

Curriculum Map - KS4 Computer Science(J277)

Subject: Computer Science Year 9 starts with unit 2

Year Group: Year 9

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
<p>Content Descriptive/propositional knowledge</p> <p>'knowing that'</p>	<p>E-safety revision 1.1 Systems architecture Programming</p>	<p>1.2 Memory and storage Programming</p> <p>know that memory is different from storage and that there are different types of storage</p>	<p>1.3 Computer networks, connections and protocols Programming</p>	<p>1.4 Network security Programming</p> <p>know that networked systems can be vulnerable to attack</p>	<p>1.5 Systems software Programming</p> <p>know that computer systems require different types of software to operate</p>	<p>1.6 Ethical, legal, cultural and environmental impacts of digital technology Programming</p>
<p>Skills Ability knowledge</p> <p>'knowing how'</p>	<p>know what actions occur at each stage of the fetch-execute cycle and understand the role/purpose of each component and what it manages, stores, or controls during the fetch-execute cycle</p>	<p>understand the need for primary storage Knows the difference between RAM and ROM and understands the purpose of RAM, ROM & virtual memory in a computer system</p>	<p>understand the components that make up digital systems, and how they communicate with one another and with other systems</p>	<p>know how we can take steps to protect a system from threats.</p>	<p>understand purpose and functionality of operating systems software and utility system software</p>	<p>understand the impacts of digital technology to the individual and to wider society</p>
<p>Key Questions</p>	<p>What is computational thinking and why is it important?</p>	<p>What are the different types of storage? Why are there different types?</p>	<p>How does the internet work? How does data travel around a network?</p>	<p>What security risks should I be aware of?</p>	<p>What is operating systems software? What is utility software?</p>	<p>What are my areas of strength?</p> <p>Which areas do I have gaps in knowledge?</p> <p>How can I improve my knowledge and close the gaps?</p>
<p>Assessment</p> <p>End of unit tests (each test</p>	<p>End of unit tests</p>	<p>End of unit tests</p>	<p>End of unit tests</p>	<p>End of unit tests</p>	<p>End of unit tests</p>	<p>End of unit tests End of term exam</p>

out of 20)						
Literacy/ Numeracy/ SMSC/ Character	Development in communication/ literacy skills/apply mathematical skills relevant to Computer Science.	Development in communication/ literacy skills/apply mathematical skills relevant to Computer Science.	Development in communication/ literacy skills/apply mathematical skills relevant to Computer Science.	Development in communication/ literacy skill/apply mathematical skills relevant to Computer Science.	Development in communication/ literacy skills/apply mathematical skills relevant to Computer Science.	Development in resilience, perseverance and aspiration
Enrichment	Duke of York Inspiring Digital Enterprise Award (Two year programme) http://idea.org.uk/					