

Programming A

EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
	<p>Moving a Robot Writing short algorithms and programs for floor robots, and predicting program outcomes.</p>	<p>Robot Algorithms Creating and debugging programs, and using logical reasoning to make predictions.</p>	<p>Sequencing Sounds Creating sequences in a block-based programming language to make music.</p>	<p>Repetition in Shapes Using a text-based programming language to explore count-controlled loops when drawing shapes.</p>	<p>Selection in physical Computing Exploring conditions and selection using a programmable microcontroller.</p>	<p>Variables in Games Exploring variables when designing and coding a game.</p>
Key Vocabulary	Key Vocabulary	Key Vocabulary	Key Vocabulary	Key Vocabulary	Key Vocabulary	Key Vocabulary
	Bee-Bot, forwards, backwards, turn, clear, go, commands, instructions, directions, left, right, route, plan, algorithm, program.	instruction, sequence, clear, unambiguous, algorithm, program, order, prediction, artwork, design, route, mat, debugging, decomposition.	Scratch, programming, blocks, commands, code, sprite, costume, stage, backdrop, motion, turn, point in direction, go to, glide, sequence, event, task, design, run the code, order, note, chord, algorithm, bug, debug, code.	Logo (programming environment), program, turtle, commands, code snippet, algorithm, design, debug, pattern, repeat, repetition, count-controlled loop, value, trace, decompose, procedure.	microcontroller, USB, components, connection, infinite loop, output component, motor, repetition, count-controlled loop, Crumble controller, switch, LED, Sparkle, crocodile clips, connect, battery box, program, condition, Input, output, selection, action, debug, circuit, power, cell, buzzer	variable, change, name, value, set, design, event, algorithm, code, task, artwork, program, project, code, test, debug, improve, evaluate, share, assign, declare