Year 6 Programming in Scratch
Knowledge Organiser

❓ What are we learning about programming in Scratch?

Scratch can be used to program using code blocks, including programming space and tennis games plus phone simulators. 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 program sprites to send messages to each other to game a project even more interactive.

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.

📖 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.
- Know how to program operators to add sums.
- Know how to program broadcasts, to send messages between sprites.

Important Vocabulary

Inputs	An example of an input are the keyboard arrow keys, which could be programmed to move a sprite.
Operators	Add sums to a program, such as more than, less than or equal to.
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.
Broadcasts	Send messages from one sprite to another.