

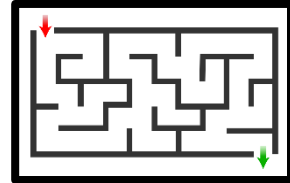
## LKS2 Computing Knowledge Organiser

### Year 4 - Term 6 - Programming - Repetition in games

**Key Focus:** explore the concept of repetition in programming using the Scratch environment.

#### **National Curriculum Objectives:**

- 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
- Select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information



#### **Programming - Repetition in games**

- To develop the use of count-controlled loops in a different programming environment
- To explain that in programming there are infinite loops and count controlled loops
- To develop a design that includes two or more loops which run at the same time
- To modify an infinite loop in a given program
- To design a project that includes repetition
- To create a project that includes repetition

<b>Key vocabulary</b>	
<b>Word</b>	<b>Meaning</b>
Loop	A block of code that is repeated.
Infinite loop	Code that is repeated without an end.
Count - controlled loop	Code that is repeated a certain number of times or until a condition is met.

#### **Sticky Knowledge:**

- Code can be repeated using a loop code block.
- More than one loop can be used in a program.