Northolt High School
Scheme of Learning

Committed to excellence

Year group: 12	Term: 1	Unit duration: 6 weeks	Number of lessons: 6	Unit title: **Components of a Processor**
Assessment outcome: To be able to convert a denary number to hex and binary and vice versa.			**Fertile question?** **What is the use of hexadecimal in a computer science context?**	

Key skills/concepts/knowledge that students should cover	**Start RAG**	**End RAG**	**Literacy. Key vocabulary/subject terminology that students should cover**
To name the main parts of a CPU **To explain each of the registers in the CPU** **To understand what factors affect performance of a processor and how it can be pipelined** **To explain how the general performance of a computer can be improved through certain parts of the processor** **To understand the main differences between the two common architectures of computers**			**CU** **ALU** **Registers** **Accumulator** **MDR** **MAR** **PC** **CIR** **FDE cycle** **Clock speed** **RAM** **GPU**
Stretch. Key skills/concepts/knowledge that students should cover **Explain where Von Neumann and Harvard architecture might be used and cover why they would be most suitable for this situation.**			**Suggested materials teachers could/should use** **TeachICT** **Computer Science Powerpoints/Worksheets** **Key home learning tasks students should complete to be set in lessons.**