Northolt High School
Scheme of Learning

Committed to excellence

<table>
<tr><td>Year group: 10</td><td>Term: 1</td><td>Unit duration: 6 weeks</td><td>Number of lessons: 6</td><td colspan="3">Unit title: Hardware and Software – Processors and RAM</td></tr>
<tr><td colspan="4">Assessment outcome: Explain how different processors can be used for different purposes.</td><td colspan="3">Fertile question?
What is the purpose of a processor, and what would upgrading it do?</td></tr>
<tr><td colspan="3">Key skills/concepts/knowledge that students should cover</td><td>Start RAG</td><td>End RAG</td><td colspan="2" rowspan="2">Literacy. Key vocabulary/subject terminology that students should cover

Gigahertz
Cache
RAM
Fetch
Decode
Execute
Clock speed
Cores
Processing speed
SRAM
SROM
Registers</td></tr>
<tr><td colspan="3">Explain what each register in the CPU does
Be able to explain and recreate the fetch/decode/execute cycle including all steps and processor parts
To be able to create and accurately label a CPU diagram
Explain what a register is and how instructions are decoded within a CPU
Explain what the cache is, its purpose and what improving it would do to the computer's overall performance</td><td></td><td></td></tr>
<tr><td colspan="4">Stretch. Key skills/concepts/knowledge that students should cover

Create a diagram of a processor with the cache and every register included, then accurately explain what each of these components does and how it contributes to the fetch/decode/execute cycle.</td><td></td><td colspan="2">Suggested materials teachers could/should use

TeachICT
Computer Science Powerpoints/Worksheets</td></tr>
<tr><td colspan="4" rowspan="2"></td><td rowspan="2"></td><td colspan="2">Key home learning tasks students should complete to be set in lessons.</td></tr>
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