

GCSE Computer Science Personal Learning Checklist

Exam Board	OCR
Subject	GCSE Computer Science (J277)
Paper(s)	Paper 1: Computer Systems Paper 2: Computational Thinking, Algorithms and Programming
Marks Available	80 marks per paper (160 in total)
Length of Paper(s)	90 minutes per paper
Topic(s)	See below for a breakdown of topics

Command Words	Refer to the OCR GCSE Computer Science Specification
Revision Videos	https://student.craigndave.org/J277
Past Papers and Mark Schemes	Refer to the OCR J277 Website (Assessment Page)

GCSE Computer Science

Paper 1

1.1 Systems Architecture				
Topics	ClearRevise page	R	A	G
1.1.1 Architecture of the CPU	2 and 3			
1.1.2 System Performance	4			
1.1.3 Embedded Systems	4			

1.2 Memory and Storage				
Topics	ClearRevise page	R	A	G
1.2.1 Primary Storage (Memory)	6 and 7			
1.2.2 Secondary Storage	8			
1.2.3 Units	11			
1.2.4 Data Storage	12 to 20			
1.2.5 Compression	21			

1.3 Computer networks, connections and protocols				
Topics	ClearRevise page	R	A	G
1.3.1 Networks and topologies	23 to 28			
1.3.2 Wired and wireless networks, protocols and layers	29 to 32			

1.4 Network security

Topics	ClearRevise page	R	A	G
1.4.1 Threats to computer systems and networks	34			
1.4.2 Identifying and preventing vulnerabilities	35			

1.5 Systems Software

Topics	ClearRevise page	R	A	G
1.5.1 Operating Systems	37			
1.5.2 Utility Software	38			

1.6 Ethical, legal, cultural and environmental impacts

Topics	ClearRevise page	R	A	G
1.6.1(a) Impacts of digital technology on wider society	40 to 42			
1.6.1(b) Legislation	43			
1.6.1(c) Software Licences	44			

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Paper 2

2.1 Algorithms				
Topics	ClearRevise page	R	A	G
2.1.1 Computational Thinking	47			
2.1.2 Designing, creating and refining algorithms	48 to 52			
2.1.3 Searching and Sorting algorithms	54 to 58			

2.2 Programming Fundamentals				
Topics	ClearRevise page	R	A	G
2.2.1 Programming Fundamentals	61 to 64			
2.2.2 Data Types	66			
2.2.3 Additional Programming Techniques	68 to 74			

2.3 Producing Robust Programs

Topics	ClearRevise page	R	A	G
2.3.1 Defensive Design	78			
2.3.2 Testing	80			

2.4 Boolean Logic

Topics	ClearRevise page	R	A	G
2.4.1 Boolean Logic	82			

2.5 Programming Languages, and Integrated Development Environments (IDEs)

Topics	ClearRevise page	R	A	G
2.5.1 Languages	84			
2.5.2 Integrated Development Environments	85			