



# St Andrew's C of E Maghull Knowledge Organiser



## Year 6 – Autumn 1 – Computing - Coding

### Knowledge:

- To know how to design programs using their choice of objects, attributing specific actions to each using their new programming knowledge.
- plan a program before coding to anticipate the variables that will be required to achieve the desired effect.
- debug when things do not run as expected.
- To know how to use functions and understand why they are useful in 2Code.
- To know to organise code into functions and Call functions to eliminate surplus code in the program.
- explain what functions are and how they can be created and labelled in 2Code.
- explain how to move code from one tab to another in 2Code.
- explain how they organised code in a program into functions to make it easier to read.
- attribute variables to user input.
- aware of the need to code for all possibilities when using user input.
- know how to create a simulation of a room in which devices can be controlled.
- know how to follow through the code of how a text adventure can be programmed in 2Code.

### 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:** To design a playable game with a timer and a score.
- Lesson 2:** To plan and use selection and variables and to understand how the launch command works.
- Lesson 3:** To use functions and understand why they are useful
- Lesson 4:** To use flowcharts to test and debug a program.
- Lesson 5:** To understand the different options of generating user input in 2Code
- Lesson 6:** To understand how 2Code can be used to make a text-based adventure game.

