

## UKS2 Computing Knowledge Organiser

### Year 6 - Term 3 - Programming - Variables in games

**Key Focus:** find out what variables are and relate them to real-world examples of values that can be set and changed.

#### **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



#### **Variables in games**

- To define a 'variable' as something that is changeable
- To explain why a variable is used in a program
- To choose how to improve a game by using variables
- To design a project that builds on a given example
- To use my design to create a project
- To evaluate my project

#### **Key vocabulary**

<b>Word</b>	<b>Meaning</b>
Variable	Something that can be set and changed throughout the running of a program.
Value	Data of a variable either letters (strings) or numbers.
Event	Something that happens, like pressing a button, moving a mouse or a timer going off.

#### **Sticky Knowledge:**

A variable can be set and changed throughout the running of a program.

Variables act as placeholders for single values in the memory of a computer. There can only be one at a time.

An event can trigger the change in a variable.