



**Buxton Junior School**

Year 6 Topic Information Sheet - Spring Term 2

### Science - How can components work together?

#### Key facts which the children will have learnt by the end of this topic:

Key facts which the children will have learnt by the end of this topic:

To understand what electricity is.

To understand how electricity works

To build and represent a series circuit

To identify the components in a series circuit

To recognise how the number of cells and voltage affect components in a circuit.

To know the affects and consequences of changing circuit components and batteries.

To understand what is safe and dangerous when working with electricity.

**Our Class Text:** This term we will be studying the following book in our English lessons: **“The Invention of Hugo Cabret”** by **Brian Selznick**

**Universal Themes: Power, Separation, Equality and Diversity and Invention**

**Key Vocabulary:** You may wish to discuss the meanings of these words with your child.

Component, proton, consequence, systematic, electron, represent, terminal, source, series, generate, voltage.

Ourselves	Our Environment	The Wider World
Links to computing unit on programming (BBC micro-bits) and practical DT project.	Linking electricity production and consumption with environmental implications – exploring where our electricity comes from?	Explore how (and why) nations are working together to reduce electricity consumption.

#### Main concepts with links to prior and current learning:

Physics is the Scientific area we will be looking at this term.

**Links to prior learning:** Year 3 Light - reflection, sources, shadows, Year 3 Forces and Magnets - forces, attract, repel, Year 4 Sound - source, vibrations, pitch, volume, Year 4 Electricity - series, circuits, elements

**In this unit, pupils will answer the following learning questions:**

What is electricity?  
How does it work?

How do we build and represent a series circuit?

What are the components in a series circuit?

How does the number of cells and voltage affect components in a circuit?

**Diagnose it** – what are the effects and consequences of changing circuit components and batteries?