**SCIENCE**

**Light**

This unit ‘Light’ takes children through six lessons where they learn how to: recognise that light appears to travel in straight lines; use the idea that light travels in straight lines to explain that objects are seen because they give out or reflect light into the eye; explain that we see things because light travels from light sources to our eyes or from light sources to objects and then to our eyes; and finally, children learn how to use the idea that light **travels in straight lines to explain why shadows have the same shape as the objects that cast them.**

**DT**

Children will **investigate** Anderson Shelters and **test** materials for strength and shape.

They will then **design** and **make** their own model of an Anderson Shelter (link with WWII),

Finally, they will test and evaluate their creations for purpose.

**MATHS**

**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.

**Measure – imperial and metric measures**

The focus of this unit is to consolidate and apply understanding of units of measure, both metric and imperial. Children practise converting between units and apply conversions to problem-solving contexts. Children revise equivalences of metric units and work with numbers with up to two decimal places. They use reasoning to describe when a number should be multiplied or divided to convert and by how much. Children are introduced to the relationship between miles and kilometres, and how to apply the 5:8 ratio to convert between them.

**Ratio and Proportion**

This unit introduces children to the concept of ratio and proportion. Children will learn to recognise, describe and compare ratios and will represent them in different ways. They will learn how to use ratio notation to record and interpret ratios and will develop an understanding of how ratios relate to fractions. They will use a range of methods to calculate amounts from a given ratio, including totals and parts of groups, and will find the difference between unequal parts of a group. They will solve word problems and 2-step problems involving ratio and proportion. This unit also introduces the concept of scale factors. Children will learn to interpret scales on plans and maps, using them to calculate actual size or distance. They will enlarge shapes by a given scale factor, will learn to identify whether two shapes are similar and will use calculations to deduce the scale factor.

**COMPUTING**

This unit continues the children's journey with visual programming and Scratch. The children will create their version of the popular app Crossy Roads by creating graphics and programming within Scratch. They will then add their game improvements. They will also document their coding by starting a journal in either Book Creator, Seesaw or Powerpoint.

Spring Term 1

Year 6

**PSHE**

**Too Much Selfie Isn’t Healthy**

We will explore how thinking of others can help us and those around us.

We will celebrate our differences and learn about those who came before us.

We will consider the positives and negatives of social media.

**RE**

**Sikhism – How do Sikhs worship?**

This unit looks at the Sikh guru Guru Nanak and why he is an important figure in the Sikh faith. Children will research what Sikhs believe, find out facts about gurdwaras and compare facts with other places of worship. Whilst doing this, they will also research the importance of the Guru Granth Sahib and compare the importance to other special books across various religions. Lastly, they will discuss the idea of life, death and rebirth, as well as the concept of karma.

**PE**

**Net and Wall games**

Children will:

* Choose, combine and perform skills more fluently and effectively in net and wall.
* Improve the range and consistency of skills in games.
* Show an understanding of how to defend and attack an area, target in a variety of games.
* Know how physical activity effects their health and why it’s good for their wellbeing.
* Develop their ability to evaluate their own and others work and suggest ways to improve performance.
* Show an ability to analyse performance and use this to improve strategies.

.**ENGLISH**

**Narrative**: Star of Fear Star of Hope

Children will read through the text Star of Fear, Star of Hope before using their Mastery Targets to write their own Suspense Narrative. Children will be focussing on using cohesive devices, dialogue, expanded noun phrases and passive voice.

**Non-Fiction**: Diary entry. Children will write a Diary Entry from the perspective of a Jewish person or soldier during World War 2.

**Shared Reading:**

The Boy in the Striped Pyjamas

**MUSIC**

In music, children will be exposed to different musical techniques through a range of genres, using graphic scores to represent different parts of a song. They will also begin to recognise consonant and dissonant intervals to create atmosphere, dynamics and timbre. Whilst doing this, they will work together to make suggestions and improve their own and their peers’ musical work.

**HISTORY**

**World War II**

**C**hildren will find out when WW2 happened and why it happened. They will research the different countries involved, using maps, and investigate the consequences of each countries’ involvement. After this, they will then begin to research the Blitz and begin to think compassionately about the lives of evacuees during the 1940s. To do this, the children will have primary and secondary resources as aids. They will also have access to real life ration books when discussing the concept of rationing, looking at case studies from the war to find out what a typical day would have been like for somebody who was forced to ration.