FORT PITT GRAMMAR SCHOOL

GCSE REVISION EVENING

Computer Science

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A Beyond SCHOOLS TRUST ACADEMY

GCSE

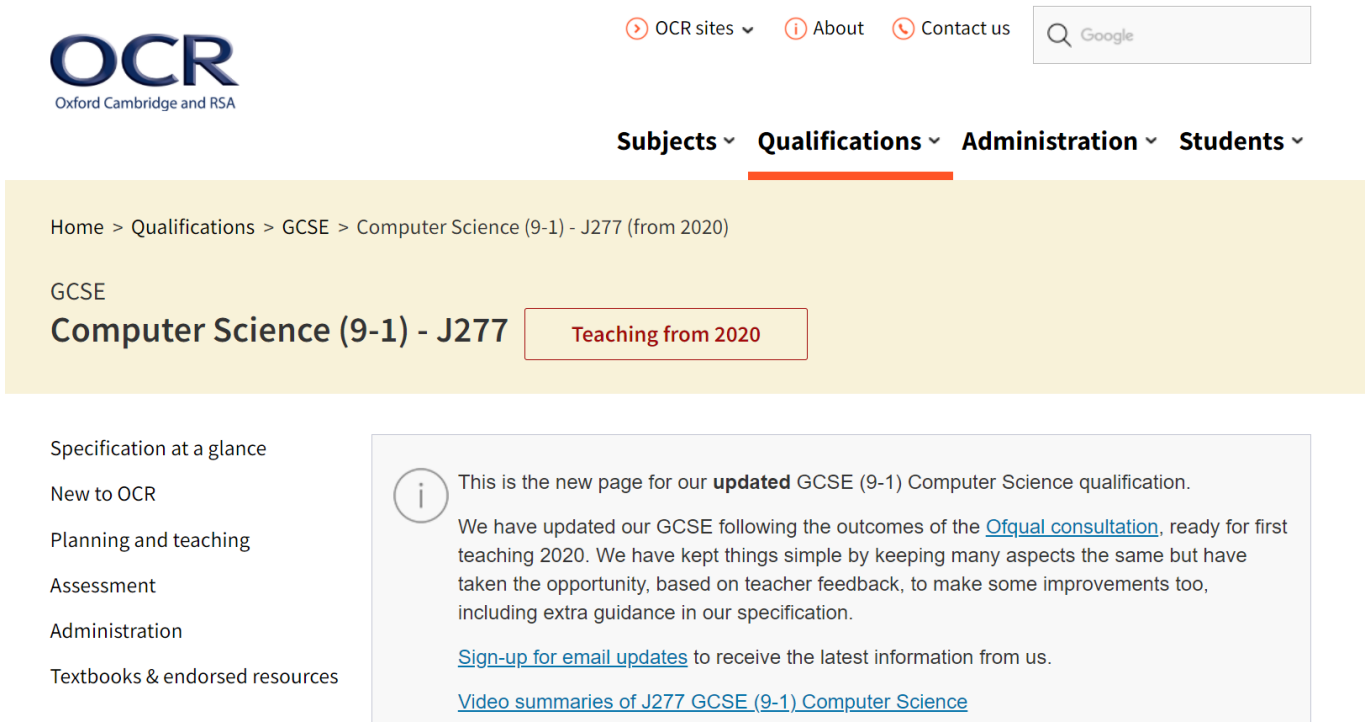
- Key exam information
- Exam content information
- Revision resources
- Subject specific revision and exam technique
- Top tips for parents
- Top tips for students

Key Exam Information

- Paper 1: Computer Systems
  - Wednesday 12th May 2025 PM 1h 30 min
- Paper 2: Computational thinking, algorithms and programming
  - Tuesday 20th May 2025 PM 1h 30 min

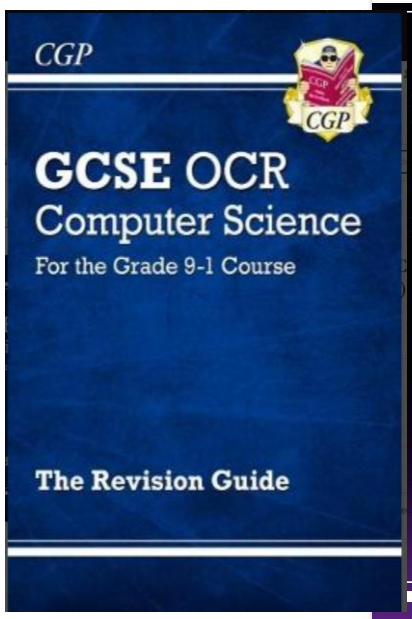
Exam board

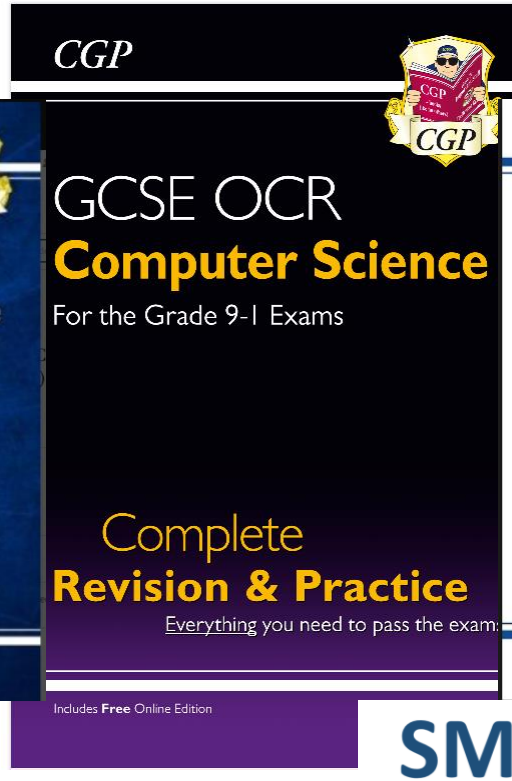
OCR GCSE Computer Science (J277)

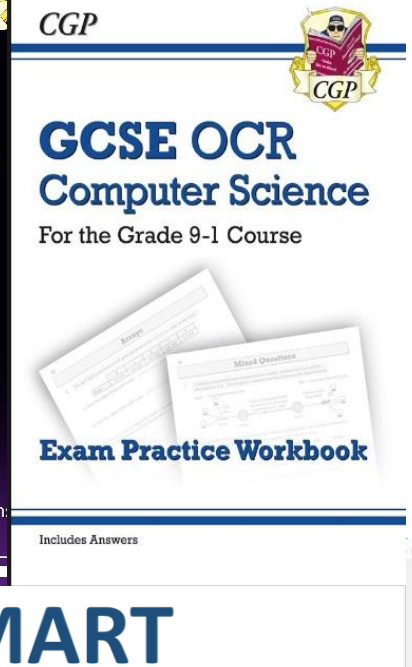


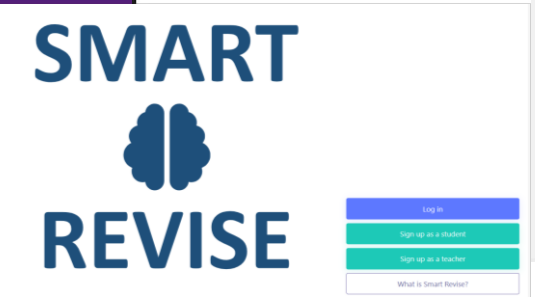
https://www.ocr.org.uk/qualifications/gcse/computer-science-j277-from-2020/

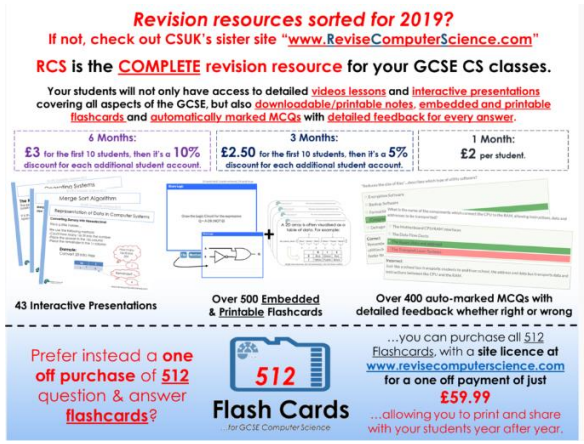
Revision resources











Computer Science specific revision and exam technique

Knowledge, Understanding and Skills	Process Goal	Performance Goal
Component 1 – Theory		
Systems Architecture	Refer to the fetch-execute cycle when talking about components and performance Link the components together when describing how the processor works	Be able to explain clearly the function of all the components of the processor Be able to explain the fetch-execute cycle Be able to explain how to improve processor performance
Memory and Storage	Use the standard list of features when comparing memory and storage technologies along with Number systems e.g. binary	Be able to recommend a storage device for a given situation
Network Technologies	Use the TCP/IP model when describing network technologies	Be able to explain how data is transmitted across a network

Computer Science specific revision and exam technique

Knowledge, Understanding and Skills	Process Goal	Performance Goal
System Security	Use the standard list of security threats and solutions Link each threat to the correct solution(s) and combine security solution Start with people as the weak point in a system	Achieve top band in each essay answer Achieve full marks on explain questions
Ethical, Legal, Cultural and Environmental Concerns	Refer to all the points given in the question Write using a top-band structure Discuss issues from more than one point of view	Achieve top band in each essay answer

Computer Science specific revision and exam technique

Knowledge, Understanding and Skills	Process Goal	Performance Goal
Component 2 – Programming		
Writing Algorithms	Break hard problems into smaller steps Know and use the standard patterns to solve problems	Be able to write an algorithm in pseudocode for an unseen problem
Robust Programming	Use your experience of coding to recall good coding practice Consider normal, boundary and erroneous test data	Be able to analyse an unseen piece of code

Top tips for parents

- Test key word knowledge from the ‘Exam Essential Revision Notes’ booklet
- Students write an answer- use the mark scheme to check their understanding
- Students complete a full paper under timed conditions
- Practice basic Maths skills- to support binary/hexadecimal/denary conversions
- Learn the processes to go through to explain sorts and searches
- Practice Pseudocode/Python coding exam questions

Top tips for students

If you are aiming for the top grades you need to know the material well enough have gone far enough beyond it that the GCSE exam becomes easy, so that you can achieve close to 100%.

Part of getting close to 100% is using strategies to make sure that you maximise your marks on each question, including:

- Getting top band on essays
- Getting full marks on 3-4 mark “explain” questions
- Avoiding “silly” mistakes