# Year 4 - Further coding with Scratch - HT2

## Key Vocabulary

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| Code (computer) | A set of instructions written in programming language, to tell a computer what to do. |
| Code block | A visual representation for a section of code that performs a certain job. They can be snapped together to build a program. |
| Conditional statement | A rule which states that something cannot happen until certain requirements are met. |
| Decompose | To break something down into smaller chunks. |
| Direction | A way in which something moves such as up, down, left, right. |
| Feature | The individual parts that make up something. |
| Icon | A small image which represents something or someone. |
| Orientation | Positioning to a particular place or direction. |
| Position | The location of where something or someone is. |
| Program verb | To write code based instructions for a computer to process. |
| Project (Scratch) | A creation developed within the Scratch program. |
| Scratch | A coding program, in which you can develop interactive games and animations. |
| Sprite | Visual objects that can be manipulated through code, for example to move, respond, appear or disappear. |
| Stage (Scratch) | The background of the Scratch project to suit your game, animation or project. |
| Tinker | To explore and play with something to discover the key functions. |
| Variable | This could be a number or text, that can change each time the program is run and often in combination with selection to change the end result of the program. |

**Examples of Scratch sprites:**

**Scratch coding blocks and what they do:**

**Motion** — move (10) steps

Move your sprite (character), change direction, point towards and position

**Sound** — start sound

Play sounds, add sound effects, change volume and pitch when the sprite performs an action

**Looks** — costume #

Include speech and thought bubbles, change the sprite or background appearance and sizes

**Events** — when clicked

Instruct to perform actions when a certain condition is met or at a specified time

**Control** — repeat (10)

Loops to repeat code, if statements for when conditions are met and cloning code

**Operators** — ( ) < ( )

Maths blocks, such as more than, less than, equal to, and, or and not statements; (+, -, x, ÷)

**Sensing** — touching (mouse-pointer) ?

Respond to certain actions, such as moving the mouse pointer, questions, timers and dates

**Variables** — set (my variable) to (0)

Set a value yourself, such as a score counter

**My blocks** — myBlock

Create your own coding blocks! - Give them a name and add instructions



| To know statements | ✓ ✗ |
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| I know how to identify the key features and writing a simple code script | |
| I know how to decompose a Scratch game to understand which code blocks have been used | |
| I understand what a variable is and start to identify how to make a variable using specific code blocks | |
| I know how to make a variable in Scratch using specific code blocks | |
| I can use knowledge of how variables work to help create a quiz in Scratch | |

What can you remember from previous units?

What is a loop? How have you used one?
What is debugging? What is the best way to do this?
How can you predict the action a block of code?

Anything else you have learnt? What have you enjoyed?