

# SUBJECT NAME COMPUTER SCIENCE



**ALDER**  
Community High School

YEAR GROUP 9

| Topic – Cyber Security |                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
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| Autumn Term 1          | <b>Composites</b><br>Recognise the forms of network attacks<br>To be able to explain the impact of malware on a network<br>To be able to explain how people can be the weak point in a system<br>To be able to compare different types of hackers<br>To be able to explain prevention methods for a network<br>To be able to explain prevention methods for a network | <b>Key Vocabulary</b> <ul style="list-style-type: none"> <li>• Passive attack</li> <li>• Active attack</li> <li>• Insider attack</li> <li>• Brute force attack</li> <li>• Dos attack</li> <li>• Password</li> <li>• Packet sniffing</li> <li>• Malware</li> <li>• Virus</li> <li>• Worm</li> <li>• Trojan</li> <li>• Encryption</li> <li>• Firewall</li> <li>• Anti-malware</li> <li>• Physical security</li> <li>• Social engineering</li> <li>• Phishing</li> <li>• Baiting</li> </ul> |
|                        | <b>Assessment</b><br>Afl every lesson using whiteboards<br>Mid point MCQ test to inform planning and reteach of misconceptions<br>End of topic assessment.                                                                                                                                                                                                            | <b>ILS</b><br>Revision - Knowledge drop, flash cards, condense it, mind map, mnemonics                                                                                                                                                                                                                                                                                                                                                                                                   |
|                        | <b>How to help at home</b><br>Use ILS strategies to ask questions on what they have studied in lesson.<br>Check retrieval of the knowledge using the knowledge organisers.<br>Ensure revision is completed on the retrieval grids.<br>Use the web links to support with wider understanding                                                                           | <b>Wider reading</b><br><a href="#">KS3 Computer Science - BBC Bitesize</a>                                                                                                                                                                                                                                                                                                                                                                                                              |
|                        | <b>SMSC</b>                                                                                                                                                                                                                                                                                                                                                           | <b>Careers Links</b><br>Software developer, Penetration tester, Cyber security                                                                                                                                                                                                                                                                                                                                                                                                           |



| Autumn 2 | Topic – App development                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                              |
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|          | <p>To be able to use testing to evaluate the effectiveness of the game.</p> <p>To be able to explain the term decomposition</p> <p>To be able to design a flow chart</p> <p>To be able to define user interface, elements and properties</p> <p>To be able to explain variables</p> <p>To be able to explain event driven programming</p> <p>To be able to use block programming to create the game</p> <p>To be able to use testing to evaluate the effectiveness of the game.</p> | <p><b>Key Vocabulary</b></p> <ul style="list-style-type: none"> <li>• Software</li> <li>• Element</li> <li>• Properties</li> <li>• User interface</li> <li>• Decomposition</li> <li>• Flow chart</li> <li>• Variable</li> <li>• Event driven</li> <li>• Debugging</li> </ul> |
|          | <p><b>Assessment</b></p> <p>Aft every lesson using whiteboards</p> <p>Mid-point MCQ test to inform planning and reteach of misconceptions</p> <p>End of topic assessment.</p>                                                                                                                                                                                                                                                                                                       | <p><b>Homework /ILS</b></p> <p>Revision – use of ILS strategies , flash cards, mind maps,</p>                                                                                                                                                                                |

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|  | <p><b>How to help at home</b></p> <p>Use ILS strategies to ask questions on what they have studied in lesson.</p> <p>Check retrieval of the knowledge using the knowledge organisers.</p> <p>Ensure revision is completed on the retrieval grids.</p> <p>Use the web links to support with wider understanding</p> | <p><b>Wider reading</b></p> <p><a href="#">KS3 Computer Science - BBC Bitesize</a></p>    |
|  | <p><b>SMSC</b></p>                                                                                                                                                                                                                                                                                                 | <p><b>Careers Links</b></p> <p>Software developer, Penetration tester, Cyber security</p> |



Our curriculum overviews are currently being revised to align with recent updates to teaching sequences and assessment planning. Once published, they will outline the key composite knowledge in each topic subject. We expect to share these with parents shortly and thank you for your patience during this update.