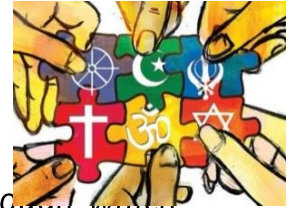# Curriculum Overview Year 6 Spring Term

Music

This is a six-week Unit of Work. All the learning in this unit is focused around one song which is Happy by Pharrell Williams - a Pop song with a Soul influence about being happy. The pupils will learn the lyrics to this song and perform it with instruments.

RE

Baptism and Confirmation

Children will know that Baptism and Confirmation are Sacraments through which Christians receive the gift of the Holy Spirit. They will be able to identify the actions, signs and symbols of Baptism and Confirmation and recognise which symbols are used in both Sacraments.

Lent

Children will know about the Church's customs for the Season of Lent. They will understand some reasons why Jesus spoke of prayer, fasting and almsgiving being important and be able to think about applying these in their own lives. The children will be able to discuss issues concerning poverty in the world today and think about some remedies for this problem. The children will know that the Scriptures speak of God's mercy and forgiveness and they will understand how the Church celebrates this in the Sacrament of Reconciliation.

Holy Week

The children will know the story of the passion of Jesus in some detail. They will be able to imagine some of the thoughts and feelings of Jesus in the Garden of Gethsemane and think of some reasons why Peter denied Jesus. They will know some words of Jesus from the cross and understand why the death of Jesus has been described as a sacrifice.

Easter

Most children will know the story of the appearance of the Risen Christ to Thomas. They will understand some reasons why he failed to believe that Christ was alive. They will be able to describe how his meeting with the Risen Christ changed Thomas' life. The children will know that Christians believe in eternal life. They will also know some New Testament stories that speak about this eternal life and identify symbols from the Baptismal and funeral liturgy that speak about eternal life.

Global Learning

Disaster

- Use maps, atlases, globes and digital/computer mapping to locate volcanoes and fault lines and identify countries that are most severely affected by earthquakes and other natural disasters.
- Use their understanding of the structure of the earth and the movement of tectonic plates to describe and understand how a volcano is formed and why it erupts.

Computing

During this term the children are 'Learning to be computer scientists'. The children will use a range of resources including programmable equipment, computers and I pads to help learn how to program. The children will be taught to understand what algorithms are; how they are implemented as programs on digital devices; and that programs work by following precise instructions. They will also learn to create and debug their own simple programs using a range of hardware and apps. The younger children will start by using Beebots and use directional language to help program them around a course. The older children will use Probots and scratch and work to create their own programs for a simple game.

Art

The whole school theme for art this term is COLOUR. Children will learn about how to create and apply colour in a number of mediums like oil pastel, chalk pastel and various types of paint. This term, children will also learn about the life and work of a well known, recognized artist.

Science

Evolution

The children will learn about the life and work of Charles Darwin and what is meant by the terms evolution and survival of the fittest. They will learn how animals and plants have adapted to their environment.

Investigate camouflage and find out how humans evolved. They will carry out a simple experiment to model evolution and selective breeding. This will allow them to understand the world around them in more depth and why living things evolve to survive.

Electricity

Pupils build on their learning from Year 4 to learn more about circuits, including how to use recognised symbols to represent circuits. They investigate how to change the amount of electricity flowing round a circuit, looking at how different components affect the flow of electricity and at the difference that the length and thickness of wires can make. They learn about series and parallel circuits and they use their knowledge of electricity to build games that use electric circuits.

English

Spring 1 - **Captain Scott** - This unit explores reading and writing for different purposes from the perspective of a cross-curricular project on explorers. The national curriculum states that pupils should have opportunities to learn about significant people, past and present. In this unit, pupils study the life and work of Captain Robert Scott and his ill-fated expedition to the South Pole. Pupils will put themselves in the shoes of those on the expedition to gain an insight into exploration at this time and the hopes and dreams of Captain Scott and his team.

Spring 2 - **Journey To The River Sea** - This unit explores the modern classic "Journey To The River Sea". The novel addresses many issues: growing up; respect for traditions; people and cultures; racism; approaching new experiences. It is rich in colour, language and imagery, inspiring pupils to respond creatively to its many themes. The book links to the region study of South America, and the world's most significant physical features in the Geography Curriculum. This is an ideal unit for study prior to pupils taking the SATs, as it covers all the main text types and engages pupils in higher levels of reading comprehension.

Maths
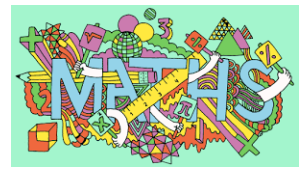
Number: Number and Place Value

* read, write, order and compare numbers up to 10 000 000 and determine the value of each digit
* round any whole number to a required degree of accuracy
* Solve number and practical problems that involve place value

Number: Addition, subtraction, multiplication & division

* multiply multi-digit numbers up to 4 digits by a two-digit whole number using the formal written method of long multiplication
* divide numbers up to 4 digits by a two-digit whole number using the formal written method of long division, and interpret remainders as whole number remainders, fractions, or by rounding, as appropriate for the context
* multiply one-digit numbers with up to two decimal places by whole numbers
* divide numbers up to 4 digits by a two-digit number using the formal written method of short division where appropriate, interpreting remainders according to the context
* perform mental calculations, including with mixed operations and large numbers
* use estimation to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy
* use their knowledge of the order of operations to carry out calculations involving the four operations

Number: Fractions

* solve problems which require answers to be rounded to a specific degree of accuracy
* use written division methods in cases where the answer has up to two decimal places

Ratio and Proportion

* solve problems involving the calculation of percentages and the use of percentages for comparison

Statistics

* Calculate and interpret the mean as an average

Algebra

* Use simple formulae
* Generate and describe linear number sequences
* Express missing number problems algebraically
* Find pairs of numbers that satisfy an equation with two unknowns
* Enumerate possibilities of combinations of two variables

Ratio and Proportion

* Solve problems involving the relative sizes of two quantities where missing values can be found by using integer multiplication and division facts

Solve problems involving similar shapes where the scale factor is known or can be found

Geometry: Properties of Shapes

* Compare and classify geometric shapes based on the properties and sizes and find unknown angles in and triangles, quadrilaterals and regular polygons

Maths (continued)

Measurement

- Solve problems involving the calculation and conversion of units of measure, using decimal notation up to three decimal places where appropriate
- Convert between miles and kilometres
- Use, read, write and convert between standard units, converting measurements of length from a smaller unit of measure to a larger unit, and vice versa, using decimal notation up to three decimal places

Geometry: Properties of Shapes

- Draw 2D shapes using given dimensions and angles
- Compare and classify geometric shapes based on their properties and sizes and find unknown angles in any triangles, quadrilaterals and regular polygons
- Recognise angles where they meet at a point, are on a straight line, or are vertically opposite, and find missing angles

Geometry: Position and Direction

- describe positions on the full coordinate grid (all four quadrants)
- draw and translate simple shapes on the coordinate plane, and reflect them in the axes.

Number: Number & Place Value

- Read, write, order and compare numbers up to 10 000 000 and determine the value of each digit
- Round any whole number to a required degree of accuracy
- Use negative numbers in context and calculate intervals across zero
- Solve number and practical problems that involve all of the above

Number: Addition, Subtraction, Multiplication & Division

- Divide numbers up to 4 digits by a two-digit number using the formal written method of short division where appropriate, interpreting remainders according to the context
- Solve problems involving addition, subtraction, multiplication and division
- Use estimation to check answers to calculations and determine, in the context of a problem, and appropriate degree of accuracy

Geometry: Properties of Shapes

- Illustrate and name parts of circles, including radius, diameter and circumference and know that diameter is twice the radius

Number: Fractions

- Compare and order fractions, including fractions >1
- Add and subtract fractions with different denominators and mixed numbers, using the concepts of equivalent fractions
- use common factors to simplify fractions; use common multiples to express fractions in the same denomination
- Multiply simple pairs of proper fractions, writing the answer in its simplest form, e.g. $\frac{1}{4} \times \frac{1}{2} = \frac{1}{8}$
- Divide proper fractions by whole numbers, e.g. $\frac{1}{3} \div 2 = \frac{1}{6}$
- Recall and use equivalences between simple fractions, decimals and percentages, including in different contexts