

# GCSE Computer Science

## Core textbooks

- PG Online - OCR GCSE (9-1) Computer Science J277 (Textbook)
- CGP - GCSE Computer Science OCR Complete Revision & Practice

## Revision Guides

- PG Online - ClearRevise OCR GCSE J277
- CGP - GCSE Computer Science OCR Revision Guide
- CGP - GCSE Computer Science OCR Exam Practice Workbook
- CGP - GCSE Computer Science OCR 10-Minute Tests (includes answers)

## Further resources to aid with GCSE curriculum

- Seneca
- BBC Bitesize
- Computer Science Shared Area
- <https://www.youtube.com/@craigdave>

## Take it further

To extend and develop your subject knowledge and understanding do look at resources outside of the GCSE curriculum. The resources below are not an exhaustive list. Please do discuss with the Computing department anything in particular that you are interested in finding out about and we can point you in the right direction.



Topic	Read	Listen	Watch	Explore and visit
1.1 Systems architecture	<ul style="list-style-type: none"> <li>• <i>Once Upon an Algorithm - How Stories Explain Computing</i> By: <i>Martin Erwig</i></li> <li>• <i>Ghost In The Wires: My Adventures as the World's Most Wanted Hacker</i> Paperback – 3 May 2012 by Kevin Mitnick (Author), William Simon (Author), Steve Wozniak (Foreword)</li> </ul>	<ul style="list-style-type: none"> <li>• Bite size revision for GCSE Computer Science - Laura James (Podcast)</li> <li>• Fetch Decode Explain - GCSE Computer Science Podcast</li> <li>• Podcast Revise – Computer Science - Seneca Learning</li> </ul>	<ul style="list-style-type: none"> <li>• Connections (1978)</li> <li>• Crash Course: Computer Science (2017– )(YouTube)</li> <li>• Craidave J277(Youtube)</li> </ul>	<ul style="list-style-type: none"> <li>• The National Museum of Computing, Bletchley Park</li> <li>• The Retro Computer Museum Leicestershire</li> <li>• The Centre for Computing History</li> </ul>
1.2 Memory and storage	<ul style="list-style-type: none"> <li>• <i>100 Things to Know About Numbers, Computers &amp; Coding Hardcover</i> – 1 Nov. 2018 by Various (Author), Federico Mariani;Parko Polo (Illustrator)</li> <li>• <i>Ghost In The Wires: My Adventures as the World's Most Wanted Hacker</i> Paperback – 3 May 2012 by Kevin Mitnick (Author), William Simon (Author), Steve Wozniak (Foreword)</li> <li>• <i>How Not to Be Wrong: The Hidden Maths of Everyday Life Paperback</i> – 26 May 2015 by Jordan Ellenberg (Author)</li> </ul>	<ul style="list-style-type: none"> <li>• Bite size revision for GCSE Computer Science - Laura James (Podcast)</li> <li>• Fetch Decode Explain - GCSE Computer Science Podcast</li> <li>• Podcast Revise – Computer Science - Seneca Learning</li> </ul>	<ul style="list-style-type: none"> <li>• Bits and Bytes (1983– )</li> <li>• The Code (2011)</li> <li>• Crash Course: Computer Science (2017– )(YouTube)</li> <li>• Craidave J277(Youtube)</li> <li>• Digits (2016)</li> </ul>	<ul style="list-style-type: none"> <li>• The National Museum of Computing, Bletchley Park</li> <li>• The Retro Computer Museum Leicestershire</li> <li>• The Centre for Computing History</li> </ul>

<p>1.3 Computer networks, connections and protocols</p>	<ul style="list-style-type: none"> <li>• <i>Hacker Paperback – 5 Feb. 2004 by Malorie Blackman (Author)</i></li> <li>• <i>Threads across the Ocean, John Steele Gordon</i></li> <li>• <i>Going Postal, Terry Pratchet</i></li> <li>• <i>Ghost In The Wires: My Adventures as the World's Most Wanted Hacker Paperback – 3 May 2012 by Kevin Mitnick (Author), William Simon (Author), Steve Wozniak (Foreword)</i></li> <li>•</li> </ul>	<ul style="list-style-type: none"> <li>• Bite size revision for GCSE Computer Science - Laura James (Podcast)</li> <li>• Podcast Revise – Computer Science - Seneca Learning</li> </ul>	<ul style="list-style-type: none"> <li>• Terms and Conditions May Apply (2013)</li> <li>• Lo and Behold, Reveries of the Connected World (2016)</li> <li>• Digits (2016)</li> <li>• Crash Course: Computer Science (2017– )(YouTube)</li> <li>• Craidave J277(Youtube)</li> </ul>	<ul style="list-style-type: none"> <li>• The National Museum of Computing, Bletchley Park</li> <li>• The Retro Computer Museum Leicestershire</li> <li>• The Centre for Computing History</li> <li>• The Postal Museum London</li> </ul>
<p>1.4 Network security</p>	<ul style="list-style-type: none"> <li>• <i>Once Upon an Algorithm - How Stories Explain Computing By: Martin Erwig</i></li> <li>• <i>100 Things to Know About Numbers, Computers &amp; Coding Hardcover – 1 Nov. 2018 by Various (Author), Federico Mariani;Parko Polo</i></li> <li>• <i>Hacker Paperback – 5 Feb. 2004 by Malorie Blackman (Author)</i></li> <li>• <i>The Code Book, Simon Singh</i></li> <li>• <i>Ghost In The Wires: My Adventures as the World's Most Wanted Hacker Paperback – 3 May 2012 by Kevin Mitnick (Author), William Simon (Author), Steve Wozniak (Foreword)</i></li> <li>•</li> </ul>	<ul style="list-style-type: none"> <li>• Bite size revision for GCSE Computer Science - Laura James (Podcast)</li> <li>• Podcast Revise – Computer Science - Seneca Learning</li> </ul>	<ul style="list-style-type: none"> <li>• The Imitation Game (2014)</li> <li>• Dark Net (2016–2017)</li> <li>• The Internet's Own Boy: The Story of Aaron Swartz (2014)</li> <li>• Citizenfour (2014)</li> <li>• Snowden (2016)</li> <li>• Digits (2016)</li> <li>• Craidave J277(Youtube)</li> </ul>	<ul style="list-style-type: none"> <li>• The National Museum of Computing, Bletchley Park</li> <li>• The Centre for Computing History</li> <li>• Imperial War Museum London</li> <li>• The National Cyber Security Centre</li> <li>• IBM Think Tours - London</li> </ul>

1.5 Systems software	<ul style="list-style-type: none"> <li>• <i>Once Upon an Algorithm - How Stories Explain Computing</i> By: Martin Erwig</li> <li>•</li> </ul>	<ul style="list-style-type: none"> <li>• Bite size revision for GCSE Computer Science - Laura James (Podcast)</li> <li>• Podcast Revise – Computer Science - Seneca Learning</li> </ul>	<ul style="list-style-type: none"> <li>• Crash Course: Computer Science (2017– )(YouTube)</li> <li>• CraginDave J277(Youtube)</li> </ul>	<ul style="list-style-type: none"> <li>• The National Museum of Computing, Bletchley Park</li> <li>• Microsoft Experience Centre – London</li> <li>• IBM Think Tours – London</li> <li>• The National Cyber Security Centre</li> <li>•</li> </ul>
1.6 Ethical, legal, cultural and environmental impacts of digital technology	<ul style="list-style-type: none"> <li>• <i>Once Upon an Algorithm - How Stories Explain Computing</i> By: Martin Erwig</li> <li>• <i>Hello World - How to Be Human in the Age of the Machine</i> By: Hannah Fry</li> <li>• <i>Creation, Life and How to Make it</i>, Steve Grand</li> <li>• Ghost In The Wires: My Adventures as the World's Most Wanted Hacker Paperback – 3 May 2012 by Kevin Mitnick (Author), William Simon (Author), Steve Wozniak (Foreword)</li> <li>•</li> </ul>	<ul style="list-style-type: none"> <li>• Bite size revision for GCSE Computer Science - Laura James (Podcast)</li> <li>• Podcast Revise – Computer Science - Seneca Learning</li> </ul>	<ul style="list-style-type: none"> <li>• CODE: Debugging the Gender Gap (2015)</li> <li>• Crash Course: Computer Science (2017– )(YouTube)</li> <li>• CraginDave J277(Youtube)</li> </ul>	<ul style="list-style-type: none"> <li>• The National Museum of Computing, Bletchley Park</li> <li>• Science Museum</li> </ul>

2.1 Algorithms	<ul style="list-style-type: none"> <li>• <i>Once Upon an Algorithm - How Stories Explain Computing</i> By: Martin Erwig</li> <li>• <i>Hello World - How to Be Human in the Age of the Machine</i> By: Hannah Fry</li> <li>• <i>100 Things to Know About Numbers, Computers &amp; Coding Hardcover – 1 Nov. 2018</i> by Various (Author), Federico Mariani;Parko Polo</li> <li>• <i>Ghost In The Wires: My Adventures as the World's Most Wanted Hacker Paperback – 3 May 2012</i> by Kevin Mitnick (Author), William Simon (Author), Steve Wozniak (Foreword)</li> </ul>	<ul style="list-style-type: none"> <li>• Bite size revision for GCSE Computer Science - Laura James (Podcast)</li> <li>• Podcast Revise – Computer Science - Seneca Learning</li> </ul>	<ul style="list-style-type: none"> <li>• The Secret Rules of Modern Living: Algorithms (2015 TV Movie)</li> <li>• Crash Course: Computer Science (2017– )(YouTube)</li> <li>• CraginDave J277(Youtube)</li> </ul>	<ul style="list-style-type: none"> <li>• Legoland Discovery Centre with Lego Education</li> <li>• The Science Museum</li> <li>• Legoland Discovery Centre with Lego Education</li> <li>•</li> </ul>
2.2 Programming fundamentals	<ul style="list-style-type: none"> <li>• <i>Once Upon an Algorithm - How Stories Explain Computing</i> By: Martin Erwig</li> <li>• <i>Hello World - How to Be Human in the Age of the Machine</i> By: Hannah Fry</li> <li>• <i>100 Things to Know About Numbers, Computers &amp; Coding Hardcover – 1 Nov. 2018</i> by Various (Author), Federico Mariani;Parko Polo</li> </ul>	<ul style="list-style-type: none"> <li>• Bite size revision for GCSE Computer Science - Laura James (Podcast)</li> <li>• Podcast Revise – Computer Science - Seneca Learning</li> </ul>	<ul style="list-style-type: none"> <li>• The Code (2011)</li> <li>• The Internet's Own Boy: The Story of Aaron Swartz (2014)</li> <li>• Crash Course: Computer Science (2017– )(YouTube)</li> <li>• CraginDave J277(Youtube)</li> </ul>	<ul style="list-style-type: none"> <li>• E4K (Engineering 4 Kids) offers coding and robotic workshops</li> <li>• The Science Museum</li> <li>• The Retro Computer Museum Leicestershire</li> <li>• The Centre for Computing History</li> <li>• Legoland Discovery Centre with Lego Education</li> <li>• The National Videogame Museum Sheffield</li> </ul>

<p>2.3 Producing robust programs</p>	<ul style="list-style-type: none"> <li>• <i>Once Upon an Algorithm - How Stories Explain Computing</i> By: <i>Martin Erwig</i></li> <li>• <i>100 Things to Know About Numbers, Computers &amp; Coding Hardcover – 1 Nov. 2018</i> by <i>Various (Author), Federico Mariani;Parko Polo</i></li> <li>• <i>The Design of Everyday Things, Don Norman</i></li> <li>• <i>Ghost In The Wires: My Adventures as the World's Most Wanted Hacker Paperback – 3 May 2012</i> by <i>Kevin Mitnick (Author), William Simon (Author), Steve Wozniak (Foreword)</i></li> <li>•</li> </ul>	<ul style="list-style-type: none"> <li>• Bite size revision for GCSE Computer Science - <i>Laura James (Podcast)</i></li> <li>• <i>Podcast Revise – Computer Science - Seneca Learning</i></li> </ul>	<ul style="list-style-type: none"> <li>• <i>Crash Course: Computer Science (2017– ) (YouTube)</i></li> <li>• <i>CraignDave J277 (Youtube)</i></li> </ul>	<ul style="list-style-type: none"> <li>• <i>The National Museum of Computing, Bletchley Park</i></li> <li>• <i>The Retro Computer Museum Leicestershire</i></li> <li>• <i>The Centre for Computing History</i></li> <li>• <i>Legoland Discovery Centre with Lego Education</i></li> <li>• <i>The Science Museum</i></li> <li>• <i>The National Videogame Museum Sheffield</i></li> </ul>
<p>2.4 Boolean logic</p>	<ul style="list-style-type: none"> <li>• <i>Ghost In The Wires: My Adventures as the World's Most Wanted Hacker Paperback – 3 May 2012</i> by <i>Kevin Mitnick (Author), William Simon (Author), Steve Wozniak (Foreword)</i></li> <li>• <i>How Not to Be Wrong: The Hidden Maths of Everyday Life Paperback – 26 May 2015</i> by <i>Jordan Ellenberg (Author)</i></li> </ul>	<ul style="list-style-type: none"> <li>• Bite size revision for GCSE Computer Science - <i>Laura James (Podcast)</i></li> <li>• <i>Podcast Revise – Computer Science - Seneca Learning</i></li> </ul>	<ul style="list-style-type: none"> <li>• <i>Crash Course: Computer Science (2017– ) (YouTube)</i></li> <li>• <i>CraignDave J277 (Youtube)</i></li> </ul>	<ul style="list-style-type: none"> <li>• <i>The National Museum of Computing, Bletchley Park</i></li> <li>• <i>The Retro Computer Museum Leicestershire</i></li> <li>• <i>The Centre for Computing History</i></li> <li>• <i>Legoland Discovery Centre with Lego Education</i></li> <li>• <i>The Science Museum</i></li> <li>• <i>The National Videogame Museum Sheffield</i></li> </ul>