



ORLEANS PRIMARY SCHOOL



Year 4

Summer 1 Curriculum Overview

2024

SCIENCE Energy: Sound and Vibration

Exploring different ways of producing sounds, children learn about the relationship between vibrations and what they hear. They study dolphins and whales to develop their understanding of how sound travels between objects and investigate the role of insulation to protect our ears. Children explore how pitch and volume can be altered and make their own musical instruments to demonstrate these principles.



Art Craft and Design: Fabric of Nature

Inspired by the rainforest the children begin by understanding the starting points in a design process. Next they will explore techniques to develop images by looking at 'one picture with four views.' The unit continues by exploring textile techniques to develop pattern. Children will then learn how to create a repeating pattern. The topic culminates with a look at fabric design and how art is used for different purposes.



GEOGRAPHY Investigating Rivers: What are rivers and how are they used?

Beginning by exploring how the water cycle works, the unit progresses by learning how to recognise the features and courses of a river. Then we name and locate some of the world's longest rivers. The children will then investigate features and facts about our local river. Our final lesson will involve a field trip to collect data on our local river!



PSHE The Changing Body and Citizenship

Children learn about the physical and emotional changes they will experience as they go through puberty and recognise that physical change is part of growing up. During our citizenship topic, children learn about Human rights and caring for the environment; exploring the role of groups within the local community and appreciating community diversity. The topic finishes with understanding the role of local government.

P.E. Our two sports for this term - 4B: **Dance & Cricket** & in 4H: **Swimming & Cricket**. P.E. day will continue to be Tuesday & Thursday.

FRENCH Food - Miam, miam!

Children begin the unit by immersing themselves in a French café. They will hold relevant conversations in French then learn how to read and say amounts of money in French. Next they will learn the correct pronunciation of French shops and learn the vocabulary for French foods focusing on unfamiliar words. Finally the children use their newfound skills to create a French menu.

Computing

Programming: Computational Thinking

Solving problems effectively using the four areas of abstraction, algorithm design, decomposition and pattern recognition.

RE Why is the Bible the best-selling book of all time?

Using historical skills and knowledge, children explore how the Christian Bible that exists today developed. They find out about how some Christians use their Bibles and present their ideas as marketers of the Bible.

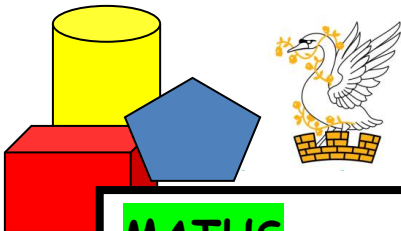
MUSIC

Pitch Perfect
Whole class recorder development lessons, singing and preparation for the Royal Festival Hall concert.



Key Instant Recall Facts

To help develop children's fluency in mathematics, we ask them to learn Key Instant Recall Facts (KIRFs) each half term. Summer term's KIRFs are: **I can multiply and divide single-digit numbers by 10 and I recognise decimal equivalents of fractions.** Please refer to the KIRF letter and activities on Google Classroom for more information and activities to support this learning.



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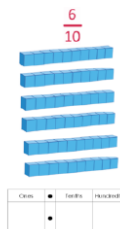
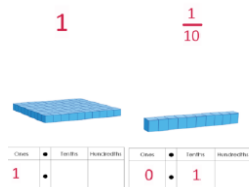
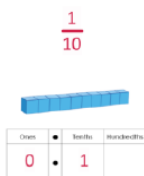
MATHS

DECIMALS

During this unit, children will repurpose Dienes in order to represent decimal numbers, with the 100 slab being assigned the value of one. This may potentially cause confusion and therefore children will have the opportunity to play with the representation in order to securely represent decimal numbers. Alongside the pictorial representations of Diene, modelling also includes concrete Dienes equipment.

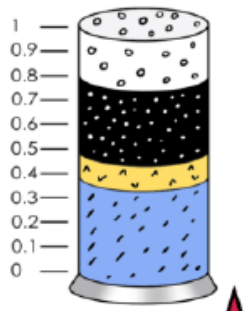
Key learning: Recognise decimal equivalents to any number of tenths, using Dienes to represent their value.

How would I represent the fraction $2\frac{5}{10}$ as a decimal and using Dienes?



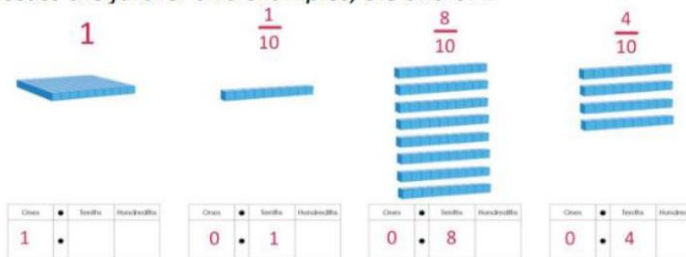
For each container, write the amount of each colour of sand as a decimal and as a fraction.

- a) blue sand = 0.4 or $\frac{4}{10}$
- yellow sand = 0.1 or $\frac{1}{10}$
- black sand = 0.3 or $\frac{3}{10}$
- white sand = 0.2 or $\frac{2}{10}$



- To compare numbers with one decimal place.

Discuss the further two examples, 0.8 and 0.4.



Let's Explore

What inequalities can you find using the following decimals?:

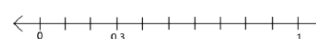


0.7 0.1 1.0 1.7 0.4

- Round decimals with one decimal place to the nearest whole number.

Number lines are the chosen representation when rounding, where children explore how the decimal sits on a number line in relation to other numbers. There is a focus on children explaining 'why' and 'how' they have used a strategy for rounding.

- Find number bonds using numbers with one decimal place.



Mentally add and subtract decimals using known number facts.

$$2.7 + 0.8$$



$$2.7 + 0.8$$

Model adding together the decimal numbers, partitioning the ones and the tenths. Add the ones and then add the tenths.

I know 7 ones plus 8 ones is equal to 15 ones, therefore 0.7 add 0.8 is equal to 1.5.

2 plus 1.5 is equal to 3.5.

Model subtracting a decimal by partitioning the number being subtracted, subtracting the tenths, and then subtracting the ones.

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$$5.3 - 2.4 =$$

Subtracting the tenths: $5.3 - 0.4$

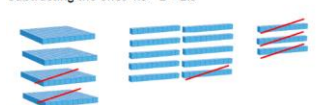
I know 4 tenths is greater than 3 tenths therefore I need to regroup one for ten tenths. 1.3 subtract 0.4 is equal to 0.9.



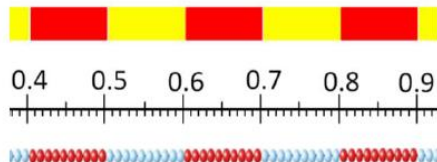
$$5.3 - 2.4$$



Subtracting the ones: $4.9 - 2 = 2.9$



Recognise and write decimal equivalents of any number of hundredths (using Dienes and a bead string)



Make each decimal using Dienes. Draw the Dienes and then write the decimal and the fraction.

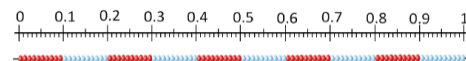
e.g. $0.27 = \frac{27}{100}$

$$0.82$$

$$0.23$$

$$0.6$$

$$0.03$$



? How could we represent 0.3?

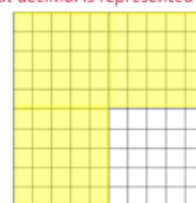
0.3 is the same as three tenths. There are one hundred beads so one tenth of the beads will be 10 beads. Three tenths of the beads will be thirty beads.

Recognise and write decimal equivalents to one quarter, half and three quarters

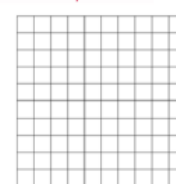
? What fraction is represented?

? How else could the same fraction or decimal be represented?

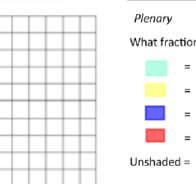
? What decimal is represented?



$$0.14$$



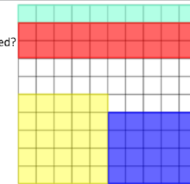
$$0.04$$



$$0.41$$



$$0.4$$



What decimal is shaded?

Unshaded =

$$\square < \square > \square > \square$$

Multiply and divide by ten including decimals to two decimal places



$$\begin{aligned} 1800 \div 10 &= 180 & 180 \times 10 &= 1800 \\ 180 \div 10 &= 18 & 18 \times 10 &= 180 \\ 18 \div 10 &= 1.8 & 1.8 \times 10 &= 18 \\ 1.8 \div 10 &= 0.18 & 0.18 \times 10 &= 1.8 \end{aligned}$$

When you multiply by ten each part is ten times bigger. In 300, each hundred will become ten times bigger, to make three thousand.

Demonstrate this on the place value chart:

Thousands	Hundreds	Tens	Ones	Tenths	Hundredths
	3	0	0		

Thousands	Hundreds	Tens	Ones	Tenths	Hundredths
3	0	0	0		

$$5000 \div 100 = 50 \quad 50 \times 100 = 5000$$

$$500 \div 100 = 5 \quad 5 \times 100 = 500$$

$$50 \div 100 = 0.5 \quad 0.5 \times 100 = 50$$

$$5 \div 100 = 0.05 \quad 0.05 \times 100 = 5$$

Write the equation $5000 \div 100$. Discuss with pupils the answer and how they know it.

I know when I divide by one hundred the number becomes one hundred times smaller. I know ten is one hundred times smaller than one thousand. Therefore fifty is one hundred times smaller than five thousand.

When I divide by one hundred, I can think about each part becoming one hundred times smaller. $5000 \div 100 = 50$.

What could the functions be? How many different solutions can you find?

$$0.3 \rightarrow \square \rightarrow \square \rightarrow \square \rightarrow 0.05$$

ENGLISH

Continuing with Charlotte's Web

Charlotte's Web by E.B White

This classic novel for children, first published in 1952, retains its appeal for modern children. It is the story of Fern, a little girl who saves a pig on the family farm from being killed, and the pig's friendship with a spider who lives alongside him in a barn with the other farm animals. Their lives are woven into the cycle of the seasons and farm life. We hear, as Fern does, their conversations, and see how life and death are a natural part of things.

Overall aims of this teaching sequence.

- Discussing writing similar to that which they are planning to write in order to understand and learn from its structure, vocabulary and grammar;
- Progressively building a varied and rich vocabulary and an increasing range of sentence structures;
- Assessing the effectiveness of their own and others' writing and suggesting improvements.

The book supports learning about character development, though changes in feelings and emotions, and emotional response in narrative fiction, exploring the themes of friendship, the passing of time, and the circles of life through the complex web of relationships portrayed in the text. The narrative structure offers young readers and writers a good model for their own story planning and descriptive writing.

Writing Outcomes

- Poetry
- Diary entry
- Story maps
- Note taking
- Fact files
- Writing in role
- Character descriptions
- Narrative descriptions

