



Curriculum Overview – Year 8 Computing & Digital Literacy

Unit Title	Learning	How can parents best support?
TERM ONE		
Digital Artifacts	<ul style="list-style-type: none">• Understand a range of application and editing techniques to produce assets.• Understand the importance of file sizes, resolution and file formats.• Understand primary and secondary assets and the legal implications.• Identify the programs and tools used to create a website banner, navigation buttons, animation and video.• Understand what a house style is and why it is important.	Encourage students to look at a variety of advertisements and logos. What colours/layouts are used to suit the purpose and target audience? How do they stand out? How could this be applied to their own work?
Web Authoring	<ul style="list-style-type: none">• Create a website of at least 4 pages in size using Adobe Dreamweaver• Import and use a range of components including website clips, images/animations and a spry menu bar to navigate my website.• Adapt the layout using tables.• Add suitable media objects in your website.• Discuss how the website you have created is suitable for purpose and audience.	Encourage students to research their website topic to collect assets from a range of sources. Ensure that materials remain free from copyright. Use W3Schools (https://www.w3schools.com/) to complete tutorials to gain a better understanding of the skills required to produce websites.

	<ul style="list-style-type: none"> • Appropriately, add text/titles in different areas appropriately applying effective formatting and effects. • Discuss in detail how appropriate file type and compression affects the quality of a website. • Suggest effective improvements that you would make to your website discussing the impact these improvements could have. • Implement advanced features that improve the usability of the website to give an improved user experience using a different scripting language e.g. JavaScript. 	
<p>TERM TWO</p> <p>Text based programming</p>	<ul style="list-style-type: none"> • Create a sequence of basic instructions using Python for something that you want to happen. • Understand what debugging is and apply this to your code. • Create variables within your program to store specific data. • Import the random library to generate random numbers in your program. • Create a program that generates random numbers. • Create an IF statement to allow for different outputs from your program. • Create a program that stores appropriate variables for your Rock Paper Scissors game. 	<p>Encourage students to create an account on https://www.codecademy.com/ Complete the Learn Python tutorials to develop your programming skills outside of lessons.</p>

<p>Computer Systems</p>	<ul style="list-style-type: none"> • Write code that stores the scores of your Rock Paper Scissors game into a text file. • Understand the difference between volatile and non-volatile storage devices. • Recognise the difference between inputs, outputs and storage devices. • Recognise how CPU performance can be affected by different architectural features. • Understand why both primary and secondary storage is required in a computer system. • Identify the purpose of a range of hardware devices. 	<p>Students can research all topics related to this unit by searching for 'BBC Bitesize KS3 Computer Systems' on a web browser. They can read topics and test themselves on quizzes provided.</p> <p>https://www.bbc.co.uk/bitesize/guides/zxb72hv/revision/1</p>
<p>TERM THREE</p> <p>Real-world Modelling</p>	<ul style="list-style-type: none"> • Understand how to use the formatting tools within Microsoft Excel to apply different formatting to a spreadsheet. • Demonstrate a range of different basic formulas that you can use to make calculations in your spreadsheet. • Recognise functions such as: sum, average, minimum and maximum and how they are used. • Understand why IF statements are used to model different scenarios in a spreadsheet. 	<p>Research the careers available to users that are proficient in creating and utilising spreadsheet models.</p>

<p>Project Management</p>	<ul style="list-style-type: none"> • Explain why conditional formatting has been used in your spreadsheet to make it more suitable for audience and purpose. • Understand why data validation and VLOOKUP are important within a spreadsheet. • Identify target audience and purpose. • Effectively use database tools to Add, Edit and Delete records. • Understand how to create an effective logo for a set purpose and target audience. • Query a dataset to find out appropriate information. • Create a structured report based on a queried dataset. • Use a range of validation rules to ensure the data set is as accurate as possible. • Implement Boolean logic to refine searches and produce an accurate set of results. • Recognise ethical issues surrounding the collection of information stored for specific purposes. 	<p>Research the careers available to users that are proficient in creating and utilising databases.</p>
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