What prior knowledge should pupils have?

- Interactive programs and apps require an input from the user in various forms, for example keypress.
- Loops or repeated script will not only make algorithm work correctly but also will be a more efficient way of coding a project.
- Variables are a location to store information and data pertinent to the effective execution of the algorithm.

What skills will pupils learn? (Disciplinary Knowledge)

- Creating a simple interactive game including basic movement commands and using the 'sensing' function.
- How to create sequences of commands and loops, including multiple costumes and backgrounds, to control movement.
- Introduction of more advanced conditional commands such as 'when', 'forever' and 'repeat'.

What key knowledge will be taught? (Substantive Knowledge)

- Pupils will refamiliarise themselves with the system life cycle are they create and debug algorithms of increasing complexity.
- How to analyse and evaluate algorithms for accuracy and to reduce the reliance on unnecessarily repetitive code.

Key Vocabulary	Definition
Scratch	A visual programming language and online community where users can create interactive stories, games, and animations.
Command	An instruction given to a computer program or code to perform a specific action.
Sprite	A graphic or character that can be moved, animated, or controlled in a computer program or game.
Background	The visual backdrop or setting of a scene or game.
Sequence	A series of instructions or actions performed in a specific order.
Loop	A programming structure that repeats a set of instructions until a specific condition is met.
Event	An action or occurrence in a program that triggers a response or change in behaviour.

Online Safety

- Working online using Scratch presents a number of opportunities to reinforce key online safety principles including
  - Safe online practices, such as creating strong passwords and recognizing potential online scams.
  - Discussing the potential consequences of sharing inappropriate or harmful content online.
  - Teaching students about the importance of protecting their own and others' digital reputations through polite and respectful interactions.
  - Encouraging responsible online behaviour and digital citizenship.