



## QPHS Year 10 Computer Science Curriculum Map

Half term	Title	Unit summary	Assessment
1	<b>Topic 6: Programming Part 1: Sequence</b>  <b>Topic 3: Computer Systems</b>	Introduction/Recap to Python Programming – using sequencing and input/output and a basic introduction to using sub-routines  Learning about Systems Software, the CPU and the Fetch-Decode-Execute Cycle	Ongoing vocab tests Past paper questions on Topic 3 Isaaccomputerscience quizzes Assessment of programming tasks
2	<b>Topic 6: Programming Part 2: Selection</b>  <b>Topic 3: Computer Systems</b>	Continuing learning programming techniques in Python – focusing on if/elif/else to make decisions  Learning about memory, storage and how all hardware components influence system performance	Ongoing vocab tests Past paper questions on Topic 3 Isaaccomputerscience quizzes Assessment of programming tasks
3	<b>Topic 6: Programming Part 3: Iteration</b>  <b>Topic 2: Data (Binary/Hexadecimal)</b>	Continuing learning programming techniques in Python – focusing on repetition (while) and iteration (for) to repeat sections of code  Learning about the binary and hexadecimal number systems and how to convert between them and denary	Ongoing vocab tests Past paper questions on Topic 2 (and Topic 3) Isaaccomputerscience quizzes Assessment of programming tasks
4	<b>Topic 6: Programming Part 4: Subroutines</b>  <b>Topic 1: Computational Thinking Part 1</b>	Continuing learning programming techniques in Python – focusing on procedures and functions, the differences between global and local variables and how to use structured programming techniques.  An introduction to computational thinking, learning about the concepts of decomposition, abstraction, algorithmic thinking and pattern recognition	Ongoing vocab tests Past paper questions on Topic 1 (and Topic 2 and 3) Isaaccomputerscience quizzes Assessment of programming tasks
5	<b>Topic 6: Programming Part 5: List and Strings</b>  <b>Topic 3: Computer Systems (Logic Gates and Truth Tables)</b>	Continuing learning programming techniques in Python – focusing on manipulating lists and strings  Learning about logic gates and how to use a truth table to predict output from a circuit	Ongoing vocab tests Past paper questions on Topic 3 (and Topic 1 and 2) Isaaccomputerscience quizzes Assessment of programming tasks
6	<b>Topic 1: Computational Thinking Part 2</b>  <b>Topic 2: Data (Text, Images, Sound and Compression)</b>	Learning about the two searching (linear and binary) and two sorting (bubble and merge) algorithms required for GCSE  Learning how to represent text, images and sound as binary and hexadecimal values	Ongoing vocab tests Past paper questions on Topic 1 and 2 (and Topic 3) Isaaccomputerscience quizzes

