

Curriculum Summary Document

Year 7 Computing (1 x fortnight)

Module/Unit of Learning	Term Taught	What will students learn?	How will this build a broad and strong foundation?	Links to other subjects
Internet safety and clear messaging through digital artefacts	1	Students will learn about how to act responsibly when using social media, what positive friendships and interactions look like when sharing and gaming. They will also learn about the fundamentals of being IT literate through the creation of an interactive presentation about how to be safe on the internet.	<p>Building a Strong Foundation in Computing for Year 7 Students</p> <p><u>Digital Citizenship and Responsibility</u></p> <p>Social Media: Learning to act responsibly online helps students manage their digital footprint and interactions.</p> <p>Positive Interactions: Understanding what positive online friendships look like promotes a safe digital environment.</p> <p><u>IT Literacy</u></p> <p>Fundamentals: Creating interactive presentations gives hands-on experience with essential IT tools.</p> <p>Internet Safety: Learning to stay safe online is crucial for all digital activities.</p> <p>Critical Thinking and Problem-Solving</p> <p>Interactive Learning: Engaging with content encourages critical thinking and creativity.</p> <p><u>Collaboration and Communication</u></p> <p>Group Work: Working on projects helps develop teamwork and communication skills.</p> <p><u>Foundation for Advanced Topics</u></p> <p>Building Blocks: These skills prepare students for more complex subjects like programming and cybersecurity.</p> <p>This approach ensures students have a well-rounded understanding of both the technical and ethical aspects of the digital world.</p>	RSE, Graphics
Networks - from semaphore to the internet	2	This unit begins by defining a network and addressing the benefits of networking, before covering how data is transmitted across networks using protocols. The types of hardware required are explained, as is wired and wireless data transmission. Learners will develop an understanding of the terms 'internet' and 'World Wide Web', and of the key services and protocols used. Practical exercises are included throughout to help strengthen understanding.	<p>Definition and Benefits: Learning what a network is and its advantages helps students grasp the basics of connectivity and communication.</p> <p>Data Transmission: Understanding how data moves across networks using protocols lays the groundwork for more advanced topics like cybersecurity and data management.</p> <p>Types of Hardware: Knowing the necessary hardware for networks (e.g., routers, switches) is essential for practical IT skills.</p> <p>Wired vs Wireless: Differentiating between wired and wireless transmission helps students understand the pros and cons of each method.</p> <p>Key Terms: Clarifying the difference between the internet and the World Wide Web ensures students have a correct conceptual framework.</p> <p>Services and Protocols: Learning about key services (like email, web browsing) and protocols (like HTTP, FTP) is crucial for understanding how the internet functions.</p> <p>Hands-On Learning: Practical exercises reinforce theoretical knowledge, making it easier for students to remember and apply what they've learned.</p>	Maths
Introduction to coding - Swift Playgrounds	3	In the "Learn to Code 1" scheme of work in Apple Swift Playgrounds, students will learn key coding concepts such as variables, loops, conditionals, and functions. They will gain practical skills by helping a character navigate a 3D world through writing Swift code, making the learning process engaging and interactive. This hands-on approach will enhance their problem-solving abilities and logical thinking.	Students will become familiar with Swift, a programming language used by professional developers to create apps, building their confidence and preparing them for more advanced coding projects. This scheme provides a solid introduction to coding, ensuring students have a strong foundation for future computing studies.	Maths