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|  | **Term 1** | **Term 2** | **Term 3** |
| **COMPUTING****YEAR 7** | **Safe Use of Technology** – Classroom Rules, Staying Safe Online and Using Technology Appropriately**Computational Thinking** – Decomposition, Abstraction and Pattern Recognition | **Computer Systems** – How computers are used and their components**Sequencing (Scratch)** – Creating a computer game using sequences of instructions | **Graphics Editing** – Using graphics editing software to create a movie poster**Extended Project** – Combining skills from previous projects to create a product for a given scenario |
| **COMPUTING****YEAR 8** | **E-Safety** – Spotting risks and understanding methods of staying safe**Networks** – How computers communicate effectively | **Computer Systems** – Understanding how different computer hardware and software works, introduction to binary**Introduction to Python** – Building computer programs using Python coding | **Sound Editing** – Using sound editing software to create a radio advert**STEM Project** – Combining skills from Science, Technology, Engineering and Maths to complete a project about space |
| **COMPUTING****YEAR 9** | **Cyber Security and Crime** – A closer look at risks, laws and methods of reducing risks when working with computers**HTML & JavaScript** – Using HTML coding to create web pages and adding interactive elements with JavaScript | **Databases** – How to manage data using databases and their tools**Python Further Steps** – Building more complex computer programs using Python Coding | **Video Editing** – Using video editing software to create a TV advert for Morecambe**Impact of Modern Technology** – Discussing the positive and negative impact of modern technology |
| **COMPUTING****YEAR 10** | Unit 1 – 1.1 **System architecture** (CPU architecture, components and performance, embedded systems)Unit 2 – 2.2 **Programming fundamentals** (fundamentals and data types) | Unit 1 - 1.2 **Memory and storage** (primary and secondary storage, units, data storage and compression) Unit 1 – 1.3 **Computer networks**, connections and protocols (networks and topologies, wired and wireless, protocols and layers) & 1.4 Network security (threats and preventions) | Unit 2 – 2.2 **Programming fundamentals** (fundamentals and additional techniques)Unit 1 – 1.5 **System software** (operating systems and utility software) |
| **COMPUTING****YEAR 11** | Unit 1 – 1.6 **Ethical, legal, cultural and environmental impact** (impact of technology on society, laws and legislation)Unit 2 – 2.1 Algorithms (computational thinking, algorithms and searching/sorting) & 2.4 Boolean logic (logic diagrams and truth tables) | Unit 2 - 2.3 **Producing robust programs** (defensive design & testing) & 2.5 Languages and IDEs (difference in programming languages and integrated development environmentsUnit 2 – 2.2 Programming fundamentals (programming practice) | **Exam revision – units 1 & 2** |
| **COMPUTING****YEAR 12** | Unit 1 - Computer Systems (LO1 Computer components) and Unit 2 – Algorithms and Programming (LO1 Computational thinking)Unit 1 - Computer Systems (LO2 Software) and Unit 2 – Algorithms and Programming (LO2 Problem solving and programming) | Unit 1 - Computer Systems (LO2 Software & LO3 Exchanging data) and Unit 2 – Algorithms and Programming (LO3 Algorithms)Unit 1 - Computer Systems (LO3 Exchanging data) and Unit 2 – Algorithms and Programming (LO2 Problem solving and programming) | Unit 1 - Computer Systems (LO4 Data types and structures) and Unit 2 – Algorithms and Programming (LO2 Problem solving and programming)Unit 1 - Computer Systems (LO4 Data types and structures) and Unit 3 –Programming Project (LO1 Analysis of a problem |
| **COMPUTING****YEAR 13** | Unit 1 - Computer Systems (LO5 Legal, moral, cultural and ethical issues) and Unit 3 – Programming Project (LO2 Design a solution)Unit 1 - Computer Systems (LO1 and LO2 review and recap) and Unit 3 – Programming Project (LO3 Develop a solution) | Unit 1 - Computer Systems (LO3 and LO4 review and recap) and Unit 3 – Programming Project (LO3 Develop a solution)Unit 1 - Computer Systems (LO5 review and recap) and Unit 3 – Programming Project (LO4 Testing and evaluation) | Unit 1 & 2 – Exam revision and preparation. Unit 3 – Programming Project (review and improvements) |