Topic: 7.6 Algorithms		Duration: 3 weeks	Composite: Project
Key vocabulary:	**Core knowledge questions**	**Powerful knowledge crucial to commit to long term memory**	**Links to previous and future topics**
Algorithm Program Flowchart Process Decision Terminator Input/Output Pseudocode	1. What is an algorithm? A sequence of logical instructions for carrying out a task. 2. What is a flowchart? A flowchart is a visual diagram that shows a sequence of instructions. 3. What is pseudocode? A method of writing up a set of instructions for a computer program using plain English 4. What is a process? A Process is an instruction to be carried out as part of a sequence. It is represented by a rectangle 5. What is a decision? A Decision is where selection is used to choose an option or command. It is represented by a diamond 6. What is a terminator? A Terminator is where a flowchart starts / ends. It is represent by a rounded rectangle. 7. What is an Input/ Output? It is where data is either input into/ output out of a flowchart. It is represented by a parallelogram. 8.	• Algorithms are plans for computer programs either represented as a diagram (flowchart) or written English (pseudocode) • Flowchart is a visual representation of an algorithm • Pseudocode is a written list of instructions in a sequence.	• Builds on skills gained from 7.3 Scratch & 7.4 Python unit and uses the same concepts of Sequencing, selection and iteration. • Utilises computational thinking and skill builds ready for KS4 Computer Science.

We will develop these skills:

Impressive reading	Impressive speaking	Impressive writing	Resilience	Numeracy via:	Digital Literacy via:	Employability via:
Read and analyse instructions to piece together an algorithm correctly.	Explain the steps needed in an algorithm.	Write an algorithm using pseudocode and flowchart.	The need to refine instructions until an algorithm Is efficient.	Using boolean logic, calculations to make decisions.	Learning how computers make calculations and decisions.	Utilising computational thinking skills and problem solving.