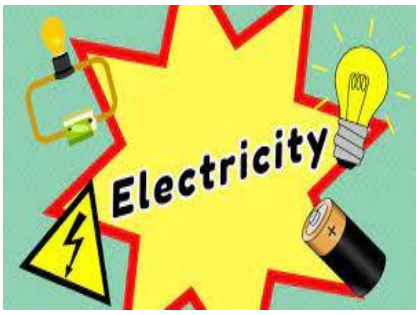
St Peter's Roman Catholic Primary School

Science Year 4

Spring 2

Electricity

What is this topic about? In this topic you will learn about what we use electricity for and if we could survive without electricity. In addition, we will learn about the dangers of electricity and how to work with it safely. We will build circuits which make bulbs light up with switches to turn them off and on and then test which materials conduct electricity.



Pupils might work scientifically by:

- **Observing/noticing patterns**, for example, that bulbs get brighter if more cells are added, that metals tend to be conductors of electricity, and that some materials can and some cannot be used to connect across a gap in a circuit.
- **Using and making** a range of circuits.
- **Exploring** which materials can be used instead of wires to make a circuit.
- **Classify and group** materials that were suitable/not suitable for wires.
- **Raising questions and test** how to connect a range of different switches and investigate how they function in different ways.

Applying their knowledge of conductors and insulators to design and make different types of switch.

At the end of the Topic I will know…

An electrical circuit consists of a cell or battery connected to a component bulbs, switches and buzzers using wires. If there is a break in the circuit, a loose connection or a short circuit, the component will not work.
Electricity can be dangerous and how to be safe around electricity
Electricity sources can be mains or battery.

KEY VOCABULARY

cell (battery), wire, bulb, bulb holder, buzzer, motor,
switch (open/closed), circuit, electrical conductor, electrical insulator,
connection, component, break,
devices, appliances, mains electricity, safety
common materials e.g. metal, wood, plastic
Expressions for making suggestions using 'if', 'might', 'could'
Comparative expressions e.g. brighter, less bright (bulbs); faster, slower (motors)