science Guru Outwood Home Learning for Computer Science Isaac Computer Science Pseudocode Challenges 101 Computing Quizlet	<p>Paper 1: Computer Systems Wednesday 15th May 2024 pm</p> <p>Paper 2: Computational Thinking, Algorithms and Programming Tuesday 21st May 2024 pm</p>

January					
Week beginning...	Topic	Content to revise	Complete (tick)	Knowledge test score	Weeks left
Monday 8th	Data Storage	Converting between denary and 8-bit binary Converting between denary and 2-digit hexadecimal Adding two 8-bit binary integers Binary shifts			18
Monday 15th	Data Storage	Representing characters and character sets Representing images Representing sound Compression			17
Monday 22nd	Computational Thinking	Abstraction Decomposition Algorithmic thinking Structure diagrams			16
Monday 29th	Algorithms	Inputs, processes and outputs How to produce algorithms using pseudocode and flow diagrams Identifying errors and suggesting fixes Trace tables			15
February					
Monday 5th	Searching and Sorting Algorithms	Binary search Linear search Bubble sort Merge sort Insertion sort			14
Monday 12th	Programming Fundamentals	The use of variables, constants, inputs, outputs and assignments The use of the three basic programming constructs The common arithmetic and comparison operators The common Boolean operators The use of data types and casting			13
Monday 19th	Testing	How to identify syntax and logic errors The purpose and types of testing Suitable test data Refining algorithms to make them more robust			12
Monday 20th	Boolean Logic	Simple logic diagrams Truth tables Applying logical operators in truth tables to solve problems Combining Boolean operators			11

March					
Monday 4th	Programming Languages and IDEs	Characteristics and purpose of different levels of programming language The purpose of translators Characteristics of compilers and interpreters IDEs			10
Monday 11th	Additional Programming Techniques	The use of basic string manipulation The use of basic file handling operations The use of arrays How to use sub programs Random number generation			9
Monday 18th	Defensive Design	Defensive design considerations - Part 1 Defensive design considerations - Part 2 Maintainability			8
Monday 25th	Units	The units of data storage How data needs to be converted into binary to be processed by a computer Data capacity and calculation of data capacity requirements			7
April					
Monday 1st	Storage	The need for primary storage RAM and ROM Virtual memory The need for secondary storage Common types of storage Suitable storage devices and storage media			6
Monday 8th	CPU Architecture	The purpose of the CPU - the FDE cycle Common CPU components and their function Von Neumann architecture Common characteristics of CPUs Embedded systems			5
Monday 15th	Networks	Types of networks Client-server and peer-to-peer networks Factors that affect the performance of networks Hardware to connect to a LAN Star and mesh network topologies Modes of connection, wired and wireless			4
Monday 22nd	The Internet	The internet Wireless encryption The use of IP and MAC addressing Standards			3

		Common protocols The concept of layers			
Monday 29th	Network Security	Forms of attack Threats posed to networks Identifying and preventing vulnerabilities			2
May					
Monday 6th	Systems Software	The purpose and functionality of operating systems Operating systems - Part 1 Operating systems - Part 2 Utility system software			1
Monday 13th	Ethical, Legal, Cultural and Environmental Impacts of Technology Paper 1 – Wednesday 15th May PM	How to investigate and discuss computer science technologies Privacy issues Cultural implications of computer science Environmental impact of computer science Impacts of digital technology on wider society Legislation relevant to computer science Open source vs proprietary software			0
Monday 20th	SQL Paper 2 – Tuesday 21st May PM	The use of records to store data The use of SQL to search for data			0
Monday 27th	Congratulations on finishing GCSE Computer Science 😊				0