



Year 6

In Year 6 at Upland, we endeavour to develop and nurture the necessary knowledge and life skills required, to enable our learners to become independent, resilient individuals able to access our challenging curriculum. This is good preparation for them for the next stage of their education as they transition to their respective secondary schools.

Year 6 are fortunate enough to take part in a wide range of exciting opportunities within the classroom environment, as well as extra-curricular activities, which promote and encourage personal growth, well-being and pride in their own achievements.

A highlight at the beginning of the academic year, is the privilege Year 6 children have in preparing and performing a Remembrance Day assembly. This provides them with an opportunity to show respect when dealing with emotive issues. Later in the year, the children's confidence and creativity are called upon again when they deliver a West End style performance for their end of year show.

Building on from their Outward Bound experience from Year 5, the children are invited to consolidate and extend themselves through a range of outdoor adventures with a focus on achieving the John Muir Award. Throughout these activities, the children are able to embed their sense of teamwork, personal safety and resilience. They are continuously encouraged to step outside of their 'comfort zone' and push themselves that little bit further.

High expectations that have been instilled in our pupils throughout their Upland journey, are more important than ever, as they face the challenges of preparing for the end of Key Stage National tests.

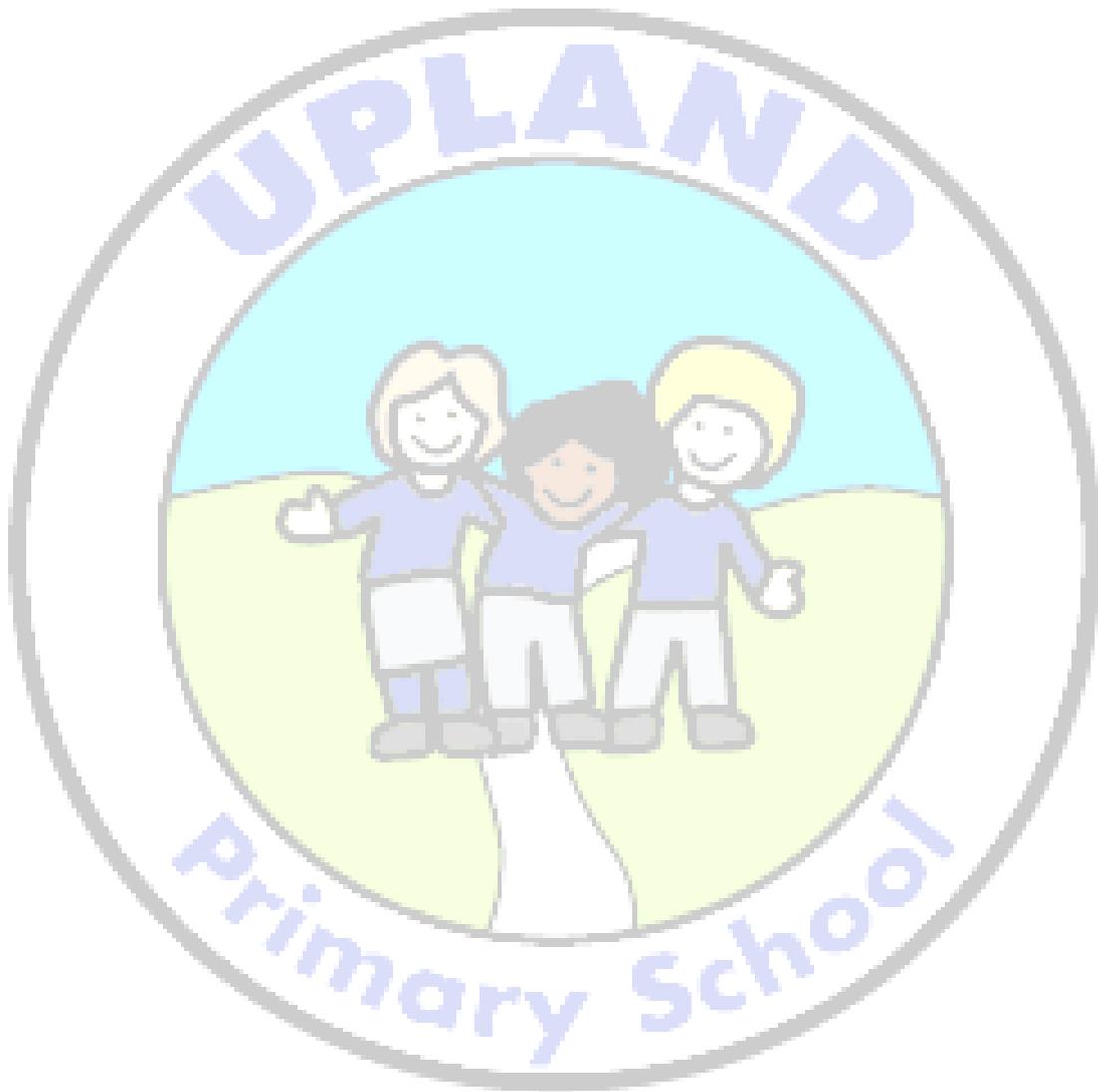
The transference of skills learned, becomes invaluable; they are provided with many opportunities throughout the year in which to showcase them through cross-curricular projects. Learning is linked and this allows for children to transfer knowledge and skills from one subject to another, e.g. during our science topic of Electricity, the children used their understanding of circuits and switches to design and build working lighthouses. Writing opportunities are often generated through carefully selected texts, which reinforce knowledge learned in other areas.

This is further supported through school trips which enhance the learning that takes place at school. One such visit involved an immersive experience in a World War Two bunker at the Chatham Dockyards as well as boarding a military war submarine. Due to the school's ethos of supporting local and global charitable issues, some fortunate year 6 children benefit from the opportunity to attend WE Day at Wembley Arena, which

highlights mature global issues, such as poverty, equality and gender.

To support their growing independence, professional organisations are invited into the school to address the children, e.g. the local police and Transport for London. The purpose of this is to promote self-awareness and personal safety when out and about in the local area. Bikeability is an additional service which aims to highlight road safety.

Our intention is that our learners leave our school as well-rounded individuals who are able to face the challenges in life with determination and perseverance. We aim for them to leave us with fantastic memories of their time here.



Year 6

Autumn Knowledge organiser *Battle of the Skies*



History Focus	Battle of Britain
National Curriculum objective	A study of an aspect or theme in British history that extends pupils' chronological knowledge beyond 1066. a significant turning point in British history, for example, the first railways or the Battle of Britain
Historical Background	
<p>Adolf Hitler had expected the British to seek a peace settlement after Germany's defeat of France in June 1940, but Britain was determined to fight on. Hitler explored military options that would bring the war to a quick end and ordered his armed forces to prepare for an invasion of Britain – codenamed Operation 'Sealion'. But for the invasion to have any chance of success, the Germans needed to first secure control of the skies over southern England and remove the threat posed by the Royal Air Force (RAF). A sustained air assault on Britain would achieve the decisive victory needed to make 'Sealion' a possibility. The Battle of Britain was a major air campaign fought over southern England in the summer and autumn of 1940.</p>	
Key Knowledge: When? Timeline of events	
1930s	A growing threat from Nazi Germany led to the expansion of the RAF and the creation of Fighter Command
11 August 1939	The Dowding System was operational
1 September 1939	Hitler invaded Poland Britain and France declare war on Germany 2 days later
10 May 1940	Winston Churchill became Prime Minister of Britain, replacing Neville Chamberlain
27 May 1940	Evacuation from Dunkirk began
10 July 1940	The Battle of Britain began
13 August 1940	Germany began attacking British airfields and radar 'Eagle Day' - The Luftwaffe carried out 1486 missions
20 August 1940	Winston Churchill made famous speech
31st August 1940	Fighter Command suffered worst day 39 British aircraft shot down. Luftwaffe over-estimated damage caused
7th September 1940	Luftwaffe changed attack to London— giving Fighter Command time to recover
15th September 1940	Fighter Command repelled a massive assault Now known as "Battle of Britain Day"
31 October 1940	Battle of Britain ended
6 June 1944	D-Day
7 May 1945	Germany surrendered—VE Day
14 August 1945	Atomic bombs dropped on Hiroshima and Nagasaki. Japan surrendered—VJ Day
Key Skills	
<ul style="list-style-type: none"> ● Place current study on timeline in relation to other studies. ● Use relevant dates and terms and sequence up to ten events on a timeline ● Find about beliefs, behaviour and characteristics of people, recognising that not everyone shares the same views and feelings. 	

- Compare beliefs and behaviour with another period studied.
- Write another explanation of a past event in terms of cause and effect using evidence to support and illustrate their explanation.
- Know key dates, characters and events of time studied
- Link sources and work out how conclusions were arrived at
- Consider ways of checking the accuracy of interpretations – fact or fiction and opinion
- Be aware that different evidence will lead to different conclusions, confident use of the library etc. for research

Key Vocabulary

Nazi	A political party in Germany, who started WW2 and the Holocaust, led by Adolf Hitler
Dowding	Britain's air defence system named after the commander of Fighter Command
radar	A way of using radio waves to detect objects
Royal Air Force	Today, the British Armed Forces consist of the Royal Navy, the Royal Marines, the British Army and the Royal Air Force
Fighter Command	Part of the Royal Air Force, responsible for fighting off the German air attack during WW2
Luftwaffe	The German air force aeroplane The British spelling of 'airplane'
Hawker Hurricane	A fighter plane which claimed 55% of the German planes which were shot down
Supermarine Spitfire	A faster and higher performance plane than the Hurricane
dogfight	A battle between 2 planes at close range

Key Questions

Why did geographical/ boundary changes after WW1 lead to conflict in Europe?
 Was evacuation a positive or negative experience for the evacuees during WW2?
 Could The Battle of Britain been averted? If so, how?

Assessment

Should it be called the Battle of Britain? Argument? Debate? Recorded?

Geography focus	Allied and Axis forces
National Curriculum objectives	Locate the world's countries, using maps to focus on Europe (including the location of Russia) and North and South America Use maps, atlases, globes and digital/computer mapping to locate countries and describe features studied
Key knowledge - Allied forces	
Allied forces- Belgium, Bolivia, Brazil, the British Empire, China, Cuba, Czechoslovakia, Ecuador, France, Greece, Guatemala, Haiti, the Hejaz, Honduras, Italy, Japan, Liberia, Nicaragua, Panama, Peru, Poland, Portugal, Romania, Serb-Croat-Slovene State, Siam, the United States, and Uruguay.	
Key Skills	
Consolidate vocabulary taught in previous years, describe route, direction, location -16 points on compass to degrees on compass	
Key knowledge - Axis	
Germany, Italy, Japan, Hungary, Romania, Bulgaria	
Fieldwork	
<div style="text-align: center;"> <p>World War II Allied/Axis</p> <p>Individual countries</p> <p>Click here for Conclusion and Sources</p> <p>Click on America, Great Britain, Russia, Germany, Japan, or Italy to get started</p> <ul style="list-style-type: none"> Green- Allies before the attack on Pearl Harbor Blue- Allies after the attack on Pearl Harbor Black- Axis Powers Red- Russia started Axis and switched to Allied Gray- Neutral or not involved countries </div>	
Key Questions	
How do boundary changes cause conflict?	

Art focus	Create a piece of art that uses techniques learned from real artists
National Curriculum objective	<p>To create sketch books to record their observations and use them to review and revisit ideas</p> <p>To improve their mastery of art and design techniques, including drawing, painting and sculpture with a range of materials [for example, pencil, charcoal, paint, clay]</p> <p>About great artists, architects and designers in history.</p>

Red Poppy by Georgia O'Keeffe



Sketch Books	Outcomes
Observational drawings of poppies. Blending of pastels to give tone to the flower	Own version of poppy

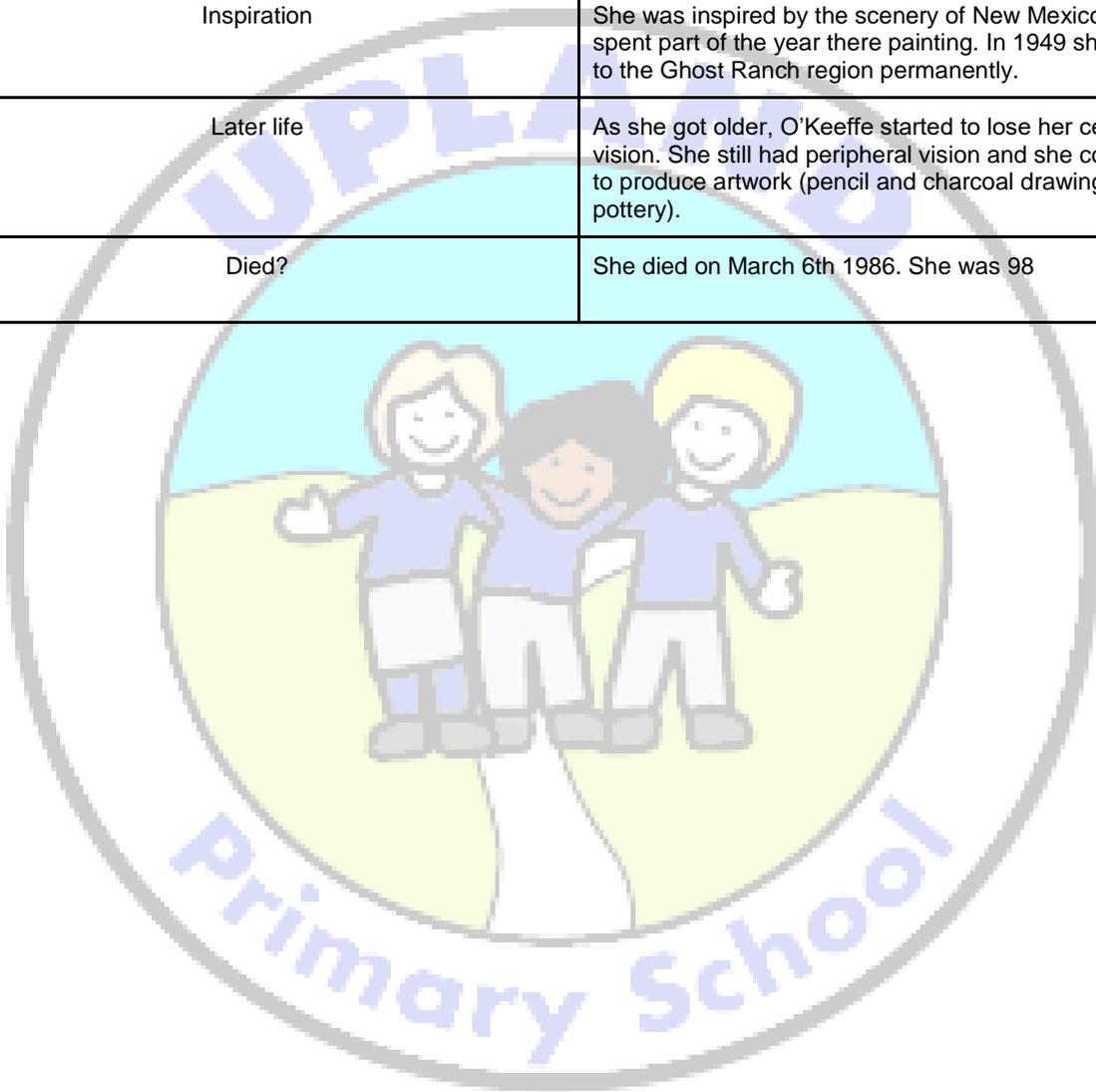
Key Skills

Work in a sustained and independent way to develop their own style of drawing. This style may be through the development of: line, tone, pattern, texture. Draw for a sustained period of time over a number of sessions working on one piece. Use different techniques for different purposes i.e. shading, hatching within their own work, understanding which works well in their work and why. Use sketchbooks to collect and record visual information from different sources as well as planning and collecting source material. Adapt their work according to their views and describe how they might develop it further .Discuss and review own and others work, expressing thoughts and feelings explaining

their views and identify modifications/ changes and see how they can be developed further. Identify artists who have worked in a similar way to their own work. Explore a range of great artists, architects and designers in history.

Key Knowledge

Where and when was she born?	Georgia O'Keeffe wa born on 15th November 1887 in Wisconsin, United States
Background	Her parents were both dairy farmers and she had six brothers and sisters
Early life	At the age of ten, Georgia O'Keeffe knew she wanted to be an artist and she started to have lessons with Sara Mann, a watercolour painter.
Inspiration	She was inspired by the scenery of New Mexico and she spent part of the year there painting. In 1949 she moved to the Ghost Ranch region permanently.
Later life	As she got older, O'Keeffe started to lose her central vision. She still had peripheral vision and she continued to produce artwork (pencil and charcoal drawings and pottery).
Died?	She died on March 6th 1986. She was 98



Art focus	Create a piece of art that uses techniques learned from real artists
National Curriculum objective	<p>To create sketch books to record their observations and use them to review and revisit ideas</p> <p>To improve their mastery of art and design techniques, including drawing, painting and sculpture with a range of materials [for example, pencil, charcoal, paint, clay]</p> <p>About great artists, architects and designers in history.</p>

Shelterers in the Tube by Henry Moore



Sketch Books	Outcomes
Development of line, pattern and texture using pencil.	Picture in the style of Henry Moore

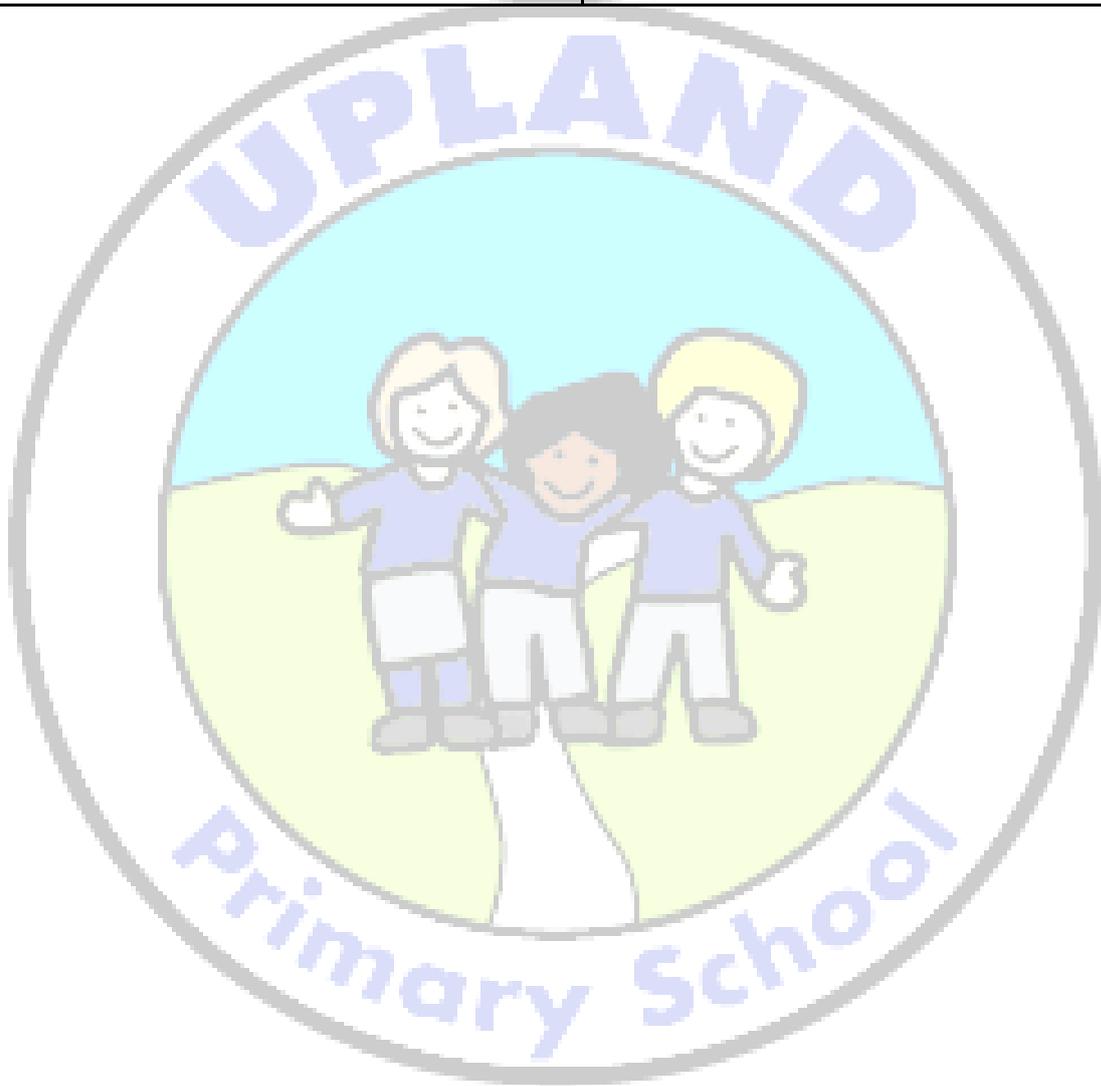
Key Skills

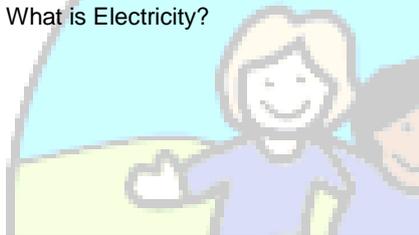
Work in a sustained and independent way to develop their own style of drawing. This style may be through the development of: line, tone, pattern, texture. Draw for a sustained period of time over a number of sessions working on one piece. Use different techniques for different purposes i.e. shading, hatching within their own work, understanding which works well in their work and why. Use sketchbooks to collect and record visual information from different sources as well as planning and collecting source material. Adapt their work according to their views and describe how they might develop it further. Discuss and review own and others work, expressing thoughts and feelings explaining their views and identify modifications/ changes and see how they can be developed further. Identify artists who have worked in a similar way to their own work. Explore a range of great artists, architects and designers in history.

Key Knowledge

When and where was he born?	Henry Moore was born on 30th July 1898 in Castleford in Yorkshire.
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Early life	Moore fought in World War 1 and he was badly injured during a gas attack in the Battle of Cambrai in 1917
Art	He studied at Leeds College of Art. He met Barbara Hepworth there – she would also become a famous sculptor.
World war influences	During World War 2, Henry Moore was commissioned as a war artist. He produced a series of drawing of Londoners using the London Underground as an air raid shelter during the Blitz.
Charity work	He set up the Henry Moore Foundation, a charity with the aim of promoting fine art.
Died?	Henry Moore died on 31st August 1986. He was 88.



Science focus	Electricity and light
National Curriculum objective	<p>Associate the brightness of a lamp or the volume of a buzzer with the number and voltage of cells used in the circuit</p> <p>Compare and give reasons for variations in how components function, including the brightness of bulbs, the loudness of buzzers and the on/off position of switches</p> <p>Use recognised symbols when representing a simple circuit in a diagram</p> <p>recognise that light appears to travel in straight lines</p> <p>Use the idea that light travels in straight lines to explain that objects are seen because they give out or reflect light into the eye</p> <p>Explain that we see things because light travels from light sources to our eyes or from light sources to objects and then to our eyes</p> <p>Use the idea that light travels in straight lines to explain why shadows have the same shape as the objects that cast them.</p>
Key Knowledge: Electricity	
<p>What is Electricity?</p> 	<p>Electricity is created by generators which can be powered by gas, coal, oil, wind or solar.</p> <p>The electrical energy can be converted into other types of energy such as light, heat, movement or sound.</p> <p>Electricity is dangerous, so be careful when using electrical appliances.</p>
Key knowledge: An electrical circuit	
<p>A series circuit (One pathway around the circuit)</p> 	<p>Electricity can flow through the components in a complete electrical circuit.</p> <p>A circuit always needs a power source, such as a battery, with wires connected to both the positive (+) and negative (-) ends. (A battery is made from a collection of cells connected together).</p> <p>A circuit can also contain other electrical components, such as bulbs, buzzers or motors, which allow electricity to pass through.</p> <p>Electricity will only travel around a circuit that is complete. That means it has no gaps.</p>
<p>What is a switch?</p>	<p>You can use a switch in a circuit to create a gap in a circuit. This can be used to switch it on and off.</p> <p>When a switch is open (off), there is a gap in the circuit. Electricity cannot travel around the circuit.</p> <p>When a switch is closed (on), it makes the circuit complete. Electricity can travel around the circuit.</p>
<p>Increasing the brightness of a bulb or the volume of a buzzer.</p>	<p>The more cells that are used in a circuit, the brighter the bulb or louder the buzzer.</p> <p>If one cell is used, the higher its voltage, the more powerful the cell is.</p>
Key Knowledge: Light Sources	
<p>We need light in order to see things. When there is no light we say it is dark.</p>	
<p>What is a light source?</p>	<p>A light source is something that makes its own light.</p>

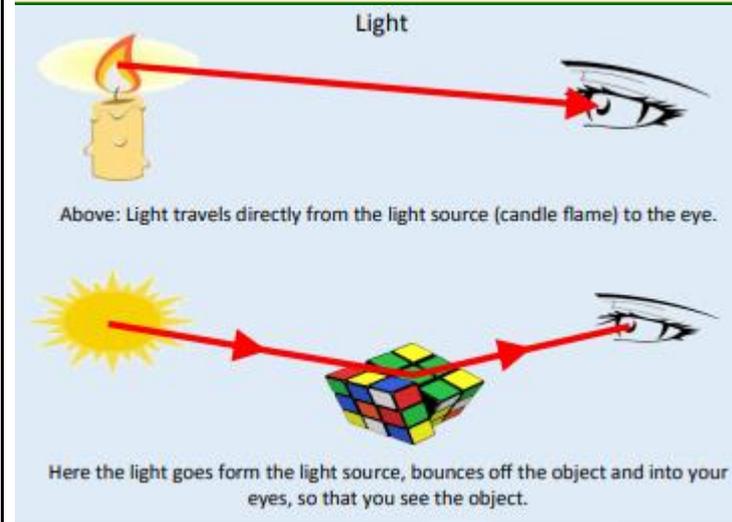
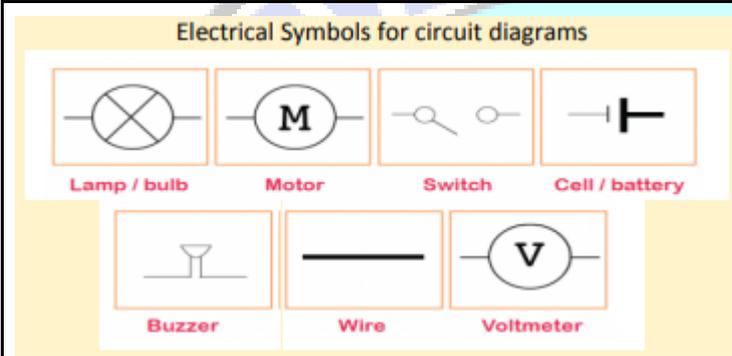
Key Knowledge: More about light

Things you need to know about light	Light travels in straight lines Light travels very, very fast - 186,282 miles per second. (that's like travelling around the world over 7 times in a second) If something gets in the way of light, a shadow is formed.
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Key Knowledge: Shadows

How is a shadow formed?	When light from a source is blocked by an opaque object, you get a shadow.
How does the size of the shadow change?	If an object is moved closer to the light sources, the shadow gets bigger. If an object is moved further away from the light source, the shadow gets smaller.

Diagrams and Symbols



Key Skills

Take measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings where appropriate. Identify patterns that might be found in the natural environment. Make their own decisions about what observations to make, what measurements to use and how long to make them for and whether to repeat them. Choose the most appropriate equipment and explain how to use it accurately. Can interpret data and find patterns. Select equipment on my own. Can make a set of observations and say what the interval and range are. Accurate and precise measurements – N, g, kg, mm, cm, mins, seconds, cm²V, km/h, m per sec, m/ sec Graphs – pie, line, bar (Year 6). Use test results to make predictions to set up further comparative and fair tests. Recognise when and how to set up comparative and fair tests and explain which variables need to be controlled and why. Suggest improvements to my method and give reasons. Decide when it is appropriate to do a fair test. Record data and results of increasing complexity using scientific diagrams and labels, classification keys, tables and bar and line graphs. Report and present findings from enquiries. Decide how to record data from a choice of familiar approaches. Can choose how best to present data.

Key Vocabulary

Generator	A machine that make electrical energy
Component	A part of something (a part of a circuit)
Voltage	Voltage is a measure of the difference in electrical energy between two parts of a circuit
Shadow	A shadow is a dark area where light from a light source is blocked by an opaque object.
Refraction	When light travels from air into water, it slows down, causing it to change direction slightly. This change of direction is called refraction.

Key Questions

Light
 How is it possible to see in the dark?
 Refraction is the bending of light-but how can this be if light travels in straight lines?
 What colour do you think a mirror is?

Electricity
 What is electricity?
 What are the advantages of renewable energy?
 Is the world a better place since the discovery of electricity? Explain and justify your reasoning.

Design and technology focus	Lighthouse
National Curriculum objective	Apply their understanding of how to strengthen, stiffen and reinforce more complex structures Understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors]
Challenge	Build a model of a working lighthouse incorporating a switch and a bulb

The Journey

Key Technical Knowledge	Design	Make	Evaluate
<p>What is a circuit? A circuit always needs a power source, such as a battery, with wires connected to both the positive (+) and negative (-) ends. (A battery is made from a collection of cells connected together). A circuit can also contain other electrical components, such as bulbs, buzzers or motors, which allow electricity to pass through. Electricity will only travel around a circuit that is complete</p> <p>What is a switch? You can use a switch in a circuit to create a gap in a circuit. This can be used to switch it on and off.</p>	<p>Look at the purpose and function of lighthouses and evaluate.</p> <p>Use this to form their own design.</p>	<p>Build a stand alone structure with an understanding of how to strengthen, stiffen and reinforce the structure.</p> <p>Must include a working circuit</p>	<p>Does is stand alone?</p> <p>Does the switch and circuit work?</p> <p>Is it fit for purpose?</p>

<p>When a switch is open (off), there is a gap in the circuit. Electricity cannot travel around the circuit.</p> <p>When a switch is closed (on), it makes the circuit complete. Electricity can travel around the circuit.</p>			
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PE focus	Invasion Games - Tag Rugby and Handball		
National Curriculum Objective	<p>Use running, jumping, throwing and catching in isolation and in combination.</p> <p>Play competitive games and apply basic principles suitable for attacking and defending</p>		
Key Knowledge			
The focus of learning is to develop passing and moving to create space to beat an opponent and score a try.	The focus of the learning is to see how effectively pupils can apply their passing and moving skills to keep possession, developing this concept into mini game situations.		
The focus of the learning is to combine passing and moving to develop ways of creating space to beat an opponent to score a try.	The focus of the learning is to develop passing and creating space, building up into mini games, where pupils explore the transition between attack and defence, working out simple tactics for creating space and keeping possession.		
The focus of the learning is to develop tagging and to explore different ways the defending team can prevent the attackers from scoring.	The focus of the learning is to combine passing, moving and shooting to create an attack which results in a shot on target against another team.		
Key Skills			
<p>Tag Rugby To develop our passing and receiving skills. To develop an understanding of our roles and responsibilities when defending and attacking in tag rugby. To develop strategies to outwit your opponent. To develop our understanding of a tag rugby game.</p> <p>Handball To develop our passing and receiving skills in isolation i.e 2v2, 3v2, 3v3 To understand how and why we need to create space to receive the ball in an invasion game. To develop our technique when shooting at a different target. To show an understanding of the transition between attack and defence, working out simple tactics for creating space and keeping possession.</p>			
Key Vocabulary			
Passing	<p>Selecting the correct passing technique for the situation i.e chest, bounce or shoulder pass.</p> <p>Rugby - the ball must travel backwards to a teammate.</p>		
FootWork - Pivot	We can't travel with the ball in our hands but we can pivot on the spot.		
Attacking and Defending	<p>Attacking - keeping possession of the ball to create an opportunity to shoot.</p> <p>Defending - Stopping the attacking team getting into positions where they could score.</p>		

Possession	The ability to work as a team and keep the ball away from the opposite team.
Offside Rule	A player is in an offside position if that player is further forward (nearer to the opponents' goal line) than the team mate who is carrying the ball.

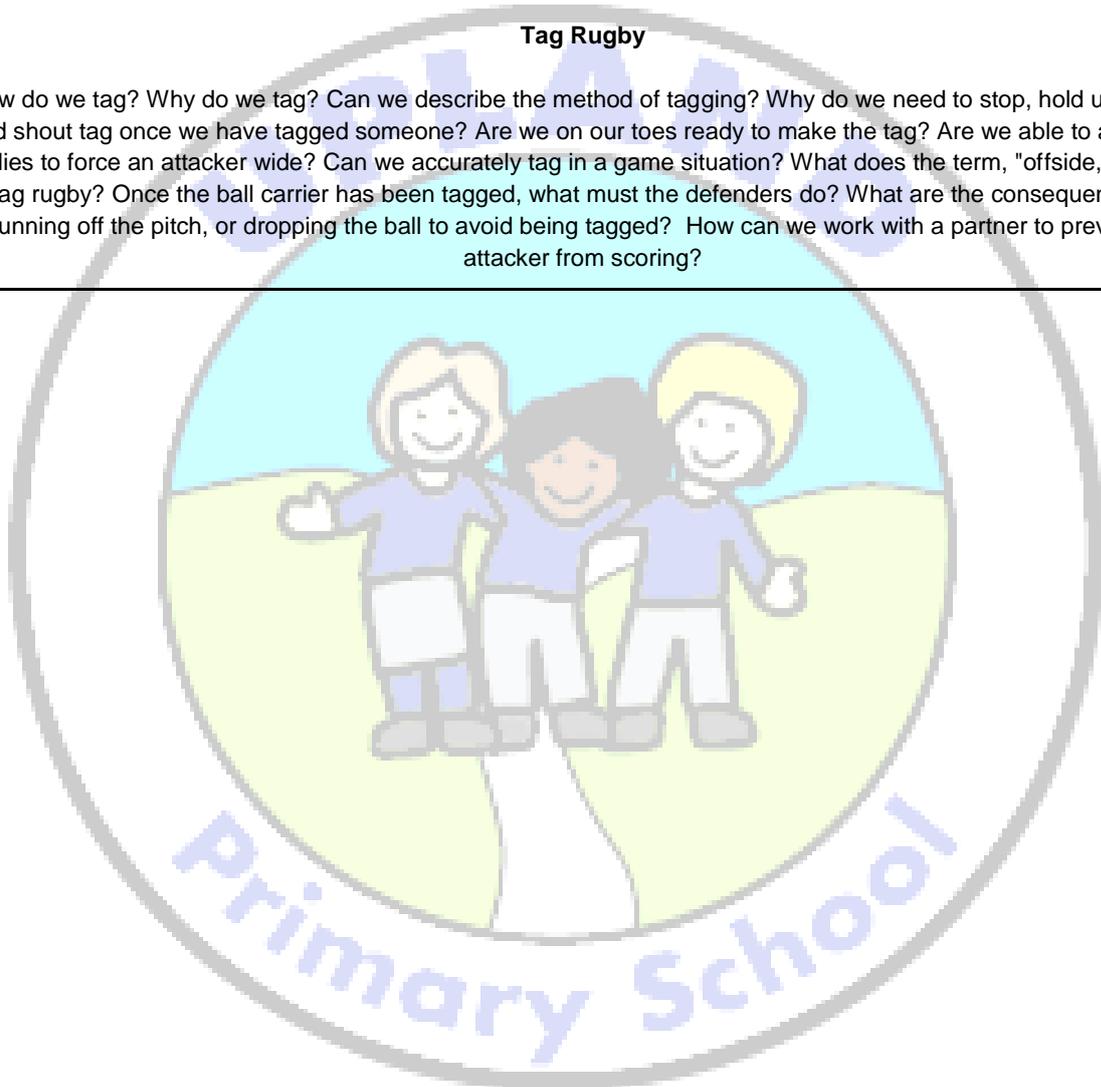
Key Questions

Handball

How do we pass in handball? Where can we pass? Why? What is the consequence in a game of an inaccurate pass? Why don't we stand behind the defender when finding a position to receive the ball? Where should we stand when we are attacking? Why do we need to pass and move? How are we going to pass and move to get the ball into a suitable place to score? Where is a suitable place to shoot from? When we have possession of the ball what is our role? How can we win the ball back if you lose possession? What do we need to do to win the ball back?

Tag Rugby

How do we tag? Why do we tag? Can we describe the method of tagging? Why do we need to stop, hold up the tag and shout tag once we have tagged someone? Are we on our toes ready to make the tag? Are we able to angle our bodies to force an attacker wide? Can we accurately tag in a game situation? What does the term, "offside," mean in tag rugby? Once the ball carrier has been tagged, what must the defenders do? What are the consequences of running off the pitch, or dropping the ball to avoid being tagged? How can we work with a partner to prevent an attacker from scoring?



Year 6
Spring
Knowledge
organiser
*Should everyone
be allowed to
vote?*

National Curriculum	A study of an aspect or theme in British history that extends pupils' chronological knowledge beyond 1066
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Historical Background

Women's right to vote.
 Traditionally only men were represented within both local and national government of Great Britain. The men had a right to own property and hold jobs allowing them to earn money and influence. The women were expected to marry as they were not seen as able to look after themselves. Their opportunities to earn money were very limited because they did not have equal access to education and could not get professional jobs. Once married all their property was given to their husbands. Their husbands had a right to represent them in the court and women had little chance of getting a divorce if they wanted one. During 19th century women started demanding equal right in several areas:

- Access to education
- Right to earn money and to be able to own property
- Right to have control over their own body
- Right to equal position to a man in a Court of Law
- Right to vote in local and national elections

Key Knowledge: When? Timeline of events

Before 1832	The right to vote depended on two things: <ul style="list-style-type: none"> • Gender. Only men over the age of 21 were allowed to vote. • Property. In order to vote, an individual had to own property over a certain value.
1867 Parliamentary Reform Act	Gave the right to vote to men over the age of 21 who not only owned and but also those who rented a property.
1894	Millicent Garrett Fawcett created a National Union of Women's Suffrage. Her aim was to gain a right to vote for women through peaceful appeals to male members of the government. The first attempt of giving women the right to vote took place four years later but the vote failed.
1903	Emmeline Pankhurst, disappointed with the lack of progress on the issue created Women's Social and Political Union that became known as Suffragettes three years later.
18th of November 1910 (also known as Black Friday)	The second reading of the bill to give women to right to vote failed. A number of women demonstrated outside the parliament buildings. The car of living Prime Minister H. Asquith was vandalised. The police responded by beating many women.
4th of June 1913	Emily Davidson rushed in front of running at full speed horse belonging to the king George V at Epsom races. She died from received injuries. Some people saw this as an act of bravery of a woman prepared to die for her beliefs other as an act of lunacy and dismissed it.
1918	Gave all the men over the age of 21 and women over the age of 30 the right to vote.
1928	Gave the women equal right to vote to men

Key Skills

Place current study on time line in relation to other studies, use relevant dates and terms, sequence up to ten events on a time line, find about beliefs, behaviour and characteristics of people, recognising that not everyone shares the same views and feelings, compare beliefs and behaviour with another period studied, write another explanation of a past event in terms of cause and effect using evidence to support and illustrate their explanation, know key dates, characters and events of time studied, link sources and work out how conclusions were arrived at, consider ways of checking the accuracy of interpretations – fact or fiction and opinion, be aware that different evidence will lead to different conclusions, confident use of the library etc. for research

Key Vocabulary

Suffrage	The right to vote in political elections.
Suffragettes	Is the name given by Daily Mail newspaper to the members of Women's Social and Political Union. Became a popular name for women demanding the right to vote.
The Parliament	The parliament is made out two Hoses of Parliament: House of commons and House of Lords. Members of house of commons are elected by all the people in the country with the right to vote. Some of the members of the House of Lords are elected and some are named by the queen/king. The parliament has a responsibility for creating all laws of the country.
Bill	A bill is proposed law that is being considered by members of the House of commons and House of Lords. A bill does not become law until it is passed by the House of commons and, in most cases, approved by the House of Lords.
Prime Minister	The head of an elected government
Equality	An idea of being equal especially in right and responsibilities.

Key Questions

How is democracy a fair system of governance? Could it be improved? How?
 How did changing attitudes towards women influence the decision to allow them to vote?
 Should the voting age in the U.K be lowered to 16? Explain why or why not.

Assessment

A newspaper report written in 1928 when women were given equal rights to vote which includes a break down of the key events leading up to the votes being granted.

Non-Chronological report (can be a presentation with hyperlinked pages) about Suffragettes to include the key facts.

Create an online quiz/questionnaire using Google.docs, which they will send to another child/group to answers.

Science focus	Living things and their habitats
National Curriculum Objective	Describe how living things are classified into broad groups according to common observable characteristics and based on similarities and differences, including micro-organisms, plants and animals Give reasons for classifying plants and animals based on specific characteristics
Key Knowledge: Grouping living things	
Grouping living things	Animals can be put into one of two groups Vertebrates or Invertebrates
Key Knowledge: Vertebrates	
Vertebrates	Are animals with a backbone
There are 5 ways	Vertebrates can be grouped Fish Amphibians Reptiles Birds Mammals
How to spot a Fish	Breathes with gills/lays eggs in water/ has fins and scales/its body temperature changes
How to spot an Amphibian	Born with gills then develops lungs/lays eggs in water/damp skin/body temperature changes
How to spot a Reptile	Breathes with lungs/lays eggs on land/ dry scaly skin/body temperature changes
How to spot a Bird	Breathes with lungs/lays eggs with hard shells/has feathers/steady body temperature
How to spot a Mammal	Breathes with lungs/babies are born live/body hair or fur/steady body temperature/feeds babies milk
Key Knowledge: Invertebrates	
Invertebrates	Invertebrates are animals without backbones.
There are 3 ways Invertebrates can be grouped	Insects Arachnids Molluscs
How to spot an Insect	3 body sections/6 legs
How to spot an Arachnid	2 body sections/8 legs
How to spot a Mollusc	Slimy foot/Often have a shell
Key Knowledge: Deciding which animal or plant is which	
Key Features to distinguish between animals	Invertebrate or Vertebrate Mammal/Reptile/Fish/Amphibian/Bird Colour Length Number of legs Number of body segments

	Distinguishing features Habitat
Key Features to distinguish between plants	Flowering or Non-Flowering Grass/cereal/garden shrub/deciduous/ algae/coniferous/fern Colour Height Number of flowers Fruit bearing or not Distinguishing features Usual location

Key Skills

Use and develop keys and other information records to identify, classify and describe living things and materials.

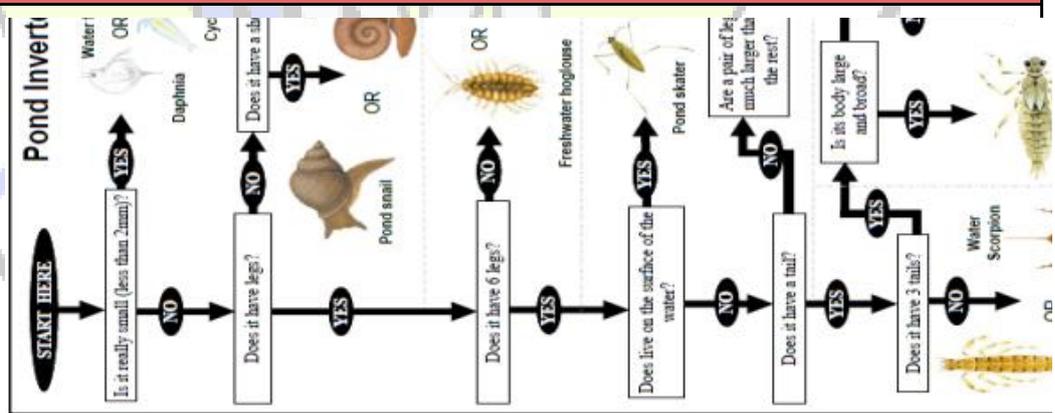
Key Vocabulary

Taxonomy	The part of science focused on classification
Classification	Grouping something using its features.
Distinguish	Recognise a difference

Key Knowledge: Scientists we need to know about

3 facts about Carl Linnaeus	Born in Sweden on 23rd May 1707 A leading light in the field of Taxonomy Famous for developing the first system to classify animals effectively.
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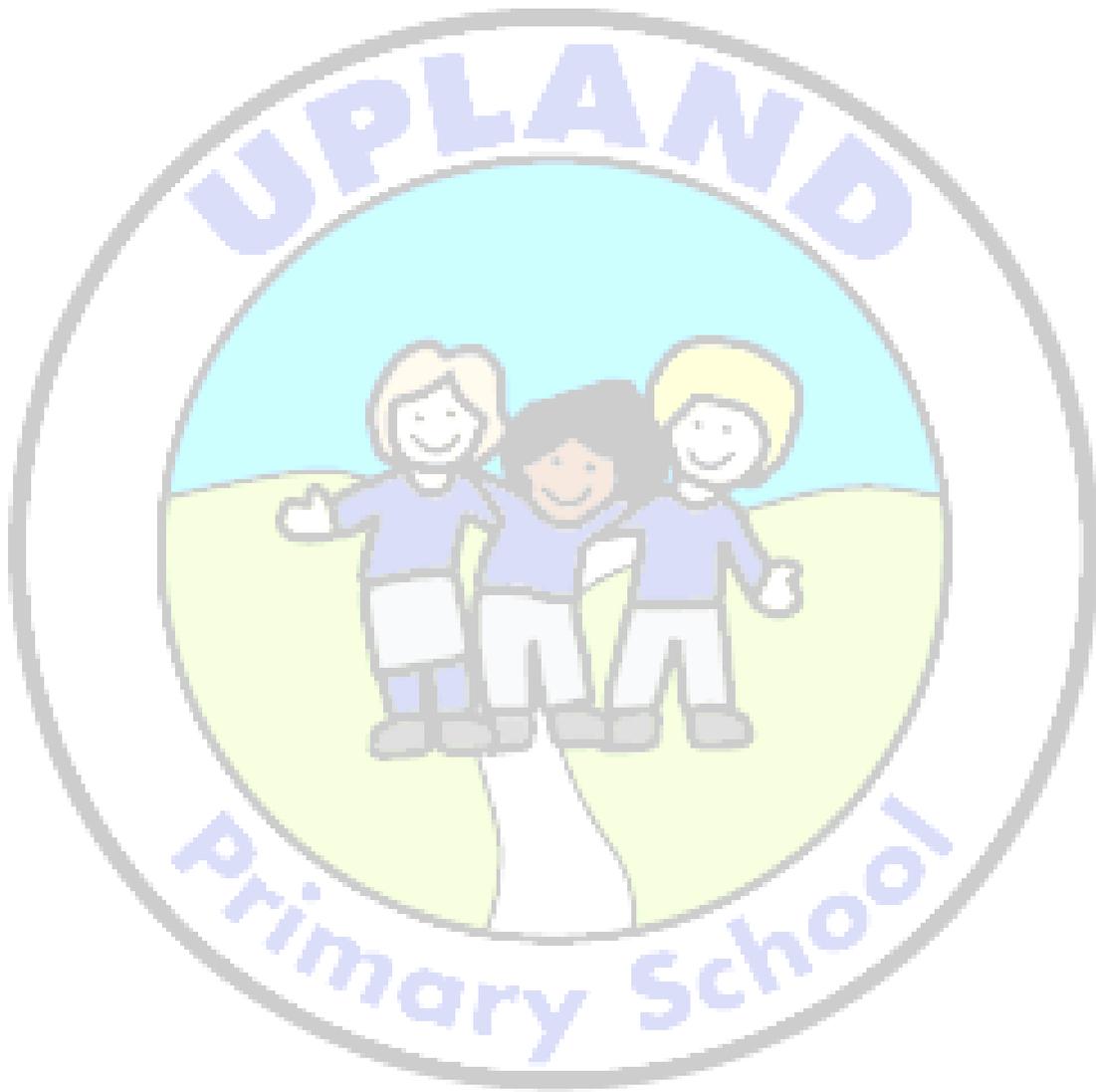
Diagrams and Symbols



Key Questions

Why is it important to classify organisms?
 What characteristics determine how organisms are classified into the different kingdoms?
 Are microorganisms more harmful than beneficial?

Assessment



PE focus	Basketball and Cricket
National Curriculum Objective	Use running, jumping, throwing and catching in isolation and in combination. Play competitive games and apply basic principles suitable for attacking and defending.
Key Knowledge	
Pupils will develop an understanding of how to dribble the ball keeping possession to beat an opponent.	The focus of the learning is to refine pupils' understanding of batting, applying simple batting tactics into mini games.
The focus of the learning is to develop passing and receiving skills in order to keep possession of the ball as a team.	The focus of the learning is to refine pupils fielding skills; catching, stopping and throwing.
The focus of the learning is to introduce pupils to shooting. Pupils will understand not just how they shoot but where they shoot from on the court in order to increase their chances of scoring.	The focus of the learning is to refine pupils understanding of bowling, applying simple bowling tactics into mini games.
The focus of the learning is to develop passing and dribbling to create space, building up into mini games where pupils explore the transition between attack and defence.	Pupils will learn where, when and why they can apply different physical and thinking skills when bowling to prevent the batters from scoring runs.
Key Skills	
<p>Cricket To increase our accuracy when bowling overarm. To develop our fielding techniques and show an understanding why we need to field the ball quickly and accurately. To learn and understand where we need to hit the ball to gain runs. To understand the objective of both batting and fielding teams including the wicket keeper.</p> <p>Basketball To develop our passing and receiving skills in order to keep possession of the ball as a team. To increase our control of the ball when dribbling and turning in various different games i.e 1v1, 2v1, 3v3. To understand how and why we need to create space to receive the ball in an invasion game. To develop our technique when shooting at a target. To show an understanding of attacking and defending principles.</p>	
Key Vocabulary	
Traveling/double dribble	A violation of the rules.
Possession	The ability to work as a team and keep the ball away from the opposite team.
Shooting - Rebounds	If a shot is missed can you collect the rebound and shoot again.
Wide and no ball	Wide - The ball is bowled wide of the wicket. No ball - the ball bounces more than once or does bounce at all.
Fielding - Outs	Different ways to get the batting team out i.e caught, bowled, stumped.
Batting and fielding	Batting team -Through batting try to gain runs to win the match. Fielding team - Try to stop the batting team from gaining

runs.

Key Questions

Basketball

What do we do when we receive the ball? When and where do we dribble? What happens if we lose possession of the ball? Can we dribble with alternate hands? Can we change direction at speed? When should we bounce/chest pass? What is the consequence in a game of an inaccurate pass? How can we create space? Why do we need to pass and move? What techniques do we use when shooting? Where should we shoot from?

Cricket

What is the difference between batting and fielding? What is the role of the wicket keepers? How can we win a game if we are batting? How can we win a game if we are fielding? How do we hold the bat safely? What different ways of fielding are there? Can we name them? i.e. catching, throwing, etc. Where can we strike the ball? Why are we striking the ball there? Can we strike the ball with intent? How can we get the batter out? Why is it important to aim where we throw? What is the consequence of an inaccurate throw?



Year 6

Summer

Knowledge

organiser

It's all Greek!



History Focus	Ancient Greece
National Curriculum objective	Ancient Greece – a study of Greek life and achievements and their influence on the western world
Historical Background	
<p>Ancient Greece is commonly known as the 'birthplace of western civilisation'. It is made up of three periods: The Archaic (c.800BCE - 500BCE), the Classical (500BCE - 323BCE) and the Hellenistic (323BCE - 146BCE). This time saw a huge increase in population and the establishment of the Greek city states, produced much of the political ideas, art, architecture, sculpture, science, philosophy and literature that influence our lives today. Fundamental to understanding the influence of Greek ideas is in understanding the spread of Athenian ideas during the Hellenistic period, following Alexander the Great's military campaigns.</p>	
Key Knowledge: When? Timeline of events	
776BCE	The first Olympic Games held (only for men)
505BCE	Cleisthenes introduced democracy in Athens
468BCE	Sophocles (famous for developing his characters) wrote his first tragedy
461BCE	Peloponnesian wars began between Sparta and Athens
432BCE	Parthenon was completed
441BCE	Euripides writes first tragedy
420BCE	Construction of Temple of Athens
387BCE	Plato founded his Academy
330BCE	Alexander the Great effectively in control of Persian Empire
146BCE	Rome conquered Greece
Key Knowledge: Who? Famous people from the time	
Homer	The name given to the legendary author of the Iliad and the Odyssey Possibly a name given to more than one person
Alexander the Great	356 - 323 BCE Alexander's conquest of the Persian Empire led to a spreading of Greek culture (especially Athenian) Across Asia, town planning, education, local government, and art was influenced by Greek ideals
Metrodora	c. 200 CE (not BCE) Author of the oldest medical book known to have been written by a woman
Socrates Plato Aristotle	Famous philosophers
Archimedes	c. 287 BCE – c. 212 BCE Famous mathematician, physicist, engineer, inventor, and astronomer.

Key Skills

Place current study on timeline in relation to other studies, use relevant dates and terms. Sequence up to ten events on a timeline. Find about beliefs, behaviour and characteristics of people, recognising that not everyone shares the same views and feelings. Compare beliefs and behaviour with another period studied, write another explanation of a past event in terms of cause and effect using evidence to support and illustrate their explanation. Know key dates, characters and events of time studied. Compare and contrast ancient civilisations. Link sources and work out how conclusions were arrived at. Consider ways of checking the accuracy of interpretations – fact or fiction and opinion. Be aware that different evidence will lead to different conclusions, confident use of the library etc. for research.

Key vocabulary

legacy	Things or ideas that are passed down from one generation to another
culture	The beliefs, customs, arts, etc., of a particular society, group, place, or time
government	The system used for being in charge of a country
democracy	In this type of government, decisions about who should lead a county are made by the majority of its people
science	The study of the nature and behaviour of natural things and the knowledge that we obtain about them
mathematics	The study of numbers and how they are related to each other and to the real world
architecture	The art or science of designing and creating buildings
philosophy	The study of the basic ideas about knowledge, right and wrong, reasoning, and the value of things
Olympics	A series of athletic challenges that take place every four years. Originally, the games were part of a religious festival to honour Zeus
literature	Written works, especially those considered of superior or lasting artistic merit
Socrates	"True knowledge exists in knowing that you know nothing."

Key Questions

What mattered to the Ancient Greeks?
 Why is democracy in modern times an improvement on democracy in Ancient Greek times?
 How similar was life in Ancient Greece to today?
 Which individual was the most important? (to the Ancient Greeks/to us today).

Assessment

A written explanation of how the Ancient Greek legacy affects our lives today. This could be done in the negative, e.g. "Without the influence of Ancient Greece, England would be a very different place..."

A letter of thanks/appreciation or a Thank you card for the legacies left behind, explaining why you are thankful and how they have influenced/affected our modern lives.

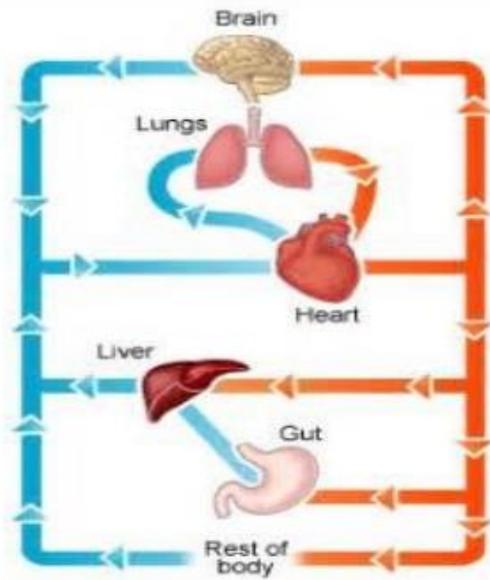
Write a rap outlining the Greek legacy. (Horrible Histories style).

Science focus	Animals including Humans
National Curriculum objective	Identify and name the main parts of the human circulatory system, and explain the functions of the heart, blood vessels and blood Recognise the impact of diet, exercise, drugs and lifestyle on the way their bodies function Describe the ways in which nutrients and water are transported within animals, including humans
Key Knowledge The Human Circulatory System	
The main parts of the human circulatory system	Heart Blood vessels Blood
What does the heart do?	The heart pumps the blood through the blood vessels so that food and oxygen can get to all the parts of the body
What do the blood vessels do?	The blood vessels carry the blood around the body
There are three main types of blood vessels	The arteries, which carry the blood away from the heart The capillaries, which enable the actual exchange of energy between the blood and the tissues The veins, which carry blood from the capillaries back toward the heart
What does the blood do?	Blood moves food and oxygen around the body.
Key Knowledge Healthy Lifestyle	
Things humans need to be healthy	To have a balanced diet of the right amount of different types of food and drink To exercise regularly To be hygienic
What is a balanced diet?	See the Eatwell guide: (http://www.nhs.uk/Livewell/Goodfood/Documents/The-Eatwell-Guide-2016.pdf) Drink 6-8 cups/glasses of fluids each day
Health risks that can damage the body	Smoking Drugs Alcohol Obesity
Dangers of smoking	Addictive Can cause heart disease and cancer
Dangers of drugs	Addictive Can damage the brain or cause death
Dangers of alcohol	Ok in small amounts for adults Can damage the liver, heart and stomach
Dangers of obesity	Can cause heart disease Can lead to cancer
Key Skills	
Recognise which secondary sources will be most useful to research their ideas.	
Key Vocabulary	
Oxygen	A chemical element within the air we breathe in

Addictive

Substance that causes you to need more and more (out of control)

Diagrams and Symbols

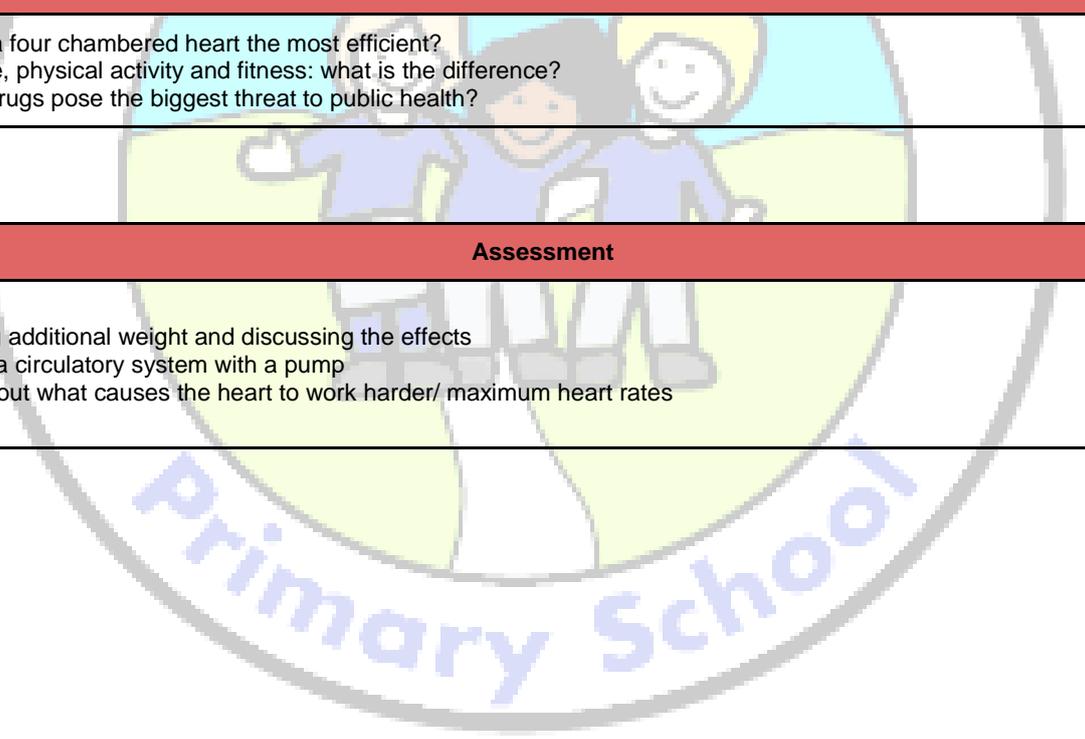


Key Questions

Why is a four chambered heart the most efficient?
 Exercise, physical activity and fitness: what is the difference?
 Which drugs pose the biggest threat to public health?

Assessment

Test
 Carrying additional weight and discussing the effects
 Making a circulatory system with a pump
 Finding out what causes the heart to work harder/ maximum heart rates



Science focus	Evolution
National Curriculum objective	<p>Recognise that living things have changed over time and that fossils provide information about living things that inhabited the Earth millions of years ago</p> <p>Recognise that living things produce offspring of the same kind, but normally offspring vary and are not identical to their parents</p> <p>Identify how animals and plants are adapted to suit their environment in different ways and that adaptation may lead to evolution.</p>
Key Knowledge	
What is evolution?	Evolution is the way that living things change over time
Do things evolve?	We know that living things used to look a lot different to how they do now. We know this because fossils have been found that show creatures that look a lot different to how they do today. Fossils show us that living things have changed over time.
So how do things evolve?	<p>A famous scientist, Charles Darwin observed that although individuals in a species shared similarities, they were not exact copies of each other. He noticed that there were small differences or variations between them. He also noticed that everything in the natural world was in competition. The winners were those that had characteristics which made them better adapted for survival. For example, they were stronger, faster, cleverer or more attractive than others in their species. These living things were more likely to reproduce and pass on their useful characteristics to their offspring. Individuals that were poorly adapted were less likely to survive and their characteristics were not as likely to be inherited. Over time, the characteristics that help survival become more common and a species gradually changes. Given enough time, these small changes can add up to the extent that a new species altogether can evolve.</p>
Variation:What's the important thing to know?	Living things produce offspring of the same kind. For example, owls produce baby owls and humans produce baby humans... BUT... Normally offspring vary and are not identical to their parents.
So what?	Natural variation like this can lead to offspring being more likely or less likely to survive in their environment. If the variant makes them more likely to survive, they are more likely to be alive to pass this variant to their offspring. As a result, this variant is more likely to become more common in this species.
What is adaption?	Adaption is when things evolve to overcome challenges in their environment. For example by adapting their behaviour
Examples of of food and died. adaption	<p>Migration: Birds have adapted to move around the world to find weather and food sources to suit them. Birds that didn't do this may have run out</p> <p>Sticking together in packs: Animals that learned to live in packs were more likely to be safer and more successful when hunting, leading them to be more likely to survive.</p>
Key Skills	
Recognise which secondary sources will be most useful to research their ideas.	
Key Vocabulary	

Fossils	A fossil is the naturally preserved remains or traces of animals or plants that lived in the geologic past
Variations	Small differences
Reproduce	To produce again/give birth Offspring Children or young
Migration	Seasonal movement of animals from one location to another

Diagrams and Symbols

How variation can impact on evolution

Because the hawks can see and catch the tan mice more easily, a relatively large fraction of the tan mice are eaten, while a much smaller fraction of the black mice are eaten. If we look at the ratio of black mice to tan mice in the surviving ("not-eaten") group, it will be higher than in the starting population.

Panel 1: A population of mice has moved into a new area where the rocks are very dark. Due to natural genetic variation, some mice are black, while others are tan.

Panel 2: Some mice are eaten by birds.

Panel 3: Tan mice are more visible to predatory birds than black mice. Thus, tan mice are eaten at higher frequency than black mice. Only the surviving mice reach reproductive age and leave offspring.

Panel 4: Mice reproduce, giving next generation.

Panel 5: Because black mice had a higher chance of leaving offspring than tan mice, the next generation contains a higher fraction of black mice than the previous generation.

Panel 1: Some individuals born happen to have longer necks.

Panel 2: Over many generations, longer-necked individuals are more successful, perhaps because they can feed on taller trees. These successful individuals have more offspring and pass the long-neck trait on to them.

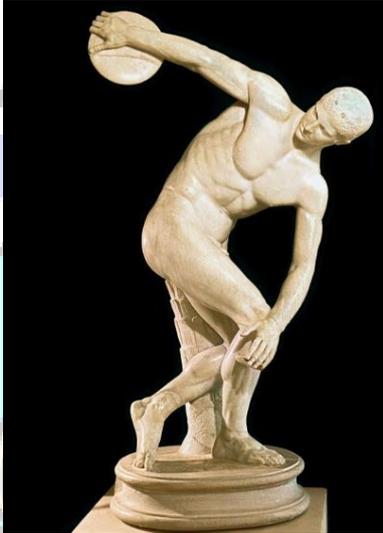
Key Questions

“You can see evidence of evolution within a period of one hundred years.” Do you agree with this statement. Why or why not?
 Are there any benefits to cross breeding? Why might some people disagree?
 Do the fittest always survive?

Assessment

Test

Design and technology focus	Food theme Greek	
National Curriculum objective	Prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques Understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed.	
Challenge	Make three meze style Greek dishes	
The Journey		
Possible learning	Outcomes	Parameters
Safe knife handling Good hygiene History of dish Healthy/balanced diet Tasting 1 or 2 pre-prepared dishes Ingredients tasting - including taste combinations Designing own version of dish	Traditional meze board	Dependent on dishes chosen
Key Skills		
Know that food is grown (such as tomatoes, wheat and potatoes), reared (such as pigs, chickens and cattle) and caught (such as fish) in the UK, Europe and the wider world and how this would affect the Greek diet. Understand that seasons may affect the food available. Understand how food is processed into ingredients that can be eaten or used in cooking. Know how to prepare and cook a variety of predominantly savoury dishes safely and hygienically including, where appropriate, the use of a heat source Understand how to use a range of techniques such as peeling, chopping, slicing, grating, mixing, spreading, kneading and baking. Know different food and drink contain different substances – nutrients, water and fibre – that are needed for health.		

Art focus	Create a sculpture reminiscent of the style from Ancient Greece
National Curriculum objective	<p>To create sketch books to record their observations and use them to review and revisit ideas</p> <p>To improve their mastery of art and design techniques, including drawing, painting and sculpture with a range of materials [for example, pencil, charcoal, paint, clay]</p>
Key Knowledge	
	
Key Vocabulary	
Sketch Books	Outcomes
To record pencil drawings capturing the human form when participating in Ancient/Modern Olympic events	A clay statue modelled on their drawings
Key Skills	
<p>Work in a safe, organised way, caring for equipment. Secure work to continue at a later date. Model and develop work through a combination of pinch, slab, and coil. Work around armatures or over constructed foundations. Demonstrate experience in the understanding of different ways of finishing work: glaze, paint, polish. Demonstrate experience in relief and freestanding work using a range of media. Recognise sculptural forms in the environment: Furniture, buildings. Use sketchbooks to collect and record visual information from different sources. Use the sketch book to plan how to join parts of the sculpture. Annotate work in sketchbook. Solve problems as they occur. Use language appropriate to skill and technique. Discuss and review own and others work, expressing thoughts and feelings explaining their views and identify/ explain modifications/ changes and see how they can be developed further</p>	

PE focus	<p>Net and Wall - Tennis</p> <p>Athletics</p>
National Curriculum Objective	<p>Use running, jumping, throwing and catching in isolation and in combination</p> <p>Play competitive games.</p>

	Develop strength, technique, control and balance (for example, through athletics)
Key Knowledge	
The focus of the learning is to continue to develop racket technique, exploring the forehand and volley shot.	To understand and show how to run for distance and speed.
The focus of learning is to develop pupils ability to think tactically about which shot to play, during a game.	To consolidate & improve the quality, range & consistency of the techniques they use for particular activities.
The focus of the learning is to look at how players can control the game from the beginning (serve)by thinking about how and where to serve.	To describe & evaluate the effectiveness of performances, & recognise aspects of performance that need improving.
Key Skills	
<p>Tennis To increase control and accuracy when playing a forehand/ volley shot. To increase our 'court' awareness i.e returning to the center of the court after a shot is played. To develop their understanding of when, where and why they are selecting to play that shot to win a point. To develop pupils ability to think tactically about which shot to play, during a game. To understand how to officiate and score a game of tennis.</p> <p>Athletics To develop running styles when sprinting and running a distance. To describe how the body reacts to different types of activity To develop and understand different throwing styles. To understand how technique can improve my distance when jumping.</p>	
Key Vocabulary	
Forehand and Volley	Types of shots played in tennis
Baseline	An area of the court.
Let	The umpire calls a let whenever a serve touches the net and still lands in the service box. The serve is then replayed
Cross Court	A shot that is hit diagonally into the opponent's court
Athletics	The sport of competing in track and field events, including running races and various competitions in jumping and throwing.
Pace	To avoid doing something too quickly or doing too much at one time, so that you have enough energy left to complete an activity.
Key Questions	
<p>Tennis</p> <p>How can we win a game of tennis? How do we hit the ball? Where should we hit the ball? What is the consequence in a game of throwing / hitting the ball out of the court or letting it bounce more than once? Why do we not stand still in tennis? Where should we stand? Why do we need to return to the middle of the court (baseline) to be ready? What does the ready position look like? What happens if we throw the ball into the space in one of the corners at the back of the court?</p> <p>Athletics</p> <p>Why do we need to be able to run fast in sport? Which athletic events are sprinting events? What is the consequence of a sprinter running out of their lane in a race? What should we do with our head when we are sprinting? Why?</p>	

Do we feel quicker when we apply the correct head technique? What should we do with our arms when we are sprinting? Why? What does pace mean? What race would you pace yourself in? Why? What is the consequence of a thrower releasing the object too late or too early? What should we do with our body position/stance when we throw? Why? Can we throw further when we apply the correct technique? What is the difference between throwing for accuracy and throwing for distance? How do we jump? What should we do with our arms? Why? What should we do with our legs? Why? Can we jump further when we apply the correct technique?

