

Jerry Clay Academy Subject Unit Overview

Subject: Computing Year Group: 4 Term: Autumn 2

Core Learning of This Unit: We are makers

- About the input process output model of computation
- About the inputs and outputs available on a BBC micro:bit
- To program using the MakeCode blockbased environment
- To test and debug programs they write, using an on-screen simulator and the micro:bit
- How to convert and transfer a program written on screen to the micro:bit.

Prior Learning:

Programming here builds on earlier programming work in Scratch, including Unit 3.1: We are programmers, Unit 3.2: We are bug fixers

National Curriculum Statements:

- Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems.
- Use sequence, selection and repetition in programs; work with variables and various forms on input and output.
- Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs

Key Vocabulary:

- Accelerometer
- Algorithm
- Bluetooth
- If/else if/else
- JavaScript
- LED
- MakeCode
- Micro:bit
- Object code
- Runtime
- Simulator
- Source code
- Variable

Significant People

• Sebastian Thrun– google self driving car