

### Science - Properties and Changes of Materials

Children will be able to compare and group together everyday materials on the basis of their properties, including their hardness, solubility, transparency, conductivity and response to magnets.

They will know that some materials will dissolve in liquid to form a solution and describe how to recover a substance from a solution.

Year 5 children will use knowledge of solids, liquids and gases to decide how mixture might be separated, including through filtering, sieving and evaporating.

Children will be able to give reasons, based on evidence from comparative and fair tests, for particular uses of everyday materials including metals, wood and plastic.

They will demonstrate that dissolving and mixing changes of state are reversible changes.

Children will explain that some changes result in the formation of new materials and that this type of change is usually not reversible.

### Maths

Children will identify, name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths. They will compare and order fractions whose denominators are all multiples of the same number.

Children will read and write decimal numbers as fractions (for example,  $0.71 = \frac{71}{100}$ ) recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents. They will recognise the per cent symbol (%) and understand that per cent relates to "number of parts per hundred", and write percentages as a fraction with denominator 100, and as a decimal.

### Religious Education Expressing Faith in Art, Drama and Song

Children will be able to express faith in art, drama and song.

Children will respond to Buddhist and Christian texts.

They will learn how to express faith through meditation.

## SPRING 1 - 2017 Year 5



### English

Children will also read, write and perform a free verse poem to extend the vocabulary within their writing.

They will write an explanation text on how the water cycle works, which is linked to our geography topic this half term.

Children will write a suspense story based on a sea mystery. They will develop skills of building up atmosphere in their writing.

### Geography – Water Cycle

Children will develop their knowledge and understanding of key aspects of a physical geography including the water cycle.

Children will be able to understand all of the stages of the water cycle. They will be able to read maps to identify rivers in the local area and identify the relationship between water and settlements.

### Design and Technology Water Mill

Children will research and design a quality product using a wide range of materials and analyse a range of existing products.

They will use mechanical systems in their products including levers. They will apply their understanding of how to strengthen, stiffen and reinforce more complex structures.

Children will make and evaluate their finished product against their original criteria and suggest ways that their water mill could be improved. This links into our geography topic on the water cycle,

### PSHE & Citizenship – Keeping Safe

Children will understand the responsibilities adults have for children and how children begin to take some responsibility themselves.

They will develop an understanding of situations that might encompass risk (travelling, alcohol related situations) Children will consider how they view themselves in risky situations.

Year 5 children will understand how self-confidence and assertiveness can help to keep themselves safe.

They will develop an understanding of situations where adult and / or peer support might be beneficial in avoiding risk.

### French – Hare and the Tortoise (adjs)

Children will recognise and use the core language for describing people and some animals. They will understand, use and respond to: Quelle heure est-il? Tue s comment? Elle est comment? Children will recognise and understand words in a story, song and tongue-twister. They will recognise and understand the use of adverbs. Year 5 children will become familiar with the circumflex accents of a/o, they will reinforce vowel sounds and compare ou and u.

### Music

Children will work from a poem to compose a minor song. Children will write their composition using a range of notation options. Children will perform their composition for the class. (Assessment task)

### Physical Education Football and Gymnastics

Children will use running, jumping, throwing and catching in isolation and in combination.

They will play competitive games, modified where appropriate, for example **football** and apply basic principles suitable for attacking and defending.

Year 5 children will develop flexibility, strength, technique, control and balance.

### (Gymnastics)

They will perform dances using a range of movement patterns and compare their performances with previous ones and demonstrate improvement to achieve their personal best.

Children will engage in competitive sports and activities with other schools.

### Computing – Staying Safe Online

Children will be able to use technology safely, respectfully and responsibly. They will recognise acceptable / unacceptable behaviour and identify steps to take to stay safe. Children will understand the link to **Bullying Awareness** in PSHE

### Bringing Learning to Life

#### Affinity water- workshop

Children will gain an understanding of the Science, Technology, Engineering and Maths involved in the building, maintenance and daily operations of the water industry.

They will learn about the scientific processes involved in getting clean and safe drinking water to their taps, where water comes from and an appreciation of why and how water should be conserved.

Children will take part in a range of activities enabling them to gain knowledge of how water is used and wasted.