



Programming A – Variables in Games

YEAR 6
Term 3

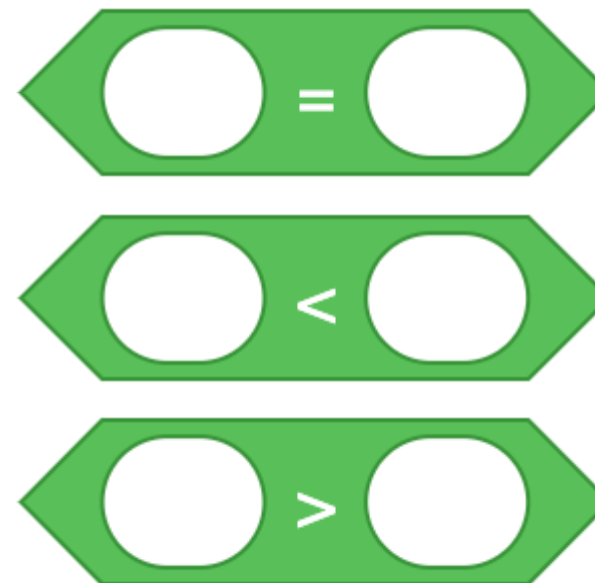
Knowledge Building Blocks:

- To define a 'variable' as something that is changeable.
- To identify examples of information that is variable.
- To explain that a variable can be used in a programme.
- To define a programme variable as a placeholder in memory for a single value.
- To explain that a variable has a name and a value.
- To identify a variable in an existing programme.
- To recognise that the value of a variable can be used by a programme.
- To recognise that the value of a variable can be updated.
- To experiment with the value of an existing variable.
- To identify that variable can hold numbers (integers) or letters (strings).
- To define the way that a variable is changed.
- To recognise that a variable can be set as a constant (fixed value).
- To choose a name that identifies the role of a variable to make it easier for humans to understand it.
- To explain the importance of setting up a variable at the start of a programme.
- To decide where in a programme to set a variable.
- To update a variable with a user input.
- To use an event in a programme to update a variable.
- To use a variable in a conditional statement to control the flow of a programme.
- To explain that there is only one value for a variable at any one time.
- To explain that if you change the value of a variable, you cannot access the previous value.
- To explain that if you read a variable, the value remains.
- To use the same variable in more than one location in a programme.
- To explain that the name of a variable is meaningless to the computer.
- To explain that the name of a variable needs to be unique.

Codes:



Operator Blocks:



Key Vocabulary:

- variable
- programme
- placeholder
- memory
- single value
- integers
- strings
- fixed value
- input/output
- conditional statement
- control
- flow
- location
- name
- update
- predict
- outcome
- block
- abstraction
- algorithms
- sprites
- backgrounds