KEVICC KS3 Curriculum:	Subject: Computing	Key terms and vocabulary.
Year: 8 Term: 3	Topic: How Computers Work (part 2)	*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 the difference between system software and application software and why both are needed
- Understand the role and tasks of an operating system
- Be able to name and describe different utility software
- Be able to name and describe the stages of the Fetch-Execute cycle of program instructions
- Understand the factors that can affect a computer's performance
- Be able to name and describe the main components of a CPU
- Be able to convert between denary and binary numbers
- Be able to add binary numbers
- Be able to represent text in binary form using the ASCII coding system
- Understand how computers store images as bitmaps using pixels and binary digits
- Understand how samples taken of analogue sound wave and stored as binary
- Understand how large binary files can be compressed
- Understand the difference between lossy and lossless data compression

Key terms and vocabulary (continued):

System software
Application software
Operating system
Resource
Utility
Fetch
Decode
Execute
Cores
Cache memory
Megabytes
Clock speed
Hertz
Character coding
Bitmap
Pixel
Binary digit
Sample
Analogue
Sampling rate
Sampling resolution
Compression
Lossy
Lossless

Used in context during lessons and understanding checked in end of unit assessment

What prior learning supports understanding of this content?	How does this content link to future learning?
- Year 7 units on How Computers Work and on Computer Graphics	- Year 9 units on Computer Systems and Data Representation

Reading: *Where in the unit are students supported to read complex academic text?*	**Writing:** *Independent writing tasks and how they are structured*
- Students will be directed to read age-appropriate content from BBC Bitesize pages and other relevant online sources	- Short written answers to worksheet questions

Key assessments:
How will students review the information learned?
How will feedback be seen?

- 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