

# YEAR 1

## 1.4 - Programming, Coding & Robotics

<b>Computing Area</b>	Computer Science
<b>National Curriculum Strands</b>	<ul style="list-style-type: none"><li>• Understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions</li><li>• Create and debug simple programs</li><li>• Use logical reasoning to predict the behaviour of simple programs</li></ul>
<b>Skills Progression Points</b>	<ul style="list-style-type: none"><li>• By the end of unit, pupils should be able to:</li><li>• Give instructions to a friend and follow their instructions to move around a space.</li><li>• Describe what happens when buttons are pressed on a robot</li><li>• Press buttons in the correct order to make a robot follow a sequence</li><li>• Begin to predict what will happen for a short sequence of instructions</li><li>• Understand what an algorithm is and be able to create a simple algorithm</li></ul>
<b>Hardware</b>	Beebots, iPads
<b>Software/App</b>	Beebot app, Beebot simulator: <a href="https://www.terrapinlogo.com/emu/beebot.html">https://www.terrapinlogo.com/emu/beebot.html</a>
<b>Unit Objective</b>	To control both physical and virtual robots with a sequence of commands.
<b>Unit Vocabulary</b>	Beebot, forward, backwards, right, left, turn, program, algorithm, clear