



## Key Stage 3 Curriculum Map 2019 - 2020

### Term 2

Year Group: 9		Subject: Computer Science	
Focus/Topic	Objectives	Key Skills	Home Learning/Recommended Reading
<ul style="list-style-type: none"> <li>Computer Crime and Cyber Security – Email</li> </ul>	<ul style="list-style-type: none"> <li>Identify common types of computer crime</li> <li>Look at examples of computer crime on the Internet</li> <li>Learn about different types of email scam</li> <li>Recognise the signs of fraudulent emails</li> </ul>	<ul style="list-style-type: none"> <li>Phishing</li> <li>Trojan horse/malware</li> <li>Virus</li> <li>Email attachments</li> </ul>	<ul style="list-style-type: none"> <li>See MS Teams</li> </ul>
<ul style="list-style-type: none"> <li>Computer Crime and Cyber Security – Hacking</li> </ul>	<ul style="list-style-type: none"> <li>Learn about the Computer Misuse Act – which makes certain activities illegal</li> <li>Look at examples of computer misuse</li> <li>Understand what is meant by hacking</li> <li>Understand what is meant by malware</li> <li>Learn ways to protect yourself from malware &amp; hacking</li> </ul>	<ul style="list-style-type: none"> <li>Computer misuse act</li> <li>Logicbomb</li> <li>Anti-Malware and anti-viruses</li> <li>Passwords</li> </ul>	
<ul style="list-style-type: none"> <li>Computer Crime and Cyber Security – Protecting personal data</li> </ul>	<ul style="list-style-type: none"> <li>Be aware of who might hold personal data about you</li> </ul>	<ul style="list-style-type: none"> <li>Data protection act</li> <li>Identify theft</li> </ul>	

	<ul style="list-style-type: none"> <li>• Discuss the need for various organisations to hold data about you</li> <li>• Be aware of the possibility of identity theft</li> <li>• Know how to minimize the chance of identity theft</li> </ul>		
<ul style="list-style-type: none"> <li>• Computer Crime and Cyber Security – Copyright protection</li> </ul>	<ul style="list-style-type: none"> <li>• Learn about Copyright law, what it says and what it means</li> <li>• Look at examples of copyright infringement</li> <li>• Understand the damage that illegal copying does to individuals, companies and society</li> <li>• Compare copyright infringement with plagiarism</li> </ul>	<ul style="list-style-type: none"> <li>• Copyright law</li> <li>• Apple vs Samsung</li> </ul>	<ul style="list-style-type: none"> <li>• See MS Teams</li> </ul>
<ul style="list-style-type: none"> <li>• Computer Crime and Cyber Security – Health &amp; Safety</li> </ul>	<ul style="list-style-type: none"> <li>• Learn about some of the common health and safety problems associated with computer use</li> <li>• Learn ways of avoiding these problems</li> <li>• Learn about Health and Safety law</li> </ul>	<ul style="list-style-type: none"> <li>• Health and safety at your workstation</li> </ul>	
<ul style="list-style-type: none"> <li>• Computer Crime and Cyber Security – assessment</li> </ul>			
<b>Mid Term Break</b>			
<ul style="list-style-type: none"> <li>• Cryptography - Encryption, Decryption and Keys</li> </ul>	<ul style="list-style-type: none"> <li>• “Summarise simple methods for encrypting data”</li> </ul>	<ul style="list-style-type: none"> <li>• What is cryptography</li> <li>• Caesar cipher and Frequency Analysis</li> <li>• Vignere Cipher</li> </ul>	<ul style="list-style-type: none"> <li>• See MS Teams</li> </ul>
<ul style="list-style-type: none"> <li>• Cryptography - Coding the Caesar Cipher</li> </ul>	<ul style="list-style-type: none"> <li>• “Construct a simple Caesar Cipher”</li> </ul>	<ul style="list-style-type: none"> <li>• Encrypting data</li> </ul>	
<ul style="list-style-type: none"> <li>• Cryptography - Hashing Passwords</li> </ul>	<ul style="list-style-type: none"> <li>• “Establish the importance of choosing strong passwords”</li> </ul>	<ul style="list-style-type: none"> <li>• What hashing is and examples of hashing</li> <li>• MD5 hashing algorithm and salting</li> </ul>	
<ul style="list-style-type: none"> <li>• Cryptography - Decrypting the Caesar Cipher</li> </ul>	<ul style="list-style-type: none"> <li>• “Build a decryption tool for a Caesar Cipher”</li> </ul>	<ul style="list-style-type: none"> <li>• Decrypting data</li> </ul>	

<ul style="list-style-type: none"><li>• Cryptography - Importance of Cryptography</li></ul>	<ul style="list-style-type: none"><li>• “Appraise the advantages and disadvantages of encryption”</li></ul>	<ul style="list-style-type: none"><li>• Public Key Cryptography</li><li>• Pros and Cons of Cryptography</li></ul>	<ul style="list-style-type: none"><li>• See MS Teams</li></ul>
---	---	---	--

UAE Links across the term

--