

Meden School Curriculum Planning							
Subject	GCSE Computer Science	Year Group	10	Sequence No.	5	Topic	Impact of Digital Technology
Week Number	Retrieval	Core Knowledge			Student Thinking		
-	What do teachers need to retrieve from students before they start teaching new content ?	What specific ambitious knowledge do teachers need to teach students in this sequence of learning?			What real life examples can be applied to this sequence of learning to develop our students' thinking, encouraging them to see the inequalities around them and 'do something about them!'		
U5: Impact of Dig: Ethical and Cultural	KS3: <ul style="list-style-type: none"> E-Safety. Effective use of computers. 	Discuss the impacts of digital technology on the wider society including: <ul style="list-style-type: none"> Ethical issues Cultural issues 			Students will be able to think about and act on of disposing electronic goods, and environmental impact.		
U5: Impact of Dig: Environmental Issues	Students have an understanding of hardware and the impact of environment through disposal.	Discuss the impacts of digital technology on the environment including: <ul style="list-style-type: none"> The impact of manufacture and disposal The impact of upgrading or replacing The impact of e-waste <p>E-Waste - the disposal of any electronic devices and accessories like plugs, phones, computers, televisions and games consoles. According to the World Economic Forum, e-waste is the fastest-growing type of waste in the world and it's a major problem for the environment. While most electronic products can be safely recycled, other processes to get rid of electronics can create dangerous substances. When broken or unwanted electronics are dumped in landfills, toxic substances like lead or mercury can go into soil and water.</p>			Students will be able to further use technology within the legislation of the UK relating to Computer Science. Students will be aware of plagiarism and risks associated with this for further studies.		

<p>U5: Impact of Dig: Legislation</p>	<p>KS3 students have are aware of the legal aspects, including:</p> <ul style="list-style-type: none"> • The Data Protection Act 2018 • Computer Misuse Act 1990 	<p>Discuss the impacts of digital technology on wider society including:</p> <ul style="list-style-type: none"> • Legal issues • Privacy issues <p>Describe legislation relevant to Computer Science:</p> <ul style="list-style-type: none"> • The Data Protection Act 2018 • Computer Misuse Act 1990 • Copyright Designs and Patents Act 1988 • Software licences including open source and proprietary <p>The Computer Misuse Act protects personal data held by organisations from unauthorised access and modification).</p> <p>The act makes the following illegal:</p> <ul style="list-style-type: none"> • Unauthorised access to computer material. This refers to entering a computer system without permission (hacking) • Unauthorised access to computer materials with intent to commit a further crime. This refers to entering a computer system to steal data or destroy a device or network (such as planting a virus) • Unauthorised modification of data. This refers to modifying or deleting data, and also covers the introduction of malware or spyware onto a computer (electronic vandalism and theft of information) • Making, supplying or obtaining anything which can be used in computer misuse offences <p>The Data Protection Act exists to protect such details. This personal data includes items such as:</p> <ul style="list-style-type: none"> • name and address 	
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		<ul style="list-style-type: none"> • date of birth • medical records • school and employment records • religion <p>Personal data is private and should only be accessible by authorised people. Also, digital files stored on computers can be easy to access, copy and share. Protection is needed to make sure that our personal data is kept private and not altered or deleted. The Data Protection Act exists to ensure our data is properly looked after.</p> <p>In addition, everyone has the right to see what data is held about them by an organisation, and to have that data corrected or deleted if incorrect.</p> <p>The Copyright Designs and Patents Act (1988) gives creators of digital media the rights to control how their work is used and distributed. Music, books, videos, games and software can all be covered by copyright law.</p> <p>Anything which you design or code is automatically copyrighted and may not be copied without your permission, as the digital creator.</p>	
<p>Tier 3 List: Ethical, cultural, environmental, legislation, Manufacture, disposal, upgrade, replace, e-waste, Privacy, legal, data protection, computer misuse, copyright, copyright designs and patents act, open source, proprietary, software licence.</p>			