

## ICT & Computing Curriculum Map

Year Group	Half Term 1	Half Term 2	Half Term 3	Half Term 4	Half Term 5	Half Term 6
7	File Management School Network, Moodle, Email & Office 365 OneNote, Baseline Testing, E-Safety	Computer Systems Basics	Introduction to programming fundamentals using BBC Microbit		Data Modelling using Modelling Spreadsheet	
8	Web Programming (HTML and CSS), E-safety - Plagiarism, copyright, Cyberbullying and Social Networking sites		Computer Systems Fundamentals I	Game Design principles – Event driven / Object Oriented Programming at a basic level		Introduction to text-based programming
9	Computer Systems Fundamentals - Hardware and Software	Computer Systems Fundamentals – Data Representation	Computational thinking and programming principles		Animal Farm “The Book” IT project – Research Skills, Information source reliability, graphic manipulation, editing digital video, mixing and editing digital audio.	
10	- System Architecture - Memory - Programming: Variables, constants, operators, input, output and assignments	- Storage - Wired and Wireless Network - Software - Programming: Control flow constructs	- Network topologies, protocols and layers - System security - Programming: Computational thinking, Writing and tracing algorithms	- Ethical legal and environmental concerns - Programming: standard searching and sorting algorithms	- Data representation I - Programming techniques: Errors and testing	- Facilities of languages and translators - Programming: File handling, sql and data sets
11	- Computational Logic - Programming: Preparation for the NEA assessment	- Data representation II - Programming: NEA	- Component 1 & 2 Revision - Programming: NEA	- Component 1 & 2 Revision - Programming: NEA	Revision GCSE exams	
12	- Components of contemporary processors, input, output and storage devices - Programming: Revisit GCSE concepts	- Software and software Development - Programming: OOP Principles	- How data is exchanged between different systems - Programming: Game Design Object oriented way	- Data types, data structures and Algorithms - Programming: Data structures and recursion	- Legal Moral cultural and Ethical issues - Programming: Building skills needed for the coursework	- Algorithms - Programming: Unit 3 Programming Project
13	- Elements of Computational thinking - Programming: Unit 3 programming project	Data representation Programming project	- Component 1 & 2 Revision - Programming project	- Component 1 & 2 Revision - Programming project	Revision A-Level exams	