Water World

Literacy

The children will begin this topic by writing their own riddle to reveal our focus theme, 'water.' The children will use personification within their clues e.g. *I can run, but I can't walk…* They will also consider the order of their clues so that the reveal is left until the end of their poem.

The children will then learn about explanation texts. They will look at different explanation texts to identify their structure – how the ideas are organised on the page and the different features that contribute towards conveying meaning to the reader clearly. The children will then begin to write their own texts to explain *'How Rainbows are Formed.'* They will think carefully about the purpose of each paragraph in their writing and the organisation of the ideas within them. The children will use a range of fronted adverbials to sequence their ideas. They will also continue to be challenged to use different causal conjunctions in their sentence structures so that their writing is fit for purpose – it is explaining a process clearly.

The children will write a second explanation text, this time explaining the stages of the Water Cycle. They will use diagrams within their text to support their explanations.

Geography

In this topic, the children will learn about a key aspect of physical geography – **the water cycle**. They will understand and use key vocabulary related to the water cycle, including precipitation, evaporation, condensation, accumulation.

The children will also learn about a key aspect of human geography – **the distribution of water as a natural resource**. They will go on to consider hydroelectricity as a form of renewable energy.

In developing their geographical fieldwork skills, the children will use the school grounds as a site for studying aspects of physical and human geography by investigating questions such as 'Where does the water go when it rains?' They will investigate and record different weather phenomena through observation and by using standard measurement devices (e.g. thermometers, rain gauges and anemometers). The children will measure, record and present data on the rainfall in our local area. Using their rain gauges, the children will explore the rainfall, over a period of a week and compare this with other locations.

Design Technology

The children will learn techniques for building a strong, stiff structure. Following this, they will be challenged to build a bridge which spans water.

Mathematics

The children will design and make their own rain gauges to measure the rainfall in England. They will use measuring jugs to work out the capacity of their rain gauge and to mark out a scale. They will use bar graphs to present the data that they collect. Using online data, the children will compare their results to a different location and solve difference problems. The children will also learn: about factor pairs, to multiply and divide by 10 and 100, the relationship between multiplication and division facts, an informal method of multiplication, how to multiply 2- and 3-digit numbers by a single-digit, and how to divide a 2-digit number by a single-digit.

Religious Education

Christmas: The role of angels in the story of Christmas as messengers of Jesus' Good News is examined. The feasts associated with Christmas, such as the Annunciation and the birth of John the Baptist, are also explored.

Revelation: This theme looks at how the apostles and Anna and Simeon saw the glory of Jesus as the only Son of the Father. The Presentation at the Temple is explored as the revelation of Jesus as Light of the World. The children will also look at the celebrations of light over darkness in the Sikh religion.

Enrichment

The children will set up a working model of the water cycle in their classrooms and closely observe what happens at each stage. They will be carrying out scientific investigations, including making a cloud in a jar! Year 4 will also enjoy a visit from the 'Waterwise' education programme which will encourage them to think more carefully about their own water usage.

PSHE/RHE

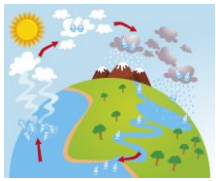
In RHE this half-term, the children will focus on their **emotional well-being**. They will learn that emotions change as they grow up (including hormonal effects) and will deepen their understanding of the range and intensity of feelings they might experience. Linked to their focus text, the children will recognise that 'feelings' are not good guides for action and will begin to understand what emotional well-being means. They will learn that positive actions and talking to trusted people can help emotional well-being.

Physical Education

Swimming: The children will be undertaking swimming lessons at the Littledown Centre this term. Less experienced swimmers will be supported by floatation aids – they will learn to maintain their head above water, looking particularly at the use of legs to provide momentum. Those children who are more confident in the water, will look at stroke technique – they will learn the correct way to breathe during the front crawl and backstroke. Children already swimming at a high level, will focus on swimming the range of strokes across different distances and will look in detail at the technique of breaststroke and butterfly. The overall aim by the end of the term is for all children to be able to swim 25m (one length) unaided.

Science

The children will explore a variety of everyday materials and develop simple descriptions of the states of matter (solids hold their shape; liquids form a pool not a pile; gases escape from an unsealed container). They will observe water as a solid, a liquid and a gas and note the changes to water when it is heated or cooled. The children will research the temperatures at which water changes state and will observe evaporation over a period of time, recording their observations carefully.



They will identify the part played by evaporation and condensation in the water cycle and will be describe each stage of the water cycle in their own words.

Computing

Data and Information - Data Logging: The children will consider how and why data is collected over time. They will consider the senses that humans use to experience the environment and how computers can use special input devices called sensors to monitor the environment. The children will collect data relating to UK rainfall as well as access data captured over long periods of time. They will look at data points, data sets, and logging intervals and then spend time using a computer to review and analyse the data. They will pose questions and then use data loggers to collect the data needed to answer those questions.

Art and Design

The children will be developing their **painting** skills, creating their own painting depicting the water cycle. They will learn different wash techniques to create their background and use layering to create their final image. The children will develop their control when working with watercolour paints, manipulating colour intensity to create different shades and painting in small scale. They will study the work of William Turner, a famous English painter who specialised in watercolour landscapes.

Music

The children will learn about the key features of ragtime music and the composers Scott Joplin and Jean Sibelius. They will discover that the titles of Joplin's pieces often came from major events, 'The Cascades' owing its title to a dramatic water display at the 1904 St. Louis World's Fair for example. They will also listen to a live performance on the violin and learn about the instruments in a jazz/swing band.