



Jerry Clay Academy Subject Unit Overview

Subject: Computing Year Group: 6 Term: Autumn 1

Core Learning of This Unit: We are toy makers

- How computers use stored programs to connect input to output
- How to generate and evaluate designs in response to a brief
- To plan a complex project by decomposing it into smaller parts
- To work with physical components of a system
- How to design and write a program for an embedded system
- To use criteria to provide others with feedback on their work.

Prior Learning:

Pupils were introduced to programming a robot in Unit 1.1: We are treasure hunters.

Pupils were introduced to programming the micro:bit using the MakeCode editor in Unit 4.2: We are makers.

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 various forms of 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
- Bluetooth
- Controller
- Decomposition
- Edge connector
- Embedded system
- Input
- Interactive
- Light-emitting diode (LED)
- MakeCode
- micro:bit
- Microprocessor
- Output
- Simulator
- system