Key Stage 3: Computing Curriculum Plan 2022/23

Computing	Subject	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
	Year7	TOPIC 1: **Intro the Network** **Knowledge:** **BASELINE TEST** • Microsoft Programs Inc. Outlook, Word, PowerPoint & TEAMS **Skills:** Practical use of IT systems, functional IT skills & keyboard shortcuts	TOPIC 2: **Using Computers Safely** **Knowledge:** E-Safety Password Protection Online Dangers **Skills:** Practical use of IT systems, functional IT skills & keyboard shortcuts	TOPIC 3: **Movie Poster (Media Project)** **Knowledge:** Editing software PhotoPea Camera Angles Film Poster Conventions **Skills:** Practical use of IT systems, functional IT skills & keyboard shortcuts	TOPIC 4: **Graphics Project** **Knowledge:** Vectors and Bitmaps Manipulating images Layering images and text **Skills:** Practical use of IT systems, functional IT skills & keyboard shortcuts	TOPIC 5: **Database (Murder on the Mountain)** **Knowledge:** Excel and Spreadsheets Inputting Data **Skills:** Practical use of IT systems, functional IT skills & keyboard shortcuts	TOPIC 6: **Intro to Scratch** **Knowledge:** Scratch Programming Writing code Testing system **Skills:** Practical use of IT systems, functional IT skills & keyboard shortcuts
	Year 8	TOPIC 1: **My Digital World** **Knowledge:** Malware & Phishing Legislation **Skills:** Practical use of IT systems, functional IT skills & keyboard shortcuts	TOPIC 2: **Understanding Computers** **Knowledge:** Hardware and Software Input, Processes and Outputs **Skills:** Practical use of IT systems, functional IT skills & keyboard shortcuts	TOPIC 3: **PowerPoint Project** **Knowledge:** Multimedia Presentation Responding to a brief **Skills:** Practical use of IT systems, functional IT skills & keyboard shortcuts	TOPIC 4: **Magazine Cover (Media Poster)** **Knowledge:** Codes and Conventions Editing Software **Skills:** Practical use of IT systems, functional IT skills & keyboard shortcuts	TOPIC 5: **Intro to Python** **Knowledge:** Writing code Creating Programs **Skills:** Practical use of IT systems, functional IT skills & keyboard shortcuts	TOPIC 6: **Spreadsheets** **Knowledge:** Excel and Spreadsheets Inputting Data **Skills:** Practical use of IT systems, functional IT skills & keyboard shortcuts

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Year 9	TOPIC 1: **Power Point Project** **Knowledge:** Understanding: Specification, pre production tools, navigation diagram **Skills:** Evaluate Specification, complete mind map of ideas, creating a navigation map	TOPIC 2: **Power Point Project (cont..)** **Knowledge:** Understanding: pre production planning tools visualisation, legal issues, Sourcing assets Product creation and Testing table uses, How to evaluate and improve interactive products **Skills:** Collecting and creating resources, testing an interactive product, recording the process.	TOPIC 3: **Create a Video** **Knowledge:** Understanding how to plan, script and storyboard a video production using pre-production tools Understanding how editing video clips together with other media creates a final video edit experience. Use effective camera angles in a video production **Skills:** learning how to write a script, create a storyboard, film an advert with camera equipment, export video from equipment, import video to editing software, import and edit text, image and audio assets in video editor, export final cut to appropriate file type.	TOPIC 4: **Computer Networks** **Knowledge:** Understand the basic principles and architecture of local and wide area networks **Skills:** At the end of this Unit all pupils should be able to: State that the Internet is a wide area network and the world wide web is part of the Internet Define the meaning of the terms "domain name", http protocol Explain the basic principle of packet switching Give examples of LANs and WANs State three different network topologies Describe what is meant by a client-server network and state some of its advantages State why some transmissions are encrypted, and use a simple algorithm to encrypt and decrypt a message	TOPIC 5: **HTML & Website Development** **Knowledge:** Understand what HTML is and how it is used to create webpages Understand what CSS style sheets are and how style sheets are used to control the look and house style of a webpage **Skills:** At the end of this unit all pupils should be able to: Write HTML code to create a simple web page and display it in a browser Write CSS to define the styles used in a web page Create a simple navigation system using HTML Use a design to create a template for a web page using HTML Create their own multi-page website	TOPIC 6: **Advanced Python Programming** **Knowledge:** Understand how to use variables in a computer program Understand how to use IF and other logic statements in a computer programme **Skills:** At the end of this unit all pupils should be able to: Use data types correctly and convert between them when necessary Write programs that use a loop to repeat a section of code Write programs that use lists (known as 'arrays' in some languages) Create and call a function or procedure Find and debug syntax errors Look at a given section of code and describe its function

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