

Y3 Computing (Computer Science)

National Curriculum	Knowledge	Skills	Y2 Vocab	Y3 Vocab
<ul style="list-style-type: none"> • Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts. • Use sequence, selection, and repetition in programs; work with variables and various forms of input and output. • Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs. 	<ul style="list-style-type: none"> • Know that different actions can happen at different times in a program. • Understand programs can be used to control physical systems. • Understand that animation means the movement of objects on screen. • Understand that code might not work the first time and will need fixing. • Understand that there are certain 'built in' terms, such as if, to help create more complex programs. 	<ul style="list-style-type: none"> • Code time elements within a program. • Make different pieces of code execute at different times. • Program objects to appear and disappear at specific times. • Create simple animations using pre-made objects. • Find errors and debug a program. • Use the conditional statement 'if' to instruct objects. 	<ul style="list-style-type: none"> • Control • Swipe • Algorithm • Execute • Press • Button • Bug • Debug • Fix 	<ul style="list-style-type: none"> • Sequence • Function box • After • Time • Physical System • Control • Animation • Error • If • Then • Condition • Conditional
Units to Teach	Key Questions			Maths Links
<ul style="list-style-type: none"> • Block Coding 3a - Sequence & Animation. • Block Coding 3b – Conditional Events. 	<ul style="list-style-type: none"> • <i>What action code icons have been used in the code?</i> • <i>What function boxes or events did we use in this app and what do they do?</i> • <i>How is time used in the code?</i> • <i>What is a physical system?</i> 	<ul style="list-style-type: none"> • <i>How is the object moving?</i> • <i>What is a 'conditional' event?</i> • <i>Why do we include conditional events?</i> 	<ul style="list-style-type: none"> • Position & Direction. • Calculation. • Decimal Numbers. 	
Previous Learning		Future Learning		
<ul style="list-style-type: none"> • Understand that a computer has a variety of inputs (K) • Write code that makes an object change direction (S) • Begin to use more technical vocabulary such as execute, button and algorithm when explaining my code (S) • Write code that makes an object change direction (S) • Program a BeeBot to travel from A to B in the Shortest / Longest Route (S) 		<ul style="list-style-type: none"> • Understand how different conditional commands are more appropriate than others (k) • Understand we can use variables to hold information (k) • Write code that changes a variable after an event (s) • Write code that solves calculation problems (s) • Use the repeat function within a program (s) 		

