



Learning in Form 4 Autumn 2024



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Overview of Autumn Term Curriculum

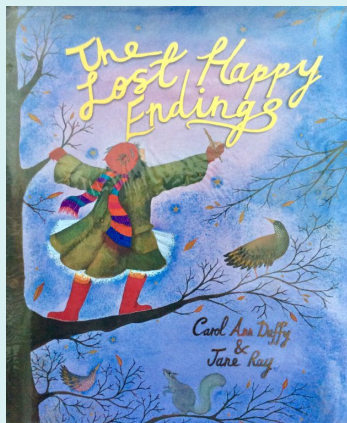
Form 4

	Autumn 1	Autumn 2
English	The Lost Happy Endings by Carol Ann Duffy	Moon Man by Tomi Ungerer Hot Like Fire by Valerie Bloom
Mathematics	Place Value, Addition & Subtraction, Measures & Data, Multiplication & Division	
Science	The Human Body	Classification of Plants and Animals
Knowledge (History)	Ancient Greece	
Knowledge (Geography)	Spatial Sense	Mediterranean Europe
Art	Light	Space
STEAM	The Great Plastics Challenge	The Floating Garden Challenge



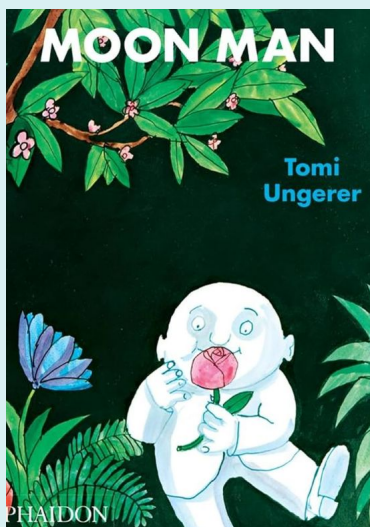
ENGLISH

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.



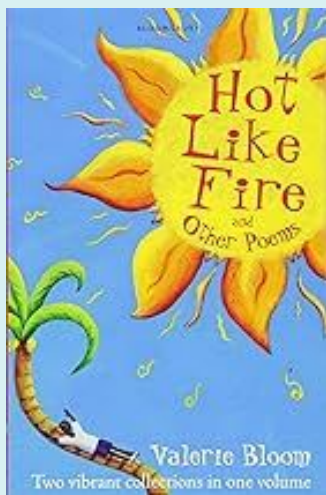
Jub has the important job of ensuring all the Happy Endings of stories are in the right part of the forest when bedtime arrives. She scatters the golden words into the air from a sack. Then one night as Jub traverses the forest, a scary woman snatches the sack from her. How will Jub restore the Happy Endings to their rightful place?

Potential Writing Outcomes : Writing in role, advisory notes, non-chronological reports, narrative and poetry



Moon Man crash lands on Earth and is imprisoned by the authorities who fear his strangeness. His unique qualities (i.e. the ability to wax and wane) enable him to escape and he leads a fugitive existence until he meets Doktor van der Dunkel who builds a rocket so he can return home to his 'shimmering seat in space'. Moon Man, as portrayed in Tomi Ungerer's illustrations, is a very sympathetic character and this picture book could lead to fruitful discussions about prejudice and people's fear of the unknown.

Potential Writing Outcomes : Poetry, diary entry, news reports, explanation writing, myth writing, persuasive writing and letter writing



Through taking a wry look at everyday experiences both here and in Jamaica, Valerie Bloom invites us to observe life from new perspectives. She writes with immediacy and humour, addressing topics such as the environment, school life and friendship – even football.

The anthology encourages children to engage in enjoying poems from a cultural perspective and enjoy the sounds of language through a range of dialects. The themes and style of the poems offer inspiration to young budding poets and serve as a model for the development of their own poetry writing.

Potential Outcomes : Use poetry as a stimulus for writing, performance , explore how language and structural devices are used in poetry to create powerful responses and explore ways in which we can use our voices, facial expressions and body language to perform poetry.



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
Adding the prefix mis- and revising un- , in- , dis-	misbehave, inactive, disagree, unfair, inhuman, mismatch, misspell, undo, mislead
Words ending in zhuh pelt -sure	treasure, measure, capture, picture, leisure, closure, enclosure, pleasure
Short u sound spelt ou	trouble, enough, toughest, country, touch, double, younger
Adding the prefix auto-	autopilot, automobile, automatic, autograph, autobiography,
Adding the suffix -ly	happily, angrily, merrily, cheekily, sleepily, breezily, heroically, magically, comically
Adding the prefix inter-	international, interact, internet, intermediate, interlock
Homophones	groan, grown, peace, piece, berry, bury, reign, rain, rein, main, mane
Words with ay sound spelt eigh , ei , ey	eight, neighbour, sleigh, weigh vein, veil, reign, Obey, they, grey, prey



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 : Place value in 3 and 4-digit numbers
16/09/24	Addition & Subtraction : Partitioning and column addition; mental subtraction including counting up
23/09/24	Addition & Subtraction: Mental addition and subtraction; Subtraction 'frog' with 3-digit numbers
30/09/24	Measures and Data: Time to the nearest minute: am/pm; calculate time intervals: 24 hour clocks
07/10/24	Multiplication and Division : Double and halve 2- and 3- digit numbers; multiplication and division facts
14/10/24	Place Value: Place value additions: 4 digit numbers; Deepen understanding of place value

Week commencing	Learning Objectives for Autumn 2
04/11/24	Multiplication and Division : Grid multiplication using tables facts; Division using efficient chunking
11/11/24	Multiplication and Division: Larger division with remainders Measures & Data : Units of time, record data and interpret
18/11/24	Addition and Subtraction: Mentally add/subtract near multiples; +/- 1-digit numbers to/from big numbers
25/11/24	Addition and Subtraction: Written subtraction
02/12/24	Measures & Data: Rehearse 24 hour clock; time intervals ; Units of time; draw line graphs
09/12/24	Place Value: Add/subtract powers of 10, nos > 1000



MATHEMATICS

CALCULATION METHODS

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

Partitioning to Add

$$24 + 48 =$$

$$\begin{array}{|c|c|} \hline 2 & 4 \\ \hline \end{array} + \begin{array}{|c|c|} \hline 4 & 8 \\ \hline \end{array}$$

$$\begin{array}{|c|c|} \hline 2 & 0 \\ \hline \end{array} \begin{array}{|c|} \hline 4 \\ \hline \end{array} + \begin{array}{|c|c|} \hline 4 & 0 \\ \hline \end{array} \begin{array}{|c|} \hline 8 \\ \hline \end{array}$$

$$\begin{array}{|c|c|} \hline 2 & 0 \\ \hline \end{array} + \begin{array}{|c|c|} \hline 4 & 0 \\ \hline \end{array} = \begin{array}{|c|c|} \hline 6 & 0 \\ \hline \end{array}$$

$$\begin{array}{|c|} \hline 4 \\ \hline \end{array} + \begin{array}{|c|} \hline 8 \\ \hline \end{array} = \begin{array}{|c|c|} \hline 1 & 2 \\ \hline \end{array}$$

$$\begin{array}{|c|c|} \hline 6 & 0 \\ \hline \end{array} + \begin{array}{|c|c|} \hline 1 & 2 \\ \hline \end{array} = \begin{array}{|c|c|} \hline 7 & 2 \\ \hline \end{array}$$

Steps to Success

1. Partition the numbers into 10s and 1s
2. Add the 10s
3. Add the 1s
4. Then add together to find the total

Compact Addition

$$246 + 372 =$$

$$\begin{array}{r} 266 \\ + 372 \\ \hline 8 \\ \hline \end{array}$$

$$\begin{array}{r} 266 \\ + 372 \\ \hline 1 \\ 38 \\ \hline \end{array}$$

$$\begin{array}{r} 266 \\ + 372 \\ \hline 1 \\ 638 \\ \hline \end{array}$$

Steps to Success

1. First add the ones
2. Next add the 10s ($60 + 70 = 130$ so we need to carry 1 hundred into the 100s)
3. Finally add the 100s

Add and Subtract Mentally Using Place Value and Number Facts

$$765 - 340 =$$

We can also use **place value** and **number facts** for subtraction when the digits in the first number are **each** bigger than the **corresponding** digits in the second number.

100s	10s	1s
7	6	5
3	4	0

$$700 - 300 = ?$$

$$60 - 40 = ?$$

$$5 - 0 = ?$$



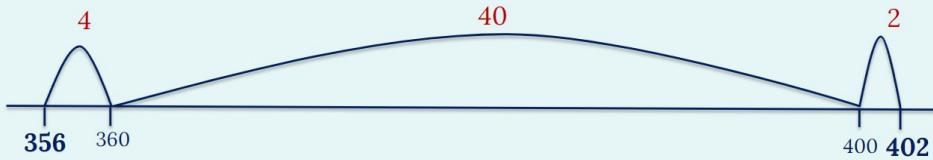
MATHEMATICS

CALCULATION METHODS

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

Use Counting Up to Subtract (frog)

$$402 - 356 =$$



Steps to Success

1. Start at the smaller number
2. Use number facts/ place value to jump to the next 10
3. Then to the next 100, add the jumps.

Double and Halve

Double

$$\begin{array}{c} 75 \\ / \quad \backslash \\ 140 \quad 10 \\ 140 + 10 = 150 \end{array}$$

Half of

$$\begin{array}{c} 26 \\ / \quad \backslash \\ 10 \quad 3 \\ 10 + 3 = 13 \end{array}$$

Half of

$$\begin{array}{c} 59 \\ / \quad \backslash \\ 25 \quad 4\frac{1}{2} \\ 25 + 4\frac{1}{2} = 29\frac{1}{2} \end{array}$$

Grid Multiplication

$$24 \times 3 =$$

×	20	4
3	60	12

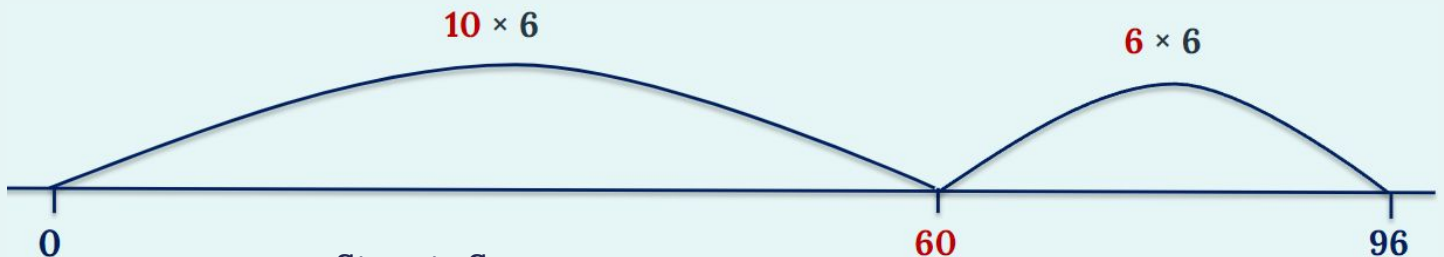
$$60 + 12 = 72$$

Steps to Success

1. First we partition 24 and put the 10s and 1s in the top line of the grid.
2. Then 3 at the left side.
3. What is 20×3 ?
4. What is 4×3 ?
5. Finally add $60 + 12$

Division Using Chunking

$$96 \div 6 =$$



Steps to Success

1. We know $10 \times 6 = 60$ so let's do a big jump!
2. How many more to 96?
3. How many 6s in 36?
4. Add together your jumps - **16**

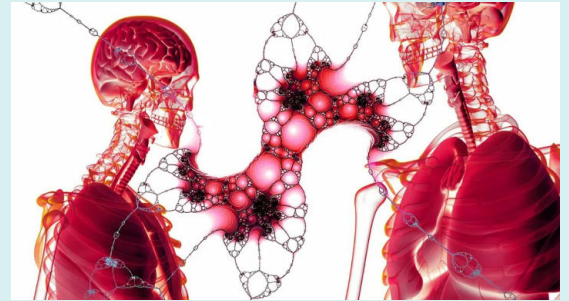
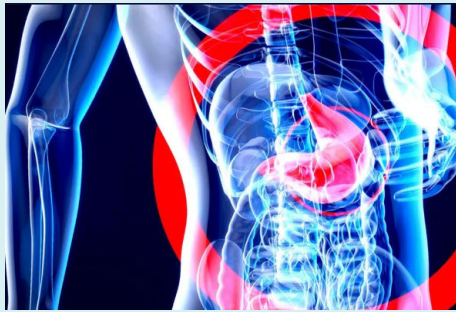


SCIENCE

The Human Body

During this unit, the children will:

- Learn about the digestive system
- Explore the digestive system in humans
- Know about their teeth
- Understand how to care for their teeth
- Investigate food chains
- Explore food webs



Classification of Plants and Animals

During this unit, the children will:

- Explore different habitats
- Research a habitat
- Explore how animals can be classified
- Create a classification key
- Adaptations and classification within species
- Explore and classify pond plants





GEOGRAPHY

Spatial Sense

Topic	Knowledge Goals
Globes and the Tropics	To use the equator and tell us how far north or south a location is. Longitude lines parallel to the Prime Meridian line and tell us how far east or west a location is. The Tropics of Cancer and Capricorn are areas where the sun can be directly overhead
Scale	Scale tells us the distance between places on a map. Some maps show an area in large-scale with lots of detail. Some maps show an area in small-scale with very little detail.
Grid References	Grid references have information that help us to find locations. The horizontal lines are called 'northings'. The vertical lines are called 'eastings'.
Our Local Area	To know that the River Thames runs through Chiswick. To know that Hammersmith Bridge(Also include Chiswick and Richmond bridges) cross the Thames. I know that Chiswick has Turnham Green and Chiswick Park underground station.
Our Local Area : Changes over Time	There are many more roads in Chiswick today than there were in the past. There are many more buildings in Chiswick today than there were in the past. Many more people live in Chiswick today than they did in the past.

Mediterranean Europe

Topic	Knowledge Goals
Key Places in Europe	Mediterranean Europe is the southern part of Europe and is almost completely surrounded by land. 'Mediterranean' comes from the Latin words meaning the middle of the land. Millions of years ago the sea had dried up and it then flooded back.
Climate of Mediterranean Europe	We can find out information about climate from graphs that show temperature and rainfall. The latitude of Mediterranean Europe is one reason why the climate is warm and dry The Gulf Stream keeps the temperature of Mediterranean Europe warm in the summer and mild in the winter.
Food and Farming	Plants have to be tough to survive the hot, dry summers in Mediterranean Europe. Olive trees grow very well in hot, dry places. The Mediterranean climate is good for growing oranges, lemons, limes, grapes and olives.
Landscape	A mountain range is a series of mountains or hills. There are many mountain ranges in Mediterranean Europe including the Alps, the Apennines and the Pyrenees mountains. There are active volcanoes in Italy.
Settlements	Mediterranean Europe has several large settlements including Lisbon, Madrid, Rome, Venice and Athens. Athens is the capital city of Greece. Venice is a city in Italy located in a lagoon.



History

Ancient Greece

Topic	Knowledge Goals
Ancient Greece: City States	Ancient Greece was made up of a series of independent city-states such as Athens and Sparta. City-states ruled individually; some had kings; some had groups of people in charge. The city-states fought each other for resources
Athens and Democracy	Athens was a city-state in Ancient Greece. Only citizens were allowed to vote in Athens. Male slaves and all women were not citizens. The citizens of Athens could vote to remove leaders, so didn't need to suffer under tyrants.
Sparta	The Spartans were famous for being the greatest warriors in Ancient Greece Spartan boys were trained to be soldiers. The training was very tough. The word 'Spartan' today is used to describe something
The Persian Wars	Sparta and Athens were enemies, but they joined together to fight the Persians. They became allies. King Darius thought it would be easy to conquer Greece, but he was wrong. The Battle of Marathon is remembered today when people run 26 miles
Alexander the Great	At 19, Alexander conquered the whole of Greece in just two years. Alexander burned the Thebes to the ground and turned the people into slaves. Alexander was challenged to untangle a rope known as the 'Gordian Knot'. He cut straight through it with his sword.
Greek Philosophy	The Ancient Greeks invented philosophy, meaning 'love of wisdom'. Three important philosophers of Ancient Greece were Socrates, Plato, and Aristotle. They asked important questions such as what it means to be a good person
Greek Gods	Religion in Ancient Greece was polytheistic which means they worshipped many Gods. Zeus was the King of the Greek Gods and controlled the sky and the weather. The influence of the Greek religion saw many similar Gods later in the Roman religion.
Mythology	Ancient Greek Myths are stories that feature gods, creatures and monsters. The Ancient Greeks retold myths as a way of explaining the world around them. A centaur is a creature from Greek mythology
Art and Architecture	The Parthenon is a temple from Ancient Greece built on the Acropolis in Athens. A long time ago, people from England removed some sculptures, known as the Elgin Marbles, from the Parthenon and they are now in a museum in London.
The Ancient Olympic Games	The Olympic Games were a festival to honour the Greek God Zeus. City-states would send men to compete in activities such as running, jumping wrestling and boxing. The Ancient Olympic Games left a legacy as the Olympics happen now in modern times.
The Legacy of Ancient Greece	They began to use a democratic system where citizens voted for their leaders; many countries around the world do this today. Our modern Olympic Games are based on the Ancient Greek Olympic Games. The Ancient Greeks began asking questions about life, thinking scientifically and solving mathematical problems



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.

The Great Plastics Challenge

This challenge provides pupils with the opportunities to apply their STEM skills to address a number of problems caused by waste plastic globally. Children will investigate the life cycle of plastics, mystery plastics and bioplastics. They will then be challenged to make a high quality product that reuses plastic and can be sold to a consumer of their choice.



The Floating Garden Challenge

This challenge, from Practical Action, requires students to design and build a model structure that will enable farmers to grow crops even in an area that may become flooded. A floating garden, built on a base of aquatic weeds, is a low cost and sustainable way of allowing people to grow vegetables.



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
Being part of a class team Being a school citizen Rights, responsibilities and democracy Rewards and consequences Group decision-making Having a voice What motivates behaviour	Challenging assumptions Judging by appearance Accepting self and others Understanding influences Understanding bullying Problem-solving Identifying how special and unique everyone is First impressions





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?

**When you dream,
are you the
audience, the actor
or the director?**

**Is the past
more real than
the future?**

**Can anything
be art?**

**Can you think
yourself happy?**



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.

SWIMMING

The children will build their confidence in the water and improve their understanding and technique of all four strokes.

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 create an app focused on online safety. They will then examine how to manipulate digital images, including their implications for safety and reliability.



Music & Performance Drama

Due to swimming lessons, Form 4 will not have Drama lessons this term.

Music

This term focuses on body percussion and composition. They will devise and compose short motifs in small groups and perform an ensemble piece with multiple parts.



Art

The children will explore light and space this term. Using the works of Monet and Cezanne they will begin to understand reflections of light, tone and shadow. They will also use the works of Hockney to gain a better understanding of perspective, form and shape.



French

The children will learn to read, write and understand a simple sentence and ask and answer familiar questions with a language scaffold around the topics below:

- Parts of the body
- Adjective position and agreement
- Authentic story "Va-t'en grand monstre vert"
- European Day of Languages
- Months
- Numbers to 31
- Birthdays dates



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.



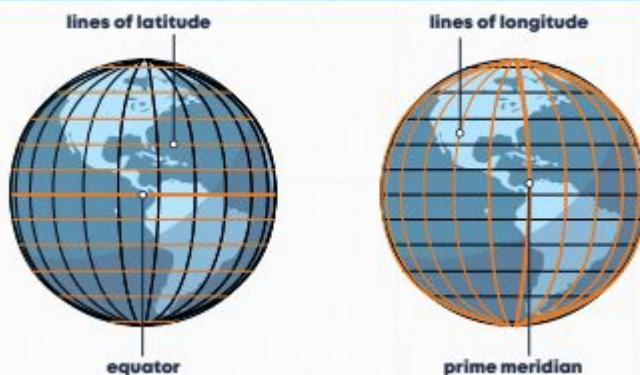
KEY VOCABULARY	
lines of latitude	imaginary lines that help us identify how far north or south of the equator a location is
lines of longitude	imaginary lines that help us identify how far east or west of the prime meridian a location is
equator	an imaginary line that shows us the locations that are half way between the north and south pole : the Equator divides the earth into the Northern Hemisphere and the Southern Hemisphere
prime meridian	the line of longitude that measures 0° and runs through Greenwich in London
tropic of Cancer	the most northern line of latitude where the sun can be directly overhead (named after the constellation of Cancer)
tropic of Capricorn	the most southern line of latitude where the sun can be directly overhead (named after the constellation of Capricorn)
scale	the relationship between the size of a map and the size of the real area that is represented on the map

map scale

- a) (1 centimeter represents 250 meters)
- b) **1:25 000**



lines of longitude and latitude



tropics of Cancer and Capricorn



Knowledge Organiser



Mediterranean Europe

KEY VOCABULARY

Mediterranean Europe

an area of Europe **near the Mediterranean Sea** (from the Latin meaning 'middle of the land')

equator

an **imaginary line around the middle of the Earth**: the sun's rays hit the equator directly, making the places located near to it very warm

latitude

latitude is a measurement that gives the location of **a place on Earth north or south of the equator**: maps sometimes show imaginary lines of latitude to help us locate places

ecosystem

a **community of plants and animals** found in a particular area

the Gulf Stream

a **current of warm water** that flows from the Gulf of Mexico in Central America, all the way across the Atlantic Ocean to Europe

the Colosseum

an ancient, giant, oval shaped **amphitheatre located in the centre of Rome**: it was built during ancient Roman times and gladiators fought there

peninsula

a region of **land that sticks out in a body of water**, with water on three sides

inhabit

to **live or dwell in a place**, as people or animals

country	Italy	Spain	Portugal	Greece	Turkey	France	Malta
capital	Rome	Madrid	Lisbon	Athens	Ankara	Paris	Valetta
language	Italian	Spanish	Portuguese	Greek	Turkish	French	Maltese



Ancient Greeks



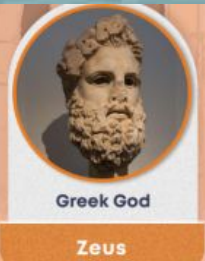
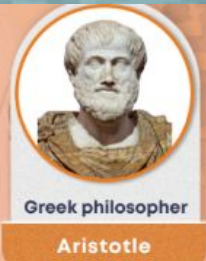
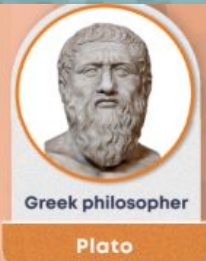
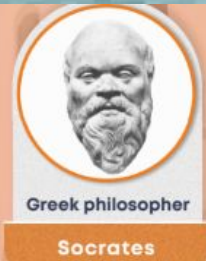
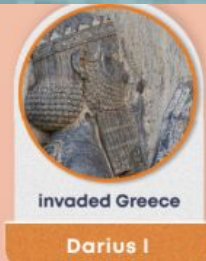
										
first ancient Olympics	Athens establishes democracy	Darius I of Persia invades Greece	the Greeks defeated the Persian army at Marathon	around 300 Spartans killed at the Battle of Thermopylae	peace between Greece and Persia	construction of the Parthenon begins	Alexander becomes King of Macedonia	Alexander invades Egypt and establishes the city of Alexandria	death of Alexander the Great	Romans invade Greece
c. 776 BCE	c. 507 BCE	c. 492 BCE	c. 490 BCE	c. 480 BCE	c. 449 BCE	c. 447 BCE	c. 336 BCE	c. 331 BCE	c. 323 BCE	c. 146 BCE

KEY VOCABULARY	
ancient Greece	an ancient civilisation based around the Greek peninsula and the surrounding islands
Athenian	people who lived in the city-state of Athens
Spartan	people who lived in the city-state of Sparta : they were known for being great warriors
democracy	a system of government where the people can vote to decide things (Athens was the first city-state to develop this system)
Persia	an empire to the east of Greece , ruled by kings , that tried to invade Greece (Ancient Persia is modern Iran)
olympics	a religious festival held in honour of Zeus , attended by people from all over Greece
legacy	something that is part of our history that remains from an earlier time



Ancient Greece and nearby regions

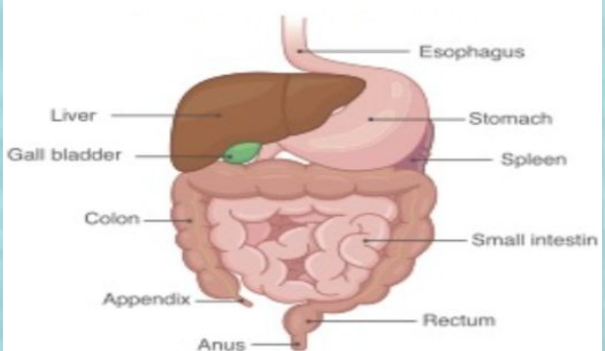
The map shows the Greek peninsula and surrounding islands. Key locations labeled include Macedonia to the north, Ionia to the east, and Crete to the south. Major cities and sites marked are Mount Olythpus, Thebes, Olympia, Corinth, Athens, and Sparta. The Aegean Sea is to the east and the Mediterranean Sea is to the south.



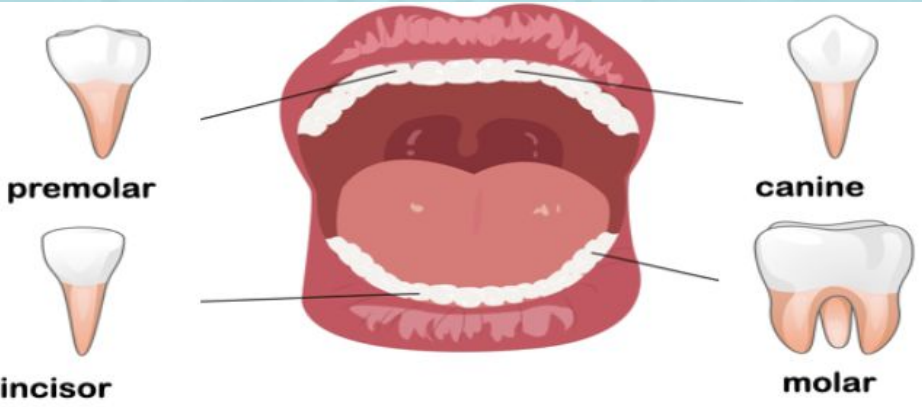
The Human Body

The Digestive System

- The digestive system begins with the mouth and teeth where food is ingested and chewed.
- Saliva is mixed with the food which helps to break it up.
- When the food is small enough to be swallowed, it is pushed down the oesophagus by muscles to the stomach.
- In the stomach, food is mixed further.
- The mixed food is then sent to the small intestine which absorbs nutrients from the food.
- Any leftover broken down food then moves on to the large intestine.
- The food minus the nutrients arrives in the rectum where muscles turn it into faeces (poo). It is stored here until it is pushed out by the anus. This is called excretion.



Types of Teeth and their function

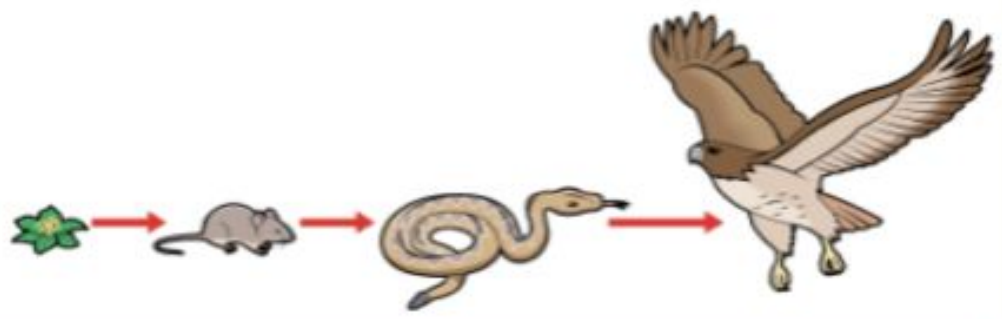
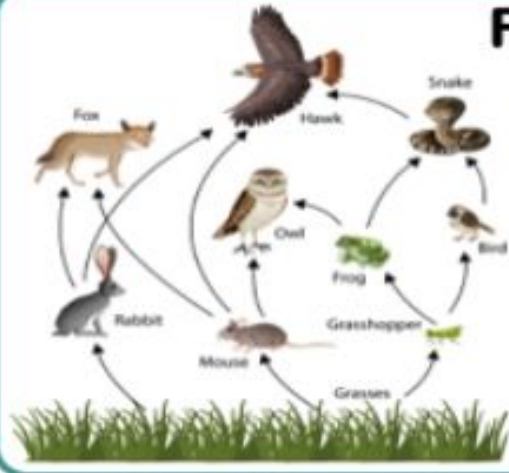


Different teeth have different functions
Teeth of animals are designed for the foods they eat

- Herbivores (e.g., horses) have little use for canines and mainly use incisors and molars
- Carnivores (e.g., Lion) mainly use canines and incisors, they don't have molars (have premolars – small molars)
- Omnivores (e.g., humans) use all three

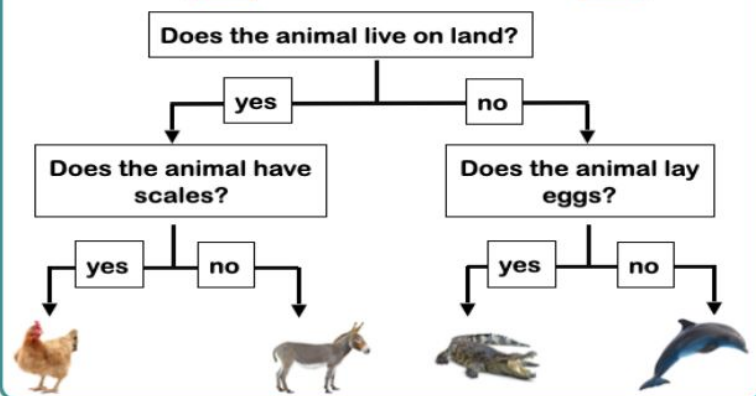
Tooth enamel is the hardest substance in the human body
Humans have two sets of teeth; milk teeth and adult teeth

Food Webs versus Food Chain

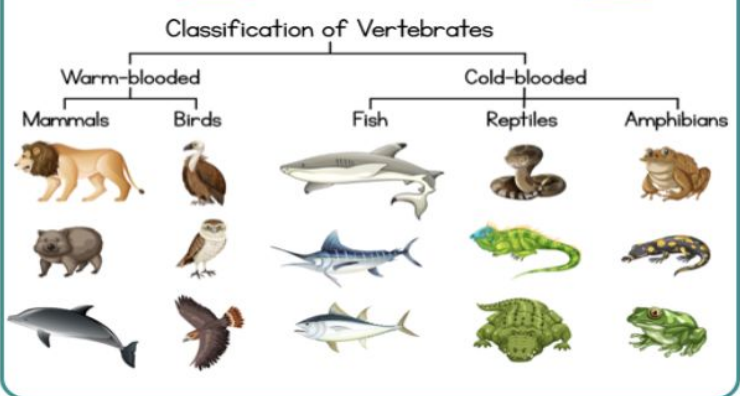


Living Things and their Habitats

Classification Keys

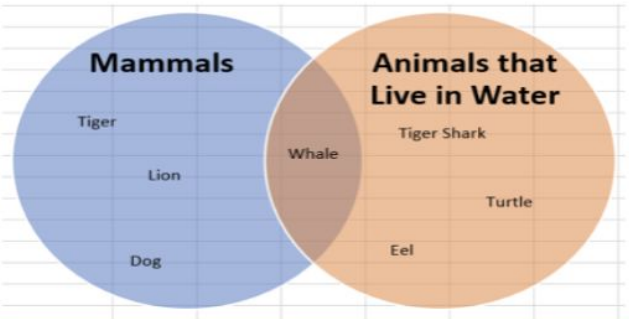


Classification

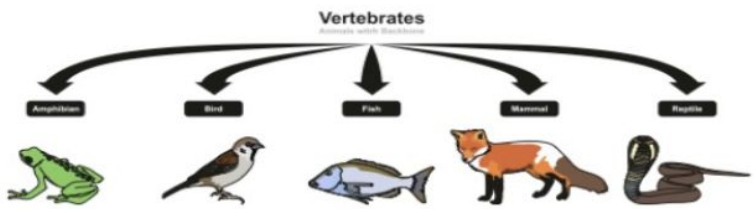


Venn Diagrams

Animals can be sorted, or classified, in a number of different ways. A 'branched' diagram or a Venn diagram, like those shown below, are just two examples.



What is a Classification Key?



A classification key is a series of questions that determine an organism's physical characteristics. When you answer one question, it either branches off to another question or identifies the organism. Ultimately, they help to identify an unknown organism, or work out how to categorise groups of similar organisms.

- 
1. Explore different habitats
- 
2. Research a habitat
- 
3. Explore how animals can be classified
- 
4. Create a classification key
- 
5. Adaptations and classification within species
- 
6. Explore and classify pond plants

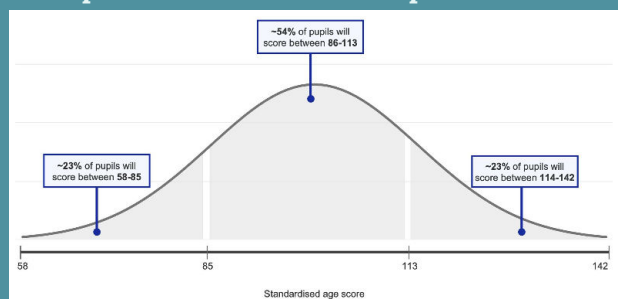
Assessments

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 4 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 3rd - 4th week of the term during reasoning lessons.