**SCIENCE**

**Electricity**

Children will work scientifically and at the end of the unit, will know:

* That the brightness of a bulb and volume of a buzzer is directly linked to the number of volts moving through the circuit.
* The recognised circuit symbols for *motor, wire, bulb, buzzer, battery, switch.*
* How to make a cause and effect statement about how the components in their circuit function.

**DT**

Children will design and make their own buzz wire game, before evaluating their product at the end.

Designing: The children will think about their intended target audience, before sharing their ideas about product design with their peers. They will sketch their design, labelling it and making annotated notes as they go along.

Making: The children will formulate a step-by-step plan to guide making, before listing any tools and materials they may need. They will then assemble their game, ensuring it is securely connected to electrical components.

Evaluate: The children will evaluate their finished product, testing its effectiveness before thinking about how they could improve it next time.

**MATHS**

**Multiplication and division**

Children will deepen their understanding of the columnar method for multiplication of 4-digit numbers by 1- and 2-digit numbers and develop an understanding of written methods for division. Children will make links to methods they have met before and apply new learning to contextual word problems.

**Four operations**

After this, children learn about the order of operations, investigating its effect on calculations and considering why it is important to have an agreed order. They then learn how brackets can affect the order of operations. Using these concepts, they complete calculations, solve problems and diagnose mistakes in calculations. Finally, children learn methods to solve mental calculations with small and large numbers. They consider where mental methods are appropriate and where written methods are appropriate.

**Fractions**

In this unit, children extend their understanding of fractions and mixed numbers by adding and subtracting unrelated fractions by finding common denominators. Children continue to develop their reasoning and problem-solving skills while exploring efficient methods.

**COMPUTING**

**VR World**

The children will explore virtual reality (VR) and how this can be used in their learning environment. Having explored this, the children will then create their own VR game.

Autumn Term 2

Year 6

Topic Web

**RE**

**Christianity – What are some of the differences and similarities within Christianity locally and globally?**

Children will learn the essential knowledge of belief within Christianity and compare worship and traditions across different Christian denominations and cultures. Through discussions and case studies, the children will compare the similarities and differences between two churches from their local community, before extending their research further by analysing what worship looks like in a church in Uganda. They will participate in discussions about how they celebrate Christmas as individuals, before comparing it to how Christians from around different parts of the world celebrate Christmas.

.**ENGLISH**

**Narrative**: The Highwayman

Children will read the poem The Highwayman, analyse the lexis before using their mastery targets to write their own narrative.

**Non-Fiction** – Balanced argument

Was the highwayman to blame for Bess’ death?

**Shared Reading:**

Holes

**MUSIC**

**African Drumming**

Children will look at different types of African drums, paying particular attention to the dunun drum. They will listen carefully to an African master drummer, before applying learnt skills on their own drum. Skills taught include playing a rhythmic ostinato and performing polyrhythms accurately and in time as a group.

**PE**

Children will participate in two PE lessons weekly.

The sports covered this half term are gymnastics and swimming.

Children will also learn water safety as part of the swimming curriculum.

**HISTORY**

**Crime and Punishment**

Children will think about common crimes committed today, before studying crimes from different time periods and comparing how they have changed over time. Children will look at time periods including: Romans, the Anglo-Saxons and the Vikings, Tudors and Victorians. They will learn crime-related vocabulary to develop their historical inquisitive minds, such as: judge, jury, lawyer and pillory.

Each week, they will have the opportunity to present their views on the crime and punishments committed from each time period, participating in healthy debates with their peers.