

Learning in Form 5

Autumn 2024



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Overview of Autumn Term Curriculum Form 5

	Autumn 1	Autumn 2
English	The Song from Somewhere Else by A.F. Harrold	Letter- 'Silent Music- a story from Baghdad' Ride the Wind by Nicola Davies and Salvatore Rubbino
Mathematics	Place Value, Addition & Subtraction, Decimals & Fractions, Measures & Data, Multiplication & Division	
Science	Materials	Change of Materials
Knowledge (History)	Baghdad AD900	The Early British Empire
Knowledge (Geography)	Spatial Sense	Mountains
Art	Style in Art	Islamic Art and Architecture
STEAM	Wild Eco Builders -Coding Places	Solar Challenge



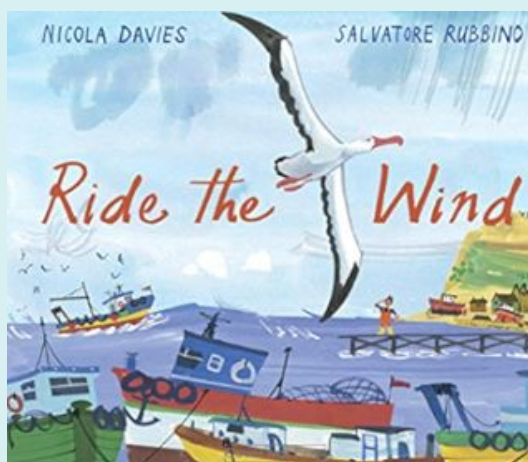
ENGLISH

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.



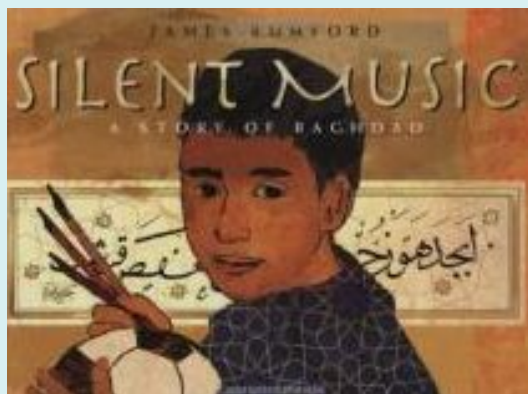
A poignant, darkly comic and deeply moving story about the power of the extraordinary, and finding friendship where you least expect it. Written by the author of the critically acclaimed *The Imaginary* and illustrated by award-winning illustrator Levi Pinfold. Francesca ('Frank') Patel and Nick Underbridge form what at first seems an unlikely friendship when he rescues her from bullies. Nick is ungainly and unpopular and Frank's initial response is to shun him. However, when she visits his home, she is drawn to the strange music she can hear and quickly discovers other worldly elements to Nick's life and background. Levi Pinfold's black and white illustrations form an integral part of this book, enhancing the sense of mystery and uncertainty.

Potential Writing Outcomes : Poetry, diary, letter, character description, narrative, newspaper article



Javier has a secret. On one of his father's fishing-trips, he finds an albatross caught on the hooks; alive, if only barely. Against his father's orders, Javier smuggles the bird to safety and begins nursing it back to health. Every day, the albatross accepts a little more food — but she shows no sign of wanting to use her wings. And if Javier's new friend refuses to fly, how will she ever find her way home? With words by award winning author Nicola Davies and dramatic watercolours by Salvatore Rubbino, this is the story of a boy, a bird and the meaning of home.

Potential Writing Outcomes : Writing in role, note-taking, explanation writing , play script writing, poetry, free writing, letter writing, writing for activism, report writing



WHEN BOMBS BEGIN TO FALL, Ali drowns out the sound of war with a pen. Like other children living in Baghdad, Ali loves soccer, music and dancing, but most of all, he loves the ancient art of calligraphy. Ali turns to his pen, writing sweeping and gliding words to the silent music that drowns out the war all around him.

This book study links with the children's studies in the Knowledge curriculum (Baghdad c.900 CE)

Potential Writing Outcomes : Note-taking, information gathering, character description and non-chronological reports



SPELLING

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



Spelling sounds practised in the Autumn term:

Focus	Example Words
Words with the silent letter b	bomb, thumb, debt, numb, doubt, limb, subtle, subtlest, doubted
Words that contain the letter string -ough	terrible, possible, sensible, reversible, credible, legible, visible, edible
Homophones	cereal, serial, heard, herd, steel, steal, stationary, stationery, father, farther
Words ending in -able	understandable, suitable, enjoyable, adorable, reliable, enviable, miserable, breakable, predictable
Orange words (Common tricky words)	accompany, according, appreciate, attached, accommodate, aggressive
Words with the silent letter t	fasten, listen, hustle, soften, castle, jostle, whistle, bustle, thistle, listene
More orange words (Common tricky words)	rhyme, rhythm, symbol, system, forty curiosity, four
Words ending in -ibly and -ably	Understandably, suitably, comfortably, horribly, terribly, possibly, considerably, responsibly
More homophones	Allowed, aloud, guessed, guest, passed, past



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. Children will be grouped into 3 sets from the second or third week of the Autumn term. These are flexible sets and are subject to change.*

Week commencing	Learning Objectives for Autumn 1
09/09/24	Place Value : Understand place value in 5 digit numbers
16/09/24	Addition & Subtraction : Column method and decimal and money calculation
23/09/24	Decimals & Fractions : Compare 1 & 2 place decimals, divide by 10/ 100 and add/subtract multiples of 0.1 / 0.01
30/09/24	Measures and Data : To understand metric and imperial units and 24 hour clocks, timetables and time intervals
07/10/24	Multiplication and Division : Multiples, factors and word problems and understanding primes, divisibility and using mental strategies
14/10/24	Place Value : Understand place value in 6-digit numbers; compare and round

Week commencing	Learning Objectives for Autumn 2
04/11/24	Multiplication and Division : Grid method and short multiplication
11/11/24	Decimals & Fractions : Subtract decimals with 1 and decimal places, understand mixed numbers and find fractions of amounts
18/11/24	Decimals & Fractions : Equivalent fractions, simplify fractions, add and subtract fractions
25/11/24	Multiplication & Division : Division of big numbers: vertical layout
02/12/24	Measures & Data : Find perimeters of rectangular and composite shapes and calculate regular and irregular areas and volumes
09/12/24	Addition & Subtraction : Revise addition and subtraction, column method and choose a strategy



MATHEMATICS

CALCULATION METHODS

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

Column / compact addition using compact addition

$$19\ 758 + 24\ 642 =$$

1 9 7 5 8
+ 2 4 6 4 2
1 1 1 1
4 4 4 0 0

Steps to Addition Success

1. Remember to leave a blank row above the answer line.
2. Start with the 1s.
3. Add the 10s.
4. Add the 100s.
5. Add the 100s

Column/ compact addition using compact addition

$$£14,79 + £12,49 =$$

£ 1 4 . 7 9
+ £ 1 2 . 4 9
1 1
£ 2 7 . 2 8

Expanded column Subtraction

$$427 - 258 =$$

300	10	17
400	20	7
- 200	50	8
100	60	9
<u>169</u>		

Steps to Subtraction Success

1. Start with the 1s. We need to move a 10 from the 10s.
2. Now look at the 10s. We need to move a 100 from the 100s.
3. Finally subtract the 100s

Compact column Subtraction

$$427 - 258 =$$

3	11	17
4	2	7
- 2	5	8
1	6	9

Finding change by counting on

The price is £18.79.

We can use Maths Frog to help us to find how much change we would get from £20.



Subtract by counting up

$$8000 - 4763$$



So $8000 - 4763 = 3237$

MATHEMATICS

CALCULATION METHODS

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

Grid Multiplication

$365 \times 3 =$

×	300	60	5	
3	900	180	15	1095

Short Multiplication

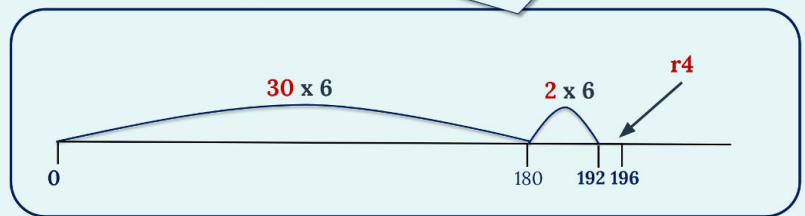
$365 \times 3 =$

$$\begin{array}{r} 365 \\ \times \quad 3 \\ \hline 1095 \end{array}$$

Written method to divide numbers above the times tables

$196 \div 6 = 32r4$

We can draw jumps on the empty number line to help find the answer.



Compare and Order Fractions

Make both denominators the same

$$\frac{3}{3} > \frac{1}{2}$$

Add and Subtract fractions

Make both denominators the same

Add or subtract numerators

Simplify or change to mixed numbers

$$\frac{1}{4} + \frac{5}{5} = \frac{2}{8} + \frac{8}{8} = \frac{9}{8} = 1\frac{1}{8}$$



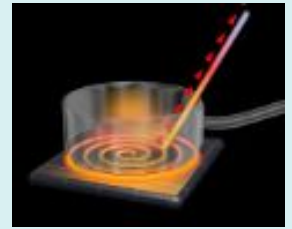
SCIENCE

Properties of Materials

Building on earlier programmes of study on 'Everyday Materials,' this unit expands on learners' knowledge of different materials and their uses. There is a sharper focus on where natural resources come from, such as crude oil. Moving away from fossil fuels, children are asked to consider how useful substances can be extracted from natural resources, and how these can be re-used. Further to this, learners can study modern environmental technologies to consider how energy efficiency can be improved.

During this unit, the children will:

- Compare and group together everyday materials based on their properties, including their hardness, solubility, transparency, conductivity (electrical and thermal), and response to magnets.
- Know that some materials will dissolve in liquid to form a solution and describe how to recover a substance from a solution.
- Use knowledge of solids, liquids and gases to decide how mixtures might be separated, including through filtering, sieving and evaporating.
- Give reasons, based on evidence from comparative and fair tests, for the use of everyday materials, including metals, wood and plastic. (Sustainability and environmental links)



Changes of Materials

This unit builds upon exploring materials, to consider how materials can be changed and adapted. This is presented in various ways, such as chemical and physical changes. Learners will discover more about the molecular structure of materials, in simple terms, and gain an understanding of changes that are reversible and irreversible.

During this unit, the children will:

- Use evaporation to recover the solute from a solution
- Recognise and describe reversible changes
- Observe chemical reactions and describe how we know new materials are made
- Investigate burning reactions
- Investigate chemical reactions - acid and bicarbonate of soda





GEOGRAPHY

Spatial Sense



Topic	Knowledge Goals
Maps: dividing the world into sections	Cartographers use imaginary lines to help them locate places on maps. Lines of latitude are parallel to the equator running from east to west. Lines of longitude run from the poles; from north to south.
Eastern and Western hemispheres	There are four hemispheres; northern, southern, eastern and western. The Prime Meridian divides the Eastern and Western hemispheres. The Prime Meridian runs through Greenwich in London.
Coordinates	Coordinates can be used to help us locate places on a map. A coordinate is a point where lines on a globe cross over. When we write coordinates we write the latitude first, then the longitude.
Scale	Maps are drawn to different scales; some show us small areas, others show us large areas. Map scale is the proportion between the distance on a map and the actual distance on the earth's surface. Map scale helps us to measure distance between places on a map.
Relief Maps	A relief map is a kind of map that shows how high land is. On relief maps, colours can be used to show heights; dark green means at the same height as the sea, through yellow to brown. For smaller areas, contours can be used to show how the land height is changing.

Mountains

Topic	Knowledge Goals
Mountains of the World	A mountain is a large landform that rises above surrounding land. Mountains are often found in groups called mountain ranges. There are many mountains around the world including the Andes, Mount Everest and the Rocky Mountains.
The Alps	The Alps are a mountain range in Europe. Mont Blanc is the highest mountain in the Alps. Otzi was a 5000 year old man found in the Alps.
The High Peaks of the Himalayas	Mount Everest, in the Himalayas is the world's tallest mountain (above sea level). The Himalaya's are 'young' mountains. They are approximately 50 million years old. In 1953, Edmund Hillary and Tenzing Norgay were the first people to climb Mount Everest.
American Mountains	There are three main mountain ranges in North and South America: The Andes in South America, and the Rockies and Appalachians in North America. The Andes are the world's longest mountain range and were home to the Inca civilization. The Appalachians were once as high as the Alps, but are so ancient they have weathered.
African Mountains	Mount Kilimanjaro is not part of a mountain range. The Ethiopian Highlands are full of wildlife and geological features like lava lakes. The Ethiopian highlands lead into the Great Rift Valley, where it is believed that humanity first evolved.



History

Baghdad circa 900CE

Topic	Knowledge Goals
The Rise of Islam	Muslims believe Muhammed was visited by the Angel Gabriel to receive the word of Allah The Islamic Empire spread rapidly, from Spain in the west to Pakistan in the east. The Islamic world made great contributions to western culture, including astronomy, philosophy and mathematics.
Baghdad: The City of Peace	Caliph Al-Mansur began the construction of Baghdad in 762 CE. Baghdad was built in this location because lots of people could travel through that land People came to Baghdad to buy and sell things and also to study
Baghdad: Building a City	The ancient city of Baghdad was a round city. In the centre of the city, there was a Mosque and a palace. Baghdad grew to be a popular and wealthy city.
Baghdad: A Centre for Learning	In 900 CE people came from all over the world to learn in Baghdad. One of the places where people went to learn was called the House of Wisdom. In 900 CE Baghdad had the largest collection of books in the world.
The Mongol Attack on Baghdad	The Mongols attacked Baghdad in 1258. The Mongols destroyed the city and killed its inhabitants. Thousands of books were thrown into the Tigris River and lost forever.

The Early British Empire

Topic	Knowledge Goals
The British Empire	An empire is a group of countries ruled by a single monarch or ruler Great Britain had an empire from the 16th to the 20th century Many monarchs were involved in growing the British Empire
Global Trade	Britain wanted to protect and expand its growing trade interests around the world. Britain set up small and large colonies in the countries where they traded (such as Africa, America, the Caribbean and India) European trading nations increasingly fought over who controlled trade.
The Mughal Empire and the East India Company	The Muslim Mogul Empire ruled most of India and Pakistan in the 16th and 17th centuries. The Mughal Emperor allowed Britain to build trading bases in India which were controlled by the East India Company Clive's victory at the Battle of Plassey was a turning point in British rule in India
The Seven Years Wars	Britain gained land in North America, Africa, the Philippines and India By the end of the War, Britain had replaced France as the most powerful nation in the world This led to a surge in patriotism in England, with people waving the Union Jack and singing Rule Britannia
What Led Britain to Build an Empire?	The British Empire emerged out of a desire to protect and expand its growing trade interests around the world. (Global Trade) India had a huge population, so Britain exploited this to create a powerful army Britain was extremely successful in the Seven Years War, gaining land in North America, Africa, the Philippines and India. Many territories were gained from the French.



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.

Solar Challenge

Set in rural southern Zimbabwe where few villages have access to mains electricity, pupils investigate how to make different circuits which include solar cells. They then look at the requirements for electricity by different people in a community and make decisions on how a fixed amount of solar cells should be allocated based on needs.



Wild Eco Builders - Coding Places

Coding Eco Places explores how we can use digital technology to code sustainable solutions to design the buildings of the future. Inspired to support our natural world, we will challenge children to innovate, design and invent digital interactive prototypes to reimagine public spaces and places. Children explore Biomimicry by inventing, building and coding an eco place with a microbit.





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.

Being Me in My World	Celebrating Difference
Planning the forthcoming year Being a citizen Rights and responsibilities Rewards and consequences How behaviour affects groups Democracy Having a voice Participating	Cultural differences and how they can cause conflict Racism Rumours and name-calling Types of bullying Material wealth and happiness Enjoying and respecting other cultures





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.

Coaching Questions

Below are some questions you can use to help facilitate deeper discussions with your child:

- Can you say why?
- Can you say more?
- How do you mean?
- Can you give me an example?
- Why is that important?
- How could you disagree with yourself?

**If you could
make one new
law, what
would it be?**

**When should
you judge a
book by its
cover?**

**Do we have
control over
our thoughts?
Our actions?**

**What is the
most important
invention ever?**



BEYOND THE ORCHARD



SPORT



PE

Alternative Sports

The children will be introduced to a new sport each week and will gain an understanding of the rules and skills needed for these. They will explore the principles of attack and defence, game play and umpiring. They will develop tactical awareness and will be introduced to new Olympic sports for LA 2028.

GAMES

Netball (girls)

- Ball skills and footwork patterns
- Attacking principles, including centre pass set play and movement in the circle.
- Defending principles in transition and in the circle.
- Positions and rules for 5 and 7 a-side.
- Shooting technique
- Competitive matches and tournaments.
- Gaining confidence, building resilience and developing teamwork skills.

FOOTBALL (boys)

- To practise ball mastery skills, including dribbling, kicking, stopping and shooting.
- To demonstrate attacking and defending in football.
- Practise shooting and goalkeeping.
- Understand more complex rules of football
- Competitive matches and tournaments
- Gaining confidence, building resilience and developing teamwork skills.

Girls will have the chance to play football in Spring 2. Squads are open to all genders.



BEYOND THE ORCHARD

Computing

The children will use app creation software to make an app focused on online safety. The children will then examine how to manipulate digital images, including their implications for safety and reliability.



Music & Performance

Drama

Form 5 will explore the creative principles of drama through teamwork and independent exploration. We will focus on classical works such as Shakespeare and Greek tragedies to develop our understanding of portraying stories which use unfamiliar language, developing higher-quality oracy skills.



Music

The children will learn about traditional Samba instruments and develop the ability to read notation and play short rhythms in groups. They will also compose a short samba piece.

Art



By exploring the works of Stubbs and Much, the children will look at comparing and contrasting styles, movement, brushstrokes, realism and expressionism.

They will also be introduced to Islamic art, including calligraphy, geometric and vegetal patterns and architecture. This links with their studies in History.

French

The children will learn to speak, read and understand a complex sentence (eg. noun, adjective, verb and adverbial phrase) and ask and answer a variety of questions. They will write a more complex sentence using a language scaffold:

- Using a bilingual dictionary
- Opinions
- Sports
- Food
- The food pyramid and healthy eating



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 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.

KEY VOCABULARY

prime meridian line

an imaginary line that **divides the earth into two sections** to show the eastern and western hemispheres (it also used as the basis for world time zones)

lines of longitude

imaginary lines that **run from north to south around the globe**: lines of longitude can be used to identify the location of a place as expressed in degrees east or west from the prime meridian line (longitude lines are not parallel to each other)

lines of latitude

imaginary lines that **run parallel to the equator**: like lines of longitude, they can be used to identify the location of a place

co-ordinates

numbers that represent a **location on a map**

Eastern Hemisphere

a term used to describe **places that are east** of the meridian line

Western Hemisphere

a term used to describe **places that are west** of the meridian line

relief maps

a map that uses shading and colours to **indicate the height of the land**

map scale

a) (1 centimeter represents 250 meters)

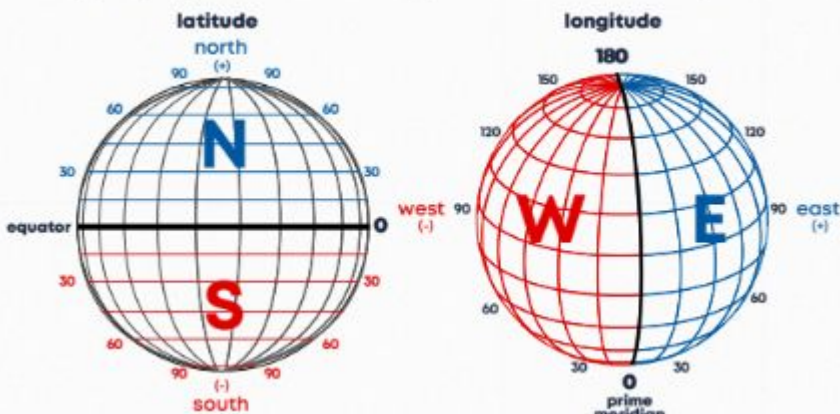
b) **1:25 000**



relief map of Wales



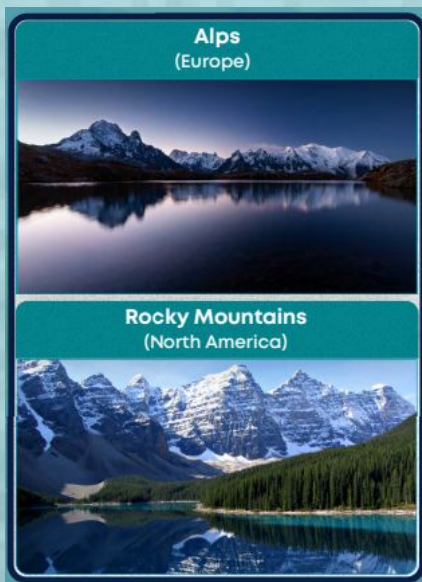
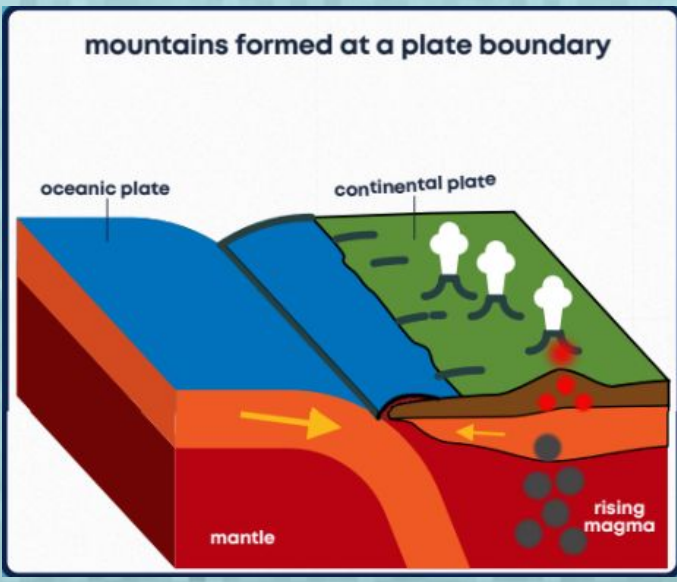
geographic coordinate system: latitude & longitude






Mountains

KEY VOCABULARY	
peak	the highest point of a mountain
range	a group of mountains connected by high ground
erosion	the process of something being worn down or destroyed over time
topography	the study of the surface of the earth : topography can look at the shape of the land, hills, mountains, valleys, rivers etc
plate boundary	scientists believe the earth's crust is split into plates, and where these plates meet (at a plate boundary) there can be mountain ranges formed
Machu Picchu	a famous Inca city built on top of a mountain in the Andes
Mount Kilimanjaro	the tallest mountain in Africa




Edmund Hillary

a well-known mountaineer from New Zealand who was one of the first to climb Mount Everest in 1953



Tenzing Norgay

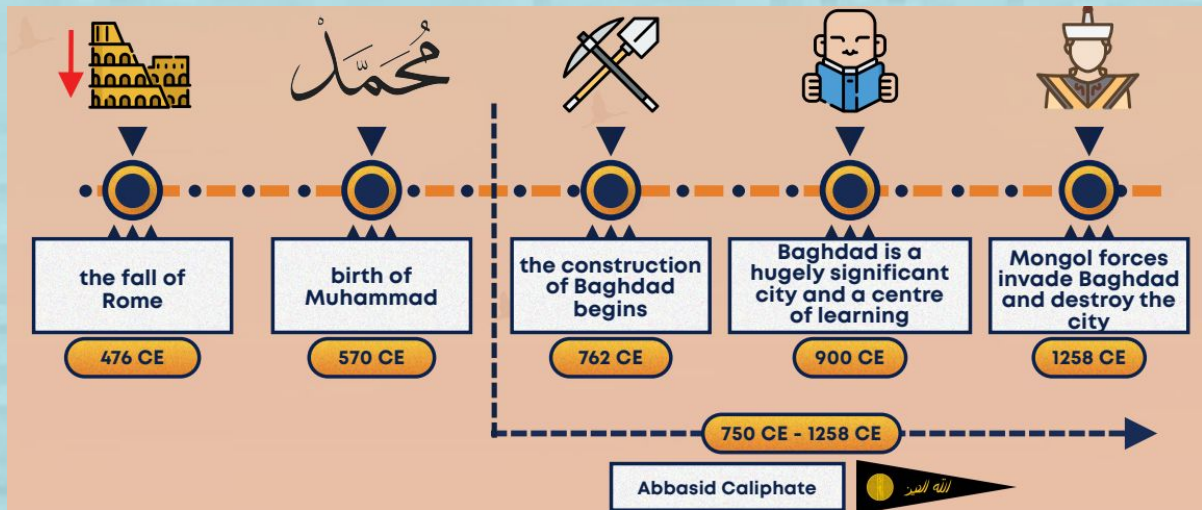
Edmund Hillary's mountaineer guide who also climbed Mount Everest in 1953





Baghdad

900 CE



KEY VOCABULARY

scholarship

the act of **academic study at a high level**

civilisation

a civilisation is a nation or group of people, that **share a common culture, common laws, a common economy** and typically a **common faith or religion**

City of Peace

Baghdad in 900 CE was referred to as the City of Peace

House of Wisdom

the House of Wisdom was a place in Baghdad where **texts were translated and where people came to learn and read** (it is remembered as one of the world's greatest libraries)

Mongols

the Mongols (originally from Mongolia) were a **tribe of nomads** who rode on horseback across central and northern Asia



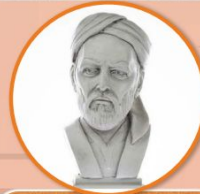
Caliph Al-Mansur

a religious leader who is remembered for founding the city of Baghdad



Muhammad

a Prophet and military leader who established Islam



Al Tabari

an influential scholar, historian and translator/interpreter



Hulagu Khan

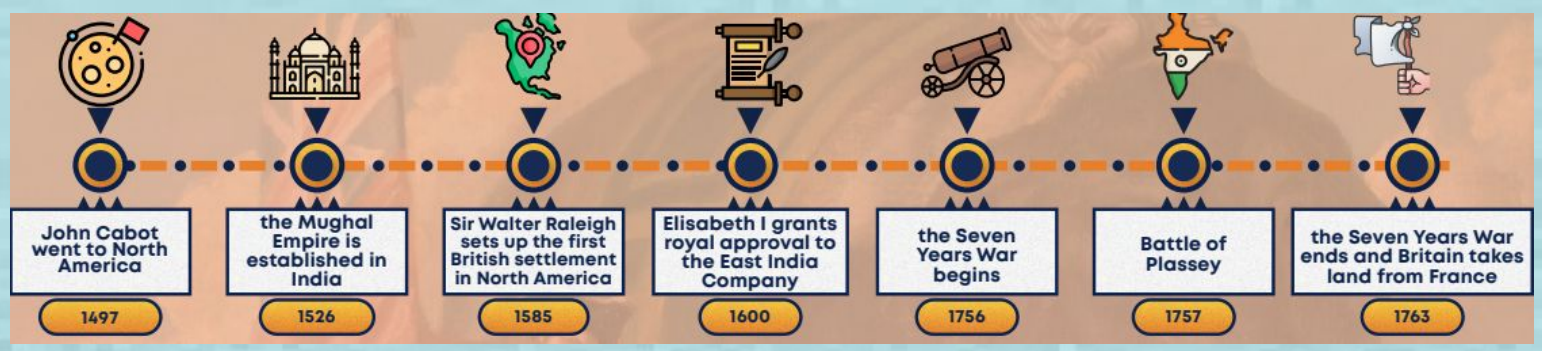
a Mongolian military leader who invaded Baghdad in 1258 and destroyed the city

Baghdad c. 900 CE



BAGHDAD between 150 and 300 A.H.

The Birth of the British Empire



John Cabot
an Italian explorer, funded by England, who 'discovered' lands in North America

Sir Walter Raleigh
founded a colony in Virginia

Emperor Jahangir
Mughal Emperor who allowed the East India Company to trade in India

Major-General Robert Clive
a military commander who helped secure an Indian empire for Britain

KEY VOCABULARY

empire	an empire is a group of countries ruled over by a single monarch or ruler
imperial	belonging or relating to an empire
trade	buying, selling or exchanging goods between people, companies or countries
colony	a country or area controlled by another country that is often far away
enslaved person	a person who is considered to be owned by another person and has to obey them
merchant	a person involved in trading goods

Elisabeth I
Queen of England 1558-1603: she gave royal approval to the East India Company

General Wolfe
he led Britain to victory at the Battle of Quebec

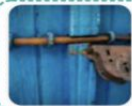
Properties of Materials



1. Explore properties of materials



2. Explore thermal conductors and thermal insulators



3. Explore hardness of materials



4. Discover materials that are soluble in water



5. Investigate the solubility of materials



6. Explore how mixtures can be separated by filtering, sieving, evaporating or magnets

conducts energy	
insulates energy	
transparent	
waterproof	
durable (strong)	
magnetic	

Everyday Materials

Metal saucepans **conduct** heat to warm food.



Wooden spoons and plastic handles **insulate** heat so hands do not get burned.

Soluble Materials

Some solids **dissolve** in water (**SOLUBLE**).

coffee



sugar



salt



jelly



Some solids do not **dissolve** in water (**INSOLUBLE**).

pepper



sand



wax

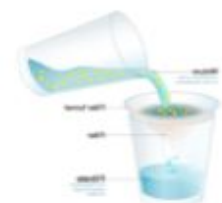


Separating Materials

Sieving



Filtering



Magnetism

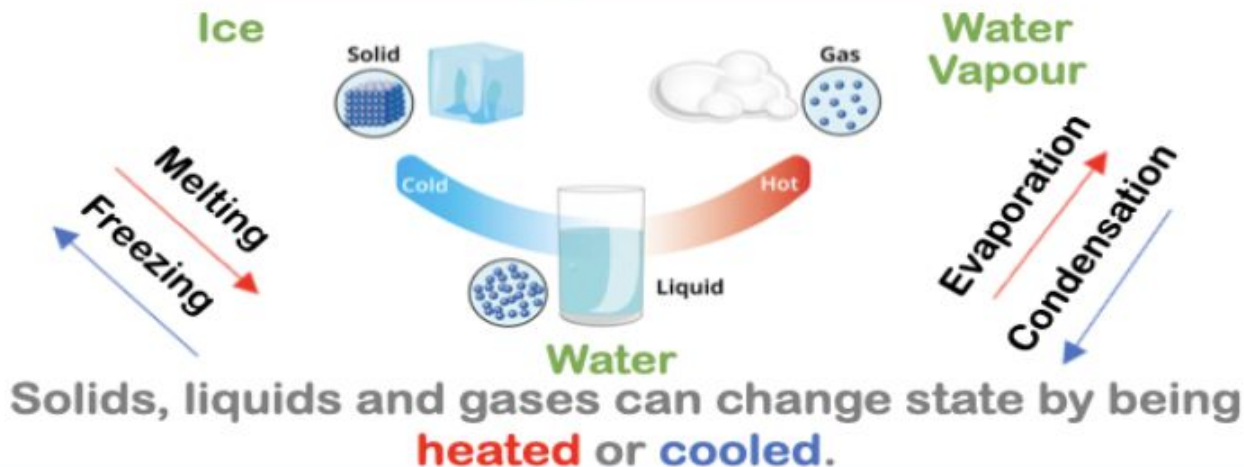


Magnetic metals:

- iron
- nickel
- steel

Changes of Materials

Changes of State



Irreversible Changes



These are **CHEMICAL** changes – they **cannot** be reversed as a new material has been made.

Reversible Changes



liquid chocolate
– cool –
solid chocolate



solid lolly
– heat –
liquid lolly



mixture of rice
and flour
– sieve –
both separated



dissolved sugar
– evaporation (heat) –
solid sugar

These are **PHYSICAL** changes – they **can** be reversed as no permanent change has been made.

Evaporation



If a solid has **dissolved** in water (for example in a salt solution), **heating** it causes the water to **EVAPORATE**, leaving the solid (salt) behind.

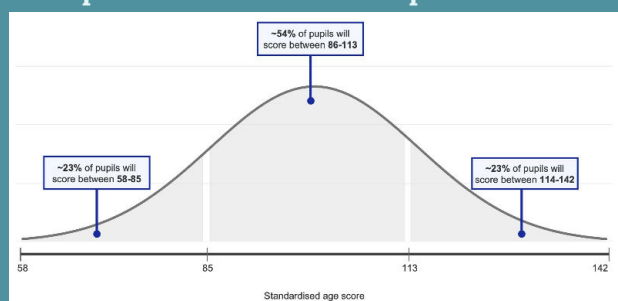
Assessments

Autumn 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 5 children at Orchard House School in the Autumn 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.

CAT4 (Cognitive Ability Test)

The Cognitive Abilities Test (CAT4) is a digital assessment of developed abilities in areas known to make a difference to learning and achievement – namely verbal, non-verbal, quantitative and spatial reasoning – and provides an analysis of potential pupil achievement and an indication of learning styles. The assessment is taken in the 2nd- 3rd week of the term during reasoning lessons.