

# Year 4 Programming in Scratch Computer Science



Key Words	
inputs	An example of an input are the keyboard arrow keys, which could be programmed to move a sprite.
selection	The sprite can be programmed to make a choice. For example, selecting whether an answer is right or wrong in a quiz.
sensing	A sensing block is triggered when a sprite touches another sprite or a colour.
variables	Something that changes in a program such as score or the speed of a car sprite.
debug	Find an error in your code and correct it.

# What do I already know?

- Know that code blocks in Scratch are different colours to help you find the blocks you need.
- Know that code blocks can be used to draw shapes by programming a pen trail and movements.
- Know that a repetition can be used to a make a program simpler.
- Know how to program an input, such as keyboard arrow keys to make a sprite move.
- Know how to find errors in a program and correct them.

## **Our Learning Steps**

#### 1. Scratch racing

Program inputs with loops, selection and sensing for interactions.



Write a program with inputs and audio outputs (sound).



# 3. **Debugging**

Debug a variety of programs (correcting errors).



#### 4. Scratch quiz

Use selection, data variables and operators.



## 5. Challenge: program a robot

Program a Virtual Robot using Scratch blocks.



## 6. Scratch unplugged

Complete unplugged activities to consolidate learning.



