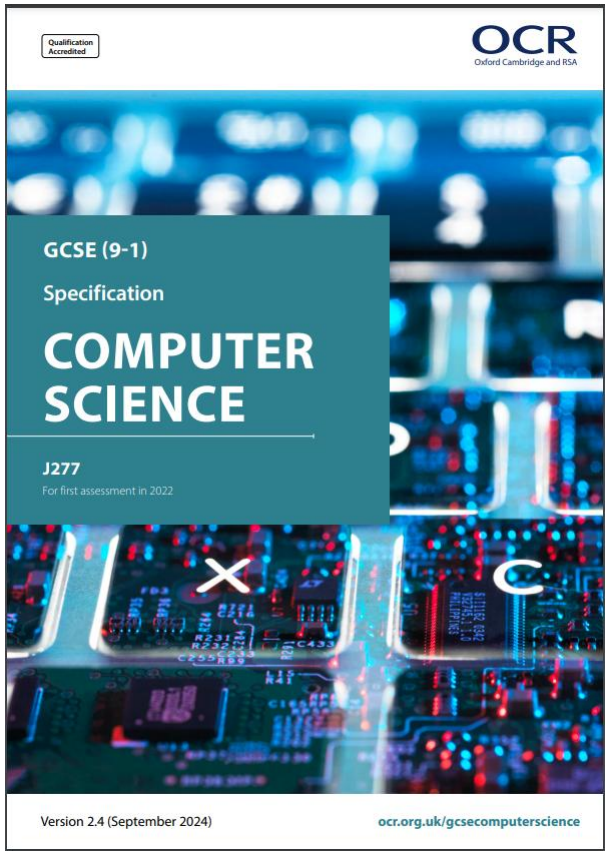
Ringwood School Year 11 Revision Evening

Courage
Ambition
Integrity
Respect

How to revise for GCSE Computer Science



Exams

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13th May 2026

J277/01: Computer systems

This component will assess:

- 1.1 Systems architecture
- 1.2 Memory and storage
- 1.3 Computer networks, connections and protocols
- 1.4 Network security
- 1.5 Systems software
- 1.6 Ethical, legal, cultural and environmental impacts of digital technology

Written paper: 1 hour and 30 minutes
50% of total GCSE
80 marks

This is a non-calculator paper.

19th May 2026

J277/02: Computational thinking, algorithms and programming

This component will assess:

- 2.1 Algorithms
- 2.2 Programming fundamentals
- 2.3 Producing robust programs
- 2.4 Boolean logic
- 2.5 Programming languages and Integrated Development Environments

Written paper: 1 hour and 30 minutes
50% of total GCSE
80 marks

This is a non-calculator paper.

Preparing for the November mocks

The November mock will be one combined paper covering both

Computer Systems (paper 1) and

Computational Thinking, Algorithms and Programming (paper 2)

Preparing for the November mocks

OCR Oxford Cambridge and RSA	The Course Specification	www.ocr.org.uk Search for J277	Check the list of topics that you need to know for the exam (section 2 in the specification)

1.2.1 Primary storage (memory)

☐ The need for primary storage	**Required**
☐ The difference between RAM and ROM	✓ Why computers have primary storage (memory)
☐ The purpose of ROM in a computer system	▪ How this usually consists of RAM and ROM
☐ The purpose of RAM in a computer system	✓ Key characteristics of RAM and ROM
☐ Virtual memory	✓ Why virtual memory may be needed in a system
☐ Cache	✓ How virtual memory works
	▪ Transfer of data between RAM and secondary storage when RAM is full

There is also an abbreviated checklist of topics on Teams

C	D	E	F
Ref	**Topic**	**Learning Objective**	**RAG**
1.1.1	Architecture of the CPU	the purpose of the CPU	RED
		o the fetch-execute cycle	AMBER
		common CPU components and their function:	GREEN
		o ALU (Arithmetic Logic Unit)	RED
		o CU (Control Unit)	RED
		o Cache	RED
		o Registers	RED
		Von Neumann architecture:	RED
		o MAR (Memory Address Register)	RED
		o MDR (Memory Data Register)	RED
		o Program Counter	RED
		o Accumulator	RED

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Resources (don't understand something):

BBC Bitesize	BBC Bitesize	www.bbc.co.uk/ bitesize/examspecs/zmtchbk	Quizzes, questions by topic and videos
YouTube	Comp Sci channels	Craig n Dave Computer Science Tutor MrBrown CS	Videos on different topics Walkthroughs of past papers
	CGP Revision Guide	New GCSE Computer Science OCR Revision Guide - for exams in 2022 and beyond ISBN: **978-1789085563**	

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Resources (practice):

SMART REVISE	Smart Revise System	smartrevise.online	All students have a personal login that has been used in lessons. Good for : Questions on all topics
	Past Papers and Mark Schemes	www.ocr.org.uk Search for J277	Past papers available from 2022 and 2023 Previous years also easily found on the internet
	Reference Language Interpreter	www.examreferencelanguage.co.uk	Practice your reference language skills.

Technique:

When reading the question

Read the question carefully and underline the command word and relevant pieces of information. If it is bold or underlined, ask yourself why?

How many marks ? What are they for ? There are NO marks for free!

When answering

Calculations : Show some working if it's worth more than one mark.

Terminology : Use correct terminology and do not mix up simple terms such as data / information.

Avoid woolly words like *thing*, *something*, *stuff*. Find a more specific word. What is it?

Avoid *better* or *easier* without explanation. Give a reason why it is better or easier.

Ensure your answer is legible particularly when writing code on paper 2.

When checking

Have I answered the question that was asked?

If it is more than one mark, what have I written that gets me all the marks available ?

Contact details

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