Computing Summer Revision Topic List

Computing - You must revise **all** the topics in this list and you must spend more time on the topics that are in Bold and Underline.

Y9 Computer Science going into Y10 Computer Science

Paper 2

- Algorithms (computational thinking, searching and sorting algorithms, flowcharts and pseudocode)
- Programming Techniques (variable, constants, sequence, selection, iteration, data types, file handling, operators, SQL and Arrays)
- Producing Robust Programs (Input sanitisation, input validation, final testing, iterative testing, test data, logical and syntax errorrs)
- Computational Logic (AND, OR, NOT, truth tables)
- <u>Translators and Facilities of Language (high/low level language, assembler, compiler, interpreter, IDE)</u>
- Data Representation (Units, Denary, Binary, Hexadecimal, Characters, Storing Images, Storing Sound, Compression)

Paper 1

- Systems Architecture (CPU, Von Neuman Architecture, Fetch-Decode-Execute Cycle, Embedded Systems)
- Memory (RAM, ROM, Virtual Memory, Flash Memory)
- Storage (Secondary Storage, Calculating Data Capactiy)
- Wired and Wireless Networks (LAN, WAN, Client-Server, Peer-to-Peer, Network Hardware, Cloud)