



Pinner Wood School



Year Group	3	Term	Autumn 1	Subject	Computing	Topic	Animations in Scratch
						Key Question	What is an algorithm and how will it help me programme?
Prior Learning and other Curriculum Links	<p>Year 2</p> <p>I understand decomposition is breaking objects/processes down</p> <p>I know how to debug algorithms</p> <p>I understand programs follow precise instructions</p> <p>I know how to create programs using different digital devices E.g. Bee Bot or ScratchJr on a tablet</p> <p>I know how to debug programs of increasing complexity</p> <p>I know how to use logical reasoning to predict the outcome of simple programs</p> <p>I know how to write algorithms for everyday tasks</p> <p>I know how to use logical reasoning to predict the outcome of algorithms</p> <p>I understand decomposition is breaking objects/processes down</p> <p>I know how to debug algorithms</p> <p>I understand programs follow precise instructions</p> <p>I know how to create programs using different digital devices E.g. Bee Bot or ScratchJr on a tablet</p> <p>I know how to debug programs of increasing complexity</p> <p>I know how to use logical reasoning to predict the outcome of simple programs</p>					Skills Statements	<p>Computational Thinking</p> <ul style="list-style-type: none"> • I know how to create algorithms for my programming projects • I know how to decompose projects (such as an animation) into steps to create an algorithm • I understand abstraction is focusing on important information • I know how to identify patterns in an algorithm <p>Coding/Programming</p> <ul style="list-style-type: none"> • I know how to design a program • I know how to create a program using a design • I know how to create a sequence of code • I know how to evaluate my program
Fundamentals	<p>Computational Thinking: To create and decompose projects (such as an Animation) into steps to create an algorithm</p> <p>Coding and Programming: To design, create a program using a sequence of code.</p>					Key Facts/Sticky Knowledge	<p>An algorithm is a set of instructions.</p> <p>Abstraction is focusing on important information</p> <p>There are patterns within an algorithm.</p> <p>Use blockly coding language to create a program.</p> <p>Understand different blocks have different uses.</p>

<p>Our Curriculum Journey</p>	<p>Journey: <i>Esafety:</i> Children will look at how to create safe and secure passwords in the first lesson. They will also continue to develop their understanding of which information should be shared online.</p> <p>D - Design: Pupils start to discuss the desired outcome for their project and are given time to tinker with scratch before planning what they will do to achieve their outcome. They will design and create an algorithm for a programme.</p> <p>A - Apply: Pupils are given the opportunity to create, make and produce an algorithm using the scratch software.</p> <p>R - Refine: Pupils spend time considering ways to modify and improve their programmes thinking about how to debug them.</p> <p>E - Evaluate: Upon completing their desired outcome, pupils are given the opportunity to reflect and consider how effectively they have achieved their goal.</p> <p>S - Share: Learners are given the opportunity to publish and exhibit their work on Seesaw embedding skills from the Digital Literacy curriculum.</p>		
<p>Key Vocabulary (revisited)</p>	<p>Markers, Augmented Reality, trigger Decomposition, debug, reason, detail, breakdown, task, Precise, logical reasoning, prediction, debug, sequence Decomposition, debug, reason, detail, breakdown, task, Precise, logical reasoning, prediction, debug, sequence</p>	<p>Key Vocabulary (new)</p>	<p>Abstraction, information, relevant, pattern, same, different, complex, sequence, code, design, programming language, Scratch</p>

Expected Examples

The image displays the Scratch code editor interface. On the left, the 'Code' tab is active, showing a script for a dinosaur character. The script starts with a 'when clicked' event block, followed by a 'switch costume to Closed mouth' block. The character then moves to x: -144, y: 60, points in direction 90, and waits for 5 seconds. It then moves 50 steps, waits 1 second, points in direction -90, waits 1 second, points in direction 90, waits 1 second, glides 2 seconds to x: 177, y: 77, switches costume to 'Open mouth', waits 1 second, and finally switches costume to 'Closed mouth'. The 'Motion' category is selected in the left sidebar.

```
when clicked
  switch costume to Closed mouth
  go to x: -144 y: 60
  point in direction 90
  wait 5 seconds
  move 50 steps
  wait 1 seconds
  point in direction -90
  wait 1 seconds
  point in direction 90
  wait 1 seconds
  glide 2 secs to x: 177 y: 77
  switch costume to Open mouth
  wait 1 seconds
  switch costume to Closed mouth
```



Sprite: TRex

Show:

Size: 100

Direction: 90

Stage

Backdrops: 1

Sprite list: TRex, Diplodocus, Narrator