

KEVICC KS3 Curriculum:		Subject: Computing	Key terms and vocabulary.
Year: 8 Term: 2	Topic: Text Based Programming in Python		Which words will be explicitly taught & how frequently will understanding be checked? How will assimilation of new vocab be checked? Syntax Source code Machine code Variables Integer String Real Float Boolean Validation Concatenate Selection Definite iteration Indefinite iteration List Array Algorithm Linear search Binary search Used in context during lessons and understanding checked in end of unit assessment
What is the essential knowledge from this unit? What do students need to remember and understand? <ul style="list-style-type: none">Understand that text-based programs must follow the syntax of the programming language exactlyUnderstand that text-based programs must be translated into machine code before they can be run (executed)Be able to write, save and run a text-based program using PythonBe able to write programs that store inputs as variablesUnderstand that variables can store different types of dataBe able to write programs that use selection to give alternative outputsBe able to write programs that can add up numbers input by the userUnderstand the difference between integers and real numbers (floats)Be able to check that only numbers have been entered (validation)Be able to join two strings together (concatenate)Be able to calculate the length of a stringBe able to write program that checks length of passwordsBe able to use definite and indefinite iteration in a programUnderstand the difference between definite and indefinite iterationUnderstand how to write a simple user authentication programUnderstand how data can be stored in lists (arrays)Understand how the linear search algorithm worksUnderstand the limitations of the linear search algorithm and how the binary search algorithm is better			
What prior learning supports understanding of this content? <ul style="list-style-type: none">Year 7 unit on graphical programmingWriting cryptography programs at end of year 7		How does this content link to future learning? <ul style="list-style-type: none">Year 9 unit on program design and algorithms	
Reading: Where in the unit are students supported to read complex academic text? <ul style="list-style-type: none">Students will be directed to read age-appropriate content from BBC Bitesize pages and other relevant online sources		Writing: Independent writing tasks and how they are structured <ul style="list-style-type: none">Short written answers to worksheet questions	
Key assessments: How will students review the information learned? How will feedback be seen? <ul style="list-style-type: none">Students will get short personalised feedback (mainly verbal) on individual tasksEnd of unit assessment in penultimate lesson, with final lesson used to give feedback and enable corrections/improvements			