

Curriculum Sequencing Grid: (KS3 – Y8 Computing)

Year 8	Term 1	Term 2	Term 3
Unit (Tablet in 39 week plan)	Coding Databases	Graphics Programming	Computer Systems Spreadsheets
Key Retainable Knowledge (Required for Y11/13) <ul style="list-style-type: none"> What... How.... Why.... 	<ul style="list-style-type: none"> Students to understand the history of coding data, and how it has evolved to the modern day. Students to be introduced to basic database skills. 	<ul style="list-style-type: none"> Students to gain skills and knowledge on image manipulation and creation. Students to build on their knowledge from Y7 in both textual and non-textual languages. 	<ul style="list-style-type: none"> Students to be given an introduction to networks and data connections, including the internet. Students to build on spreadsheet knowledge built in Y7.
Key Technical Vocabulary (To be modelled and deliberately practiced in context.)	<ul style="list-style-type: none"> Coding Colossus Enigma Encryption Decryption Cryptography Hieroglyphics Bletchley Park Codebreaking Decipher Moore's Law Caesar Ciphers Database Tables Queries Forms Reports Data Information Field Record Filter Results 	<ul style="list-style-type: none"> Image Manipulation Pixel BMP JPG Compression Lossy Lossless Bitmap Vector Colour Depth Resolution Metadata Sequence Selection Iteration Algorithm Variable Integer Constant Function Concatenation String 	<ul style="list-style-type: none"> Network Topologies LAN WAN Workstation NIC Switch Bridge Gateway Binary Hexadecimal Spreadsheets Column Row Cell Conditional Formatting Formatting Data modelling Formula Function Graph/Chart

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	<ul style="list-style-type: none"> • Validation • Data Types • Primary Key 	<ul style="list-style-type: none"> • Syntax 	<ul style="list-style-type: none"> • Cell Referencing • Validation • What IF • Absolute Cell Referencing
Opportunities for Reading	<ul style="list-style-type: none"> • BBC BITESIZE • TEACH ICT • Twitter 	<ul style="list-style-type: none"> • BBC BITESIZE • TEACH ICT • Twitter 	<ul style="list-style-type: none"> • BBC BITESIZE • TEACH ICT • Twitter
Developing Cultural Capital (exposure to very best- essential knowledge and skills of educated citizens – appreciation of human creativity and achievement.)	<ul style="list-style-type: none"> • Bebras • Hour of Code 	<ul style="list-style-type: none"> • Bebras • Hour of code 	<ul style="list-style-type: none"> • Bebras • Hour of code
Cross Curricular Links (Authentic Connections)	<ul style="list-style-type: none"> • History- WWII 	<ul style="list-style-type: none"> • Art- Digital image manipulation • Maths- integer manipulation 	<ul style="list-style-type: none"> • Maths- formulas and functions
Key Assessment	<ul style="list-style-type: none"> • SPA and CTG embedded into lesson structures. 	<ul style="list-style-type: none"> • SPA and CTG embedded into lesson structures. 	<ul style="list-style-type: none"> • SPA and CTG embedded into lesson structures.