




Curriculum Overview for Computer Science Year 10

<p>Half Term 3 Operating Systems Substantive Knowledge:</p>		<p>Model reading Reading out loud Skim and Scan of source information Decoding terms Etymology of key terms</p>
<ul style="list-style-type: none"> • Understand the role of the operating system in a computing device • Understand how an operating system is started • Understand the role of the BIOS in a computing a device • Understanding the key functions of the operating system • Understand the role of the user interface • Identify the key user interfaces (Command Line, GUI, Touch Screen and Natural Language) • Understand the importance of memory management in an Operating System • Understand how data moves around a computer system • Understand why peripherals need management • Understand the need for device drivers and what they do • Understand the role of user management in an operating system 		<p>BIOS Bootstrap Operating System User Interface Command Line GUI – Graphical User Interface Touch Screen Natural Language Memory Management Multi-tasking Peripherals Devices Device drivers User Access rights Roles Administrators Filesystem Partition Filename Security</p>
<ul style="list-style-type: none"> • Understand the difference between users and administrators • Understand the use of access rights in an operating system 		<p>Formative assessment Knowledge checks Smart Revise Practice questions Summative assessment End of unit assessment</p>
<ul style="list-style-type: none"> • Understand the role of the file system in secondary storage • Understand what a partition is • Understand the differences between common filesystems • Understand the functionality and purpose of utility software • Understand the functionality and purpose of data compression software 		<p>Practice questions Revision tasks Research tasks</p>



- Understand the functionality and purpose of encryption software

Disciplinary Knowledge:

- Be able to install Windows on a PC
- Be able to evaluate a user interface type
- Be able to identify processes in Windows
- Be able to identify which users have accounts on a Windows device
- Be able to identify the file systems used on a Windows device
- Be able to list different utility software and their roles
- Be able to show how defragmentation might work
- Be able to list reasons for compression
- Be able to discuss reasons for encryption