

KEVICC KS3 Curriculum:	Subject: Computer Science	Key terms and vocabulary.
Year: 9 Term: 6	Topic: Advanced Programming and SQL	Which words will be explicitly taught & how frequently will understanding be checked? How will assimilation of new vocab be checked?
What is the essential knowledge from this unit? What do students need to remember and understand? - Understand that there can be many different algorithms to solve the same problem or task - Be able to name and describe different searching algorithms (linear, binary) - Be able to compare these two algorithms - Be able to name and describe different sorting algorithms (bubble, merge) - Be able to compare these two algorithms - Understand how data structures enable programs to access and process data in an efficient way - Understand the difference between a 1D and 2D lists - Be able to write programs that create and use 2D lists - Understand the concept of modular program design (structured programming) - Be able to describe the benefits of structured programming using subroutines - Be able to use parameter passing and return values to and from subroutines - Understand the difference between local and global variables - Understand the difference between a flat file and a relational database - Be able to describe the benefits of using a relational database - Understand how a relational database is made using tables, fields and records - Be able to identify and describe the use of primary keys and foreign keys - Be able to use SQL to extract and modify data in a relational database		Algorithm Linear search Binary search Bubble sort Merge sort Data structure 1D lists 2D lists Modular programming Structured programming Subroutine Parameter Return value Local variable Global variable Flat file database Relational database Table Record Field Primary key Foreign key Structured Query Language (SQL)
What prior learning supports understanding of this content? - Year 8 lessons on using 1D lists - Year 9 unit on program design	How does this content link to future learning? Essential learning for students going on to take GCSE Computer Science course	
Reading: <i>Where in the unit are students supported to read complex academic text?</i> Students will be directed to read age-appropriate content from BBC Bitesize pages and other relevant online sources	Writing: <i>Independent writing tasks and how they are structured</i> - Short written answers to worksheet questions - Extended written descriptions using key words as prompts	Used in context during lessons and understanding checked in end of unit assessment
Key assessments: <i>How will students review the information learned?</i> <i>How will feedback be seen?</i> - Students will get short personalised feedback (mainly verbal) on individual tasks - End of unit assessment in penultimate lesson, with final lesson used to give feedback and enable corrections/improvements		