

	INVEST in the power of the written word	EXPERIENCE a range of cultures, histories and beliefs	EXPLORE the shared values of civilisation	SHAPE society and our place within it	GROW as instinctive readers, writers and orators	PURSUE English beyond the classroom
Curriculum Sequencing Grid						
Subject	Computer Studies			Year		7
	Term 1		Term 2		Term 3	
	HT1	HT2	HT3	HT4	HT5	HT6
Component	1. Digital Literacy 3. Digital World	3. Digital World 2. Bebras UK	5. Spreadsheets	6. Introduction to Business	7. Micro:Bit	8. Computer Systems 4. IDEA
Developing Cultural Capital	By fostering digital literacy and an understanding of the foundational tools required in modern workplaces. Learning to navigate tools like Office 365, SharePoint, and OneDrive equips students with practical skills for academic and professional success. By exploring email etiquette and online search techniques, pupils develop an appreciation for effective communication and research, critical in today's digital society. Additionally, introducing students to the importance of collaboration tools, responsible online behavior, and efficient computer usage emphasizes the cultural relevance of technology in personal and professional life. Understanding these skills within the context of broader technological advancements helps students appreciate the role of innovation in shaping society and the global workplace.	By equipping them with essential digital literacy skills needed to navigate modern society. By understanding social networking and its impacts, pupils gain insights into responsible digital interactions and the societal role of technology. Lessons on online risks foster critical thinking, teaching students how to stay safe and informed in an increasingly digital world. Additionally, exploring AI's applications and ethical concerns introduces pupils to cutting-edge technology shaping global industries. This knowledge not only enhances their awareness of future opportunities but also prepares them to engage thoughtfully with emerging technological advancements.	By introducing practical spreadsheet skills that are essential in many modern careers, from data analysis to business management. Learning to create and format spreadsheets teaches students how to organise and present data effectively, a vital skill in today's data-driven world. By exploring the use of charts, pupils gain the ability to visualise complex information, enhancing their communication and decision-making abilities. Additionally, applying spreadsheet skills to real-world scenarios like market sales or athletics performance fosters an understanding of how technology is used to solve everyday problems, preparing pupils for professional environments and enhancing their employability.	By introducing them to foundational concepts in business and entrepreneurship, offering them a taster of KS4 Business Studies. By exploring real-world entrepreneurial skills such as risk-taking, time management, and pitching ideas, pupils gain insight into how businesses are created and sustained. Designing promotional materials and practising presentation skills prepare pupils for careers that require creativity and public speaking. Additionally, these lessons highlight the importance of customer awareness and market trends, connecting classroom learning to the real-world challenges of running a business, thus equipping pupils with skills they can carry into further education and the workplace.	By introducing them to foundational programming concepts and the physical computing of the Micro:Bit. By exploring embedded systems, pupils gain insight into how hardware and software interact to create functional devices, an essential understanding in today's technology-driven world. Working with the Micro:Bit not only introduces students to coding but also allows them to apply these skills in tangible ways, such as creating animations on an LED matrix or developing interactive programs. This hands-on experience fosters problem-solving and creativity, preparing students for future opportunities in fields like engineering, robotics, and computer science.	By introducing them to the fundamental components of a modern computer, the concepts of hardware and software. This gives students a depth of understanding into the devices they use and carry around each day. A practical hands-on experience of breaking down a computer individually looking at components gives and appreciation of the technology that runs our lives.
Substantive Knowledge/ Disciplinary Knowledge	Substantive Knowledge: > Rules for using a computer lab, including logging on and equipment care > Identifying computer components (e.g., keyboard, mouse, desktop) > Using the Start Menu to access files and programs > Functions of Microsoft Word, Excel, PowerPoint, and Edge > Accessing lesson files via SharePoint and storing work on OneDrive > Email etiquette, including proper formatting and behavior > Using Google search operators for refining online searches > Keyboard shortcuts (e.g., Copy, Paste, Undo, Redo) > Screenshot methods: Print Screen, Snipping Tool, PowerPoint Screenshot Disciplinary Knowledge: > Writing professional emails with proper structure and etiquette > Organizing work using folders in OneDrive > Refining searches using advanced Google operators > Applying keyboard shortcuts to improve efficiency > Designing posters with PowerPoint to showcase skills > Navigating and using Office tools to complete tasks > Using "Save As" to save to OneDrive	Substantive Knowledge: > Understanding what social networking is and the functionality of popular apps like TikTok, Instagram, and Pinterest > Identifying online risks such as catfishing, online abuse, malware, and misinformation > Understanding the types of malicious software (e.g., worms, spyware, viruses) and how to identify suspicious messages > Learning how Artificial Intelligence (AI) works, including concepts like machine learning, deep learning, and AI's application in sectors like healthcare and energy > Exploring the ethical impacts of AI, including privacy concerns, job displacement, and bias in AI systems Disciplinary Knowledge: > Analyzing the benefits and drawbacks of social networking platforms and discussing their societal impact > Evaluating and ranking risks based on scenarios, with a focus on safety measures for online interactions > Practising how to protect against online risks by implementing safety measures like reporting suspicious messages and using antivirus software > Discussing the ethical dilemmas posed by AI, including decision-making in autonomous cars and biases in AI systems > Researching and presenting how AI is used in various industries while critically evaluating its pros and cons	Substantive Knowledge: > Spreadsheets are used for storing information and performing calculations > Key spreadsheet components: cells, rows, columns, labels, and values > Introduction to formulas (e.g., =A2+B2) and functions (<SUM(A1:A5), =AVERAGE, etc.) > Formatting spreadsheets, including font styles, borders, and adjusting column widths for clarity > Types of charts: bar charts, pie charts, and line charts, and their purposes (e.g., visualising trends, comparing data) Disciplinary Knowledge: > Creating and editing spreadsheets by adding and deleting data, adjusting formatting, and using cell references in formulas > Using functions to automate calculations, such as totals and averages > Designing and interpreting data visualisations like bar, pie, and line charts to identify patterns and trends > Developing spreadsheet solutions for real-world scenarios, such as managing sales data for a market stall or recording athletic performance	Substantive Knowledge: > Reasons for starting a business, including independence, profit, and making an idea a reality > Definitions of goods (tangible items) and services (intangible processes) > Key skills and characteristics of entrepreneurs, such as confidence, risk-taking, and problem-solving > The influence of customer needs and wants on business decisions, including demographics and consumer trends > Steps for creating a product pitch, including identifying the target audience, setting a price, and deciding on promotional methods Disciplinary Knowledge: > Designing promotional materials like leaflets to market a product > Analysing the reasons behind starting a business and categorising motivations > Differentiating between goods and services using real-world examples > Creating a product pitch and mood board by identifying customer needs and business strategies > Designing and evaluating leaflets with key product details, including pricing, benefits, and branding > Designing and interpreting data visualisations like bar, pie, and line charts to identify patterns and trends > Developing spreadsheet solutions for real-world scenarios, such as managing sales data for a market stall or recording athletic performance	Substantive Knowledge: > Definition and purpose of iteration in programming, including conditional, continual, and count-controlled iteration > Understanding embedded systems like Micro:Bit and Arduino, and their use in dedicated functions > Roles of input devices (e.g., buttons on the Micro:Bit) and output devices (e.g., LED matrices) in computing > Basic programming constructs like loops, variables, and IF statements, and their role in executing specific tasks > Features and functions of the Micro:Bit, including its sensors, buttons, and LED matrix for creating interactive programs > Functionality of tools like random number generators in programming to create randomness > Use of a simulator in coding environments to test and debug code without needing physical hardware Disciplinary Knowledge: > Applying iteration types (conditional, continual, and count-controlled) to solve problems programmatically > Designing and testing programs on embedded systems like the Micro:Bit using its input and output capabilities > Debugging and refining code using simulators to observe behavior and correct errors without physical hardware > Incorporating programming constructs such as IF statements and loops to build responsive, dynamic programs > Using random number generation to create unpredictable behaviors in programs, such as games > Exploring and understanding how hardware like the Micro:Bit interacts	Substantive Knowledge: > Definition of Hardware > Definition of Software > Component lists of the computer > Purpose of the CPU > Purpose of the Motherboard > Purpose of RAM > Purpose of Secondary storage > Purpose of the PSU Disciplinary Knowledge: > Explain how the components in a computer interact and communicate. > Explain how to put a computer together and the parts inside > Understanding what impact on performance does each part have
Cross Curricular Links	ICT Usage in all careers and subjects Social Networks	E-Safety AI	ICT	Business	Computer Science	Computer Science
Vocabulary	Topic 1 Glossary Topic 3 Glossary	Topic 3 Glossary Topic 2 Glossary	Topic 5 Glossary	Topic 6 Glossary	Topic 7 Glossary	Topic 8 Glossary Topic 4 Glossary
Assessments	Topic 1 SPA	Topic 2 SPA Babras Online Test	Topic 4 SPA	Topic 5 SPA	Topic 5 SPA	Topic 6 SPA