



algorithm



bug



computer



debug



input



programming



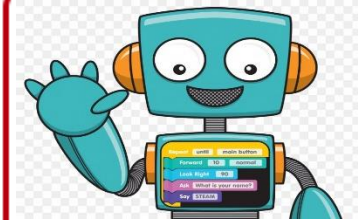
# Computing: We are Treasure Hunters (Coding)



logical  
reasoning



turn



output



clockwise



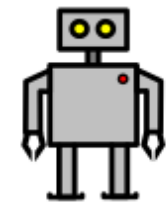
anticlockwise



directions

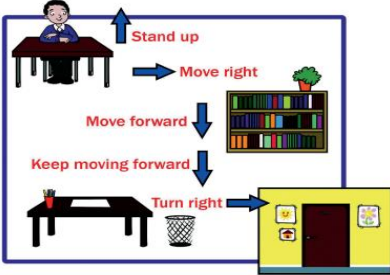



instructions



robot

# Y1 Computing: We are Treasure Hunters - Topic Vocabulary Mat

Subject Specific Vocabulary		Relevant Pictures	Exciting Books/Websites
<b>algorithm</b>	A sequence of precise instructions or steps (sometimes a set of rules) to achieve an objective		<p>Have a go at coding here:</p> <p><a href="https://scratch.mit.edu/projects/editor/?tutorial=getStarted">https://scratch.mit.edu/projects/editor/?tutorial=getStarted</a></p> <p>See also:</p> <p><a href="https://kids.britannica.com/kids/article/Katherine-Johnson/628677">https://kids.britannica.com/kids/article/Katherine-Johnson/628677</a></p>
<b>bug</b>	An error or mistake in a program or algorithm, causing the computer or robot to behave in a manner that was not originally intended		
<b>computer</b>	A device that accepts input, processes it according to instructions or rules and produces output		<p><b>Black History Month</b></p> <ul style="list-style-type: none"> <li>• <b>Katherine Johnson</b> was an American mathematician whose calculations helped to send people to the moon.</li> <li>• Her success with challenging calculations became well known. She helped pioneer (lead) the use of computers to perform required tasks.</li> </ul>
<b>debug</b>	To correct mistakes in a computer program or algorithm		<p><a href="https://kids.nationalgeographic.com/history/article/katherine-johnson">https://kids.nationalgeographic.com/history/article/katherine-johnson</a></p>
<b>input</b>	Data supplied to a computer, in this case, pressing buttons on the robot	<b>What I've learnt already</b>	<b>Key Knowledge</b>
<b>logical reasoning</b>	To be able to give a reason for something which others would have to accept as correct	<p><b>EYFS:</b></p> <ul style="list-style-type: none"> <li>• Negotiate space and obstacles safely, with consideration for themselves and others.</li> <li>• I have used computing equipment including class iPads, Bee-Bots and the IWB.</li> </ul>	<ul style="list-style-type: none"> <li>• An algorithm is a set of step-by-step instructions to solve a problem or complete a task.</li> <li>• A computer program is a sequence of instructions that can be followed by a computer.</li> <li>• A programmable toy (or robot*) can be made to move by inputting the algorithm as button presses. It is then stored as a program.</li> <li>• Input is data supplied to a computer (in this case pressing buttons on the robot)</li> <li>• Output is information produced by a computer (in this case movements of the robot, like moving forwards).</li> <li>• A computer (for example a Beebot) is a device with inputs, outputs and the ability to store programs.</li> <li>• A robot is a computer that can move.</li> <li>• A bug is an error or mistake in a program.</li> <li>• Debugging means finding and correcting mistakes in a computer program algorithm. The term was made popular by Grace Hopper.</li> </ul>
<b>output</b>	Information produced by a computer – in this case, movements of the robot		
<b>programme</b>	A sequence of instructions (or sometimes a set of rules) that can be followed by a computer		
<b>robot</b>	A computer that can move, or that can move part of itself		