Electricity- Science

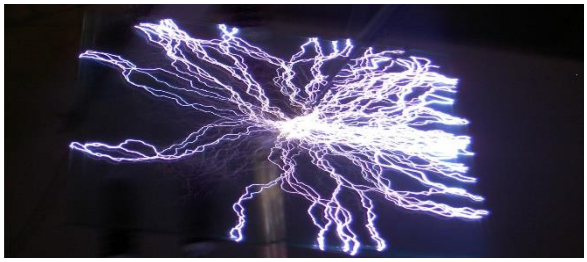
Year 6 Summer 2

Overview

In this topic, we study electricity – where we get electricity from, how we use it and then we experiment with practical resources. We learn the electrical symbols for common components, then we plan, draw and build series circuits that fulfil different criteria. We will investigate how to make bulbs brighter or dimmer, then we apply all of this knowledge to creating a complex circuit for a new Blackpool Illuminations tableaux.

Key knowledge - Science

- Understand where electricity comes from and how we use electricity in our lives.
- Identify common components in an electrical circuit including a switch, cables, batteries, bulbs, buzzers, motors and resistors and learn their electrical symbols.
- Plan and draw series circuits using electrical symbols for bulbs, batteries, switches, cables, resistors, buzzers and motors. Make successful circuits that combine a given criteria of components.
- Test whether different circuits work both by analysing drawn circuits and using physical electrical circuit equipment.
- Apply knowledge of circuits and components to designing and building a complex circuit for a new Blackpool Illuminations tableaux.



Key Vocabulary

Word	Definition
Resistor	A component that limits the flow of electricity.
Motor	A component that powers / drives a turbine or another moving part. Like an engine.
Series circuit	A drawn or constructed circuit that follows on in a connected loop.
Component	A piece of electrical equipment used in a circuit like a switch or a bulb.
Insulator	A material that does not let electricity pass through it.
Conductor	A material that lets electricity pass through it freely.
Mains electricity	Where we get electricity from at home via plugs and sockets.