Northolt High School
Scheme of Learning

Committed to excellence

Year group: 8	Term: 2	Unit duration: 6 weeks	Number of lessons: 6	Unit title: **Logic Gates**

Assessment outcome: To be able to use logic gates basic functions.	**Fertile question?** Logic gates can allow two pieces of data to enter and exit through one door.	
Key skills/concepts/knowledge that students should cover	**Start RAG**	**End RAG**
Logic gates are the basic building blocks of any digital system. It is an electronic circuit having one or more than one input and only one output. The relationship between the input and the output is based on a certain logic. Based on this, logic gates are named as AND gate, OR gate, NOT gate etc. **What is a logic gate?** **Why is it needed?** **Digital systems architecture** **Create a logic diagram** **Be able to use a truth table**		

Literacy. Key vocabulary/subject terminology that students should cover
AND Gate **logic diagram** **truth table** **OR Gate** **NOT gate** **NAND Gate** **XOR Gate** **XNOR Gate**

Stretch. Key skills/concepts/knowledge that students should cover		**Suggested materials teachers could/should use**
To be able to build a logic gate from multiple component logic gate.		**TeachICT** **Computer Science Powerpoints/Worksheets**
		Key home learning tasks students should complete **to be set in lessons**