<table>
<tr><td>Subject: Computing</td><td>Year group: Year 3</td><td>Topic: Algorithms</td><td rowspan="2">Initiation & activation activities:</td></tr>
<tr><td colspan="2">Prior knowledge required: To know what an algorithm is. Know that programs are made up of a sequence of codes. To be able use these codes or instructions to control devices or objects on screen.</td><td>Vocabulary:</td></tr>
<tr><td>Programme of Study: Year 3 & 4</td><td>Implementation:</td><td>Impact –lesson sequence:</td><td>Evaluations and assessments:</td></tr>
<tr><td>• 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.</td><td>Scratch – Animation
• Navigate the Scratch programming environment.
• Create a background and sprite for animation
• Change background after a specific time.
• Add inputs to control their sprite.
• Change position of sprite on screen

<u>Knowledge skills and understanding</u>
• Can they experiment with variable to control models?
• Can they use 90 degree and 45 degree turns?
• Can they give an on-screen robot directional instructions?
• Can they draw a square, rectangle and other regular shapes on screen, using commands?
• Can they more complex programs?

<u>GD</u>
Logo
• Write a simple program in Logo to produce a line drawing.
• Use more advanced Logo programming, including pen up, pen down etc.
• Write a program to reproduce a defined problem, e.g. geometric shape/pattern.</td><td></td><td></td></tr>
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