

Algorithms Progression

Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
<ul style="list-style-type: none"> • I can explain that an algorithm is a set of instructions • I can explain that algorithms are implemented on digital devices as programs. • I can understand algorithms run in an order (from start to finish) • I can sequence a set of instructions • I can orally describe an algorithm (series of instructions) for a given task • I can predict a change when I change part of my algorithm 	<ul style="list-style-type: none"> • I can explain what an algorithm is • I know that computers need precise instructions • I can record a simple algorithm using symbols • I can show care and precision to avoid errors • I can use some terminology for loops and selection when discussing an algorithm 	<ul style="list-style-type: none"> • I can write an algorithm for a task I do regularly e.g. getting ready for school • I can debug my algorithm after testing it • I can evaluate the efficiency of an algorithm • I can record a more complex algorithm using a flowchart • I can show care and precision to avoid errors • I can use some terminology for loops and selection when discussing an algorithm 	<ul style="list-style-type: none"> • I can plan a more complex algorithm using a flowchart • I can write an algorithm for a task using loops and selection • I can debug my algorithm after testing it • I can discuss sort and search algorithms • I can evaluate the efficiency of an algorithm 		

National Curriculum Coverage

KS1

- Understand what algorithms are; how they are implemented as programs on digital devices
- Use logical reasoning to predict the behaviour of simple programs

KS2

- Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms