

# Year 3 Programming

## Prior Learning (Y2):

Develops pupils' understanding of instructions in sequences and the use of logical reasoning to predict outcomes. Pupils will use given commands in different orders to investigate how the order affects the outcome. Pupils will also learn about design in programming. They will develop artwork and test it for use in a program. They will design algorithms and then test those algorithms as programs and debug them

## Current Learning (Y3):

Learners will be introduced to a selection of motion, sound, and event blocks which they will use to create their own programs, featuring sequences. The final project is to make a representation of a piano. The unit is paced to focus on all aspects of sequences, and make sure that knowledge is built in a structured manner. Learners also apply stages of program design through this unit.

## Future Learning (Y4):

Learners will create programs by planning, modifying, and testing commands to create shapes and patterns. They will use Logo, a text-based programming language.

## Key Vocabulary

**Vocabulary to use from KS1:** Algorithm, program, command, debug, logical reasoning

Sequence

A pattern or process in which one thing follows another

## Key Unit Specific Vocabulary:

Scratch; Programming Blocks; Sprite; Event; Sound; Motion; Combine; Instruments

## Key Questions:

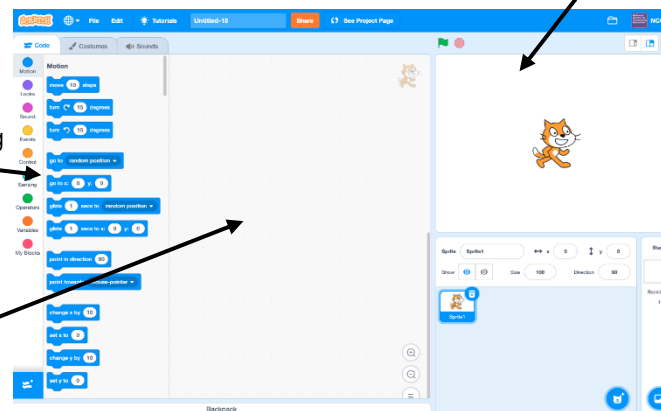
- How do I program a Sprite on Scratch?
- How can I start my program?
- How can I order blocks into a sequence?
- What is a sequence?
- How can I change the appearance of my project?
- How can I implement my algorithm as code?

## Scratch- The Basics

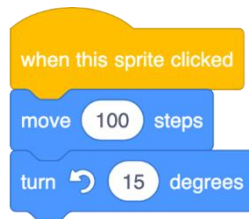
Stage with Sprite

Programming Blocks

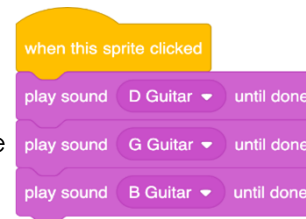
Programming Area



## Combining Blocks to make sequences



When blocks are joined together, they make a sequence. The sequence always needs to begin with an event block.



## Scratch- The Blocks

In Scratch, we have different blocks to program different things. The blue blocks are **motion** blocks; these allow the Sprite to move.



The yellow blocks are **events** blocks; these are events that start the project.



The pink blocks are **Sounds** blocks; these can add sounds to the sprite.

