

Subject :	Computer Science	Year Group:	11
-----------	------------------	-------------	----

	June - July	September to October	October - December	December - February	February - April
Scheme title	Non Exam Assessment	Fundamentals of Computer Networks	Cyber Security	Ethical, Legal and Environmental Issues	Topic 1- 5 Revision
Purpose of Scheme	A high-quality Computer Science education ensures all students: •Are prepared for the future giving them opportunities to gain knowledge and develop skills for the ever changing digital world.	A high-quality Computer Science education ensures all students: •Are prepared for the future giving them opportunities to gain knowledge and develop skills for the ever changing digital world.	A high-quality Computer Science education ensures all students: •Are prepared for the future giving them opportunities to gain knowledge and develop skills for the ever changing digital world.	A high-quality Computer Science education ensures all students: •Are prepared for the future giving them opportunities to gain knowledge and develop skills for the ever changing digital world.	A high-quality Computer Science education ensures all students: •Are prepared for the future giving them opportunities to gain knowledge and develop skills for the ever changing digital world.
Knowledge in sequence	Non Exam Assessment 3.9.1.1 Purpose of non-exam assessment Non-exam assessment (NEA) allows students to develop their practical skills in a problem-solving context by coding a solution to a given problem. Non-exam assessment is as much a learning experience as it is a method of assessment: allowing students to work independently, over a period of time, extending their programming skills and increasing their understanding of practical, real world applications of computer science.	Fundamentals of Computer Networks 3.5.1 Computer Networks •Define what a computer network is. •Discuss the benefits and risks of computer networks. •Describe the main types of computer network including: •Understand that networks can be wired or wireless. •Explain the following common network topologies: • star • bus. •Define the term 'network protocol'	Fundamentals of Cyber Security 3.6.1 Cyber Security 3.6.1.2 Malicious code	Ethical, legal and environmental impacts of technology 3.7.1 Ethical, legal and environmental impacts	•Fundamentals of Algorithms •Fundamentals of Programming •Fundamentals of Data Representation •Fundamentals of Computer Systems •Fundamentals of Computer Networks •Fundamentals of Cyber Security •Ethical, Legal and Environmental Issues
Skills	Algorithmic Thinking is thinking like a computer in a sequence of instructions or a set of rules to get something done. Logical reasoning helps us explain why something happens. Decomposition is the process of breaking down a task into smaller more manageable parts. Abstraction is about simplifying things identifying what's important without worrying too much about detail. Evaluation is about making judgements, where possible is an objective and systemic way.	Abstraction is about simplifying things identifying what's important without worrying too much about detail. Digital Literacy (DL) Information Technology (IT)	Abstraction is about simplifying things identifying what's important without worrying too much about detail. Digital Literacy (DL) Information Technology (IT)	Abstraction is about simplifying things identifying what's important without worrying too much about detail. Digital Literacy (DL) Information Technology (IT)	Revision topic 1-7 (AL) Algorithmic Thinking (LR) Logical Reasoning (DE) Decomposition (AB) Abstraction (P) Programming (EV) Evaluation (IT) Information Technology (DL) Digital Literacy
Key Words	Data Types, Basic Programming, Advanced Programming, Data Structures, File Handling, Subroutines	LAN WAN PAN, Wireless networks, Wired networks, Topologies, Protocols, Network Security, TCP/IP model	Social engineering, Malicious code, Weak and default passwords, Penetration testing, Blagging, phishing, pharming, shouldering	Ethical, Legal and Environmental Issues, Cyber Security, Mobile Technology, Wearable Technology, Cracking, Hacking, Privacy Issues	Algorithms, Programming, Data Representation, Computer Systems, Networks, Cyber Security, Issues
End Point	NEA Completion	Students are able explain the different type of computer networks. Students will develop a good understand about network protocols. They will also be able to answer GCSE exam style questions.	Students are able to spot social engineering techniques and understand how to use technology safely, respectfully, responsibly and securely. They will also be able to answer GCSE exam style questions.	Students are able to identify issues with technology and will learn how to use technology safely, respectfully, responsibly and securely. They will also be able to answer GCSE exam style questions.	Student will be able to answer GCSE exam style questions confidently. Ready for Mocks and rel exams in Summer.
Assessment method	*20 hour NEA Sample sent to AQA in May every year	Final written assessment: •Networks exam 60 marks •Mid unit assessment •Reflection grids x 2	Final written assessment: •Cyber Security exam 60 marks •Mid unit assessment •Reflection grids x 2	Final written assessment: •Ethical, Legal and Environmental Issues exam 60 marks •Mid unit assessment •Reflection grids x 2	*Exam Style questions •Mock papers •Studying mark scheme •Learning key terms