



# Year 6 - Autumn 1 - Computing Knowledge Organiser

## What I already know...

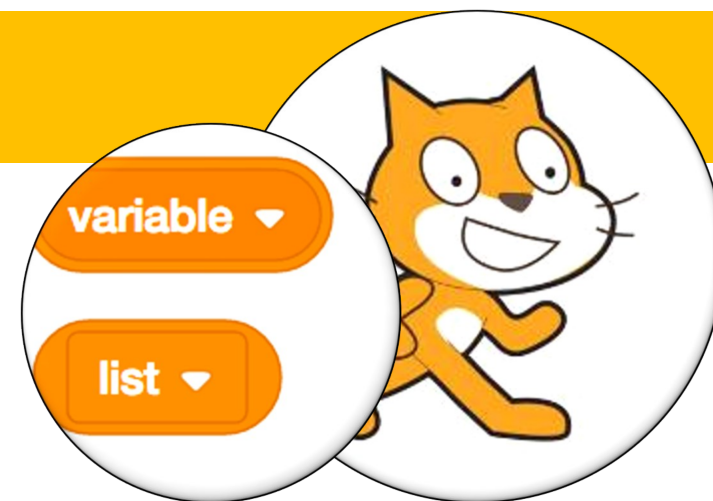
- How to create simple programs in Scratch
- That a program has a start and follows a sequence of commands
- How to use count-controlled and infinite loops in programming

## What I will learn...

- That a variable is something changeable
- How to identify a variable in an existing program
- That variables can hold numbers (integers) or letters (strings)
- To decide where in a program to set a new variable
- To update a variable with user input and use an event in a program to update a variable
- To use variables to control the flow of a computer program
- How to modify variables in an existing game
- How to create a game in Scratch, incorporating (and improving) a number of variables

## Key Vocabulary

Variables	Names given to things we want a computer to remember e.g. scores
Repetition	Instructions that can be repeated
Condition	Something that is either true or false
Sequence	A set of instructions that are followed in order
Selection	A way to make choices in a
Algorithm	Steps to follow to achieve a task
Debug	Finding and correcting errors
Input	A method of computers receiving information
Output	A response made by a computer
Program	Instructions written in a language (code) that a computer can



## Making a difference at The Merton

Our Autumn computing unit will advance our programming skills by exploring the concept of variables in programming through games in Scratch. First, the children will learn what variables are, and relate them to real-world examples of values that can be set and changed. We will then use variables to create a simulation of a scoreboard. We will explore existing games in Scratch before modifying them and using them as inspiration to create and improve our own games using our knowledge of variables.

## Making a difference at home

**Scratch** is a free programming language and online community where you can create your own interactive stories, games, and animations.

Why not create an account that can be used at home? Create your own games or re-create classic arcade games together as a family: <https://scratch.mit.edu/join>