



Year 5 Programming in Scratch Knowledge Organiser



? What are we learning about programming in Scratch?

You may have used Scratch to program drawings and characters (sprites) to talk to each other but we can also use it program games, including football games and mazes. To do this we need to program interactions so that sprite can be controlled, sense other sprites/objects, make choices and score points. We can also use our Scratch programming skills in other software, such as programming a virtual reality robot.

National Curriculum Content

Design, write and debug programs that accomplish specific goals; 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.

Quick tips

- Drag code blocks into the backpack at the bottom of the screen to be used again to save time.



- Change the language of Scratch by clicking the down arrow next to the globe in the top left corner.

Key knowledge

- Know that sprites can be controlled in different ways using keyboard or touch screen inputs.
- Know that sprites can be programmed to sense other sprites or colours then make decisions. (Eg if a ball sprite touches the colour of a goal it scores a point.)
- Know how to program variables, including random variables that can be used to make a game unpredictable.

Important Vocabulary

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. They can also be random to make the game more unpredictable.
Debug	Find an error in your code and correct it.

