



Subject	Year	Term
Computer Science		
Topic		
Algorithms		
Content - Intent		
Prior Learning (Topic): Network Security, System Software, 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: Networks, Programming		
What Knowledge and Skills will be Taught (Implementation)		How will your understanding be assessed and 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. Suggestions on how to improve answers to the next grade boundary will be provided. There will be interim on-line testing throughout the unit.
The main algorithmic constructions, functions, sequence, selection and Iteration		Algorithm answers, extended questions, to be marked with reference to exam board criteria. Feedback based on how to improve responses.
How can parents help at home?		
Parents can help by ensuring revision and homework is completed.		
Helpful further reading and discussion (Including reading and Vocabulary List)		
Reading CGP Computer Science revision book GCSE pod Smart Revise Computer Science UK Teach ICT ISAAC Computing YouTube – Craig ‘n’ Dave	Vocabulary List Translation Interpreter Compile Variable Swap Available Bubble Insertion	Merge Sort Linear Binary Search