



Y10 Computer Science Checklist

Part 1 – Computer Systems			
Student Checklist			
Denary, binary and hexadecimal	R	A	G
I can convert between denary, binary and hexadecimal			
I can perform binary additions and shifts			
CPU components	R	A	G
I can identify the purpose & function of CPU registers			
Networks	R	A	G
I can identify factors that impact performance			
I can explain the process of data transfer over a network			
I can explain the purpose and function of network hardware			
I can describe methods to protect networks			
I can identify the purpose and function of network protocols			
Law, ethics and culture	R	A	G
I can explain legal, ethical and cultural issues of a given scenario			
I can state the appropriate legislation related to a given scenario			



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Part 2 – Computational Thinking, Algorithms and Programming			
Programming	R	A	G
I can identify the three programming fundamentals			
I can write algorithms in pseudocode or a high-level language for a given purpose			
I can identify suitable inputs and outputs for algorithms			
I can trace inputs, outputs and variables			
I can identify data types and apply casting			
I can identify the purpose and function of arithmetic operators			
I can create maintainable code			
Computational thinking	R	A	G
I can state the principles of computational thinking			
Logic gates & diagrams	R	A	G
I can create logic diagrams for given boolean expressions			
I can create truth tables for given boolean expressions			
Algorithms	R	A	G
I can create flowchart algorithms for a given purpose			



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I can apply linear or binary searching algorithms			
I can apply bubble, merge, or insertion sorting algorithms			

Computer Science Revision Resources	Link
OCR Ada Computer Science	https://adacomputerscience.org/topics?examBoard=ocr&stage=gcse
OCR BBC Bitesize Computer Science	https://www.bbc.co.uk/bitesize/examspecs/zmtchbk
OCR Craig & Dave Videos	https://student.craigndave.org/J277
W3 Schools: Python Tutorial	https://www.w3schools.com/python/