

# YEAR 4

## 4.2 - Repetitions & Loops in Scratch

<b>Computing Area</b>	Computer Science
<b>National Curriculum Strands</b>	<ul style="list-style-type: none"><li>• Design, write and debug programs that accomplish specific goals; solve problems by decomposing them into smaller parts</li><li>• Use sequence in programs; work with variables and various forms of input and output</li><li>• Use logical reasoning to detect and correct errors in algorithms and programs</li><li>• Select, use and combine a variety of software to design and create content that accomplish (es) given goals, including presenting information</li></ul>
<b>Skills Progression Points</b>	<ul style="list-style-type: none"><li>• Understand how an algorithm is implemented using a sequence of precise instructions.</li><li>• Can predict the outcome of a sequence of precise instructions.</li><li>• Repeatedly test a program and recognise when they need to debug it.</li><li>• Detect a problem in an algorithm, which could result in a different outcome to the one intended.</li><li>• Understand what inputs and outputs are, how they can be used.</li><li>• Provide examples of how to use inputs and outputs effectively.</li><li>• Designs, writes, executes and debugs programs of increasing complexity that accomplish a specific goal.</li><li>• Use logical reasoning to predict and debug more complex programs including inputs and outputs.</li></ul>
<b>Hardware</b>	iPads/Laptops/Desktop PCs
<b>Software/App</b>	Scratch online
<b>Unit Objective</b>	To use repetition and loops within coding
<b>Unit Vocabulary</b>	Sequence, selection, repetition, input, algorithm, programming, debugging, computational thinking, tinker.