2022/ 2023	AUTUMN			SPRING		SUMMER	
	HT1		HT2	HT3	HT4	HT5	HT6
Y 7	**Area of study** Baseline Test + Induction **Key concepts** Baseline, H&S, Office 365, Email, Teams **Assessment method** Baseline Test	**Area of study** Getting Started **Key concepts** File Management, Office 365, Internet and Well-being, Vector Graphics, Bitmap Images, Photographs **Assessment method** End of Unit Assessment (Assessment of work)	**Area of study** Computing components **Key concepts** Hardware, measuring computer performance, computer peripherals, storage devices and media, the Internet of Things **Assessment method** End of Unit Assessment (Assessment of work)	**Area of study** Internet Safety, cyber security & Encryption **Key concepts** Digital Footprint, passwords and phishing, malware, encryption, automating encryption, keeping safe online **Assessment method** End of Unit Assessment (Assessment of work)	**Area of study** Introducing Spreadsheets **Key concepts** Formulae, replication, referencing, Functions, Boolean Operators, IF and COUNT, Formatting, Graphs and charts, Modelling, Theme Park Challenges **Assessment method** End of Unit Assessment (Assessment of work)	**Area of study** Programming in Scratch **Key concepts** Introduction, sequencing, variables, selection, selection and logical operators and iteration **Assessment method** End of Unit Assessment (Assessment of work)	**Area of study** Programming in Python (Sequencing) **Key concepts** Computer programs, getting data from the user, Data Types, Placeholders and lists, working with lists, working with strings **Assessment method** End of Unit Assessment (Assessment of work)
Y 8	**Area of study** Computing: past present and future **Key concepts** Word processing, designing a leaflet, Moore's law, the history of computing, learning to present, the future of computing **Assessment method** End of Unit Assessment (Assessment of work)		**Area of study** Binary and computer logic **Key concepts** Logic gates, binary, creating an app, testing and reviewing an app, representing text and images **Assessment method** End of Unit Assessment (Assessment of work)	**Area of study** Networking and the Internet **Key concepts** IP addressing and switching, Domain names and DNS, Packets /packet switching, The Internet, Connecting to the internet **Assessment method** End of Unit Assessment (Assessment of work)	**Area of study** Algorithms **Key concepts** Computational Thinking, Pattern Recognition, Flow Diagrams, Decomposition, Abstraction **Assessment method** End of Unit Assessment (Assessment of work)	**Area of study** Programming in Python (Sequencing) **Key concepts** Computer programs, getting data from the user, Data Types, Placeholders and lists, working with lists, working with strings **Assessment method** End of Unit Assessment (Assessment of work)	**Area of study** Programming in Python (Selection) **Key concepts** Selection, Decisions and calculations, IF…ELSE, comparing strings and numbers, ELIF, Multiple ELIFs **Assessment method** End of Unit Assessment (Assessment of work)
Y 9	**Area of study** Sound and Video Editing **Key concepts** Sound, Audio effects, Video editing, creating audio tracks, visual effects **Assessment method** End of Unit Assessment (Assessment of work)		**Area of study** Programming in Python (Selection) **Key concepts** Selection, Decisions and calculations, IF…ELSE, comparing strings and numbers, ELIF, Multiple ELIFs **Assessment method** End of Unit Assessment (Assessment of work)	**Area of study** Programming in Python (Iteration) **Key concepts** Instructions, For loops, strings, lists, searching using for loops, while loops **Assessment method** End of Unit Assessment (Assessment of work)	**Area of study** Project 1 Theme Park Advert **Key concepts** Graphics, audio/video editing, advert, marketing **Assessment method** Assessment of Project 1	**Area of study** Ethics of Computing **Key concepts** Sourcing content, using technology responsibly, technology and the environment, technology and the law **Assessment method** End of Unit Assessment (Assessment of work)	**Area of study** Project 2 Programming in Python **Key concepts** Planning, Design, Development, Testing, Evaluation **Assessment method** Assessment of Project 2
Y 10	**Area of study** System Architecture	Algorithms	Boolean Logic **Key concepts** Architecture of the CPU, CPU Performance, Embedded Systems, Computational Thinking, Designing, creating and refining algorithms **Assessment method** End of Unit Assessment (Theory)		**Area of study** Memory and Storage	Programming Fundamentals **Key concepts** Primary Storage and secondary storage, development of programming skills **Assessment method** End of Unit Assessment (Theory + Python)	**Area of study** Memory and Storage	Additional Programming techniques **Key concepts** Units, Data Storage, development of programming skills **Assessment method** End of Unit Assessment (Theory + Python)	**Area of study** Memory and Storage	Additional Programming techniques **Key concepts** Data storage, compression, development of programming skills and practice **Assessment method** End of Unit Assessment (Theory)	**Area of study** Producing Robust Programs	Additional Programming techniques	Raspberry Pi projects **Key concepts** Defensive design, testing, development of programming skills and practice tasks **Assessment method** End of Unit Assessment (Theory) Assessment of challenge solutions	**Area of study** Programming Challenges	Revision **Key concepts** Development of programming skills/practice (read, write, test & refine tasks based on a given problem) **Assessment method** End of Unit Assessment (Theory) Assessment of challenge solutions
Y 11	**Area of study** Recap of Year 10	Networks and Topologies	Wired and Wireless networks, protocols and layers	Threats and preventing vulnerabilities **Key concepts** Networks, Topologies, Hardware, Client/Server networks, P2P Networks, Internet, Encryption, IP and MAC addressing, TCP/IP Layers Standards and Protocols, Threats, Vulnerabilities **Assessment method** End of Unit Assessment		**Area of study** Operating Systems	Utility Software	Ethical, Legal, Environmental + Cultural Impacts	Mock Revision **Key concepts** Operating Systems, Utility Software, Impacts **Assessment method** Mock Exams	**Area of study** Ethical, Legal, Environmental + Cultural Impacts	Searching and Sorting Algorithms	Languages + IDE's	Revision **Key concepts** Impacts, Searching, Bubble sort, merge sort, insertion sort, identifying algorithms **Assessment method** End of Unit Assessment	**Area of study** Revision **Key concepts** Component 1 and 2 **Assessment method** Paper 1 Mock Exam Paper 2 Mock Exam	**Area of study** Revision **Key concepts** Component 1 + 2 **Assessment method** Final GCSE Exams	

SKILLS FOR LIFE/ FUTURE LEARNING AND EMPLOYMENT

NOTES
- Problem Solving Skills
- Logical Thinking Skills
- Digital Literacy
- Team-working
- Communication