South Nottinghamshire Academy

REDHILL ACADEMY TRUST
Equality and Achievement

Computer Science Checklist

Subject Comp Science	Paper 1 and Paper 2	Duration 1 hour 30

	What to revise	How to revise it
1	Systems architecture • The purpose of the CPU: ○ The fetch-execute cycle • Common CPU components and their function: • How common characteristics of CPUs affect their performance:	Pages 2-5 in revision guide https://student.craigndave.org/videos/ocr-gcse-j277-slr-1-1-common-cpu-components-and-their-function https://student.craigndave.org/videos/ocr-gcse-j277-slr-1-1-the-common-characteristics-of-cpus
2	Primary Memory and secondary storage	Page 4 - 7 https://student.craigndave.org/videos/ocr-gcse-j277-slr-1-2-ram-rom https://student.craigndave.org/videos/ocr-gcse-j277-slr-1-2-the-need-for-secondary-storage
3	Data representation ○ Numbers ○ Characters ○ Images ○ Sound ○ Compression	Pages 13 - 21
4	Networks ○ Networks and topologies ○ Wired and wireless networks, protocols	Pages 24, 27, 28, 29
5	Network security ○ Threats to computer systems and networks ○ Identifying and preventing vulnerabilities	Page 32
6	Boolean Logic	Page 57-59 https://www.csnewbs.com/ocr2020-4-1-booleanlogic
7	Producing robust programs ○ Defensive design ○ Testing	Pages 71-72 https://www.csnewbs.com/ocr2020-3-2-testing
8	SQL	Page 65
9	Languages and translators ○ Languages ○ IDE	Pages 74-75 https://www.csnewbs.com/ocr2020-5-1-languagestranslators
10	Algorithms ○ Computational thinking	Pages 45- 48

	○ Designing, creating and refining algorithms ○ Searching and sorting algorithms	
11	Programming fundamentals ○ Programming fundamentals ○ Data types ○ Additional programming techniques	Pages – 60-67 https://www.csnewbs.com/ocr2020-2-3-additionaltechniques https://www.csnewbs.com/ocr2020-1-2-designingalgorithms