EDEN Academy Trust
Working together to make a difference

Science Curriculum – Cycle B
Upper Key Stage 2 – Summer 1

Theme – Electricity (Physics)

Enquiry Question – Can we vary the affect of electricity?

National Curriculum Coverage

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 Scientist: **Thomas Edison**	**Comparative Test** Which type of fruit makes the best fruit battery? **Fair Test** Does the voltage of a battery in a circuit affect the volume/brightness of a lamp/buzzer?	**Observation over time** How does the brightness of a bulb change as the battery runs out?	**Pattern Seeking** Does the temperature of a light bulb increase the longer it is on?	**Research** How has our understanding of electricity changed over time?

Objective	Challenge	Working Scientifically	Vocabulary
• To know and use recognised symbols when representing a simple circuit in a diagram - To construct a simple series circuit with different components (buzzers, switches, motors and bulbs) - To accurately draw recognised circuit symbols to represent a circuit • To associate the brightness of a lamp or volume of a buzzer with the number and voltage of cells used - To know that the more voltage/cells, the brighter the lamp or louder the buzzer will be	• To make their own traffic light system or something similar • To explain the danger of a short circuit • To explain what a fuse is • To explain how to make changes in a circuit • To explain the impact of changes in a circuit	See separate objectives sheet.	Voltage, brightness, volume, switches, danger, series circuit, switch, bulb, buzzer, motor, symbols, variations, components

• To compare and give reasons for variations in how components function, including the brightness of bulbs, the loudness of buzzers, the on/off position of switches.	*or own challenges		