Curriculum Overview for Computer Science
Year 11

Half Term 3 **Algorithms** **Substantive Knowledge:** • Understand how a computer runs code • Understand what is meant by algorithmic thinking • Understand what is meant by decomposition • Understand what is meant by abstraction • Understand how to identify outputs • Understand how to identify inputs • Understand how to identify the processes required • Understand how to identify repeatable processes • Understand the purpose of a structure diagram • To be able to understand pseudocode • Understand what a flow chart is used for • Understand what the flow chart symbols mean • Understanding trace tables to check variables through a program **Disciplinary Knowledge:** • To be able to break a problem down using decomposition and abstraction • To be able to take a problem and produce step-by step instructions • Be able to produce a structure diagram • To be able to write a pseudocode solution • To be able to produce a flow chart to solve a problem • Be able to complete a trace table when running through a program	Model reading Reading out loud Skim and Scan of source information Decoding terms Etymology of key terms
	Computational thinking Sequence Decomposition Abstraction Algorithmic thinking Input Output Process Repeatable Process Structure diagram Pseudocode Flow chart Terminal Process Question Decision Input Output Sub program Trace Tables
	Formative assessment Knowledge checks Smart Revise Practice questions **Summative assessment** End of unit assessment
	Practice questions Revision tasks Research tasks