YEAR 10 (CS) HALF TERM

J277/01

MAGHULL HIGH SCHOOL – CURRICULUM MAP

Unit: 1.1 systems architecture	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7
LESSON TOPIC QUESTION(S)	**Lesson 1** Introduction to syllabus; structure and content. The purpose of the CPU? **Lesson 2** What are the common CPU components and their functions? **Lesson 3** What is the role/purpose of each component?	**Lesson 4** What are the common CPU components and their function? **Lesson 5** What is the Von Neumann architecture?	**Lesson 6** Von Neumann architecture (cont) What are MDR and MAR? **Lesson 7** Why is program counter important in the fetch-decode-execute cycle? **Lesson 8** What effects the CPU performance?	**Lesson 9** What is an embedded system? **Lesson 10** Interim recall check – Published past questions (exam board exam generator)	**Lesson 11** Topic 1.2 Storage What is primary storage? **Lesson 12** What is Virtual Memory (VM?) **Lesson 13** What is Cache? Interim knowledge recall check (past questions)	**Lesson 14** What is Secondary storage? **Lesson 15** What are the advantages and disadvantages of: Optical Magnetic Solid state?	**Lesson 16** Advantages and disadvantages (cont.) **Lesson 17** Interim recall check – Published past questions (exam board exam generator)
Knowledge & Skills development	**<u>Theory Knowledge</u>** Fault identification (errors with hardware processing) Acronyms of registers Role of CPU in computer systems				**<u>Digital Skills</u>** *Be able to work with multiple windows* *Be able to access Teams and complete work* *Be able to access the MS365 suite of apps* *Use common shortcut keys* *Research and development of solutions to problems* *Recall*		
Assessment / Feedback Opportunities	***Formative Assessment*** Class activity Class Discussion Questioning pupils Verbal Feedback Live Marking				***Summative assessment*** Practice assessments Cumulative testing Published past questions (exam board exam generator)		

Key Vocabulary	• Processor, Execute, Fetch, Decode, Storage, CPU, Instruction, Arithmetic Logic Unit, Control Unit, Cache, Registers, Accumulator, MAR (Memory Address Register) MDR (Memory Data Register) Accumulator, Buses, Von Neumann Architecture, Program Counter, CU (Control Unit),MHz, GHz, Hertz, Instruction, Clock Speed, Cache, Core, embedded system. • Virtual memory, primary storage, secondary storage, RAM, ROM, volatile, optical storage, magnetic storage, solid stage storage
Literacy/Reading opportunities	https://www.bbc.co.uk/news/technology https://www.bbc.co.uk/programmes/m0029b3v (BBC programme - Tech Now)
Cross Curricular Themes	Development of digital skills and use of online platforms. Competence with TEAMS, OneDrive and Office365
Personal Development (Including British Values, RSE, Citizenship)	C13 - diverse national, regional, religious and ethnic identities in the United Kingdom and the need for mutual respect and understanding Working with others Respectful communication
Career Opportunities	Applications developer, Data analyst, applications developer, Programmer, digital forensics, hardware engineer, software engineer, systems analyst, web developer