

## Year 7 Long Term Plan

In Year 7, students are introduced to a foundational curriculum focusing on various aspects of technology, computing, and digital literacy. Firstly, they explore the basics of networking through an introduction to the school network, learning about its structure, components, and functions. They delve into network security and e-safety, understanding the importance of safeguarding information and practising safe online behaviour, particularly within platforms like Google Classroom, Google Drive, and email. Students learn to navigate these digital tools effectively, understanding their features and applying prior e-safety knowledge to ensure responsible digital citizenship. They also explore design principles, considering the suitability of different media types (text, image, sound, video) and learning to create engaging digital artifacts, including interactive quizzes and multimedia presentations using tools like Google Slides. Additionally, students gain a foundational understanding of hardware and software, exploring concepts such as input, processing, and output, as well as the internal components of a computer, including the CPU and logic circuits. They learn to represent information using binary digits and develop programming skills, including sequencing, variables, selection, iteration, and debugging, using a variety of programming languages or environments. Overall, the Year 7 curriculum provides students with essential knowledge and skills in technology, digital literacy, and computing, setting a strong foundation for further exploration and development in these areas.

Topic 1	Topic 2	Topic 3
E-safety Creating effective safe and discerning users of technology	Creating a Digital Artefact for a given audience using Interactive Multimedia	Hardware Components that make up a Computer System
Key Concepts		
Digital literacy  Components: Introduction to School Network Network Security Google Classroom Google Drive Email E-Safety	ICT Digital literacy  Components: Design Principles Suitability of text, image, sound, video Application of prior esafety knowledge Key features of good interactive quiz Tools to copy image between apps Digital artifact created in GS Combine text and graphics	Computer Science  Components: Input Process Output Hardware and Software Identifying device function Inside the computer CPU - Fetch Decode Execute Logic Circuits NOT AND OR gates
Assessment		

Topic 4	Topic 5	Topic 6
Topic Introduction to Data Representation	Topic: Computational Thinking	AI and Machine learning
Key Concepts		
<p style="text-align: center;">Computer Science</p> <p style="text-align: center;">Components: Binary numbers Representing characters using Binary Digits Representing images using Binary Digits</p>	<p style="text-align: center;">Computer Science</p> <p style="text-align: center;">Components: Introducing algorithms Creating algorithms Refining algorithms Coding algorithms using sequence selection and iteration Variables</p>	<p style="text-align: center;">Computer Science</p> <p style="text-align: center;">What is AI History of AI How computers learn Ethics of AI image recognition Creating a chatbot Turing tests</p>
Assessment		
<p style="text-align: center;">Assessment: Part 1 KE Part 2 Practical - Conversions</p>	<p style="text-align: center;">Practical coding task</p>	<p style="text-align: center;">End of block summative assessment</p>