

## Electricity: a force of nature?

**Big question: Is electricity a natural phenomenon?**

Reading books:

Picture books

The heart and the bottle

Class novel

The City of Ember

Short reads – Frankenstein and

Dracula

### Art

**Focus Artist: Matthew Albanese**

Lightning and the power of nature

<https://www.matthewalbanese.com/blog>

To explore different medium techniques to create the effect of lightning. To express their own perception of the power of lightning.

<http://www.reyweb.com/famous-paintings-of-lightning/>

To improve their mastery of art techniques, including wax crayons, paint.

1. Oil pastels – paint – scrape.
2. Marble oil in water, tray of water, pipettes,

### DT

Celebrating culture and seasonality  
Healthy and varied diets

Knowledge: **Cooking and Nutrition**

Understand and apply the principles of a healthy and varied diet. Prepare and cook a variety of predominantly savoury dishes using a range of cooking technique

Skills: Measure accurately and calculate ratios of ingredients to scale up or down from recipe.

Create and refine recipes, including ingredients, methods, cooking times and temperatures.

Design

Use research and develop, model and communicate their ideas through discussion to inform of their planned meals are appealing products that are fit for purpose, aimed at particular individuals or groups.

Make

Select from and use a wider range cooking tools, ingredients and equipment according to the required qualities.

Evaluate

Evaluate their ideas and products against their own design criteria and consider the views of others to improve their work

Understand how key events and individuals in food have helped shape the world. **key chefs:** Nadiya Hussain, Jamie Oliver school lunch healthier meals initiative

Reading link – look at key chefs

Children create appetizing meal/dessert which is healthy. Class competition. Finals in assembly (Master Chef).

### RE: Forms of expression.

**How do our beliefs lead us to believe in our god?**

**Key concepts:** Know about and understand a range of religions and worldviews;

**End points:** Make connections between key teachings in religious and non-religious worldviews.

**New learning:** Identify the purpose in depth – the significance of key writings and teachings for the followers of the 6 major world faiths and non-religious worldviews.

Lesson 1: Islam & Christianity & Judaism

Lesson 2: Hinduism & Sikhism

Lesson 3: Buddhism & non- religious viewpoints

Lesson 4: similarities and differences- table form.

### English

Spring 1 – Suspense & Poetry about thunder and lightning (poetry not a single unit)

Cold: Sandman

PP: Suspense story

Hot: Francis

Y3 Skills	Y4 Skills	Y5 Skills	Y6 Skills
Use the range of punctuation taught in mostly correctly (capital letters, full stops and question marks must always be accurate), ‘ ? ! “ ”	Extend the range of sentences with more than one clause by using a wider range of: coordinating and subordinating conjunctions, adverbs & prepositions	Use relative clauses beginning with who, which, where, when, whose, that or with an implied (i.e. omitted) relative pronoun	Use a range of clause structures e.g. relative clauses, fronted adverbials, subordination and parentheses. Proof read to check for errors. To use semi colons and hyphens in writing. Use the range of punctuation correctly.

### Big Statement: Investigating Circuits Electricity

How to construct a simple circuit

-To know and can use conventional symbols when drawing a simple circuit - To know electricity output from a cell.

Lemon and potato experiments electromagnets

Explain reasons for their findings, using appropriate scientific vocabulary

- To apply scientific knowledge to solve a practical problem

Record findings accurately in a variety of ways and present with accuracy using scientific evidence to support findings, using appropriate, conventional circuit symbols

Focus Skills

1. Making predictions using prior knowledge
2. Comparative/Fair testing
3. Recording Data
4. Interpreting and communicating results

Flow of sessions

1. What do we already know? Symbols and drawing of circuits. Complete circuits.

2. Create given circuits including ‘broken’ circuits. End of lesson task – design own broken circuit. Swap with a partner.

Explain the problem and how to fix it. Draw the solution and practically make it.

3. WAGOLL Fair testing. Do the amount of wires in a circuit make a difference to how bright the bulb glows? End of lesson task think of what you would like to investigate next. To test – how many sheets of paper does it take to block the light? Use a graph to record data.

4. INDEPENDENT Children plan and carry out their own experiment to prove/disprove a hypothesis (prediction).

5. To create a non-chron report on our scientific findings from our experiment from lesson 4. Background knowledge. How to conduct an experiment. How to investigate.

**Concept:** Altering different elements of the circuit will affect the electrical output e.g. brighter bulb or louder buzzer - Voltage affects the electrical output of a component.

**History Lead question – who invented electricity? (No one – it’s a force of nature that we have learnt to harness)**

**Concept:** Continuity between the way we live today and previous civilisations

How has electricity changed and adapted over time (old to modern and how has it changed our lives)

- E.g. telegram to phone to mobiles to smartphones inc the internet (energy efficient)

**Skills history:**

- Analyse trends over time and explain the trend (why is it a trend and not a series of separate events)
- Provide clear, succinct, well evidenced explanations for why things are as they are today
- To use different 1st/2nd hand sources of evidence and identify similarities/differences and read critically and evaluate evidence and apply

**Lesson breakdown:**

**Compare Tesla (electric cars etc) to Edison to B Franklin – who was the most influential and who was the most innovative?**

**To use history texts in reading – retrieval, evidence, etc.**

**To use a weekly rapid retrieval knowledge in topic books and explanations. Deeper thinking or statement.**

**Reading materials:**

Electric eels  
Lightning  
Nerves  
Static electricity

### PSHE: Health and relationship focus

**Drug awareness talk-**

To understand which, why and how, commonly available substances and drugs (including alcohol and tobacco) could damage their immediate and future health & safety, that some are legal, some are restricted and some are illegal to own, use and supply to others.

To resolve differences by looking at alternatives, seeing & respecting others’ points of view, making decisions and explaining choices.

To research, discuss and debate topical issues, problems and events concerning health and wellbeing and offer their recommendations to appropriate people.