

# GCSE Computer Science Personal Learning Checklist

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

<b>Command Words</b>	Refer to the <a href="#">OCR GCSE Computer Science Specification</a>
<b>Revision Videos</b>	<a href="https://student.craigndave.org/J277">https://student.craigndave.org/J277</a>
<b>Past Papers and Mark Schemes</b>	Refer to the <a href="#">OCR J277 Website (Assessment Page)</a>

# 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			

# GCSE Computer Science

## 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			