



ORLEANS PRIMARY SCHOOL



Year 4

Spring 1 Curriculum Overview

2018

SCIENCE

Electricity



This unit builds on children's previous practical experience of making circuits and extends their understanding of circuits, conductors and insulators and the need for a complete circuit in order for a device to work. They will create a simple series circuit both with and without a switch and explain how a switch turns the electric current on and off. They are introduced to ways in which they can vary the current in a circuit and accurately record their findings in a table. They will explain the role of protons, neutrons and electrons in generating an electric current. They will know how electrons move in a complete and an incomplete circuit and explain why some materials conduct electrical currents and others don't.

ART

Famous Buildings

Children will explore the role of an architect and look at Britain's most famous architects. They will investigate a variety of the world's most famous buildings, thinking about what makes a building aesthetically pleasing and exploring how architectural styles change over time. They will have the chance for plenty of hands-on and creative activities with the opportunity to recreate famous buildings in a variety of ways. Finally, they will draw on everything they have found out about architecture and a variety of building designs to design their own building for a particular purpose.

GEOGRAPHY - WATER



Children will obtain information about water and weather patterns from maps and atlases. They will investigate water supply at local and world scales and learn how water is used and accessed in different parts of the world. They will collect and analyse evidence and understand what is meant by usable water. They will also learn about aid agencies' work on water provision in less economically developed countries.

PSHE Work and Money

This unit covers the basic concepts around savings accounts, lending and borrowing, paid employment and work of charities. We would love a visit from anyone in the banking/finance industry to help enrich our learning and give us some first-hand experience. Or, we could come into your workplace for a little discovery and exploration session! Please let us know and we would be happy to accommodate you.

P.E. Our two sports for this term are **Rugby** and **Dance**.

Please ensure your child has shin pads for every hockey lesson. These can be sent in each week or kept in their locker.

FRENCH



Bon appétit, bonne santé! (healthy eating)

Children learn names of food and drink related to packed lunches and break time snacks. They learn how to talk about what they have eaten and drunk the previous day. Children practise following and creating their own recipes.

Computing

Emails and E-Safety

Children will use their own email account to send and receive messages. They will learn to attach documents and 'cc' others in.



RE

Our topic is based around the question: how do Christians celebrate Easter?



MUSIC

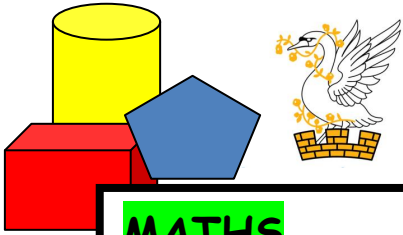


Children will explore arrangements through a range of musical styles. They will take part in group performances using tuned/untuned percussion. They will explore the concepts: Unison/duet/accompaniment/phrase/pitch/ostinato.

TRIPS & VISITORS

London Building Walk + Tate Modern 22nd JANUARY 2017 - linked to our topic on 'Famous Buildings and Architecture'

Local Architect – linked to our topic on 'Famous Buildings'. If there are any local architects you know that would enjoy coming in to enrich the children's learning, please let us know so that we can arrange for them to come in.



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MATHS

Measurement: Length and Perimeter

- Convert between different units of measure, for example, cm/m and m/km. Here children use their new knowledge of four digit numbers in a real life context. These contexts could include running, swimming, cycling etc
- Measure and calculate the perimeter of a rectilinear shapes by counting squares on a grid (a rectilinear shapes one whose edges meet at right angles). Children then move on to looking at rectangles no longer on a square grid where some values may be missing. They explore different ways of expressing the calculation using known number facts including multiplication and division.
- Calculate the area of compound rectilinear shapes (a shape made up of more than 2 shapes). They apply their knowledge of missing numbers to work out dimensions by finding the difference.

Multiplication and Division

- Multiply by 10 – using the language of 'ten lots of'
- Understanding the commutative law - children need to see that calculations such as 10×3 and 3×10 are related and must be represented differently if posed as a worded question
- Multiply by 100. This will build on the previous step by showing a concrete representation as ten times bigger so children have a clear image. This can be shown like a 100 square grid, as this is familiar to children
- Divide by 10 and 100. Here children see the inverse, dividing by 10 and 100, instead of multiplying by 10/100. Using whole number answers only, children link to real life contexts of units of measure
- Multiply by 1 and 0. Children explore what happens when you multiply by 1 and 0
- Divide by 1 or by itself. Children explore what happens to a number when you divide it by 1 or by itself. Using concrete and pictorial representations, children demonstrate how both sharing and grouping can be used to divide by 1 or the number itself
- Multiply and divide by 6. Children use known table facts to become fluent in the six times table. For example, knowing that the six times tables are double the sum of the three times tables and knowing their derived division facts. Children will draw on their knowledge of their times tables facts in order to multiply and divide by 6. They will use their knowledge of equal groups to use concrete and pictorial methods to solve multiplication problems. Children use stem sentence to encourage them to see this e.g. 5 grouped into 5s equals 1 ($5 \div 5 = 1$) and 5 grouped into 1s equals 5 ($5 \div 1 = 5$) Money and measure is a will be used as a real-life context for this, as coins can be used for the concrete stage. Place value counters and dienes will be used to explore what is happening to the value of the digits in the calculation and children are encouraged to see a rule so they can begin to move away from concrete representations
- Multiply and divide by 9. Children use known times table facts to become fluent in the nine times table. For example knowing that the nine times table is one less than the ten times table and using that knowledge to derive related facts. Children should also be able to apply the knowledge of the 9 times table when multiplying and dividing by 10 and 100
- Multiply by 7. Children will count in 7s, use their knowledge of equal groups and use concrete and pictorial methods to solve multiplication calculations and problems. They will also explore commutativity and understand that multiplication and division are inverse. They will progress onto multiplying with larger numbers. They will explore links between multiplication tables and investigating how this can help with mental strategies for calculation. e.g. $7 \times 7 = 49$ $5 \times 7 = 35$ and $2 \times 7 = 14$

ENGLISH



Sentence Bootcamp - "Get writing s

Once we return from the holidays we will have a sentence structure bootcamp. This will focus on developing our ability to use different sentence types, including simple, compound and complex. We will be discussing the different types of conjunctions, e.g. coordinating and subordinating. Using a range of sentence types in our writing for effect is one of the most important and valuable skills within KS2.



Fiction: Stories Set in Imaginary Worlds

Focus Text: *The Spiderwick Chronicles*

In this this unit, the children explore fantasy fiction. They read Spiderwick Chronicles, asking questions and developing understanding of inference. They will use drama to explore characters and suspense. They will broaden their vocabulary by focusing on language in the text and using dictionary skills. They develop editing and proof-reading skills based on feedback. They then plan, edit and write a new episode of the fantasy story we have studied.

Focusing on grammar, children will learn to use:

- Fronted adverbials
- Multi-clause sentences