

Curriculum Map: Year 9 Computing

	Half Term 1	Half Term 2	Half Term 3	Half Term 4	Half Term 5	Half Term 6
Topic	E-safety recap  AppShed programming	HTML Coding	Theory Environment  Using a spreadsheet to present information.  Using a spreadsheet to get useful information	Artificial Intelligence (AI)	Creating an interface and reviewing.	Mini Project – Photoshop  Linking with Travel & Tourism and Media studies
Intent	Offer students the opportunity to experience using additional applications such as AppShed and gaming and video editing software.  Create opportunities for students to learn practical and transferable employability skills and knowledge which allow learners to progress on a pathway to work or to an apprenticeship.	develop diverse ambitious IT and computer -literate individuals with the ability to think commercially and creatively, to be resilient and solve problems.  We give students the opportunity to experience different types of programming in the real world and explore the changing world of <b>computer science</b> .	Learn about important issues in the use of IT.  Learn about the impacts of using IT in the real world. Using information and presenting it in a meaningful way.	Spark students' imagination through a wider knowledge of the digital world including accessibility and knowledge of the digital divide.  We provide skills for working life through <b>Information technology</b> giving students the opportunity to be creative and learn how technologies transform lives.	develop diverse ambitious IT and computer -literate individuals with the ability to think commercially and creatively, to be resilient and solve problems.	Ensure students receive an ambitious curriculum and learn both academically and through practical application which inspire students to enter the world of Computing and IT
Key Knowledge	Refresh students knowledge and understanding of the threats of using online tools and the dangers of using modern technology.  Use planning tools to plan an interface  Learn about different requirements different groups have when using IT Risks of using Digital tools and the internet.  Tools and knowledge to plan a product such as	Students to use HTML code to create a website.  Students to understand basics of how websites are constructed and the code behind them.  Students be able to add images and text. Structure of code  Code for images and text  Code for colours  Structure using tables  Colour choice for audience	Making data and information easier to view and use.  Analysing data for a purpose. Consider how data is collected  Using Data to find information.  Converting raw data into useable information in a variety of ways.  The effects on the environment of discarded IT. The resources used in making IT equipment and how they are recycled.	Understand the uses for AI  Learn about data driven models in AI systems.  Learn how limited data set can lead to a flooded machine learning model (bias in and Bias Out)	Create an interface following plans.  Create a questionnaire using forms that can be used to improve the interface  Security risks when using IT. How hackers operate, ways to protect data and IT systems.  Creating a product for a specific need.  Linking slides together  Selecting appropriate content.	Identify and products for a defined audience.  Understanding key concepts of travel & Tourism  Understand how to promote tourism using print

	<p>story boards and mind maps.</p> <p>Identifying audiences and their needs.</p>		<p>Present information in a manageable way.</p> <p>Use information to make useful recommendations.</p> <p>Use of formatting and formulas to create information from raw data.</p> <p>Using formulas to process data.</p> <p>Creating charts to display data in an easy to view format.</p>			
Key Skills	<p>Identify dangers of online tools</p> <p>Use mind map software.</p> <p>Storyboard slides</p> <p>Identify and audience and purpose</p>	<p>Adding text and images</p> <p>Creating table</p> <p>Using colour</p> <p>Adding hyperlinks</p>	<p>More formatting</p> <p>Pivot tables</p> <p>Hyperlinks</p> <p>Macros</p> <p>Using data to make recommendations</p> <p>IF Formulas</p> <p>Vlookups</p> <p>Formatting</p> <p>Drop boxes</p> <p>Creating charts</p>	<p>Interpret decision trees</p> <p>Solving problems with machine learning models</p> <p>Create a model card</p>	<p>Adding slides</p> <p>Formatting images</p> <p>Linking pages</p> <p>Hyperlinks</p> <p>Editing designs</p> <p>Creating questionnaires</p> <p>Identifying improvements</p> <p>Different types of security risks</p> <p>What hackers are</p> <p>What materials go into making a computer</p> <p>How computers are recycled</p> <p>Net neutrality</p> <p>Issues with accessing the internet</p> <p>Impacts of not being able to access internet</p>	<p>Understanding assignments</p> <p>Recapping on previous material</p> <p>Designing and creating products</p> <p>Reviewing products</p>
Key Vocabulary	<p>Cyberbullying</p> <p>Esafety</p> <p>Hacking</p> <p>CEOP</p> <p>Predators</p> <p>Audience</p> <p>Purpose</p> <p>Storyboard</p> <p>Mind map</p> <p>Product</p> <p>Client</p>	<p>Tag</p> <p>Colour</p> <p>Head</p> <p>Body</p> <p>Title</p> <p>Hyperlink</p> <p>Emoji</p> <p>Center</p>	<p>Hyperlink</p> <p>Macro</p> <p>Pivot tables</p> <p>Data</p> <p>Recommendation</p> <p>Spreadsheet</p> <p>Sheet</p> <p>Formula</p> <p>IF Formula</p> <p>Vlookup</p> <p>PivotTable</p> <p>Chart</p> <p>Data</p> <p>Row, Column, Cell</p> <p>Format</p>	<p>Machine learning</p> <p>Decision tree</p> <p>Artificial intelligence</p> <p>Data</p> <p>Bias in</p> <p>Bias out</p> <p>Accuracy</p>	<p>Format</p> <p>Image</p> <p>Hyperlink</p> <p>Edit</p> <p>Questionnaire</p> <p>Open and closed questions</p> <p>Forms</p> <p>Layout</p> <p>Consistency</p> <p>Worm, Trojan, Virus, Black hat Hacker. Ransomware</p>	<p>Cloning</p> <p>Layers</p> <p>Magic wand tool</p> <p>Selection tool</p> <p>Images</p> <p>Blend</p> <p>Crop</p> <p>Repurpose</p> <p>Canvas</p> <p>Import</p> <p>Export</p> <p>Fireworks</p> <p>Resolution</p> <p>File type</p>

			Drop Box Conditional format		Recycling, Raw materials. RAM, CPU, Motherboard. Net Neutrality, Access, Equality, Remote working.	
Key Reading	Websites PowerPoints	Websites PowerPoints	Websites PowerPoints	Websites PowerPoints Activity sheets worksheets	Websites PowerPoints	Websites PowerPoints
End Point	PP reminder on E-safety  Audience and purpose word doc  Storyboards	Students to produce a website containing images and text.	Dashboard showing data. Use of Skills	Students create a model cad to explain heir machine learning model	Students create a Interface App	Create a magazine cover to promote Bradford
Form of Assessment	Formative Teacher observations	Formative Teacher observation	Formative teacher observations	Formative + Quiz	Formative teacher observations	Formative + Quiz
Enrichment opportunities						
Leadership opportunities	Independent tasks Discussion on topics and issues		Independent tasks Discussion on topics and issues	Independent tasks Discussion on topics and issues		Independent tasks Discussion on topics and issues