



Subject	Year	Term
Computer Science	11	1
Topic		
Algorithms and programming		
Content (Intent)		
Prior Learning (Topic)	Network security, system software, impacts of digital technology, programming	
Understand how the main sort and search algorithms are applied and in what circumstances they are useful. Demonstrate the order in which they can reorganise data and why this might be useful in a given set of circumstances. How to interpret a given set of algorithms, modify and adapt them to a particular purpose.		
Future Learning (Topic) Logic and Languages and programming		
What Knowledge and Skills will be taught (Implementation)	How will your understanding be assessed & recorded (Impact)	
The mains algorithms to sort and search data, bubble, insertion and merge sort, linear and binary searches. Which algorithm should be used and under what circumstances.	A test in class based on past questions and on those provided by the exam board which are part of the end of unit test package. Students will be given a grade based on published grade boundary data. Assorted Google and Teams Forms to test knowledge PG-online set tasks and homework.	
The main algorithmic constructions, functions, iteration, branching, sequence.	Long answers, extended questions, to be marked with reference to exam board criteria. Feedback based on how to improve responses Assorted Teams and Google Forms to test knowledge	
How can parents help at home?		
Ensure students revise for class tests, and do the homeworks		
Helpful further reading/discussion (including Reading and Vocabulary Lists)		
Reading CGP Computer science ISBN: 9781782946021 GCSE pod PG-online powerpoints	Vocabulary Lists Translation Interpreter Compile Variable Swap Available Bubble Insertion Merge sort Linear binary search	Aware Comment Pose Previous Relevant Require Response