

Year 11 Computer Science Homework October – November 2024

<u>Week;</u>	<u>Topic Area</u>	<u>Video Link</u>	<u>Activity</u>
1	<p>The purpose of the CPU:</p> <ul style="list-style-type: none"> o The fetch-execute cycle <p>Common CPU components and their function:</p> <ul style="list-style-type: none"> o ALU (Arithmetic Logic Unit) o CU (Control Unit) o Cache o Registers <p>Performance of the CPU</p>	<p>AQA GCSE (8525) SLR1 - 3.4 CPU components (youtube.com)</p> <p>AQA GCSE (8525) SLR1 - 3.4 Von Neumann architecture (youtube.com)</p> <p>3. AQA GCSE (8525) SLR1 - 3.4 Performance of CPUs (youtube.com)</p> <p>4. AQA GCSE (8525) SLR1 - 3.4 Fetch-execute cycle (youtube.com)</p>	<p>Watch the videos and make either a mind-map or flash cards.</p> <p>Answer questions at http://smartrevise.online/</p> <p>Due on the following Monday of each week.</p>
2	<p>The need for primary storage</p> <p>The difference between RAM and ROM</p> <p>The purpose of ROM in a computer system</p> <p>The purpose of RAM in a computer system</p> <p>The need for secondary storage</p>	<p>6. AQA GCSE (8525) SLR2 - 3.4 Different types of memory (youtube.com)</p> <p>7. AQA GCSE (8525) SLR2 - 3.4 RAM and ROM (youtube.com)</p> <p>8. AQA GCSE (8525) SLR2 - 3.4 The need for secondary storage (youtube.com)</p>	<p>Watch the videos and make either a mind-map or flash cards.</p> <p>Answer questions at http://smartrevise.online/</p> <p>Due on the following Monday of each week.</p>
3	<p>Types of network:</p> <ul style="list-style-type: none"> o LAN (Local Area Network) o WAN (Wide Area Network) PAN (Personal Area Network) 	<p>12. AQA GCSE (8525) SLR3 - 3.5 Types of networks (youtube.com)</p> <p>13. AQA GCSE (8525) SLR3 - 3.5 Modes of connection - YouTube</p>	<p>Watch the videos and make either a mind-map or flash cards.</p> <p>Answer questions at http://smartrevise.online/</p>

	Modes of connection		Due on the following Monday of each week.
4	Star and Bus network topologies	14. AQA GCSE (8525) SLR3 - 3.5 Star and bus networks - YouTube	<p>Watch the videos and make either a mind-map or flash cards.</p> <p>Answer questions at http://smartrevise.online/</p> <p>Due on the following Monday of each week.</p>
5	Common network protocols	15. AQA GCSE (8525) SLR3 - 3.5 Common network protocols (youtube.com)	<p>Watch the videos and make either a mind-map or flash cards.</p> <p>Answer questions at http://smartrevise.online/</p> <p>Due on the following Monday of each week.</p>
6	<p>The need for and methods of network security</p> <p>Network layers and protocols that fit in each layer</p>	<p>16. AQA GCSE (8525) SLR3 - 3.5 The need for & methods of network security (youtube.com)</p> <p>17. AQA GCSE (8525) SLR3 - 3.5 The TCP-IP protocol model (youtube.com)</p>	<p>Watch the videos and make either a mind-map or flash cards.</p> <p>Answer questions at http://smartrevise.online/</p> <p>Due on the following Monday of each week.</p>
7	Cyber security and cyber security threats	<p>18. AQA GCSE (8525) SLR4 - 3.6 Cyber security & threats (youtube.com)</p> <p>19. AQA GCSE (8525) SLR4 - 3.6 Social engineering threats (youtube.com)</p> <p>20. AQA GCSE (8525) SLR4 - 3.6 Malware (youtube.com)</p>	<p>Watch the videos and make either a mind-map or flash cards.</p> <p>Answer questions at http://smartrevise.online/</p> <p>Due on the following Monday of each week.</p>

8	Security measures and penetration testing Systems software	21. AQA GCSE (8525) SLR4 - 3.6 Penetration testing - YouTube 22. AQA GCSE (8525) SLR4 - 3.6 Security measures (youtube.com) 24. AQA GCSE (8525) SLR5 - 3.4 Systems software (youtube.com) 25. AQA GCSE (8525) SLR5 - 3.4 Operating systems 1 (youtube.com) 26. AQA GCSE (8525) SLR5 - 3.4 Operating systems 2 (youtube.com) 27. AQA GCSE (8525) SLR5 - 3.4 Utility system software (youtube.com)	Watch the videos and make either a mind-map or flash cards. Answer questions at http://smartrevise.online/ Due on the following Monday of each week.
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