



Orleans Primary School

Year 5 Spring 2 Overview



Science

Living Things and their Habitats: Life Cycles and Reproduction

In this unit of work, we will be further deepening our understanding of life cycles. The children will understand and compare the life cycles of mammals, amphibians, birds and insects. They will deepen their understanding of the life cycle of a plant by being included the reproductive stage. Finally, they will learn and describe asexual reproduction in plants.

Computing

Programming 1: Music

We will be revisiting Scratch to input basic commands, tinker with and debug an existing musical code. The children will use code to create a themed music soundtrack, using Scratch software. Finally, they will plan and program a soundtrack for a specific purpose - 'Battle of the Bands'.

RE

What happens when we die? (part 2)

The objective is to recognise beliefs about the soul being part of God. Focussing on the Hindu and Sikh faiths, the children will learn about the beliefs relating to karma and reincarnation. They will discover the concept of enlightenment through Art.

HOME LEARNING:

SET ON TUESDAYS

IN ON MONDAYS

PE

Remember to wear your PE kit to school. We will be improving our tennis skills as well as our gymnastic skills. PE is on **Wednesday and Friday.**

Music

The focus of music this term is **TECHNICAL GREEKS**, to tie in with your history learning. The children will be learning about the *Ukulele*, pitch, chords and music tech composing.

DT

Structures - Bridges

In this topic, the children will explore how to reinforce a beam (structure) to improve its strength. Initially, they will build a truss bridge using spaghetti, progressing onto using wood. Finally, they will complete, reinforce and evaluate their truss bridge.

READING

Children should read for a minimum of **15 mins** at home every night. We do encourage them to read to an adult so they can practice reading aloud.

French

We will be learning to recognise, read and respond to directional language, as well as giving directions in French. We will also begin to identify features of countries in the French-speaking world.

PSHE

Safety and the Changing Body

In this topic, they will recap on the importance of staying safe online. We will be naming parts of the body and understanding the changes their own gender will go through during puberty. We will learn some basic first aid, Finally, we will understand that other people can influence our decisions, but we have the right to make our own choices.

KIRFs

To help develop children's fluency in mathematics, we ask them to learn Key Instant Recall Facts (KIRFs) each half term.
This term's KIRF is:

- I can identify prime numbers up to 20.

History

What did the Greeks ever do for us?

The focus of this topic is to identify the ancient Greeks' legacies and their impact. The children will learn about the key periods of the ancient Greek civilisation. They will discover who the Greeks believed in and how democracy was developed. They will also compare the people of Athens and Sparta and different philosophers.

English

This term we will be looking at: *The Viewer* by Gary Crew and Shaun Tan,

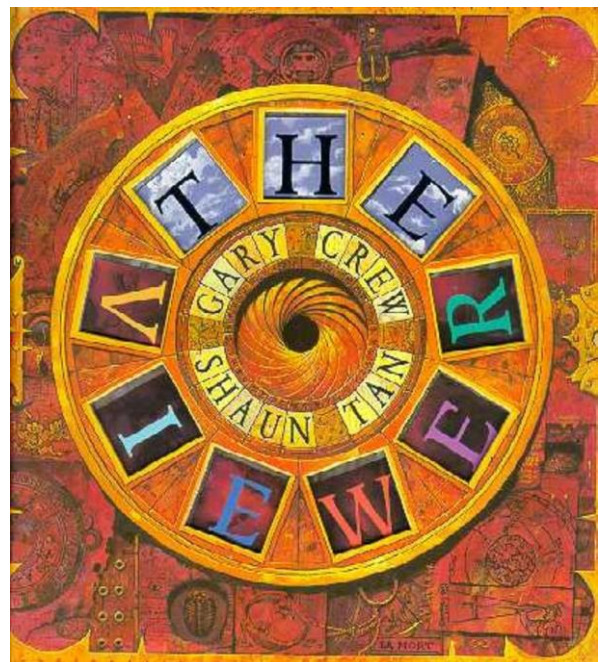
The Viewer tells the peculiar story of a boy (Tristan) whose obsession with curious artefacts leads him to discover a strange box at a dump site. It proves to be an ancient chest full of optical devices, one of which captures his interest; an intricately mechanical object which carries disks of images; scenes of destruction, violence, and the collapse of civilisations throughout time. Tristan is afraid, but also cannot help but look into the machine time and time again as the images shift and change...

Overall aims of this teaching sequence.

- To explore, interpret and respond to illustrations in a book.
- To enjoy a story and discuss its meanings.
- To build an imaginative picture of a fantasy world, based on real life experiences.
- To explore these through role play and through writing in role.
- To write own stories based on the story read from another character's point of view.

Throughout this book, we will develop a range of skills with the children and will produce several pieces of written work, including:

- Writing in role
- Letter writing
- Poetry
- Narrative writing
- Information text writing
- Note writing
- Newspaper report
- Personal research
- Autobiography
- Argument

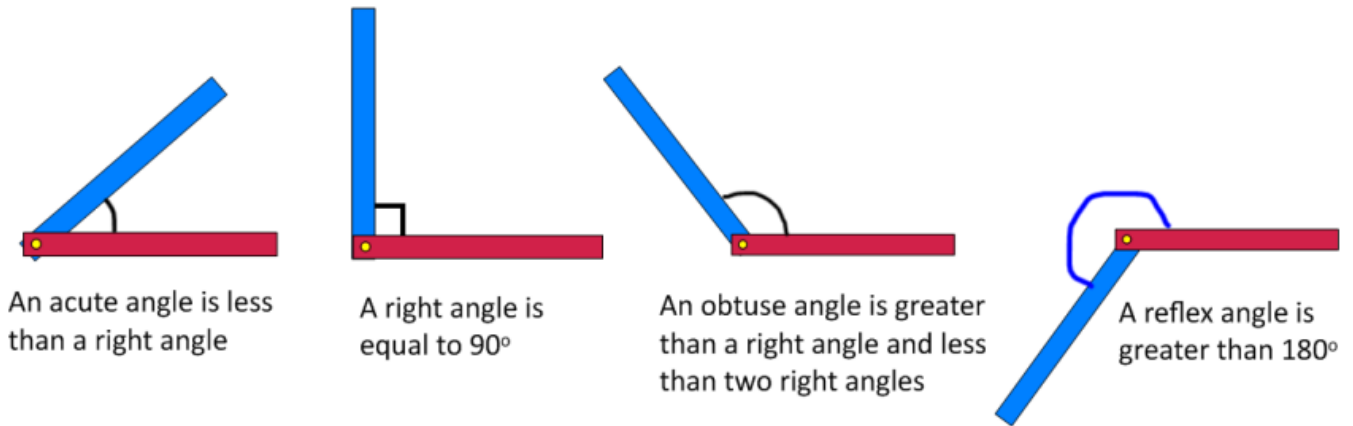


Maths

Angles

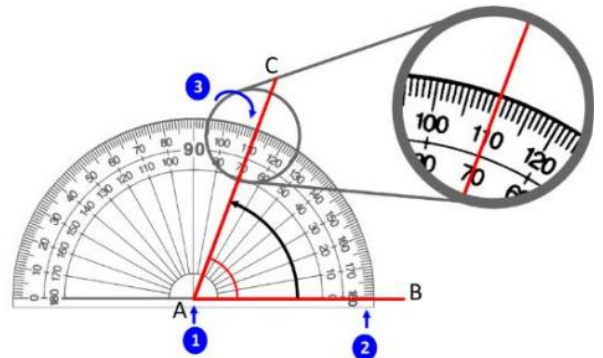
- L1 = Classify, compare and order angles

Pupils use an angle maker to review their understanding of angles as a measure of turn. They identify acute, right and obtuse angles and are introduced to reflex angles, identifying these in shapes.



- L2 = Measure angles using a protractor
- L3 = Draw angles using a protractor
- L5 = Measure and draw reflex angles

Pupils use a protractor to measure acute and obtuse angles and explore how to use the different scales on the protractor to measure the same angle. Pupils then move on to sketching angles using a ruler before measuring them with a protractor to see how accurate they were. The same skills are then applied to reflex angles.



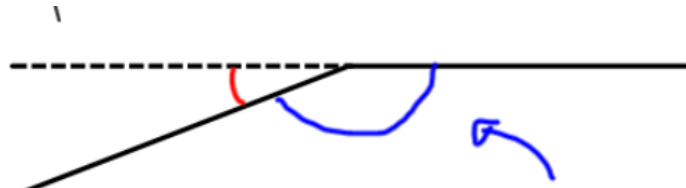
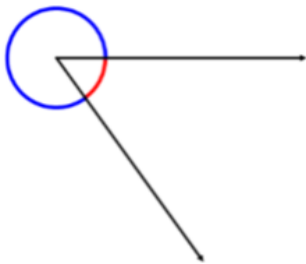
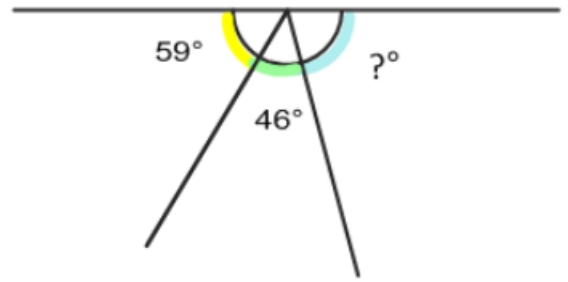
- L4 = Know that angles at a point are equal to 360°
- L6 = Identify angles at a point on a straight line total 180°

Pupils build understanding that a full turn is equal to 360 degrees and use hands on a clock to explore two angles that sum to 360° . They then use this knowledge to measure reflex angles. Pupils move on to review their understanding that a half turn and the angle of a straight line are 180° and use this knowledge to measure and calculate missing angles at a point on a straight line.



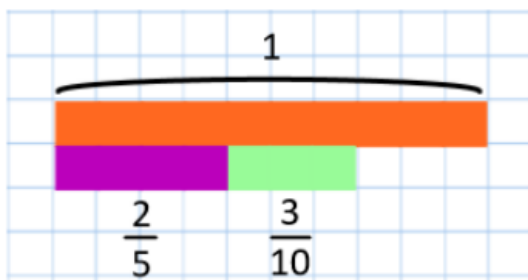
- L7 = Investigate angles at a point within shapes
- L8 = Investigate angles within shapes

Pupils explore angles made by patterns of crossing lines and try to see how many angles they can calculate using knowledge about angles at a point rather than measuring. They then draw triangles and begin to explore the angles within a triangle. Pupils move on to investigate a series of statements about the angles within shapes, justifying whether they are always, sometimes or never true, using geoboards and grid paper to support their choices.



I could measure the smaller angle and subtract this from 360.

Fractions, Decimals and Percentages



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$$\frac{2}{5} + \frac{3}{10} = \frac{5}{15}$$

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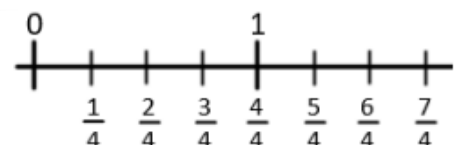
$$\frac{2}{5} + \frac{3}{10} = \frac{5}{5}$$

- L1 = Add and subtract fractions with the same denominator
- L2 = Add and subtract fractions with denominators that are multiples of the same number
- L3 = Add and subtract fractions, including improper fractions

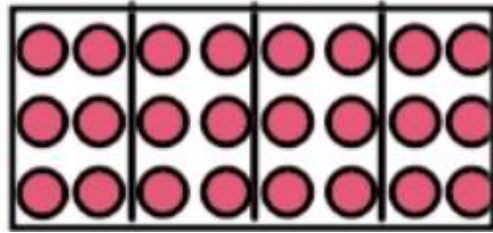
Pupils review content from Y3 and 4 and extend to working with fractions that do not have a common denominator. This is an opportunity to apply and deepen understanding of equivalent fractions. Cuisenaire rods are used to represent and make sense of the abstract calculations. Existing understanding of the relationship between addition and subtraction should be used to explore related facts.

- L4 = Multiply a fraction by a whole number
- L5 = Multiply a mixed number by a whole number
- L6 = Fractions of quantities
- L7 = Solving problems involving fractions of a quantity

Multiplication of fractions is introduced with the context of repeated addition with the representation of skip counting along a number line. This mirrors pupils' early experiences when connecting repeated addition and the multiplication symbol. Finding fractions of a quantity can be interpreted as multiplication and pupils are supported in seeing that, for example, $\frac{3}{4} \times 24$ is the same as finding $\frac{3}{4}$ of 24.

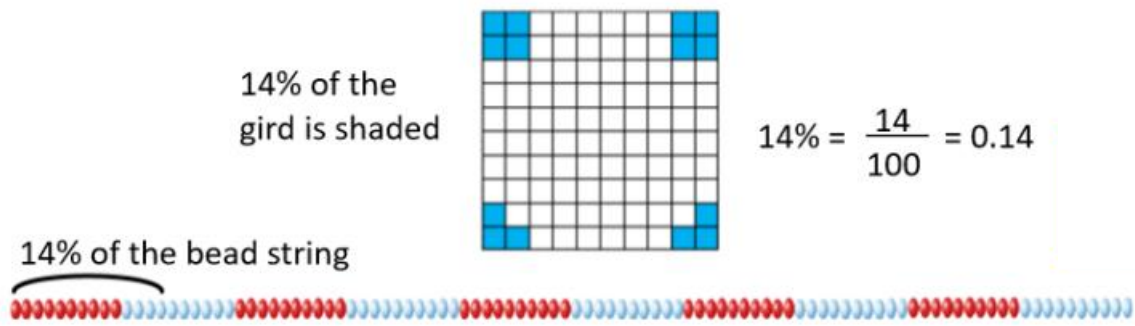


$$\frac{3}{4} \times 24 = 18$$



- L8 = Relate percentage to 'number of parts per hundred'
- L9 = Relate percentages, decimals and fractions

It is important that understanding of percentage is grounded in connections to 100 parts. Initial experiences involve working with 100 items/objects and using percentage to describe and compare parts of these sets. Clear connections are made with fractions and decimals, using familiar representations to support this.



- L10 = Use percentage to describe proportions of a set of any size
- L11 = Identify percentage of amounts
- L12 = Use percentage to compare

So far, percentage has been used to describe part of a set of 100 items and this is built upon to use percentage to describe part of a set of any size and develop understanding that per cent relates to 'number of parts per hundred'. The final lesson of the unit provides opportunities for application of knowledge and understanding of fractions, decimals and percentage to solve problems and make comparisons using proportional reasoning.

