ORLEANS PRIMARY SCHOOL

Year 4 | Spring 1 Curriculum Overview | 2021

SCIENCE Ecosystems

The units begins with a recap of our knowledge plants, animals and habitats and learning about ecosystems. Children then learn the difference between carnivores, herbivores and omnivores and classify organisms into a Venn diagram. Children will learn about producers and consumers and think carefully about where plants get their energy. They will learn how to draw a food chain and discuss the different organisms that make up food chains. Children will use their knowledge of drawing food webs and then learn how to construct a food web. We finish by learning about the main factors that are affecting food webs and changing our planet's ecosystems. This links with our topic on 'Being a Responsible Citizen' in PSHE.

D.T. Cooking and nutrition: celebrating culture and seasonality

We will begin by exploring a range of cultures and the foods that we eat. We will also explore our own cultural differences and carry out an investigation to find the needs and wants of a selected individual or group of individuals. Children explore where our food comes from, how it is processed and how it ends up on our plate. We will also explore seasonality of foods. We look at the needs of a healthy and varied diet, revisit the Eatwell plate, and design a dish that we have previously investigated. We will carry out a focused practical task to explore how to prepare, cut, peel, chop and combine ingredients using a range of tools and equipment. Children will also learn how to read and understand food packaging, including the nutritional information.

GEOGRAPHY – Earthquakes

Our key question for this unit is: Why do some earthquakes cause more damage than others? This enquiry introduces children to some key aspects of physical geography, in particular one of the major outcomes of tectonic activity in the world – earthquakes. Some work is also focused on volcanic activity. As they progress through the unit, children, come to understand why it is that earthquakes only tend to occur in particular areas of the world as a consequence of the pattern and movement of the tectonic plates of the Earth's crust. Children initially investigate the causes and impact of one specific recent earthquake in one particular location in the world, where earthquakes occur frequently, before

PSHE Health and Wellbeing

How can we manage our feelings?

We will explore how everyday things can affect feelings and how feelings change over time and can be experienced at different levels of intensity. We will discuss the importance of expressing feelings and how they can be expressed in different ways. We will learn how to respond proportionately to, and manage, feelings in different circumstances, as well as looking at ways of managing feelings at times of loss, grief and change.

P.E. Our two sports for this term are **Hockey** and **Gymnastics.** P.E. day will continue to be **Tuesday** & **Thursday**.

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. Children will also revise numbers using the euro and add to their repertoire of songs and rhymes to help them remember new language.

Computing

Email 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

Children will continue to learn about Christianity with a focus on its origins, core beliefs the festivals that place

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.

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. Spring term's KIRFs are: **I know the x and ÷ facts for the 9x & 11x** 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.
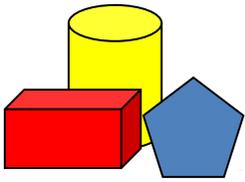
MATHS

Securing Multiplication Facts

By the end of year 4, children are expected to know their multiplication facts up to 12 × 12. This unit helps build an increasing depth of understanding and fluency in mental multiplication calculations. It will extend their understanding of times tables, particularly looking at patterns and rules, and the seven and nine times tables.

Discrete and Continuous Data

By the end of this unit pupils will be able to:

- Present data in pictograms and bar charts
- Consider the use and suitability of a range of different scales when constructing graphs
- Interpret data presented in a pictogram and bar chart
- Read and interpret data presented in a time graph

Fractions

During this unit children begin by revisiting previous learning, considering what a fraction is and how it can be represented. They then progress to find equivalent fractions, are introduce to mixed numbers and improper fractions, add and subtract fractions, calculate fractions of quantities and finally solve problems involving fractions. Throughout the unit children will be using a variety of representations, to increase their flexibility and depth of understanding with fractions.

Key Learning:

- To recognise fractions as different representations
- To identify and find fractions of a quantity
- To recognise equivalent fractions
- To calculate non-unit fractions of a quantity
- To find equivalent fractions using multiplication and division
- To solve problems involving fractions and division
- To compare and order fractions
- To recognise and write mixed numbers
- To recognise and write improper fractions
- To convert mixed numbers to improper fractions
- To add fractions which are equal to less than one
- To subtract fractions less than one whole
- To add fractions to equal an answer greater than one
- To subtract fractions including fractions greater than one

MATHS

Maths

Key Learning: To solve problems involving fractions and division

New Learning

A fraction can be the result of division

If three pizzas are divided equally between four people, how much does each person get?

Each person gets $\frac{3}{4}$ of a pizza

3 pizza ÷ 4 people

$3 \div 4 = \frac{3}{4}$

divide, division, equal, fraction, vinculum, denominator, numerator, equivalent

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Key Learning: To solve problems involving fractions and division

Develop Learning

Would you rather share four pizzas between five or six people?

$\frac{4}{5}$ > < or = $\frac{4}{6}$

move me   move me

divide, division, equal, fraction, vinculum, denominator, numerator, equivalent

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Key learning: To order fractions

Talk Task

True or false?

$\frac{2}{3} < \frac{1}{2}$ $\frac{2}{4} < \frac{5}{8}$ $\frac{7}{9} > \frac{2}{3}$

$\frac{4}{5} > \frac{7}{10}$ $\frac{1}{3} < \frac{3}{6}$ $\frac{5}{6} > \frac{11}{12}$

fraction bars, order, numerator, greater than, denominator, less than, vinculum, equivalent

Counting in eighths, quarters and halves

$1\frac{3}{4}$

$\frac{4}{4} + \frac{3}{4}$

$= \frac{7}{4}$

Key learning: To recognise and write improper fractions

How many fifths are there?

Call and response
Equivalent fractions

fractions, numerator, denominator, vinculum, whole, mixed numbers, improper fractions

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Key learning: To convert mixed numbers to improper fractions

Independent Task

Convert the following mixed numbers into improper fractions:

$2\frac{1}{4}$ $1\frac{1}{6}$ $1\frac{1}{3}$ $2\frac{5}{7}$ $3\frac{1}{2}$

$2\frac{2}{7}$ $2\frac{5}{8}$ $3\frac{3}{4}$ $3\frac{2}{3}$ $2\frac{2}{5}$

Call and response
Equivalent fractions

fractions, numerator, denominator, vinculum, whole, mixed numbers, improper fractions

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Key learning: To add fractions

A pizza has eight equal slices. Lisa eats one slice, and then eats a further two slices. What fraction of the pizza did she eat?

How could we represent this using a bar model?

$\frac{1}{8}$ $\frac{2}{8}$

?

numerator, denominator, vinculum, whole, equal, parts, bar model, addition, plus

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Key learning: To subtract fractions

Amrita has $\frac{7}{8}$ of a kilometre to walk to school. If she has walked $\frac{2}{8}$ of a kilometre, what fraction does she have left to walk?

How could we represent this using a bar model?

1 kilometre

$\frac{2}{8}$?

numerator, parts, denominator, bar model, vinculum, subtraction, whole, minus, equal

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ENGLISH

We are continuing with Ice Palace and will then move on to:

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

FULL COLOUR EDITION
Charlotte's Web
WINNER OF THE NEWBERY HONOR
by E.B.WHITE
Author of STUART LITTLE
Pictures by GARTH WILLIAMS