



# St Andrew's C of E Maghull

## Computing Knowledge Organiser

### Year 5 – Autumn 1 – Coding



#### Key Knowledge

- To review coding vocabulary.
- To be able to explain how their program simulates a physical system.
- To be able to reflect/explain upon the effectiveness of their simulation.
- To explain what a variable is in programming.
- To understand that you can set/change the variable values appropriately.
- To know some ways that text variables can be used in coding. To read code so that it can be adapted, personalised and improved.

#### Vocabulary

**Action** – a command used to open and save a file.  
**Alert** – a small window that pops up and provides information.  
**Algorithm** – a list of instructions.  
**Bug** – an unexpected error.  
**Code Design** – a combination of algorithms to create.  
**Command** – a specific order from the computer operating system.  
**Control** – the ability to manage or run something on a computer.  
**Debug/Debugging** – fixing an unexpected error.  
**Event** – an action that can be recognised by a program.  
**Function** – 'self-contained' modules of code that accomplish a specific task.  
**Get Input** – data that is entered into the computer.  
**If (command)** – a decision-making statement that guides a program to make decisions based on specific criteria.  
**If/Else** - tells the computer that if the condition is true, do this. Else, if the condition is false, do another thing.  
**Timer** – keeps track of time.  
**Variable** – a value that can change.

#### Lesson Sequence

##### Lesson 1

I can review existing coding knowledge.

##### Lesson 2

I can understand what a simulation is.

##### Lesson 3

I can use decomposition to make a plan of a real-life situation.

##### Lesson 4

I can begin to understand what a function is and how functions work in code.

##### Lesson 5

I can understand what the different variable types are and how they are used differently.

##### Lesson 6

I can begin to explore text variables when coding.

