



Knowledge Organiser

Coding - Year 5

Key Learning:

- To begin to understand the importance of writing efficient code.
- To use decomposition and abstraction to design and make a simulation based on a real-life scenario.
- To be able to use different strategies to make simulations more realistic.
- To begin to understand how to use functions in coding.
- To understand how different types of variables can be used in programs.

Key Vocabulary:

- abstraction – a way of getting rid of unnecessary details to help a program function more efficiently.
- decomposition – a method of breaking down a task into manageable chunks, for example identifying separate algorithms.
- function – a block or sequence of code that can be recalled when needed instead of being rewritten each time.
- physical system – a system that exists in the real world using robotics, motors or sensors
- simulation – a model that represents a real or imaginary situation.
- tab – a separate page that can be used to keep sections of code separate in longer programs.



Key Questions:

- What is a simulation? When and why do people use simulations?
- Why are decomposition and abstraction useful skills in coding?
- What are the benefits of writing efficient code?
- Why are there different types of variables? Can you use more than one type of variable in a program?