

## Year 5 Computing: Coding



## Prior Learning (Year 4)

- I can use sequence, selection and repetition in my code.
- I can use Scratch to create algorithms to create a game.
- I can debug my code to fix errors.



## Sticky Knowledge

- I can simplify some code.
- I can create a playable game.
- I understand what a simulation is.
- I can program a game using 2Code.
- I know what decomposition and abstraction are in computer science.
- I understand what a function is and how functions work in code. I understand what the different variables types are and how they are used differently.
- I know how to create a string.
- I understand what concatenation is and how it works.



| Key Vocabulary |  |
|----------------|--|
| abstraction    | A way of de-cluttering and removing unnecessary details to get a program functioning .   |
| action         | The way that objects change when programmed to do so. For example, move.   |
| algorithm      | A precise step by step set of instructions used to solve a problem or achieve an objective.  |
| concatenation  | The action of linking a mixture of strings, variable values and numbers together in a series.  |
| debug          | Fixing code that has errors.   |
| decomposition  | A method of breaking down a task into easier components.   |
| function       | A block or sequence of code that you can access when you need it.  |
| input          | Information going into the computer.   |
| nesting        | Where coding commands are put inside other commands.   |
| object         | Items in a program that can be given instructions to move or change.   |
| output         | Information that comes out of the computer. E.g. sound.  |
| repeat         | This command can be used to make a block of commands run a set number of times.  |
| sequence       | This when a computer program runs commands in order.   |
| selection      | A computer will choose which bit of code to run depending on a condition. In 2Code, this is achieved using 'if' or 'if/else' statements.                                   |
| variable       | A named area in a computer memory. A variable has a name and a value. Variables are used in programming to keep track of things that can change when a program is running. |