

Curriculum Overview: Year 10 Computer Science

Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Topic 2.2 Programming fundamentals	Topic 2.1 Algorithms 2.2 Programming fundamentals	Topic 2.3 Producing robust programs 2.4 Computational logic	Topic 2.2 Programming fundamentals 2.5 Translators	Topic Paper 2 revision	Topic 1.1 System architecture 1.2 Memory and storage
Links to prior learning Programming 1 and programming 2 units at KS3 Stretch and Challenge Enquiry How do you program using iteration?	Links to prior learning Algorithms 1 and 2 units at KS3 Programming fundamentals knowledge from Aut1 Stretch and Challenge Enquiry How do you program using 2d arrays? How do you program searching and sorting algorithms?	Links to prior learning Knowledge developed from testing their programs Binary Stretch and Challenge Enquiry What is appropriate test data?	Links to prior learning All previous knowledge of programming Binary Stretch and Challenge Enquiry How do you program using subroutines?	Links to prior learning 2.1,2.2,2.3,2.4,2.5 Stretch and Challenge Enquiry How can you answer exam questions using OCR reference language?	Links to prior learning System Architecture 1 &2 and Data representation 1 Stretch and Challenge Enquiry How can you apply technical terminology to exam questions?
Equipment Needed		Wider Reading		Family activities	
Programming challenges Idle Google Classroom A device to be able to program on (CGP GCSE Computer Science 9-1 Revision)		ClearRevise OCR Computer Science J277 OCR GCSE (9-1) J277 Computer Science (S Robinson,2020)		Ask your child to discuss or show you some of the programs they have created. Encourage your child to develop a growth mind-set and accept mistakes as part of the learning process. If you have a PC or laptop and can access the following website https://repl.it/@enaard/Python-3 Or download the free Python software; students can work on their programming skills.	