



<b>Year group:</b> 4	<b>Term:</b> Autumn 2	<b>Unit:</b> Programming- Further coding with Scratch
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<p><b>Must have knowledge:</b></p> <ul style="list-style-type: none"> <li>- To know that a variable is a value that can change (depending on conditions) and know that you can create them in Scratch.</li> <li>- To know what a conditional statement is in programming.</li> <li>- To know that variables can help you to create a quiz (on Scratch.)</li> </ul>
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<p><b>Key Vocabulary:</b></p> <p><b>Code Block:</b> A visual representation for a section of code that performs a certain job. They can be snapped together to build a program.</p> <p><b>Conditional statement:</b> A rule which states that something cannot happen until certain requirements are met.</p> <p><b>Sprite:</b> Visual objects that can be manipulated through code, for example to move, respond, appear or disappear.</p> <p><b>Variable:</b> This could be a number or text, that can change each time the program is run and often in combination with selection to change the end result of the program.</p>
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<p><b>Key skills</b></p> <ul style="list-style-type: none"> <li>• Incorporating variables to make code more efficient.</li> <li>• Coding a simple game.</li> <li>• Remixing existing code.</li> </ul> <p>Examples of Scratch sprites:</p> 
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<p><b>Scratch coding blocks and what they do:</b></p> <p><b>Motion</b> <small>move steps</small></p> <p>Move your sprite (character), change direction, point towards and position</p> <p><b>Sound</b> <small>start sound</small></p> <p>Play sounds, add sound effects, change volume and pitch when the sprite performs an action</p> <p><b>Looks</b> <small>costume</small></p> <p>Include speech and thought bubbles, change the sprite or background appearance and sizes</p> <p><b>Events</b> <small>when clicked</small></p> <p>Instruct to perform actions when a certain condition is met or at a specified time</p> <p><b>Control</b> <small>repeat</small></p> <p>Loops to repeat code, if statements for when conditions are met and cloning code</p> <p><b>Operators</b> <small>&lt; &gt;</small></p> <p>Maths blocks, such as more than, less than, equal to, and, or and not statements; (+, -, x, ÷)</p> <p><b>Sensing</b> <small>touching mouse-pointer ?</small></p> <p>Respond to certain actions, such as moving the mouse pointer, questions, timers and dates</p> <p><b>Variables</b> <small>set my variable to</small></p> <p>Set a value yourself, such as a score counter</p> <p><b>My blocks</b> <small>myBlock</small></p> <p>Create your own coding blocks! - Give them a name and add instructions</p>  <p>© Scratch</p>
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