

# St George's Central CE Primary School and Nursery

## Computing Y3/4 – Where is the bug?

What will we learn:

- To design algorithms using flowcharts.
- To design an algorithm that represents a physical system and code this representation.
- To use selection in coding with the 'if' command.
- To understand and use variables in 2Code.
- To deepen understanding of the different between timers and repeat commands.

### Prior Learning

In Y1/2 I learnt:

- What a code is and why we use them
- The functionality of the directional keys on the keyboard
- How to create a set of instructions for the computer to follow (algorithm)
- How to fix (debug) a set of instructions (algorithm)
- To use directional keys as part of an algorithm.

### Future Learning in Year 5/6

To represent a program design and algorithm.

To use the Launch command in 2Code Gorilla.

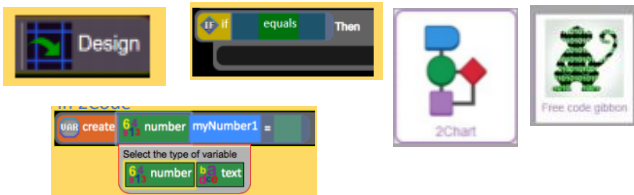
To program a playable game with timers and scorepad.

To explore string and text variable types so that the most

### Vocabulary

Bug	A problem in a computer program that prevents it from working in the way it was designed.
Code Block	A group of commands that are joined together and are run when a specific condition is met or when an event occurs.
'If' Command	A conditional command. This tests a statement. If the condition is true, then the commands inside the block will be run.
Variable	A named area in computer memory. A variable has a name and a value. The program can change this variable value.
Input	Information going into the computer. Can include moving or clicking the mouse, using the keyboard, swiping and tilting the device.
Output	Information that comes out of the computer e.g. sound.
Computer Simulation	A program that models a real-life situation.
Action	Types of commands, which are run on an object. They could be used to move an object or change a property.
Repeat	This command can be used to make a block of commands run a set number of times or forever.

### Resources that are going to help me achieve my learning.



### Fun Facts:

- Ada Lovelace, the daughter of the English poet Lord Byron, is considered to be the first computer programmer.
- Some programs are designed to steal your data or damage your computer. These programs are called malware. Coders that study and write malware are known as hackers. Those who write malware to commit crimes are known as "black-hat" hackers, and those who write programs to protect against malware are called "white-hat hackers"
- Most web pages are built using more than one programming language

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