

Curriculum Map Year 8 Computing

Spelling	Half Term 1	Half Term 2	Half Term 3	Half Term 4	Half Term 5	Half Term 6
Topic	Esafety	Web Design	Spreadsheets	ICT – Year 8 Enterprise Project	Python	Computer science
Intent	To learn how to stay safe online.	Identify what websites are, who uses them and what for. Use a readymade web page for a specific purpose Edit and add buttons to web pages. Webpages with titles	Understand what a spreadsheet is. Know why a spreadsheet is used. Become familiar with basic spreadsheet skills. Apply basic spreadsheet formatting skills. Understand basic spreadsheet formulae. Understand spreadsheet functions. Test a hypothesis using a spreadsheet model	Be able to write a simple hypothesis and identify different data types. be able to explain methods for testing a hypothesis and identify different data types. be able to evaluate methods for testing a hypothesis and identify different data types	Write, save, and run a program in script mode in python. Be able to identify strings, integers in python. Be able to write a variable in python. Be able to identify arithmetic operators and a range of statements in python such as IF-ELSE.	Be able to understand the different concepts in computer science. Looking at identifying different hardware and software, understand how to stay safe online when using social media and from cyberbullies, Understand the key concept cybercrime. Learn what internet security is and encryption of data. About Understand the key elements of the computer misuse act. Be able to understand the difference between types of devices i.e., desktops, laptops, netbooks. Understand and learn about what supercomputers are and where they are stored. Be able to identify different types of system security on a PC and understand how bandwidth measures.
Lesson Intentions	Understand the features of cyberbullying, Know how to recognise cyberbullying, Know how to report cyberbullying	Identify what websites are, who uses them and what for Describe what websites are, how they are created, what browsers are, who might	What a spreadsheet is used for Why learn how to use a spreadsheet Different parts of a spreadsheet Applying and using simple formulas Applying and using simple functions	To write a simple hypothesis and identify different data types To explain methods for testing a hypothesis and identify different data types To evaluate methods for testing a hypothesis and	Open the Python editor Start a new program Print a sentence using Strings Change the speed a program runs at Add a variable Use the int, float and round functions Understand how to use assignment statements correctly	Understand the features of cyberbullying Know how to recognise cyberbullying Know how to report cyberbullying Understand the features of cyber crime Know how to recognise cyber crime Know the different computer brands

	Understand what we mean by the term 'Cyberbullying'. To consider how Cyberbullying can impact a persons life. Understand how to respond to any form of Cyberbullying Explore the different security risks that comes with computers, To understand the meaning behind the key words for today, Emails, Scams, Hacking, Viruses, Spam, To identify ways in which to be more secure and safe online. Understand what is meant by Grooming. To become aware of the ways people may attempt to Groom online, Examine how we can protect ourselves from Grooming and ways of reporting Grooming. Understand what is meant by Sexting, To become aware of how we can protect ourselves and others from Sexting. Examine the laws surrounding Sexting in the UK	create/use a website. Identify web folders and pages for a specific purpose. Use web folders and pages for a specific purpose. Manage a website Describe what html is and how HTML pages are created. Add content to a web page on Dreamweaver Edit titles on web pages. Add a second page to your website. Add content to your pages Add a set of buttons to your web pages. Hyperlink buttons to pages.	Formatting a spreadsheet Applying and using the drag and fill feature Applying and using absolute cell referencing Using simple formulas and functions Creating charts Using IF Statements Using a VLookup Understanding If Statements Using IF Statements Understanding Vlookups Using Vlookups Apply spreadsheet skills Use a model to test a given scenario Identify your spreadsheet skill strengths Identify the spreadsheet skills you need practice more	identify different data types Bring together data that has been collected and use this to create meaningful tables and charts Analyse gathered data, showing an understanding of what the data represents to the viewer Evaluate how meaningful gathered and analysed data is to the viewer Define the term "Packaging" Explain what is required on a piece of packaging Evaluate existing packaging designs Construct a basic presentation Create a formal presentation Create a formal presentation using a variety of resources	Understand the importance of using correct data types: string, integer or float Understand the need for arithmetic operators in python Use arithmetic operators to perform different calculations Understand the importance of using arithmetic operators Understand the purpose of if statements Know the syntax of an if statement Execute code based on a condition	Be able to recognise different computer brands Recognise different computer terms Be able to explain the different common computer terms and definitions Identify different computing terminology Understand different computing terminology Apply and use PowerPoint skills to complete the Computer Science Knowledge Builder PowerPoint.
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Key Knowledge	Understand the risks and solutions for the diverse types of E-Safety topics, Cyber bullying, Predators, Mobile Phone use, Viruses,	Domain Names, HTML, Types of browsers, Understanding browsers, Commercial websites, subject specific vocabulary,	Formatting, formulas, when and where a spreadsheet can be used and why, creating a useful spreadsheet	Hypothesis, marketing, promotion, presenting, product design	Understand how to use different python code and statements to create and run a program. Be able to use if else statements to make a more complex program.	Understand the key concept cybercrime. Learn what internet security is and encryption of data. About Understand the key elements of the computer misuse act. Be able to understand the difference between types of devices i.e., desktops, laptops, netbooks. Understand and learn about what supercomputers are and where they are stored. Be able to identify different types of system security on a PC and understand how bandwidth measures
Key Skills	Publisher skills, inserting images, text, editing images, text, using templates, formatting a Publisher document, managing websites, editing text, adding links	logging on, retrieving work, making folders, using folders, saving work, house style, managing websites, editing buttons, editing titles, adding text to pages,	Basic formatting on Excel, adding formulas to make calculations, using functions, creating charts	Creating and using a survey and analysing results to produce a product design	Using python software, exploring how to input strings, variables, integers, floats, print statements, input, output, if and else statements. Be able to use a flow chart to create a program.	Understanding the difference between different types of computing terminology i.e. bandwidth and servers. Be able to understand the importance and usage of a supercomputer. Able to learn about how to stay safe on social media. The consequences of cybercrime and the importance of internet security.
Key Vocabulary	E-Safety Evaluate Formatting Cyber bullying Predator Risks	Password Secure Folder Structure Domain Browser Website	Excel Spreadsheet Cell Row Column Formula	Hypothesis Marketing Presenting Survey Analysis	Python Input Output String Print statement IF else statement	Cyber crime Bandwidth Desktops Netbook Laptop Internet safety

	Phishing	Web Pages	Functions Charts VLOOKUP Absolute Cell Reference If Statement		Variable Integer Float Arithmetic operators Flow charts Debugging Syntax error IDLE	Firewall Supercomputer Encryption Anti-Virus Computer misuse act Access level Computer BIT Bytes Data theft Hacking
Key Reading	PowerPoints on Esafety, cyberbullying, predators, phishing and risks	PowerPoints on Web design. The theory behind designing them				Use a given computer science book to read tasks to expand knowledge.
End Point	Explain the meaning of E-Safety Explain the purpose and audience of your leaflet Write about the risks and solutions of Cyber Bullying Write about the risks and solutions of Predators Identify the advantages and disadvantages of E-Safety Explain the impact that ICT has on Society Write about the risks and solutions of a mobile phone Identify the advantages and disadvantages of a mobile phone Explain the impact of using a mobile phone Explain the importance of consistency Write about the risks and solutions of spam	Create appropriate folder structure to support you in organising all your files and folders in a professional manner. Describe what websites are, how they are created, what browsers are, who might create/use a website. identify web pages and web software for a specific purpose. Webpages with working buttons. Edit and add titles to web pages.	To Format a basic spreadsheet. Navigate around a spreadsheet. Use basic formulae. Use functions, drag & fill, Apply absolute cell referencing.	Create and produce a survey to appropriately market a product and the right audience.	Run, create a program in python. Using variable, strings, input and output to create in interactive mode a program in python.	Complete a booklet with starters about the following key topics including starters: Supercomputer, safety, cyberbullying, Cyber stalking, Cybercrime, Antivirus software, Encryption, Bandwidth and hacking.

	Write about the risks and solutions of viruses					
Links to British Values	Rule of Law Individual liberty Mutual respect	Mutual Respect Individual liberty	Democracy, Mutual respect	Mutual respect, Tolerance	Individual liberty	Individual liberty
Links to Careers	Acceptable use of IT. Respect for others across all fields.	Life skills across all fields. Including further education.	Life skills across many fields. Accountancy, business ownership, Personal finance.	Business ownership, advertising, sales.	Computer programming, app design, games design.	Computer engineer, Computer programming.
Form of Assessment	Online assessment during year 8 exam week	Teacher Feedback in lesson	Online assessment during year 8 exam week	Online assessment during year 8 exam week	Online assessment during year 8 exam week	Teacher Feedback in lesson. Purple pen in starters and booklet feedback in lessons with a end of topic assessment in lesson (online).
Enrichment Opportunities – Coding Club						
Leadership Opportunities -						