

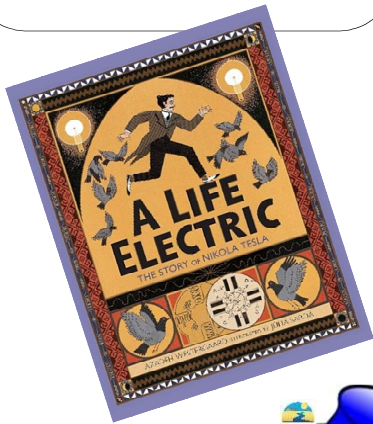
Dear Parents,

This half term our topic is all about electricity. We will learn about circuits and how to make them, as well as famous scientists / electrical engineers. Alongside this Science topic, we will also have a focus on Cragside due to the important hydroelectricity that is based there. We will learn about the family who resided in Cragside and their impact on our local area. In Computing we will be looking at how webpages are made. We will also be creating lighthouses in DT using our circuits knowledge.

Mrs Timmins

**Our recommended read:**

This half term 'A Life Electric' will be available at the library or in school for you to borrow and share at home.



Who was **William Armstrong**?

What is **hydroelectricity**?



*Sparks  
Might Fly*

How do we make a **circuit**?

Who was **Thomas Edison**?

What happens when we add more **cells** to a circuit?

**Spring 2**

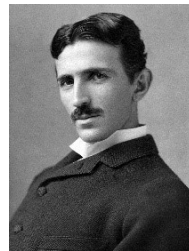
**Things to remember:**

**Tuesday** - PE day and forest school

**Thursday** - Reading books changed and PE day

**Friday** - Spelling test and library day

**Wed 2<sup>nd</sup> April** - Trip to Cragside



**Nikola Tesla**

Invented AC in 1888 and changed how we use electricity in the modern age.



**Cragside**

A famous Victorian Tudor Revival country house, owned by William Armstrong. It was the first house to be lit by hydroelectricity.



**Circuit**

An electric circuit contains a power source and devices, which are connected together in a loop using wires.

**Useful words**

**AC** – alternating current. The current used in modern electricity

**Battery** – cells that is used to generate a current

**Current** – a flow of electrons in a circuit

**Electrons** – very small particles that travel around an electric circuit and carry energy.

**Filament** – A conducting wire or thread with a high melting point which forms part of an electrical bulb.

**Hydroelectricity** – electricity that is produced by water

**Insulator** – a material that doesn't allow electric to flow through

**Resistance** – A measure of the difficulty of passing an electric current through a conductor

**Static electricity** – A stationary electric charge, typically produced by friction, which causes sparks, crackling or the attraction of dust.

**Switch** – A device used for making and breaking the connection in an electrical circuit.