**MATHS**

**Place Value within 10,000,000**

In this unit, children extend their knowledge of numbers from within 1,000,000 to within 10,000,000, before they go on to work with the four operations in the next two units. This includes looking at place value, ordering and comparing numbers and rounding. They will also look at number lines and negative numbers. Before they start this unit, it is expected that children understand the place value of numbers within 1,000,000, can use number lines, including counting in 10s, 100s, 1,000s and 10,000s, and can round numbers within 1,000,000.

**Four Operations**

This unit allows children to develop fluency with efficient columnar written methods for addition and subtraction, without and with exchanges. Children will make links to methods they have met before and apply new learning to contextual word problems. They will learn to recognise and find common factors and multiples, before looking at prime numbers as a special example of numbers with specific factors. Next, children investigate the effects of squaring and cubing, linking this to what they know about the dimensions of the namesake shapes

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. They also use number facts they already know to solve problems involving related number facts.

**SCIENCE**

**Evolution and Inheritance**

**Children will:**

* Recognise that living things have changed over time and that fossils provide information about living things that inhabited the Earth millions of years ago.
* Recognise that living things produce offspring of the same kind, but normally offspring vary and are not identical to their parents.
* Identify how animals and plants are adapted to suit their environment in different ways and that adaptation may lead to evolution.

**Working Scientifically:**

* Plan different types of scientific enquiries to answer questions,
* Take measurements, using a range of scientific equipment, with increasing accuracy and precision, repeat readings when appropriate.
* Record data and results of increasing complexity using scientific diagrams and labels, classification keys, tables and graphs.
* Use test results to make predictions to set up further comparative and fair tests.
* Report and presenting findings, including conclusions, causal relationships and explanations of and degree of trust in results.

**Art**

**Jasper Johns – Pop art**

Children will:

* Develop a personal style of painting, drawing upon ideas from other artists.
* Use the qualities of watercolour and acrylic paints to create visually interesting pieces.
* Combine colours, tones and tints to enhance the mood of a piece.
* Use brush techniques and the qualities of paint to create texture.

**COMPUTING**

**My Online Life**

Children will improve their knowledge of the risks of their online lives and will learn to develop the skills when using online services. Children will discuss situations that may arise when they are using online services and encourage them to think critically about their online lives.

**RE**

**Christianity –** How and why do Christian’s worship? What are the benefits for believers?

Children learn the essential knowledge of worship within Christianity and compare to worship in other religions. They will develop skills and attitudes such as critical thinking and empathy. This understanding of others’ worldviews is an essential first step to enabling each pupil to understand, reflect on and develop their own personal worldview, finding meaning and purpose when looking at the world; Learning about and reflecting on important concepts, experiences and beliefs that are at the heart of religious and world views.

Autumn Term 1

Year 6

Topic Web

**ENGLISH**

**Narrative**: Dilemma – King Kong

**Non-Fiction:** Balanced argument

**Reading:**

When Darwin Sailed The Sea

The Explorer

Darwin’s Dragons

**MUSIC**

**Modes**

This half term there is a focus on modes.

Children will learn:

- many forms of early western music are built on modes, a type of scale.

- compose using modes

- refine performances and compositions

- evaluate their final performance

**PE**

**Invasion Games**

-Apply basic principles suitable for attacking and defending.

-Play competitive games, modified where appropriate.

**Swimming**

-Swim competently, confidently and proficiently over a distance of at least 25 metres.

-Use a range of strokes effectively e.g. front crawl, backstroke, breaststroke

Perform safe self-rescue in different water-based situations

**GEOGRAPHY**

**Locality Study – Comparing Places & People (Chester)**

* Understand geographical similarities and differences through the study of human and physical geography in and around Chester
* Describe and understand human geography including types of settlement and land use, economic activity including trade links, and distribution of natural resources including energy, food, minerals and water.
* Compare satellite and map views of Chester and discuss the similarities and differences using geographical language
* Identify the reasons why people live in an urban area.
* Research the jobs and lifestyles of those living in their local area.
* Discuss the advantages and disadvantages of urban living and prepare questions for a visitor.
* Collate knowledge of the local area, including its features and characteristics and identify those features which may appeal to others who live elsewhere.

*Identify their local area’s unique selling point to tourists from outside the area.*