



## Linked learning theme: World War II

Summer term 1, Year 6

### Science – Electrical circuits

#### Prior Knowledge

In Year 4 children learnt about common appliances that run on electricity. They constructed a simple series electrical circuit, identified and named its basic parts, including cells, wires, bulbs, switches and buzzers.

#### Core knowledge

- Lamps will vary in brightness depending on how many there are in a circuit.
- The voltage of a cell and how this voltage is shared will cause variations in the output of an electrical circuit.
- Symbols can be used to draw 2D representations of circuits.
- Electricity can be dangerous and precautions need to be taken when using it.

#### Key skills

- Create a simple series circuit using a cell and lamp.
- Observe changes in output when variations are made to series circuits.
- Represent series circuits by drawing them using 2D symbols.
- Systematically make adaptations to circuits to see how this affects their functionality.

#### Vocabulary

Lamp

Cell

Electricity

Symbol

Series circuit

Voltage

Brightness

Conductivity

#### Learning outcomes

- I know that the brightness of bulbs in a circuit will vary depending on how many there are in a circuit.
- I understand about the voltage of a cell in a simple circuit.
- I can use symbols to draw 2D representations of circuits.
- I understand the dangers of electricity and precautions need to be taken when using it.
- I can create a simple series circuit using a cell and lamp.
- I can observe changes in output when variations are made to series circuits.
- I can systematically make adaptations to circuits to see how this affects their functionality.