

Year 11 Revision Computer Science Support 2021-22

		Computer Science	
		Advice and support for all Year 11 students	Tick
	Regula	r independent study will aid the recall of knowledge and enhance your skills to	when
		ensure targets are met next year	complete
•	Create	a study timetable to help you pace your revision	
•	Have a	study exercise book, revision cards, mind-maps and other revision aides to make notes	
	when	ou are revising	
•	Using t	he mitigated Computer Science PLC identify the areas of weakness in your knowledge	
•	Start to	revise your weak areas first using the resources given to you and resources available:	
	0	PLC mitigated (Independent Learning folder/CS-PLC/CS PLC with mitigations for 2022)	
	0	OCR Computer Science textbook	
	0	(KIAN) KnowItAllNinja OCR Computer Science (J277) modules for paper 1 and paper 2	
	0	Test your knowledge after you have revised each topic	
	0	Craig n Dave OCR GCSE J277 YouTube videos	
	0	Python to pseudocode/Exam Reference Language booklet	
	0	Past sample papers for J277 spec	
	0	Seneca - OCR Computer Science (J277 spec)	
	0	Revision booklets and workbooks/worksheets	
	0	Independent Learning folder revision resources	
	0	Your completed Python programs	
	0	Marked work in your CS classroom books	

Internet websites and apps for study support

- Python Visualiser https://pythontutor.com/visualize.html#mode=edit
- Python W3C https://www.w3schools.com/python/
- KIAN https://www.knowitallninja.com/
- Seneca https://app.senecalearning.com/dashboard/courses/add?Price=Free&Subject=Computer+Science
- GCSE Bitesize https://www.bbc.co.uk/bitesize/articles/zfxy3j6

General information

Intervention day and time

Wednesday term time: 8am to 8.30am

• Easter – Monday 4th April: 12.30pm to 2.30pm

Computer Science exam dates:

• Paper 1 – Monday 16th May 2022

Paper 2 – Monday 27th May 2022

Exam board - Advanced info guidance

Only paper 1 topics have been mitigated for. See the new PLC. Only topics in red crossed out do not have to be revised for paper 1 exam. All other paper 1 topics must be revised.

Paper 2 topics remain the same. No changes made. All paper 2 topics need to be revised.

Study areas to practise or complete	Where to find the information	Tick when
	to revise	complete
 Practice sorting algorithms – bubble sort, insertion sort, 	OCR textbook, Independent	
merge sort	learning folder resources (ILF),	

		KIAN, Seneca, Bitesize, CraignDave	
		vids	
•	Ensure you can interpret algorithms, complete algorithms	OCR textbook, Independent ILF,	
	and interpret algorithms	KIAN, Seneca, Bitesize	
•	Algorithms using trace tables	OCR textbook, ILF, KIAN, Seneca,	
		Bitesize	
•	Write Algebraic expressions	OCR textbook, ILF	
•	Ensure you understand the use of all logical and	OCR textbook, ILF, KIAN, Seneca,	
	mathematical operators including Exponentiation, Mod and Div.	Bitesize	
•	Use of Sequence, Selection, Iteration in programs	OCR textbook, ILF, Python W3C, Your python programs	
•	Use of sub-programs (functions and procedures)	Python W3C, ILF, KIAN, Your python programs, CraignDave	
•	Use of 1d and 2d arrays in programs	Python W3C, ILF, KIAN (data structures)	
•	Know the different data types: Integer, Character, Real (float), String, Boolean	OCR textbook, Independent ILF, KIAN, Seneca, Bitesize	
•	Know difference between syntax error, logic error, runtime error	OCR textbook, Independent ILF, KIAN, Seneca, Bitesize, CraignDave	
•	How to use casting in a program	OCR textbook, ILF, Python W3C	
•	File handling (open, read, append, write, close)	OCR textbook, ILF, Python W3C, Your python programs	
•	Defensive design and maintainability of programs	OCR textbook, ILF, KIAN, Seneca, Bitesize, CraignDave	
•	Testing – selecting suitable test data to test programs,	OCR textbook, ILF, Bitesize	
	completing test plans	Contentioon, IEI , Breesie	
		Where to find support on how	Tick when
	completing test plans		Tick when complete
•	Completing test plans Key skills to practise Practice writing simple programs in Exam Reference	Where to find support on how to practise J277 – programming ERL guide	_
•	completing test plans Key skills to practise	Where to find support on how to practise	
•	Completing test plans Key skills to practise Practice writing simple programs in Exam Reference Language (pseudocode) Practice writing programs as flowcharts using correct symbols (start/stop, process, input/output, decision, sub- process). Clearly draw the symbols and remember to	Where to find support on how to practise J277 – programming ERL guide (Independent learning folder)	
•	Rey skills to practise Practice writing simple programs in Exam Reference Language (pseudocode) Practice writing programs as flowcharts using correct symbols (start/stop, process, input/output, decision, sub- process). Clearly draw the symbols and remember to show using arrows the flow of information Boolean logic - Draw and complete accurate Boolean logic diagrams and logic circuits using AND OR NOT. Complete	Where to find support on how to practise J277 – programming ERL guide (Independent learning folder) KIAN (Algorithm Design), ILF	
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	Rey skills to practise Practice writing simple programs in Exam Reference Language (pseudocode) Practice writing programs as flowcharts using correct symbols (start/stop, process, input/output, decision, sub- process). Clearly draw the symbols and remember to show using arrows the flow of information Boolean logic - Draw and complete accurate Boolean logic diagrams and logic circuits using AND OR NOT. Complete truth tables related to the logic diagram Ensure you know how to clearly draw the different logic diagram symbols so it isn't ambiguous Practice number conversions – Binary, denary, hex and	Where to find support on how to practise J277 – programming ERL guide (Independent learning folder) KIAN (Algorithm Design), ILF KIAN, ILF, OCR textbook KIAN, ILF, OCR textbook	
•	Rey skills to practise Practice writing simple programs in Exam Reference Language (pseudocode) Practice writing programs as flowcharts using correct symbols (start/stop, process, input/output, decision, sub- process). Clearly draw the symbols and remember to show using arrows the flow of information Boolean logic - Draw and complete accurate Boolean logic diagrams and logic circuits using AND OR NOT. Complete truth tables related to the logic diagram Ensure you know how to clearly draw the different logic diagram symbols so it isn't ambiguous Practice number conversions – Binary, denary, hex and vice versa. Practice your Python knowledge from the programming	Where to find support on how to practise J277 – programming ERL guide (Independent learning folder) KIAN (Algorithm Design), ILF KIAN, ILF, OCR textbook ILF, OCR textbook Python visualiser, Your Python	_