

### Jerry Clay Academy Subject Knowledge Organiser

Subject: Science (Electricity) Year Group: 6 Term: Summer

### **Core Learning of This Unit:**

- To know that the brightness of a bulb is associated with the voltage.
- Be able to compare and give reasons for variations in how components function.
- Be able to use recognised symbols when representing a simple circuit in a diagram.
- Have constructed simple series circuits.
- Be able to answer questions about what happens when you try different components, for example, switches, bulbs, buzzers and motors.

#### **Prior Learning:**

From KS2: Children will have learnt about electricity in Y4.



# National Curriculum Statements:

Pupils should be taught to:

- Associate the brightness of a lamp or the volume of a buzzer with the number and voltage of cells used in the circuit.
- Compare and give reasons for variations in how components function, including the brightness of bulbs, the loudness of buzzers and the on/off position of switches.
- Use recognised symbols when representing a simple circuit in a diagram.

## **Key Vocabulary:**

- bulb -A glass lamp that provides light by passing an electrical current through a filament
- buzzer -An electrical device that makes a buzzing noise used for signalling
- cell / battery -A device containing energy used for generating an electrical current and used as a source of power
- circuit -A complete and closed path that a circulating electrical current can flow through
- conductor -A material or device that electricity (or heat) can flow through
- current- A flow of electricity charge through a conductor
- electricity- A form of energy caused by electrons moving to make a current
- filament -A conducting wire or thread with a high melting point that is part of an electric bulb
- motor -A machine powered by electricity that will enable a device to move
- switch- A device for making or breaking the connection in a circuit
- voltage- An electrical force that makes electricity move through a wire, measured in volts
- component- The individual parts that are put together to make the circuit

## Significant People

Alessandro Giuseppe Antonio Anastasio Volta was an Italian physicist, chemist, and pioneer of electricity and power who is credited as the inventor of the electric battery and the discoverer of methane.