

R Programming - Algorithms		Computational Thinking – Algorithm
<p><b>Playing and Exploring – engagement –</b></p> <ul style="list-style-type: none"> <li>Move like a programmable robot following instructions e.g. ‘up’, ‘down’, ‘left’ and ‘right’. (Figure 1.)</li> <li>Exploring how characters (Red Riding Hood etc) might travel to a desired location using toys. (Figure 3.)</li> </ul>	GDS	<ul style="list-style-type: none"> <li>I can write or record simple <u>algorithms</u>.</li> <li>I know what an <u>algorithm</u> is in real life.</li> <li>I can spot an error in an <u>algorithm</u>.</li> </ul>
<p><b>Active Learning – motivation –</b></p> <ul style="list-style-type: none"> <li>Put instructions into order e.g. practically move elements of a recipe or simple instructions.</li> <li>Program toys (BeeBot) to move across a grid.</li> </ul>	EXS	<ul style="list-style-type: none"> <li>I know that <u>algorithms</u> are used to solve problems.</li> <li>I know that an <u>algorithm</u> is a set of instructions.</li> <li>I can use the term <u>algorithm</u>.</li> </ul>
<p><b>Creating and thinking critically – thinking –</b></p> <ul style="list-style-type: none"> <li>Predict the outcome of a set of instructions.</li> <li>Matching symbols to simple grids and the directions the trucks will take on the masking tape paths. (Figure 2.)</li> </ul>	WTS	<ul style="list-style-type: none"> <li>In practical activities, I can verbally give a set of instructions.</li> <li>With support, I can explain the term <u>algorithm</u>.</li> </ul>

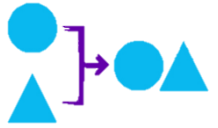

	Key Vocabulary	Apps	Breakdown
 <p><u>Algorithm</u></p>	<p>Children explore how an algorithm is a set of instructions. Usually to get something done or solve a problem. It would be useful to look at real life Algorithms.</p>		<p><u>Bee bot</u> - it is important with the devices that the children are given a specific aim. Debugging on Bee bot is pressing the reset button.</p> <p><a href="#">BBC what is Coding?</a></p> <p><a href="#">BBC What is an algorithm?</a></p>



Fig 1.



Fig 2.



Fig 3.

