

Computer Science and Digital Information Technology
Year 9 curriculum map

Year 9	T1	T2	T3	T4	T5	T6
Content / Topic for Term	Games programming in Scratch <i>Design and program computer games</i>	Understanding computing and microbits	Databases and SQL	Creating a video	Animation	Web design
Key Knowledge for acquisition, recall and application in assessment or exam	Understanding computing in more depth. Sequence, selection and iteration. Using and organising blocks of code Producing shapes using routines. Searches and Bubble Sorts. Understanding of flowcharts to solve problems.	Elements of a computer systems, The CPU, binary to decimal, adding binary numbers, storage, convergence and new technologies, logic gates. Using microbits with Python.	Development of relational databases to include relationships between table. Knowing the importance of select and complex queries. Form design and reports using a Switch Board understanding relationships and working with SQL.	Students will design a product and create a campaign, using all of the skills learned so far. They have to complete product research, market research from target audiences, use research to create a design using fireworks and create a full marketing campaign including a website.	Students will learn the basics of frame by frame animation and create cartoons and then develop their work into more complex designs.	Use skills learnt in term one to create relevant graphics for websites. Understand some basic html and how to create a website using dreamweaver
Key skills to apply in assessment or exam	A project to assess the development process of designing and programming a	Understand simple Boolean logic (for example, AND, OR and NOT) and some of its uses in circuits	Design, use and evaluate computational abstractions that model the state and	Demonstrate and apply knowledge and understanding of information technology skills in	Demonstrate and apply knowledge and understanding of information technology skills in	Use of tables, creating pages, basic user interface design, adding

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	unique, end-user focused, game using the various components of Scratch: design, development, testing, and evaluation.	and programming; understand how numbers can be represented in binary, and be able to carry out simple operations on binary numbers (for example, binary addition, and conversion between binary and decimal)	behaviour of real-world problems and physical systems	project based assignment.	project based assignment.	interactive elements.
Software	Scratch	Fundamentals	Databases	N/A	Fireworks	Web design