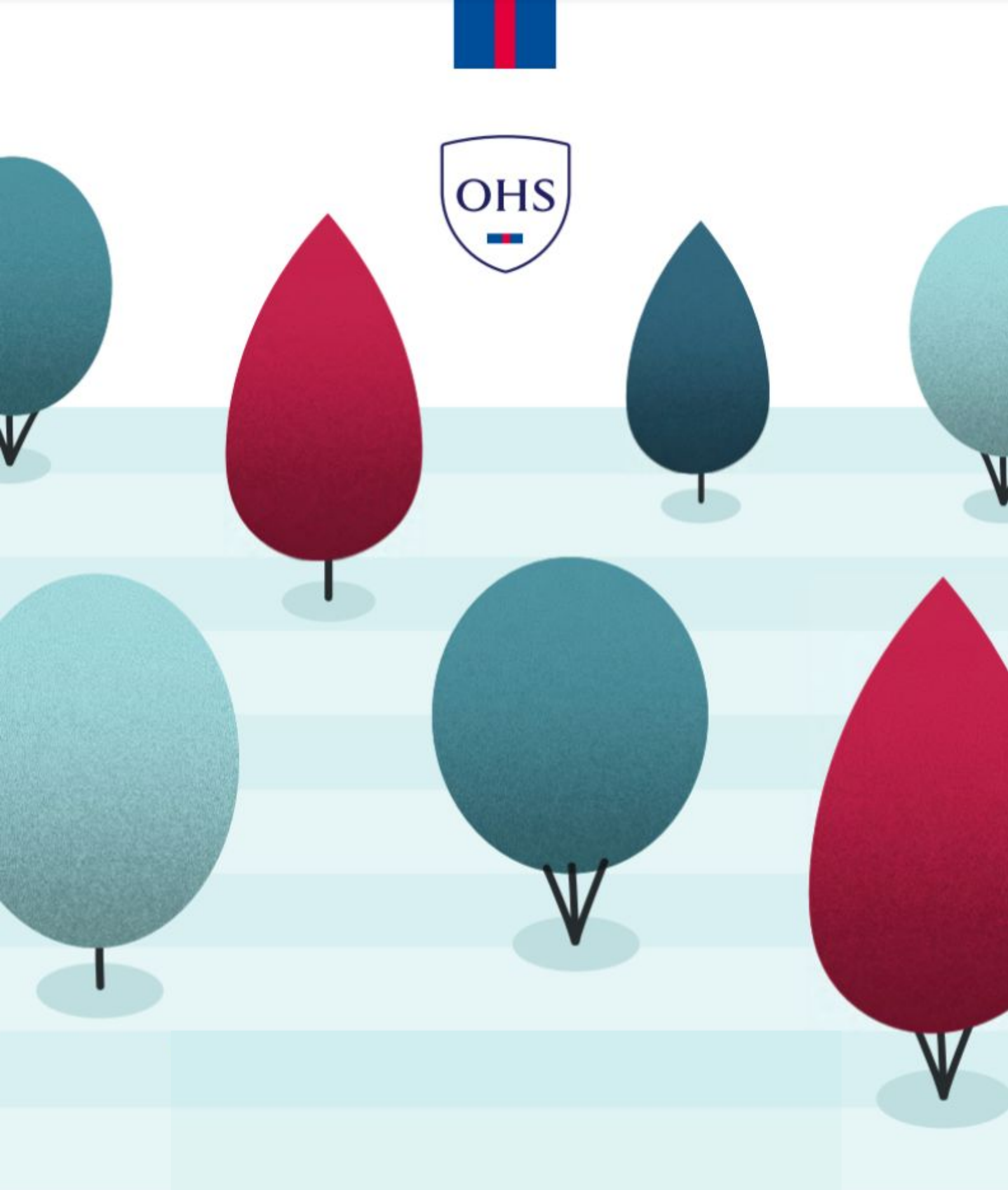


Learning in Form 4
Spring 2025

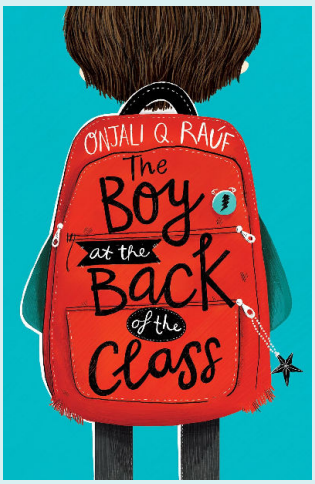
CONTENTS

Overview of Spring Term Curriculum Form 4

	Spring 1	Spring 2
English	**The Boy at the Back of the Class** by Onjali Q. Rauf	**The Miraculous Journey of Edward Tulane** by Kate DiCamillo **A Nest Full of Stars** By James Berry
Mathematics	**Place Value, Addition & Subtraction, Measures & Data, Multiplication & Division, Decimals and Fractions and Shape**	
Science	**Ecology**	**Sound**
Knowledge (History)	**Life in Ancient Rome**	**The Rise and Fall of Rome**
Knowledge (Geography)	**Eastern Europe**	**UK Geography: Northern Ireland**
Art	**Henri Matisse, Design & Architecture**	**Monuments of Ancient Rome**
STEAM	**LEGO Spike - Quirky Creations**	**Wild Eco Builders - Wild Cities**

ENGLISH

To support children to read and write with accuracy, we place high quality, challenging children's literature at the heart of our approach to English.

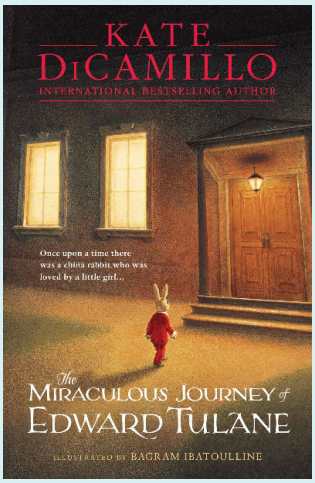


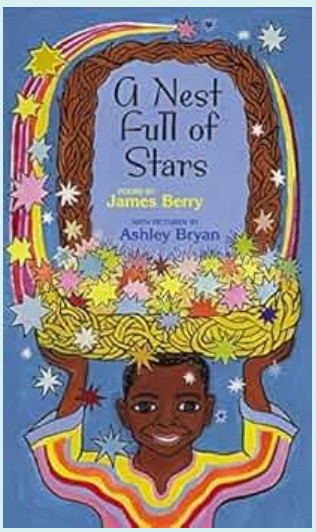
When Ahmet arrives in their class, a group of children are curious to know more about him – where he is from, what language does he speak and where is his family? As they learn more about him – that he is a Kurdish refugee from Syria and that he was separated from his family en route to Britain – their concern for him grows. When they hear that the gates to refugees are to be closed, they hatch a plan 'The Greatest Idea in the World' with the aim of ensuring that Ahmet can be reunited with his family. Narrated by one of this group of children, this touching novel conveys the seriousness of the situation while maintaining a humorous tone when describing the scrapes they get into while trying to accomplish their mission.

Potential Writing Outcomes : Postcard ,Scripted News Report , Critique, Poster Picture Book, Non-fiction book, School Policy, Labels for Art Installation ,Discussion Notes ,Free Verse Poetry, Scripted Infomercial, Persuasive Poster, Pamphlet, PowerPoint, Fact Cards, Research Notes, Personal Profile, Debate Cards, Letter , Cookbook and Scripted Cookery Show

A poignant adventure story set in North America. Through a roller coaster of emotions, Edward, a china rabbit, experiences wildly different settings, identities and owners, thereby gradually learning the value of love and friendship. Edward's often harrowing experiences help shape him from a vain, pompous creature into a thoughtful, considerate friend. The narrative structure is carefully crafted and the characters and settings are well drawn, offering young readers a good model for their own story planning and descriptive writing.

Potential Writing Outcomes : Poetry, diary entry, story maps, instructions, writing in role, character descriptions, narrative descriptions and autobiography





In this collection of poems by James Berry, about half of the poems relate to Caribbean settings and subjects and the rest are poems set in the UK. This teaching sequence focuses both on poems relating to familiar childhood themes (such as friendship and family) and on themes special to the Caribbean. Berry dwells on his childhood experiences in Jamaica, especially in a lyrical sequence of thoughtful poems entitled 'From My Sister's Secret Notebook', which reveals his qualities as a nature poet. He also demonstrates the energy and style of Caribbean dialect speech, and the raps and chants he includes in this collection lend themselves to performance.

Potential Outcomes :

- Learn more about writing poems (as a class and individually) based on observation and experience.
- Identify dialect features in the poems written in a Caribbean voice and discuss differences between dialect and standard English, especially in poetry.
- Learn how to bring out the meaning of a poem through performance develop generalisations about the main themes and features in the work of an individual poet.

SPELLING

Orchard House School follows the Read, Write, Inc programme for the teaching of spelling.

Spelling sounds practised in the Spring term:

Focus	Example Words
Words ending in **-ous**	serious, obvious, tremendous, jealous, enormous, glamorous, anxious, hideous, courageous, outrageous,
Words with the **s** sound spelt **sc**	scissors, ascent, science, scent, scene, ascend, muscle, fascinate
Possessive apostrophes with plural words	The boy's dog. (The dog belongs to one boy) The boys' dog. (The dog belongs to more than one boy) For plural words that do not end in s, we add **'s** to make these words possessive.
Words ending in ***zhun*** spelt **-sion**	confusion, division, revision, decision, explosion
Adding **il-** and revising **un-, in-, mis-** and **dis-**	illiterate, illegal, illogical, impatient, impractical, unclear, disqualify
The **c** sound spelt **-que** and the ***g*** sound spelt **-gue**	cheque, antique, grotesque, unique, dialogue, tongue, catalogue, league, tongue
Homophones	heal, heel, missed, mist, who's, whose, accept, except, affect, effect
Adding **ir-** to words beginning with **r**	Irrelevant, irregular, irresistible, irresponsible

MATHEMATICS

**Please note : subject to adjustment and adaptation to accommodate reinforcement or allow for further differentiation as required by cohort. May also be subject to change to allow for other educational events.*

Week commencing	Learning Objectives for Spring 1
07/01/25	**Place Value** : Use place value in calculations **Multiplication and Division** : Times tables x/-:- facts
13/01/25	**Decimals and Fractions** : Unit and non-unit fractions of amounts Equivalent fractions; simplest form; +/-
20/01/25	**Addition & Subtraction**: Adding money using column addition Count up to find change and differences
27/01/25	**Multiplication and Division:** Times tables revision: factors & multiples Multiply multiples of 10 and 100
03/02/25	**Decimals and Fractions** : Introduction to one place decimals Consolidate one place decimals
10/02/25	**Addition & Subtraction**: Column addition - 3 or more 2 digit numbers Subtraction strategies; written methods

Week commencing	Learning Objectives for Spring 2
24/02/25	**Shape** : Draw circles, study polygons, e.g. triangles **Place Value**: Decimals: x/-:- by 10/100; +0.1
03/03/25	**Multiplication and Division**: Grid multiplication: vertical layout Division: chunking with remainders
10/03/25	**Decimals and Fractions**:Introduction 1- and 2-place decimals Decimal/ fraction equivalents, 10/100ths
17/03/25	**Shape**: Coordinates - draw polygons Identify and explore 3-D shapes
24/03/25	**Shape**: Lines of symmetry: identify and construct Angle types; properties of polygons
31/03/25	**Measures and Data**: Measure in m, cm, mm; convert units

MATHEMATICS

CALCULATION METHODS

Below you will find a reference for some of the methods used to teach the mechanical aspects of mathematics this term.

Fractions - Finding Fractions of Amounts

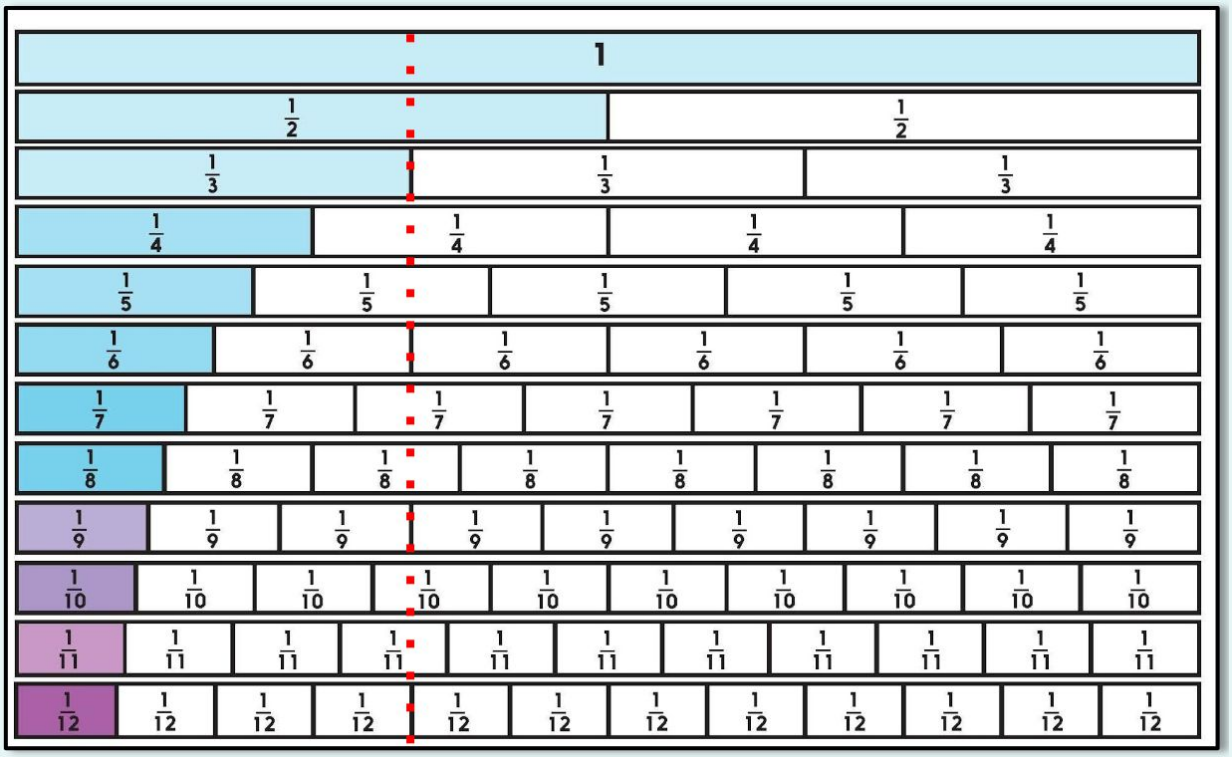
16							
2	2	2	2	2	2	2	2

We can also show fractions of 16 using a **bar model.** Each small bar represents $^1/_8$ of the whole. How can we use the bar model to find $^3/_8$ of 16 or $^5/_8$ of 16?

$^3/_8$ of 16 will be 3 of the 2s. $3 \times 2 = 6$.

$^5/_8$ of 16 will be 5 of the 2s. $5 \times 2 = 10$.

Fractions - Fractions in their simplest form



What fractions can you see that are equivalent to $^1/_3$?

$^2/_6$, $^3/_9$ and $^4/_{12}$ are all equivalent to $^1/_3$.

What do you notice about the **denominator** and **numerator** of all those fractions?- The **denominator is** always three times the **numerator.**

We can make fractions **equivalent to** $^1/_3$ by multiplying the **numerator** and **denominator** by the same number!

MATHEMATICS

CALCULATION METHODS

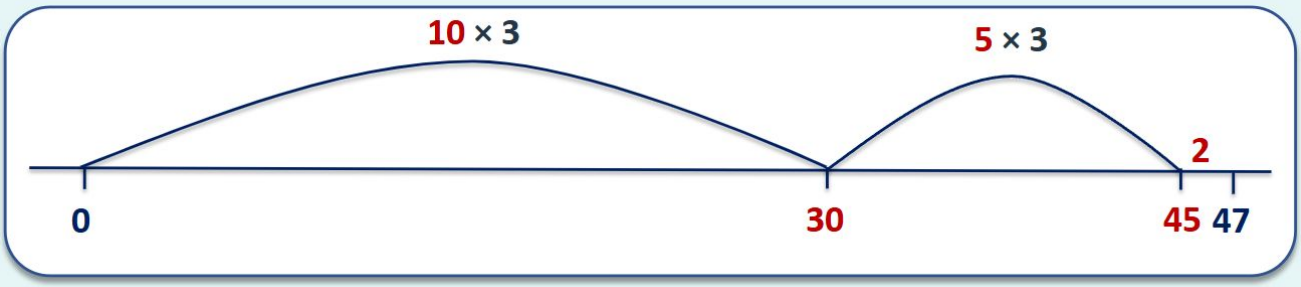
Below you will find a reference for some of the methods used to teach the mechanical aspects of mathematics this term.

Multiplication and Division
Multiply multiples of 10 and 100 by 1 digit numbers using tables facts.

4 × 8	4 × 80	4 × 800
7 × 3	7 × 30	7 × 300

Once you know 4 × 8 = 32 and 7 × 3 = 21 you can use place value to find the others.

Divide 2-digit numbers by 1-digit numbers (with remainders), using a 'compact' vertical layout



Steps to Success : 47 ÷ 3=

1. How many 3s are in 30?
2. 17 left. How many 3s do you think are in 17 ? How many left over?

Multiply and divide by 10 and 100 Using 1-place decimals

24 x 100 =

Each digit is worth 100 times its previous value and has moved TWO PLACES TO THE LEFT.

1000s	100s	10s	1s	0.1s
		2	4	

1000s	100s	10s	1s	0.1s
2	4	0	0	

What will happen to 2400 if divide by 10?

1000s	100s	10s	1s	0.1s
2	4	0	0	

1000s	100s	10s	1s	0.1s
	2	4	0	

SCIENCE

Ecology

During this unit, the children will:

- Describe ecosystems and how they are affected by changes in the seasons.
- Understand the human impact on the environment through deforestation.
- Explore air pollution
- Understand water pollution.
- Explore methods that can be used to conserve water.
- Understand that humans can have a positive impact on nature

Sound

During this unit, the children will:

- Identify how sound is made.
- Explore how vibrations from sounds travel through a medium to the ear.
- Explore sound insulation.
- Explore volume.
- Explore pitch.
- Explore sounds.

GEOGRAPHY

Eastern Europe	
Topic	**Knowledge Goals**
Key Places in Eastern Europe	Eastern Europe covers a wide area, with many countries, peoples, cities and rivers. Some Eastern European countries are grouped into Balkan or Baltic Countries. Eastern European countries have different languages.
Climate of Eastern Europe	Eastern Europe has a continental climate. Balkan countries are closer to the equator so are slightly warmer. Baltic countries are further north and so are colder.
Physical Features of Eastern Europe	There are some very long rivers in Eastern Europe, including the Danube and the Volga. The Caucasus Mountains form a boundary between Europe and Asia and contain Mount Elbrus, Europe's tallest mountain. The Pinsk Marshes are one of Europe's largest wetland areas.
Comparison of an Eastern European country with the UK	Russia is much, much larger than the UK. Russia is a transcontinental country. The UK is in Europe. The highest mountain in Russia is Mt Elbrus (18,481ft)
Conflict in Eastern Europe	Russia and Ukraine share a border in Eastern Europe. Russia invaded the Ukraine in 2022 to take control of land. The war that followed the invasion caused many people to leave their homes to seek safety.

Northern Ireland	
Topic	**Knowledge Goals**
An Introduction to Northern Ireland	Northern Ireland is part of the United Kingdom. Belfast is the capital of Northern Ireland and is the largest city. Lough Neagh is the largest lake in the British Isles.
Visiting Northern Ireland	People visit Northern Ireland to see areas of outstanding natural beauty. Belfast is the capital of Northern Ireland and is a popular city for visitors. The Giant's Causeway is located in Northern Ireland.
Northern Ireland, the Republic of Ireland and the partition	The Republic of Ireland was partitioned from Northern Ireland in 1922. Unionists want to remain part of Britain. Nationalists wish to become part of the independent Irish nation.
The Giant's Causeway	Giant's Causeway is a landscape of rock columns. The Giant Causeway was created by an ancient volcanic eruption. There is an Irish Legend which tells of a Giant creating the causeway so he could cross the sea.
The Marble Arch Caves	The Marble Arch Caves were formed by water flowing slowly through rocks and gradually dissolving the stone away. Stalactites hang from the roof of a cave and reach towards the ground. Stalagmites form ground and reach up towards the cave roof.

History

Life in Ancient Rome	
Topic	**Knowledge Goals**
Locating Ancient Rome	Ancient Rome was one of the most powerful empires in history. The Romans told stories about Romulus and Remus who were said to have founded Rome. Rome's position in the Mediterranean gave the Romans a strong location from which to trade and conquer
Monarchy, Republic, Empire: Rome's different governments	Rome had three distinct phases of government: monarchy (led by Kings), republic (led by people) and empire (led by an emperor). Rome started as an absolute monarchy and became a republic. Patricians were wealthy Romans who often owned land ; Plebeians were Roman citizens, but were poor; and Slaves were owned and had no rights.
Pompeii	The destruction of Pompeii was a major event in Roman history. The events were well recorded by the writer Pliny the Younger The preserved ruins have given archaeologist a great deal of information about the both the destruction, and everyday life in a Roman town.
A day in the life of Ancient Rome	The forum was the centre of political, religious and commercial life. The baths were a social leisure activity. The gladiatorial games were often used by emperors to keep the huge crowds of poorer Romans content.
Latin: A Roman legacy	The Latin language formed the basis of many languages including Italian, Spanish, French, Portuguese . Many English words come from Latin roots. Until the 17th century, most works of science, religion and politics were written in Latin.

The Rise and Fall of Ancient Rome	
Topic	**Knowledge Goals**
The Punic Wars and the expanding empire	Rome had many rivals to its power; the earliest and greatest was the city of Carthage. Rome fought and won three wars (The Punic Wars) against Carthage. The Punic Wars enormously increased Rome's power and prestige across the Mediterranean .
Julius Caesar	Many historians believe that the Roman Empire could not have existed without Julius Caesar . Julius Caesar conquered a great deal of territory for Rome, but also defeated his rivals. Julius Caesar made himself dictator-for-life.
Caesar Augustus and the Pax Romana	Caesar's murder in 44 BCE, led to the destruction of the Roman Republic and the birth of the empire. Brutus and Cassius plotted to assassinate Julius Caesar. Julius Caesar was killed by the senators on the Ides of March (15th March)
Christianity in the Roman Empire	The man who became Caesar's successor was called Octavian, but on taking power he renamed himself Caesar Augustus. He became the first emperor of Rome and reformed it into a powerful, stable empire. His reforms contributed to a two-hundred year period of stability called the Pax Romana, or Roman Peace.
The Fall of the Roman Empire	Christianity went from a small sect in a far corner of the huge Roman Empire, to the largest religion in the world within the space of a few hundred years. Christianity was illegal for the first three centuries of its existence. After Emperor Constantine made it legal, Christianity become a dominant religious, political and cultural force in the ancient world.

STEAM

Skills & Competencies:

Our STEAM curriculum consists of a series of projects that aim to develop a set of fundamental competencies, that empower pupils to effectively navigate personal, cultural, economic, and societal obstacles they will inevitably encounter throughout their lives:

1. **Curiosity:** The ability to ask questions and explore how the world works
2. **Creativity:** The ability to generate new ideas and apply them
3. **Criticism:** The ability to recognise information and ideas and to form reasoned arguments and judgements
4. **Communication:** The ability to express thoughts and feelings clearly and confidently in a range of forms
5. **Collaboration:** The ability to work constructively with others
6. **Compassion:** The ability to empathise with others and to act accordingly
7. **Composure:** The ability to connect with the inner life of feeling and develop a sense of personal harmony and balance
8. **Citizenship:** The ability to engage constructively with society and to participate in the processes that sustain it.

LEGO Spike - Quirky Creations

This challenge provides pupils with the opportunities to develop their engineering design skills as they investigate ways of defining problems, brainstorming solutions and testing and refining prototypes for inventions that solve problems at home and school. They'll refine their problem-solving skills as they create a solution to a problem that has constraints, and improve upon others' ideas. All while honing their ability to identify failure points and success criteria when comparing, modifying and evaluating a solution.

Wild Eco Builders: Wild Cities

Form 4 will explore how we can learn and be inspired by animals' traits and characteristics to design places and spaces that are best suited to their surroundings such as land or water. They will be inspired by animals and minibeasts to design fun, creative and useful buildings! Build an entire city of buildings, using different junk materials and LEGO® pieces. Their city could be on the land, water or even air.

PSHCEE / RSE

Orchard House School has been implementing the PSHCEE /RSE Programme across the school since September 2020. We would like to reassure you that all the online Jigsaw teaching materials meet the current statutory expectations for RSHE (DfE, 2019) and if and when any new guidance is published, you can be fully confident that our materials will be updated and reviewed to ensure that they are compliant and reflect the needs of our children.

We follow a scheme of work called Jigsaw, a mindful approach to PSHCEE / RSE. The lessons aim to build children's emotional literacy, self- esteem and knowledge of who they are and how they relate to each other and the world in a positive and healthy way.

Dreams and Goals	Healthy Me
Hopes and dreams Overcoming disappointment Creating new, realistic dreams Achieving goals Working in a group Celebrating contributions Resilience Positive attitudes	Healthier friendships Group dynamics Smoking Alcohol Assertiveness Peer pressure Celebrating inner strength

PHILOSOPHY & ORACY

Philosophy and oracy are integral disciplines at Orchard House School. They are woven throughout the curriculum and we encourage a thoughtful, talk-rich culture within every classroom and incorporate both disciplines into lesson planning. In addition to the opportunities to nurture these elements at school, we invite families to take part in our weekly "Sticky Questions" school initiative.

What is Sticky Questions?

The aim of sticky questions is to get parents and children talking about interesting questions. Every Wednesday, your child will come home with a Sticky Question stuck to their uniform. There's no writing involved. Just take the time to talk with them about it and see what you each think and why.

What makes Sticky Questions "sticky" is that you can keep arguing about them. It's not like a maths worksheet where a teacher is looking to see a particular answer. What matters is that you and your child talk and think together. If you disagree, so much the better. If you think alike, you might play at disagreeing for the sake of argument.

On Thursday, the class will carry on the talk, bringing in ideas heard from home. Part of the point of this exercise is to celebrate differences in thinking between children and within families.

Whole Class Philosophy Lessons

Debating Skills	Topic : Just the Universe and Everything in it! Themes : Living things, Science, The Blue Planet, The Truth Shall Set You Free, Galaxies Far, Far Away and Wibbly Wobbly, Timey Wimey
The Value of Trees	A variation of the question, "if a tree falls in a forest and nobody hears it, does it make a sound". If a tree stays standing in a forest and no one buys it, how much is it worth. This topic aims to get children to think about value beyond the scope of money.
The Pharaoh's Afterlife	Linking with history studies on Egypt, children explore questions such as : If you were Pharoah's advisor, what would you recommend he be buried with? What would be better, an eternal afterlife or reincarnation in our world? What would a 'perfect' afterlife look like? Are people naturally good?
Monstrous	A story on myths and monsters that prompts questions such as: Where do we come across myths and monsters? What are monsters and myths for? Are any myths being created today?

Art

Art is highly valued at Orchard House School. Topics promote creativity and self-expression alongside ambitious teaching of artistic periods, mediums and movements. Learning is interconnected with the Knowledge curriculum, adding colour and texture to people, places and moments in time.

Spring 1	Spring 2
Key Vocabulary : elements of art, design, composition, collage, cut-out, expressionism, complementary colours	**Key Vocabulary : monument, ancient Rome, amphitheatre, column, dome, portico, arch, in relief, in the round, frieze**
Henri Matisse • To learn about Matisse's paper cut-outs. Collage and contrasting colours. • How to create art without a pencil or paintbrush.	Ancient Rome • Roman busts portraiture, the use of value and form.
Design and architecture • To learn about Zaha Hadid -" The queen of curves", design and architectural model • To learn about contrast, Shape and Form	Roman Architecture • To learn about the ancient Roman architecture, • To learn about lines and shapes, so that pupils can draw a detailed Roman colosseum. • Colosseum art project. Mixed Media and texture.


Trojan's Column (113 CE)


Relief from Trojan's Column showing the Roman army


The Pantheon (126 CE)


The Fall of Icarus - Matisse 1947

BEYOND THE ORCHARD

SPORT

PE
Children will continue their rotation of:

Gymnastics
- To learn and practise a wide range of gymnastics skills including; cartwheels, handstands, rolls and balances.
- To put these skills into routines and sequences.

Health Related Fitness
- What happens to the body during exercise (physiological changes)
- Why is exercise important?
- Range of activities to focus on: cardiovascular endurance, speed, agility, balance, coordination, competition.

POP Lacrosse
- Introduction to Pop lacrosse.
- To focus on skills of throwing and catching and ground balls.
- To understand principles of attack and defence and put these into a game. To be able to play a small sided game showing basic skills.

GAMES

Girls
Hockey- Spring 1
- To practise and improve passing skills including a push pass
- Dribbling technique and reverse stick
- Attacking and defending principles
- Basic rules
- To play games against other schools

Football- Spring 2
- To practise ball mastery skills, including dribbling, kicking, stopping and shooting
- To demonstrate attacking and defending in football
- To practise shooting
- To play a small sided and larger games

Boys
Tag & Contact Rugby
- Progressive Introduction to contact rugby
- Passing Tackling
- Attacking principles
- Defending principles
- Game play against other schools.

Hockey
- To practise and improve passing skills including a push pass
- Dribbling technique and reverse stick
- Attacking and defending principles
- Basic rules
- To play games against other schools

BEYOND THE ORCHARD

Computing

Graphics continued

- Creating a range of different images
- Can we believe what we see online?

Collecting Information

- Using Google Forms to collect information

Spreadsheets

- Creating and using spreadsheets

Music & Performance

Music

Form 4 will be introduced to playing the ukulele this term in their music lessons. This versatile instrument provides an engaging and accessible way for pupils to develop their musical skills, including rhythm, melody, and chord playing.

French

- To learn the plural of nouns
- To Listen and recognise a simple sentence e.g. noun and colour adjective (Matisse paintings)
- To write a descriptive sentence using a language scaffold (Matisse paintings)
- To learn about the tradition of La Chandeleur - listening to a poem and finding the rhyme, reciting a poem
- To learn about ancient Roman buildings
- To learn about France as part as the Roman Empire
- To write sentences to describe what there is in a French Roman city “â Arles, il y a …”
- To write sentences using high frequency verbs to introduce Roman gods and goddesses.

Knowledge Organisers

What is a Knowledge Organiser?

A knowledge organiser shows the key factual knowledge that we want our children to use and remember to have basic knowledge and understanding of a topic. These are a one page overview of each topic taught over a half term and can include:

- Key vocabulary and technical terms
- Images such as maps, diagrams or photographs
- A timeline
- Famous quotations
- Essential knowledge laid out in easily digestible chunks

The Benefits of Knowledge Organisers

- They help children learn and retain the knowledge of the curriculum.
- They give children the 'bigger picture' of a topic, subject area or concept.
- It provides opportunities for regular retrieval which aids long term retention
- They make the knowledge explicit.

How You Can Use Knowledge Organisers to Help Your Children with Their Learning.

- Using them as a springboard for discussion - Talk to your child about what's on the knowledge organisers.
- Quizzing - Crucially, all information information on a knowledge organiser is quizzable. Fun, low stakes quizzes of the information will help children learn and remember the knowledge.
- Displaying them somewhere at home will enable your child to become more familiar with the knowledge.

Eastern Europe

KEY VOCABULARY

Balkan countries	south of the Danube are the Balkan countries, along the Balkan Peninsula: these include **Croatia, Albania, Bosnia-Herzegovina, Bulgaria and Kosovo**
Baltic countries	countries located on the Baltic Sea: **Latvia, Lithuania and Estonia** (this term sometimes includes Poland)
Cyrillic	the **alphabet used in Russia**, named after St. Cyril who translated the Bible
human geography	the geographical study of **people and their communities, cultures, economies and interactions with the environment**
physical geography	the geographical study of **processes and patterns in the natural environment**
steppe	**flat grassland** with few or no trees

Russia

- population: 144,463,451
- capital city: Moscow
- main language: Russian (РУССКИЙ)
- currency: Russian ruble (₽)(RUB)

example of Cyrillic alphabet:

А Б В Г Д Е
Ж З И Й К
Л М Н О П
Р С Т У Ф
Х Ц Ч Ш Щ
Ы Э Ю Я

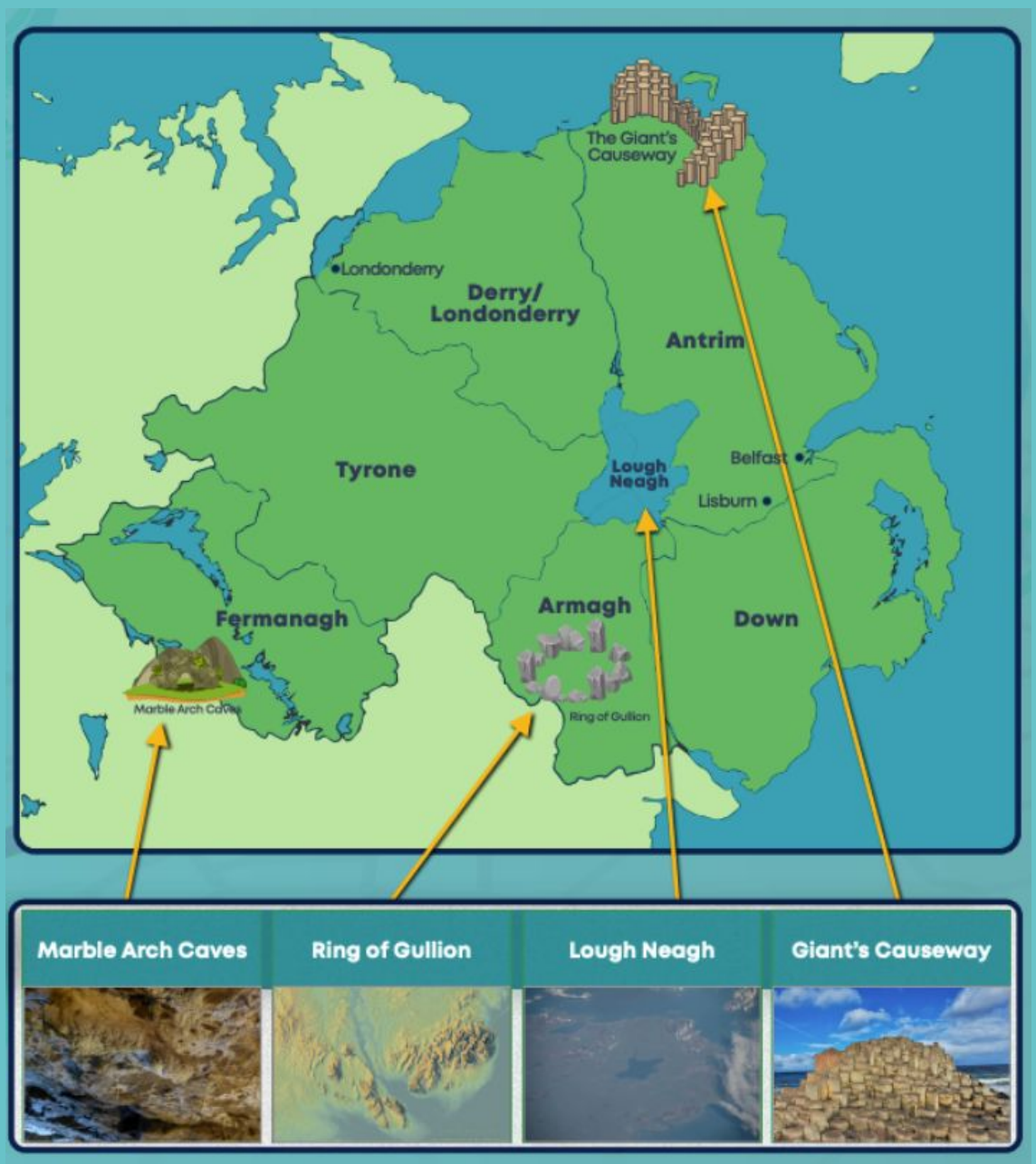
Eastern European seas:

- Caspian Sea
- Black Sea
- Adriatic Sea
- Baltic Sea

Moscow	St. Petersburg
Russia	Russia
	

Warsaw	Kiev
Poland	Ukraine
	

Northern Ireland



KEY VOCABULARY

Belfast	the **capital city of Northern Ireland** on the east coast
Londonderry	the **second-largest city in Northern Ireland**
republic	a state in which **supreme power is held by the people who have an elected president** rather than a monarch
partition	the dividing of a country into **separate areas of government**
Lough Neagh	a **lake in Northern Ireland** and the largest lake in the British Isles
Giant's Causeway	an **area of basalt columns**; the result of an ancient volcanic eruption
Unionists	people who are **in favour of the union** of Northern Ireland with Great Britain
Nationalists	people who **supports political independence** for a country

Finn MacCool

legend says that Finn MacCool made Lough Neagh as well as the Giant's Causeway

Life in Ancient Rome

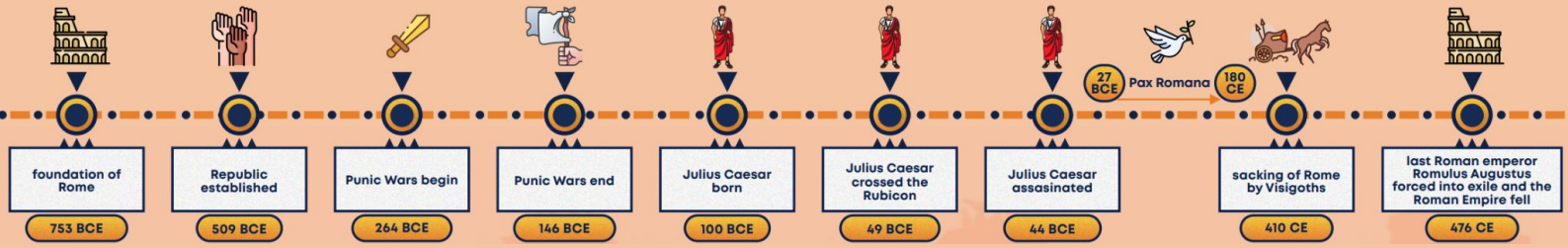
753 BCE	509 BCE	55 BCE	44 BCE	27 CE	54 CE	64 CE	79 CE
founding of Rome by Romulus	beginning of the Roman Republic	Julius Caesar attempts to invade Britain	death of Julius Caesar and end of Roman Republic	Augustus becomes emperor	Nero becomes emperor	much of Rome destroyed in fire	Mount Vesuvius erupts and destroys Pompeii

KEY VOCABULARY

Roman Empire	a **huge empire controlled by Rome**, lasting between 509 BCE and 476 CE
republic	a government where the **people are in charge, rather than a king**
Mediterranean	the **countries that surround the Mediterranean Sea**: these were once dominated by Rome
Latin	the **language of Rome**, spoken across the Roman Empire
Pompeii	a **small town in Southern Italy** that was totally destroyed by a volcano in 79 CE
aqueduct	a **stone trough to carry water** across the country into Roman towns
gladiator	a person, usually a slave, who **was forced to fight while other people watched as a form of entertainment**
forum	the **centre of Roman public life**, with market stalls set up, merchants and traders doing business and politicians speaking to large crowds of listeners

patricians	the wealthy ruling class who held all of the power
plebians	all the other citizens of Rome were plebeians: plebeians were the farmers, craftsmen, laborers and soldiers of Rome
slaves	enslaved people were not considered citizens: they often did manual or domestic work

The Rise and Fall of the Roman Empire



KEY VOCABULARY

Punic Wars	**three wars between Rome and Carthage**, which Rome won
assassinate	to **kill someone** for political reasons
Pax Romana	a **period of two hundred years** when the **Roman Empire was very peaceful and rich**
persecution	**hurting someone**, often for their religious beliefs or ethnicity
barbarian	an **insulting word** the Romans used for the different tribes attacking the empire in the 5th Century CE
sack	to **destroy an enemy city** and steal anything of value

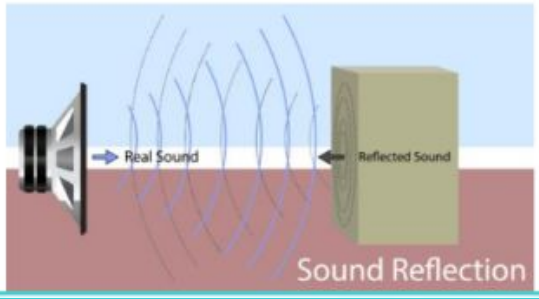
the Roman Empire 117 CE

Knowledge Organiser: Sound

Careers connected to sound: audiologist, sound engineer

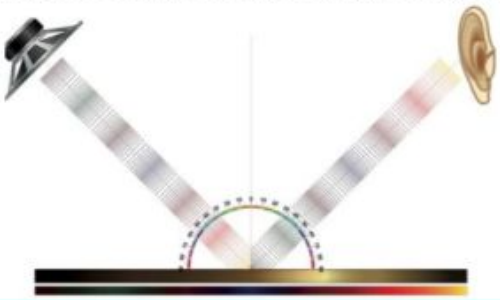
How sounds are made and travel

When objects vibrate, a sound is made. The vibration makes the air around the object vibrate and the air vibrations enter your ear. These are called sound waves. If an object is making a sound, a part of it is vibrating, even if you cannot see the vibrations. Sound waves travel through a medium (such as air, water, glass, stone, and brick).



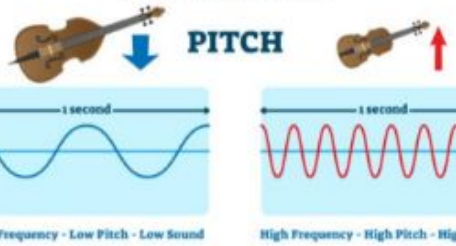
How do we hear?

The sound waves travel to the ear and make the eardrums vibrate. Messages are sent to the brain which recognises the vibrations as sounds.



Pitch

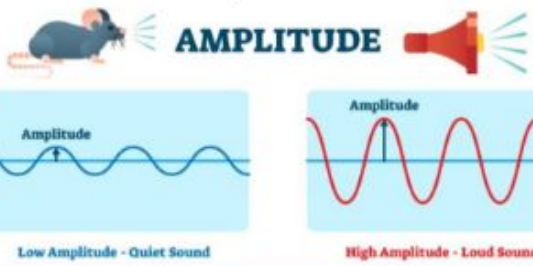
The pitch of a sound is how high or **low** it is. A squeak of mouse has a high pitch A roar of a lion has a low pitch.



A high pitch sound is made because it has a high frequency. The sound source vibrates many times a second.

Volume

The volume of a sound is how **loud** or **quiet** it is. Quieter sounds have a smaller **amplitude** and less energy (**smaller vibrations**) and louder sounds have a bigger amplitude and more energy. The **closer** we are to a sound source the louder it will be. A train arriving at a station sounds loud. The further away from a sound the fainter it will be. A train in the distance sounds quieter.



Lesson Sequence

1. Identify how sound is made

2. Explore how vibrations from sounds travel through a medium to the ear

3. Explore sound insulation

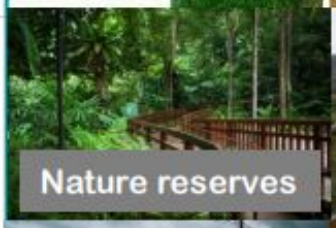
4. Explore volume

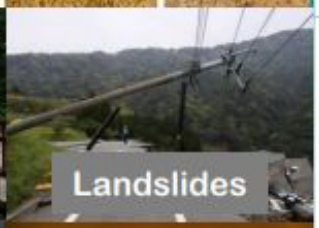
5. Explore pitch

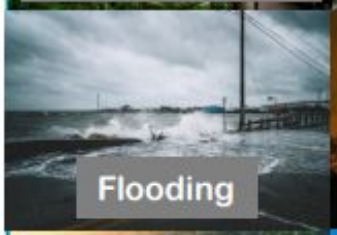
6. Explore sounds

Knowledge Organiser: Living things and their habitat - Conservation

How environments change?







The water people use in their homes comes from nature and must be cleaned up to be returned to nature so it can be used again. This is an important part of our water cycle.

Why environments change

NATURAL CHANGES – different seasons can change habitats. Greenhouse gases cause climate change and climate change has caused our planet to get a lot warmer over a very short period of time. This has caused more extreme weather events like hurricanes, floods and droughts. It has also caused the extinction of many living things.

HUMAN CHANGES – How humans live and what they do can impact habitats both negatively and positively.

Negative ways:
- Deforestation - cutting down trees for a range of reasons
- Littering – dropping rubbish or leaving large objects lying in the environment
- Pollution – introducing harmful substances into the environment.
- Air pollution from cars, e.g., carbon monoxide, and the burning of fossil fuels.
- Water pollution through industrial waste and farm fertilisers that can pollute rivers and streams.
- Rubbish—Plastic and household waste ends up on the streets, in the sea or in rubbish dumps, destroying habitats and wildlife.

Positive ways:
- Protecting endangered species via conservation projects
- Cleaning bodies of water
- Recycling
- Creating nature reserves

Lesson Sequence

1. Describe ecosystems and how they are affected by changes in the seasons

2. Understand human impact on the environment through deforestation

3. Explore air pollution

4. Understand water pollution

5. Explore methods that can be used to conserve water

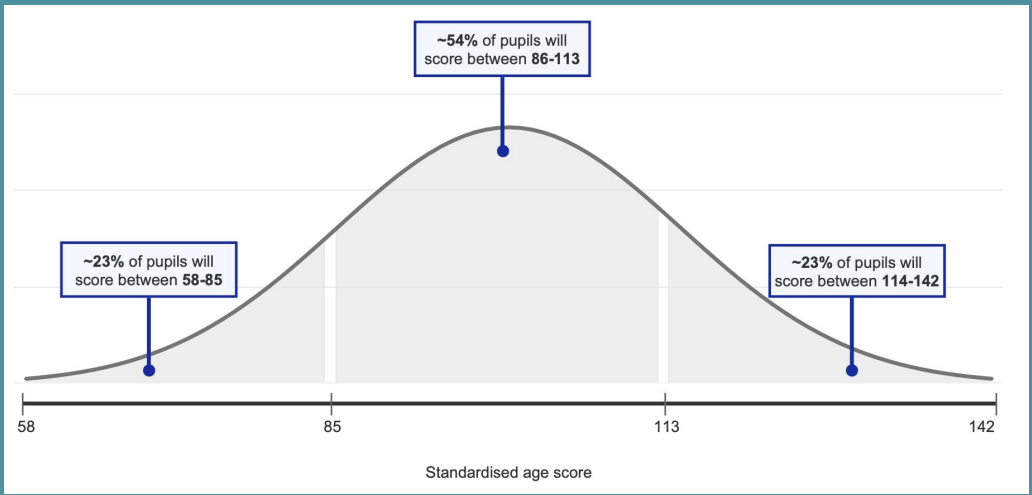
6. Understand that humans can have a positive impact on nature

Assessments Spring Term

Understanding Standardised Scores

Pupil performance in assessments is measured using a standardised age score (SAS). Standardised age scores can range from 58 at the lowest end, to 142 at the highest end. The average standardised age score is 100.Please note that a child's score is an indication of their ability on any one occasion, as performance can be affected by a number of factors and should be considered together with other indicators of ability. The graph below shows a normal distribution of standardised age scores. Standardised age scores allow for a fair comparison of results, as they take into account:

- The number of questions answered correctly
- The difficulty of the questions answered
- The pupil's age at the time of assessment
- The pupil's performance compared to a national sample



Assessments taken by Form 4 children at Orchard House School in the Spring Term

NGRT (New Group Reading Test)

This is a standardised, adaptive, termly assessment to measure reading and comprehension skills against the national average. It is used to identify where intervention may be needed and to monitor progress made. This test will be taken termly in its digital form during the 3rd-4th week of term during English lessons.

NGST (New Group Spelling Test)

The New Group Spelling Test (NGST) is an adaptive, digital assessment which allows termly monitoring of spelling skills, benchmarked against the national average. Questions are delivered via audio and the assessment is adaptive – meaning that questions change based on pupil's responses, so more able pupils can be challenged while weaker pupils are kept engaged. This test will be taken termly in its digital form during the 3rd-4th week of term during English lessons.

New PUMA (Progress in Understanding Mathematics Assessment)

This is a standardised, paper based termly mathematics assessment. It is used to track progress over a year and enables teachers to identify gaps in learning at strand level and therefore inform future teaching. It is taken in the 6th - 7th week of term during Maths lessons.