

Prior Knowledge

In KS1, the children have created an algorithm, that with a given command, can control and move a robot, described a series of instructions as part of a sequence and identified where an algorithm is wrong.

In KS2, they have explored new programming environments to identify commands that lead to an outcome and the importance of accuracy in programming a design.



My Component Knowledge:

Lesson 1: I can define a 'variable' as something that is changeable

Lesson 2: I can explain why a variable is used in a program

Lesson 3: I can choose how to improve a game by using variables

Lesson 4: I can design a project that builds on a given example

Lesson 5: I can use my design to create a project

Lesson 6: I can evaluate my project

My Composite Knowledge:

To know what variables are and relate them to real-world examples of values that can be set and changed. To use variables to create a simulation of a scoreboard.

My Powerful Knowledge:

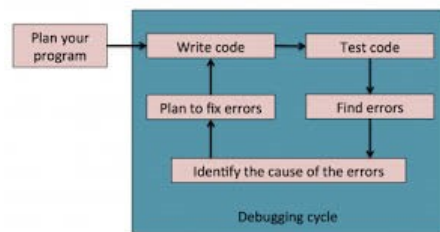
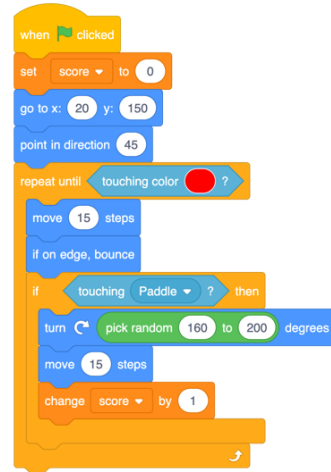
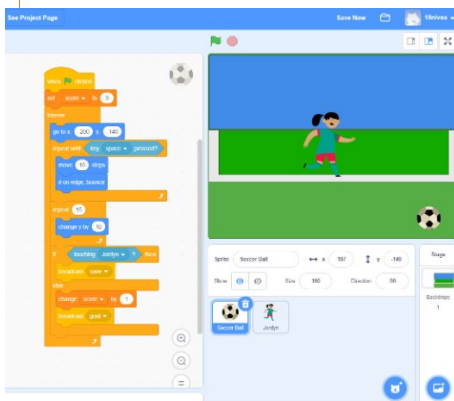
In this unit, the children will develop their understanding of variables in Scratch, a block-based programming language. They will know where variables can be used and how they can be set and changed through the running of a program. They will also develop their understanding of design in programming.

Key Vocabulary

Tier 1: change, name, value, improve, share, score, data, movement, program, event

Tier 2: variable, evaluate, value, sprite, stage, command, task

Tier 3: code snippet, algorithm, program flow, programming constructs



What is a variable?

How do I change the same change score block in different parts of a program?

How can I design a game?

What are programming constructs?