



# Year 3

## **Personal Safety & Wellbeing**

In Year 3 we ensure that the children have the opportunity to develop their personal safety through participating in Bexley's Walkability scheme. This gives the children the opportunity to learn how to safely navigate busy roads. Weekly circle time sessions allow the children time to discuss and reflect on situations that may cause emotional distress.

## **Pride**

Children at Upland Primary School are aware of the high expectations that are set by all adults across the school. Children are motivated and challenged across all subjects. An example of this is within their mathematics lessons, where children are given the opportunity to apply their knowledge of the fundamentals through increasingly sophisticated reasoning and problem solving questions.

## **Creativity**

Children are encouraged to show their independent creative skills through opportunities given within their topic homework. Within our topic entitled 'What did the Romans do for us?' children are given creative freedom to design and construct a replica of a Roman shield through their own independent research.

## **Independence & Confidence**

Children in Year 3 develop their confidence through delivering class assemblies to their peers and talking to parents at our termly festivals of learning.

## **Resilience & Determination**

The transition from Year 2 to Year 3 can prove challenging to our children due to increased levels of expectation. Children are expected to independently critique their own written composition, a skill to which they have not been exposed in Key Stage 1.

## **Teamwork**

During outdoor week, the children are given the opportunity to develop their verbal communication and leadership skills through various outdoor activities.

## **Responsibility**

Children in Year 3 are expected to become increasingly responsible for their own actions and finished product of work. They are given this opportunity through increased independence.



# Year 3

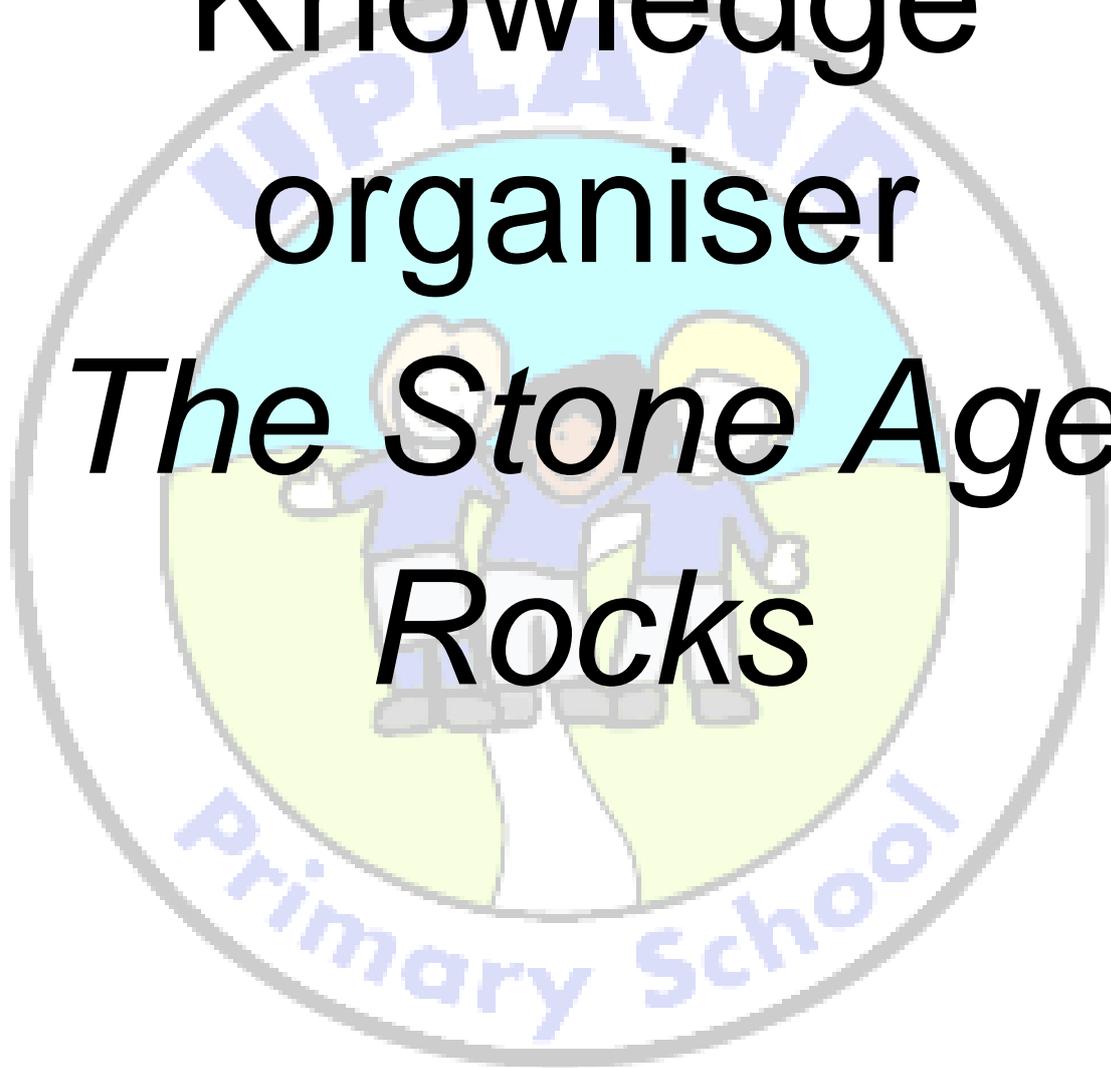
## Autumn

### Knowledge

### organiser

## *The Stone Age*

## *Rocks*



History Focus	Changes in Britain from the Stone Age to the Iron Age
National Curriculum objective	Changes in Britain from the Stone Age to the Iron Age.
<b>Historical Background</b>	
<p>Prehistory in Britain began with the arrival of groups of hunter-gatherers from further south in Europe around 900,000 years ago and ended with the Roman invasion in AD43. During this huge amount of time, humans developed from hunter-gatherers moving around a sparse country, to people who erected great monuments which still survive today. Prehistory is usually divided into three periods; the Stone Age, the Bronze Age and the Iron Age (and each of these periods can be subdivided). These periods are named after the materials used to make tools and weapons</p>	
<b>Key Knowledge: When? Timeline of events</b>	
814,000BCE	Evidence of flints made into tools, in Britain
40,000BCE	Homo Sapiens arrived in Britain
33,000BCE	Ice Age drove humans out of Britain
11,000BCE	Humans returned to Britain
6,500BCE	Doggerland flooded, forming the English Channel, cutting off Britain from the rest of
4400BCE	People began to settle across Britain, building farms
3180BCE	Village built at Skara Brae, in the Orkney Islands, in Scotland
2200BCE	Bronze Age began in Britain
2,000BCE	Stonehenge was completed
2,000BCE	Fields with stone walls were built
800BCE	The Iron Age began
100BCE	Coins were used for the first time, in Britain
55BCE	Britons in war-chariots defeated the Romans
43AD	The Romans invaded Britain again and the Iron Age ended
<b>Key Knowledge: Who? Key people</b>	
Cheddar Man	<p>A human male fossil Found in Gough's Cave in Cheddar Gorge, Somerset, England</p> <p>Cheddar man died around 7150 BC</p> <p>It appears that he died a violent death.</p>
Boxgrove Man	<p>A 500,000 year old fossil</p> <p>Only two pieces of the tibia (shinbone) and two teeth were found</p> <p>Discovered in 1993, by archaeologist Mark Roberts</p> <p>Found in Boxgrove, West Sussex, near the south coast of England</p> <p>May actually have been a woman</p>

## Key Skills

Place the time studied on a timeline. sequence events or artefacts. Use dates related to the passing of time. Find out about everyday lives of people in time studied. Compare with our life today. Identify reasons for and results of people's actions. Understand why people may have had to do something. Identify and give reasons for different ways in which the past is represented. distinguish between different sources and evaluate their usefulness. Look at representations of the period – museum, cartoons etc. use a range of sources to find out about a period. Observe small details – artefacts, pictures. select and record information relevant to the study. Begin to use the library, e-learning for research. Ask and answer questions

## Key Vocabulary

prehistory	The period of time in the past before people could write
human	We are human but there have been different 'types' of human, over time, including Neanderthals
Homo sapiens	The scientific name for modern humans. Homo means 'man' and sapiens means 'wise'
hunter gatherers	Groups of people who get food by hunting, fishing, and foraging rather than by farming
climate	The weather conditions in an area over a long period of time (during the last ice age, the climate in Britain was extremely cold)
tools	The first stone tools were made 3.3 million years ago
village	A group of houses where people choose to live near each other agriculture Farming
Stonehenge	A group of standing stones on Salisbury Plain in southern England
fossil	The preserved remains of plants or animals

## Key Questions

Discuss the Charles Darwin quote: It is not the strongest of the species that survives, not the most intelligent that survives. It is the one that is the most adaptable to change. Do you think this applies to early man?  
 What can we learn about life in the Stone Age from a study of Stonehenge/ Cheddar Man/ Boxgrove Man?  
 Why is it so difficult to work out when Stonehenge was built?  
 Why was bronze a preferred material for making tools and weapons?  
 Describe the similarities and differences between the Stone Age, Bronze Age and Iron Age.

## Assessment

You are a time traveller. You have the choice to travel back and live in one of the following periods of history: Stone Age, Bronze Age or Iron Age. Which period would you prefer to live in and why?

Art focus	Create a piece of art that uses techniques learned from real artists
National Curriculum objective	To create sketch books to record their observations and use them to review and revisit ideas. To improve their mastery of art and design techniques,

Stone Age art



Sketch Books	Outcomes
Develop understanding of the use of Stone Age Art (cave paintings) <a href="https://www.dkfindout.com/uk/history/stone-age/cave-painting/">https://www.dkfindout.com/uk/history/stone-age/cave-painting/</a>	Usings fingers or home made tools to create artwork in the style of cave paintings onto sandpaper to replicate the rough surface of the stone.

Key Skills

Demonstrate increasing control the types of marks made and experiment with different effects and textures inc. blocking in colour, washes, thickened paint creating textural effects, Use light and dark within painting and begin to explore complementary colours, Mix colour, shades and tones with increasing confidence, Use a sketchbook to record media explorations and experimentations as well as try out ideas, plan colours and collect source material for future works, Confidently create different effects and textures with paint according to what they need for the task, Discuss own and others work, expressing thoughts and feelings, and using knowledge and understanding of artists and techniques.

Science focus	Rocks
National Curriculum objective	Compare and group together different kinds of rocks on the basis of their appearance and simple physical properties Describe in simple terms how fossils are formed when things that have lived are trapped within rock recognise that soils are made from rocks and organic matter
Key Knowledge: Types of Rocks	
There are three main types of rock	Sedimentary Metamorphic Igneous
Sedimentary	Sedimentary rocks are formed from particles of sand, shells, pebbles, and other fragments of material. Together, all these particles are called sediment. Gradually, the sediment accumulates into layers and over a long period of time hardens into rock. .
Metamorphic	Metamorphic rocks are formed under the surface of the earth from the metamorphosis (change) that occurs due to intense heat and pressure (squeezing)
Igneous	Igneous rock is formed when magma cools and solidifies, it may do this above or below the Earth's surface.
Key Knowledge: How to spot each type of rock	
Sedimentary	Usually crumbly and allow water through them Made of layers and stuck together with mineral crystals They can contain fossils within their layers
Metamorphic	Usually hard May contain tiny crystals or fossils
Igneous	Very hard Contain crystals
Key Knowledge: How fossils are formed	
How are fossils formed?	An animal dies, its skeleton settles on the sea floor and is buried by sediment. The sediment surrounding the skeleton thickens and begins to turn to stone. The skeleton dissolves and a mould is formed. Minerals crystallise inside the mould and a cast is formed. The fossil is exposed on the Earth's surface.
Key Knowledge: How is soil made	
What is soil made from?	Minerals (small stone fragments: clay, silt or sand) Organic Matter (decaying plants and animals) Water (which the nutrients in the minerals and the organic matter dissolve into) Air (which fills the gaps between the mineral and organic matter parts).
Types of soil	Sandy soil is pale in colour with lots of small air gaps. Water drains through sandy soil easily so it usually feels quite dry. Clay soil is an orange or blue-ish sticky soil with very few air gaps. Water does not drain through it easily. When it rains, puddles stay on top of clay soil for a long time. Chalky soil is a light brown soil. Water drains through it quickly. Peat is different from other soils because it does not contain any rock particles. It is made from very old decayed plants and is dark, crumbly and rich in nutrients (chemicals plants need to grow).

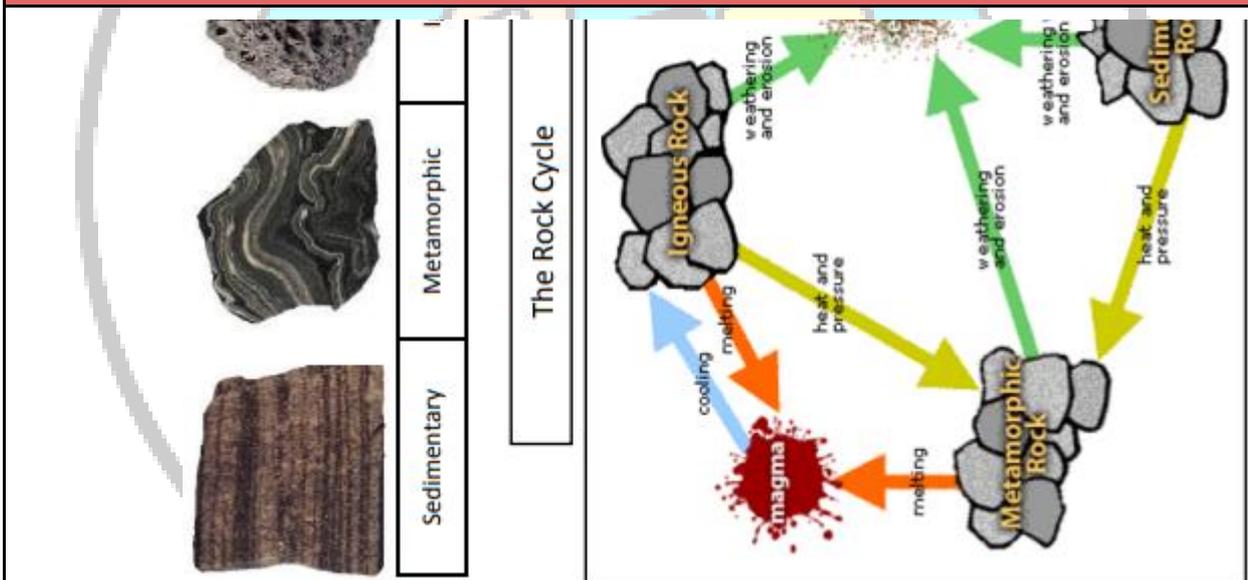
## Key Skills

Gather, record, and begin to classify and present data in a variety of ways to help in answering questions. Begin to record findings using simple scientific language, drawings, labelled diagrams, keys, bar charts and tables. Begin to report on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions. Begin to use notes, simple tables and standard units and help to decide how to record and analyse their data. Begin to record results in tables and bar charts.

## Key Vocabulary

Erosion	The gradual wearing away of something.
Magma	Hot fluid below or within the earth's crust from which lava and other igneous rock is formed on cooling.
Tectonic plates	A layer under the ground made up of large, moving pieces called plates. All of Earth's land and water sit on these plates.
Solidify	To become solid or hard.
Dissolve	To become part of a liquid

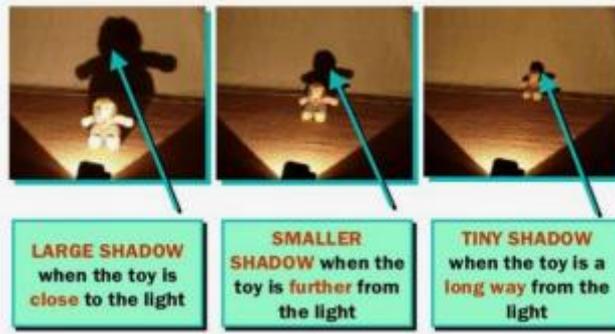
## Diagrams and Symbols



## Key Questions

- Make your own rock. (Crayon rocks)
- How are rocks eroded?
- Which type of rock would you use to build a roof?
- How can you use rocks to work out the age of a fossil?

Science focus	Light
National Curriculum objective	<p>Recognise that they need light in order to see things and that dark is the absence of light</p> <p>notice that light is reflected from surfaces</p> <p>Recognise that light from the sun can be dangerous and that there are ways to protect their eyes</p> <p>Recognise that shadows are formed when the light from a light source is blocked by a solid object</p> <p>find patterns in the way that the size of shadows change</p>
Key Knowledge: Light Sources	
We need light in order to see things. When there is no light we say it is dark.	
What is a light source?	A light source is something that makes its own light.
Common sources of light	The Sun The stars Flames Electric lights Some animals (fireflies and glow worms make their own light)
Things you may think are light sources but aren't	The Moon A mirror Shiny objects These basically reflect light from a light source but aren't light sources themselves
Reflection	Light bounces off some materials better than others. Shiny objects reflect light well.
The Sun	WARNING IT IS NOT SAFE TO EVER LOOK DIRECTLY AT THE SUN, EVEN WHEN WEARING SUN GLASSES.
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.
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?	<p>If an object is moved closer to the light sources, the shadow gets bigger.</p> <p>If an object is moved further away from the light source, the shadow gets smaller.</p>



### Key Skills

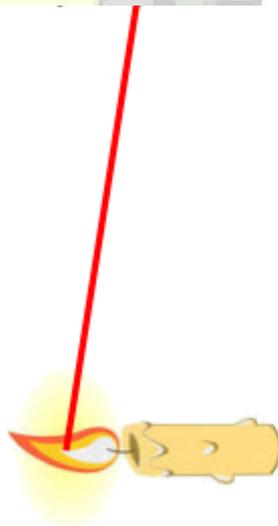
Begin to use results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions. Begin to use straightforward scientific evidence to answer questions or to support their findings. With help, begin to look for changes, patterns, similarities and differences in their data in order to draw simple conclusions and answer questions. With support, begin to identify new questions arising from the data, make new predictions and find ways of improving what they have already done.

### Key Vocabulary

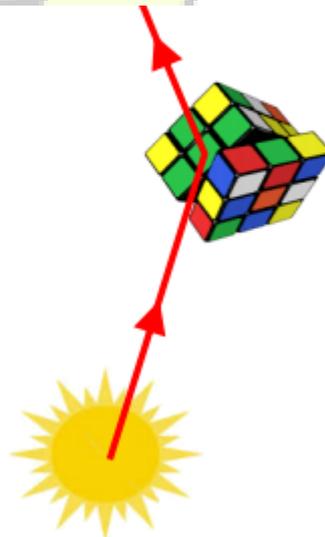
Opaque	An object you are not able to see through.
Warning	Something that is said or written to tell people of danger.
Source	A thing from which something starts
Electric	A form of energy that provides power to devices.
Reflection	When light bounces off a surface.

### Diagrams and Symbols

We see things when light from source enters our eyes.



Above: Light travels directly from source (candle flame) to the



Here the light goes from the light source, bounces off the object and into your eye that you see the object.

### Key Questions

Experiment to find out how the length of shadows can change with the seasons. (Caused by the earth's tilt). Can we make a light-ray, pass from Goodall to Hawking using mirrors? Shadow puppets theatres with size of shadow changes for bigger characters.

Why is the moon not a source of light?

Which colour is the best for reflecting sunlight?

How many light sources are there in your home?

Name three natural light sources.



PE focus	Invasion Games - Netball and Handball
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	
The focus of the learning is to introduce passing and receiving in order to keep possession of the ball.	The focus of the learning is to understand our roles when attacking and defending
The focus of the learning is on using passing and moving skills (creating space) to keep possession, developing this concept into mini game situations..	The focus of the learning is to ensure pupils understand not just how we shoot but also where we shoot in terms of court position and why?
Key Skills	
To develop our passing and receiving skills when using a chest, bounce or shoulder pass. 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 attacking and defending principles.	
Key Vocabulary	
Passing	Selecting the correct passing technique for the situation i.e chest, bounce or shoulder pass.
Foot Work	We can't travel with the ball in our hands but we can pivot on the spot.
Attacking and Defending	Attacking - keeping possession of the ball to create an opportunity to shoot.  Defending - Stopping the attacking team getting into positions where they could score.
Possession	The ability to work as a team and keep the ball away from the opposite team.
Key Questions	
How do we pass in netball/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?	

**Year 3**  
**Spring**  
**Knowledge**  
**organiser**  
*Where do we*  
*live?*



Geography focus	UK Geography
National Curriculum objective	Name and locate counties and cities of the United Kingdom, geographical regions and their identifying human and physical characteristics, key topographical features (including hills, mountains, coasts and rivers), and land-use patterns; and understand how some of these aspects have changed over time.
<b>Key Knowledge</b>	
Top 10 cities of the United Kingdom (according to population)	London, Birmingham, Leeds, Glasgow, Sheffield, Bradford, Edinburgh, Liverpool, Manchester, Bristol
Climate in the UK	north west - cool summers, mild winters, heavy rain all year north east - cool summers, cold winters, steady rain all year south east - warm summers, mild winters, light rain all year, especially summer south west - warm summers, mild winters, heavy rain all year, especially in winter
Hill and mountain ranges in the UK	Grampian Mountains, Cheviots, Cumbrian Mountains, Cambrian Mountains, Cotswold Hills, Chiltern Hills, North Downs, South Downs, Mourne Mountains, Snowdonia, Brecon Beacons, Black Mountains, Pennines
Top 10 busiest airports in UK	London Heathrow, London Gatwick, Manchester, Stansted, Luton, Edinburgh, Birmingham, Glasgow, Bristol, Belfast
Major rivers in UK	Severn (354km): source in the Cambrian mountains in Wales; runs to the Atlantic Ocean near Bristol Thames (346km): source in Gloucestershire; flows through London; flows to the North Sea at Southend on Sea Trent (297km) starts in Staffordshire, flows to the Humber River
3 biggest lakes in the UK	Lough Neagh, Lower Lough Erne, Loch Lomond
UK landmarks	Stonehenge, White Cliffs of Dover, The Angel of the North, Loch Ness, Cheddar Gorge, Hadrian's Wall, Giant's Causeway, Clifton Suspension Bridge, Land's End,
Regions in England	<p style="text-align: center;">England's Regions</p>
<b>Key Skills</b>	
Consolidate vocabulary taught in previous years. To describe route and direction –8 compass points e.g. N, S, E, W, NW, NE, SW, SE link words to topic e.g. river/meander/flood/plain/location/ industry/transport. Ask geographical questions: where is this location? What do you think about it? Analyse evidence and draw conclusions e.g. make comparisons between locations using photos/pictures, temperatures in different locations, population. Identify and	

explain different views of people including themselves e.g. views of different sections of community when developing holiday resort/new housing estate hold geographical issues through drama role play e.g. recycling. Collect and record evidence: construct questionnaire, use field sketch, sketch, brainstorm words about a place, sketch maps (e-learning, atlases). Communicate in ways appropriate to task and audience creating a sense of place eg. use questionnaires, charts, graphs to show results, write views to local paper.

### Key Vocabulary

Region	An area of land that has common features. Regions in the UK are defined for governmental purposes.
Population	The number of people that live in the same area

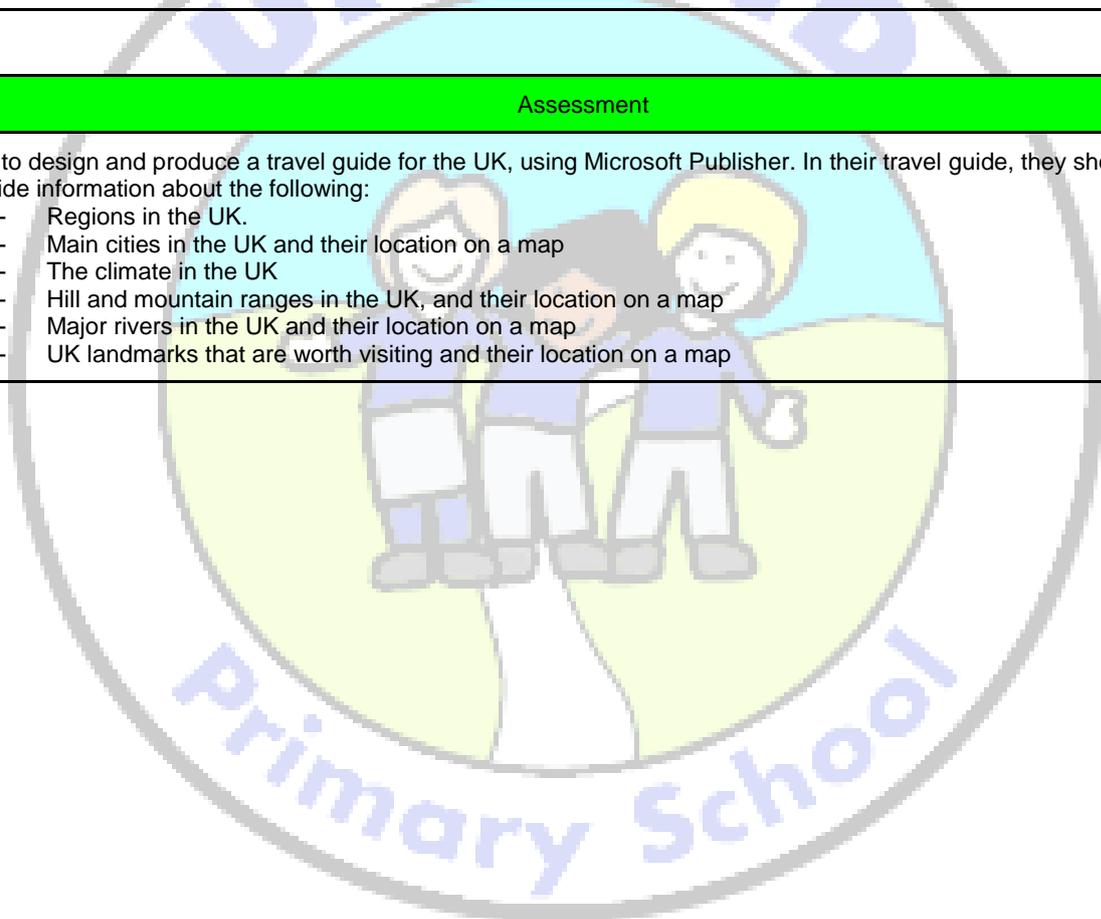
### Key Questions

Why is the temperature generally cooler in the north and warmer in the south?  
 Why is there generally more rainfall in cities that lie in the west of the UK compared to the east?  
 Identify the position and significance of the Equator.  
 Describe the physical characteristics/ key topographical features of the regions in the UK.  
 Compare the climates in the following two regions: South East and the North West.

### Assessment

Chn to design and produce a travel guide for the UK, using Microsoft Publisher. In their travel guide, they should provide information about the following:

- Regions in the UK.
- Main cities in the UK and their location on a map
- The climate in the UK
- Hill and mountain ranges in the UK, and their location on a map
- Major rivers in the UK and their location on a map
- UK landmarks that are worth visiting and their location on a map



History Focus	How transport changed Bexley
National Curriculum objective	A local history study. Examples (non-statutory) a depth study linked to one of the British areas of study listed above a study over time tracing how several aspects of national history are reflected in the locality (this can go beyond 1066) a study of an aspect of history or a site dating from a period beyond 1066 that is significant in the locality.
Historical Background	
<p>Bexleyheath is a town in the London Borough of Bexley. Bexley was first mentioned in official records in 841 AD when the land was gifted to the Archbishop of Canterbury. Since then, changes in transport links have caused the population to flourish and had a huge impact on the area. Tricia Dyer's poem 'How times have changed' sums up some of the changes that will be studied beautifully.</p> <p><a href="https://www.bexley.gov.uk/sites/bexley-cms/files/Early-industry-in-Bexley.pdf">https://www.bexley.gov.uk/sites/bexley-cms/files/Early-industry-in-Bexley.pdf</a>  <a href="https://www.bexley.gov.uk/services/archives-and-local-history/online-resources/changing-times-100-years-broadway-bexleyheath-1912-2012">https://www.bexley.gov.uk/services/archives-and-local-history/online-resources/changing-times-100-years-broadway-bexleyheath-1912-2012</a></p>	
Key Knowledge: When? Timeline of events	
1894	Upland Primary School first opened
1895	Bexleyheath Train station opened
1903	Tramways opened
1912	Clocktower opened
1925	Danson Park opened to the public
1984	Bexleyheath Broadway opened
1993	Bexleyheath Broadway Pedestrianised
2005	Danson House reopened
2005	New building opened for Upland School
Key Skills	
<p>Place the time studied on a timeline. Sequence events or artefacts. use dates related to the passing of time. Find out about everyday lives of people in time studied. Compare with our life today. Identify reasons for and results of people's actions. Understand why people may have had to do something. Identify and give reasons for different ways in which the past is represented. distinguish between different sources and evaluate their usefulness. Look at representations of the period – museum, cartoons etc. use a range of sources to find out about a period. Observe small details – artefacts, pictures. select and record information relevant to the study. Begin to use the library, e-learning for research. ask and answer questions</p>	
Key Vocabulary	
Bexleyheath	The name of our town
Bexley	The name of the Borough
Greater London	County of England, located in the London region, to which Bexley belongs

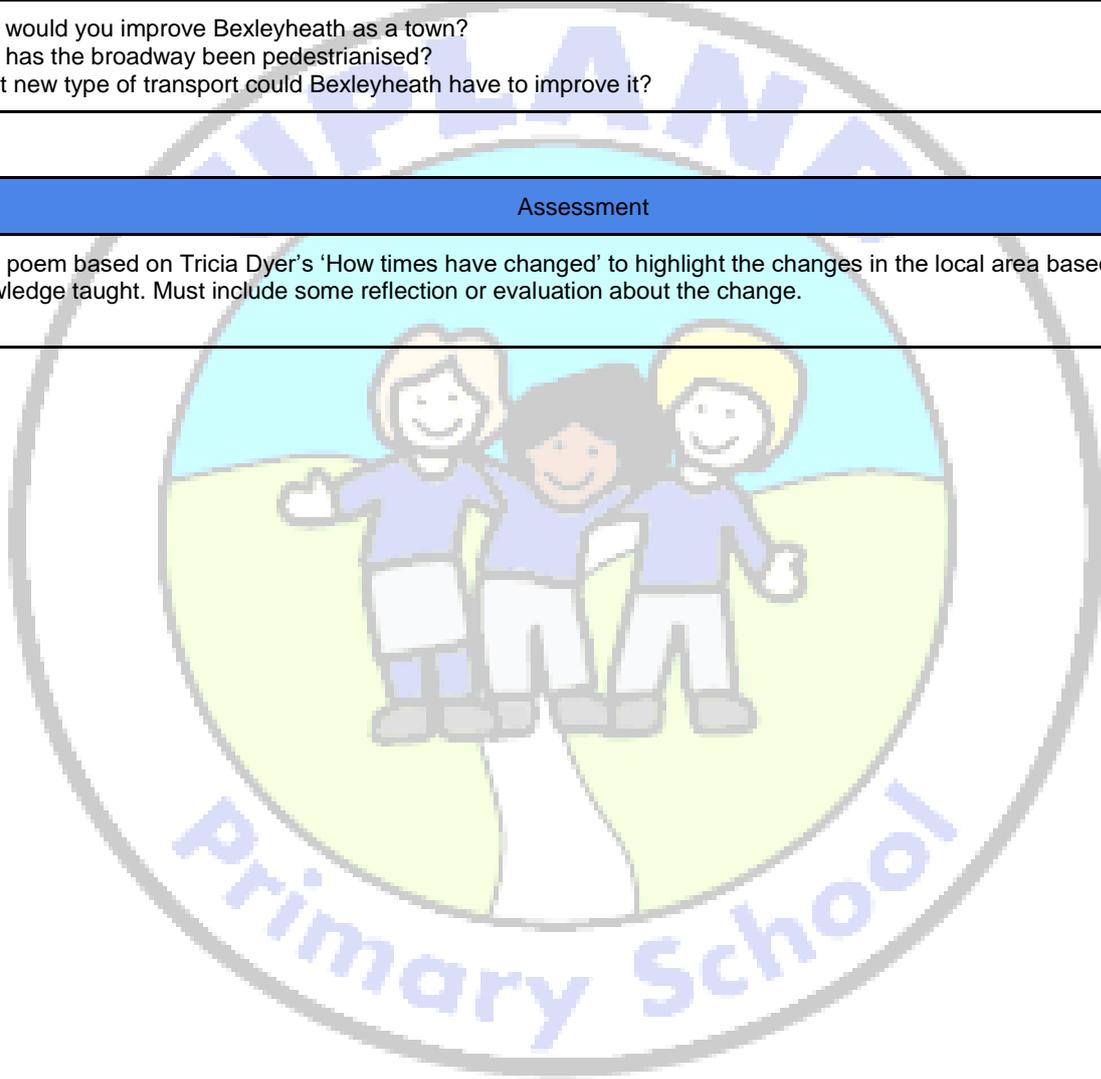
History	A study of the past
Past	A time that has already happened
Transport	A way of moving people or goods from place to place
Industry	Economic activity concerned with the processing of raw materials and manufacture of goods in factories.
Population	Number of people living in one place

**Key Questions**

How would you improve Bexleyheath as a town?  
 Why has the Broadway been pedestrianised?  
 What new type of transport could Bexleyheath have to improve it?

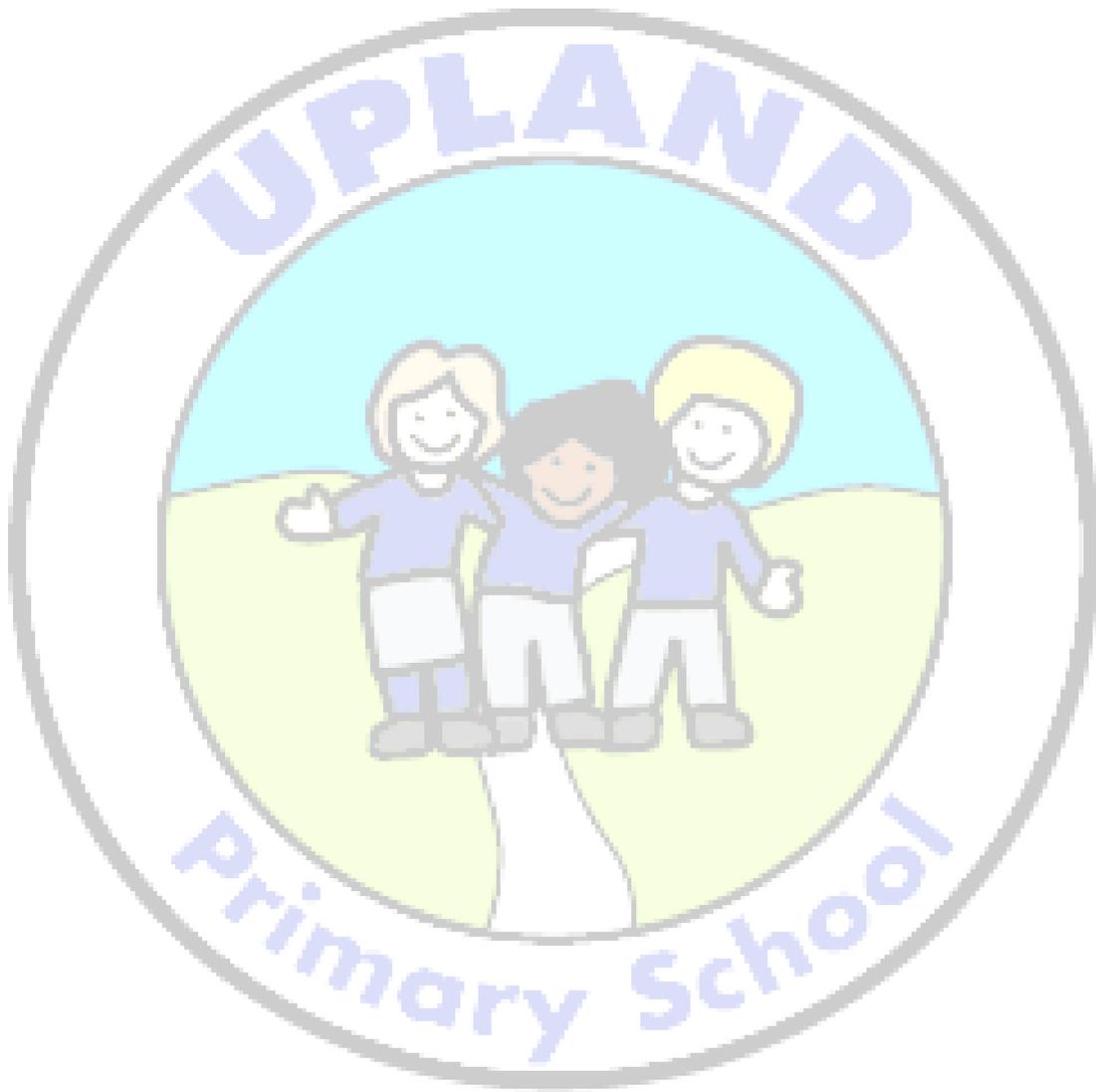
**Assessment**

Own poem based on Tricia Dyer's 'How times have changed' to highlight the changes in the local area based on knowledge taught. Must include some reflection or evaluation about the change.



Art focus	William Morris
National Curriculum objective	Learn about great artists, architects and designers in history.
Key Knowledge	
Born	1834
Died	1896
Education	Earned a degree from Exeter college, Oxford and began work as an architect.
Married	Jane Burden 1859
Red House	Soon after they were married, they began work on Red House in Bexleyheath. Together, they designed all the interior and decoration themselves.
Companies	William Morris started a number of companies over his life time which focussed on handmade furniture and wallpaper.
Arts and Crafts movement	William Morris is considered the father of the Arts & Crafts movement, a style of design that looked to handicraft and traditional forms and techniques
Famous quotes	'Have nothing in your house that you do not know to be useful, or believe to be beautiful.'
Key Vocabulary	
Industrial revolution	Beginning in the mid-18th century, inventors began developing processes to power machines with steam.
A good example of pattern as repetition	
	
Sketch Books	Outcomes
Given a small, enlarged segment of a William Morris design, children to explore extending and developing the design Sketches of leaves, vines and flowers Exploration of harmonious colours (colours that are found side-by-side on the colour wheel - blues and purples,	An original natural wallpaper design Must not be a copy of the example Must use floral or natural patterns Must use harmonious colours Must include high level of detail

oranges and reds)



Science focus	Plants
National Curriculum objective	Identify and describe the functions of different parts of flowering plants: roots, stem/trunk, leaves and flowers explore the requirements of plants for life and growth (air, light, water, nutrients from soil, and room to grow) and how they vary from plant to plant Investigate the way in which water is transported within plants Explore the part that flowers play in the life cycle of flowering plants, including pollination, seed formation and seed dispersal
Key Knowledge	
The main parts of a plant	Flowers Leaves Stem Roots
Flowers	They have colour and smell to attract insects.
Leaves	They change Carbon Dioxide and water into food for the plant and Oxygen.
Stem	They hold the plant up and carry water from the roots to the rest of the plant.
Roots .	They hold the plant in the ground and soak up water and minerals from the soil
Sometimes plants bear fruit	Fruit is the part of the plant we often eat but its main job is to keep the seeds safe.
To grow and survive, plants need:	Light Water Carbon Dioxide This is so that they can make their own food. Warmth This is because if plants get too hot or too cold then they will die.
How does a plant get water?	The roots take up water from the soil. The water travels through the stem of the plant to the leaves.
The job of the flower	<ul style="list-style-type: none"> <li>• The flower exists to make new plants.</li> <li>• The flower contains the pollen and eggs which make seeds.</li> <li>• The seeds grow into new plants.</li> </ul>
Parts of the flower	<ul style="list-style-type: none"> <li>• Petal Stamen (The male part of a flower)</li> <li>• Carpel (The female part of a flower)</li> </ul> (Look at the second diagram)
Pollination and Fertilisation	For a plant to grow a new seed, Pollen needs to get to its Carpel from another plant.
How does Pollen get from one plant to another?	Insects: <ul style="list-style-type: none"> <li>• The insect goes to the first flower looking for Nectar.</li> <li>• Pollen gets stuck to it.</li> <li>• When it goes to another flower, the Pollen gets stuck to that flower.</li> </ul> Wind: <ul style="list-style-type: none"> <li>• Pollen is blown from one flower to another.</li> </ul>
Fertilisation	When the Pollen joins the Egg of the new flower a seed or many seeds are formed.
How do the new seeds get to the soil to grow?	The seeds are dispersed. This can be done in 3 main ways: 1) By wind, for example like Dandelion seeds. 2) By animals, (they get eaten and pooped out). 3) By explosion. Dry seed pods split open and shoot out the seeds.

### Key Skills

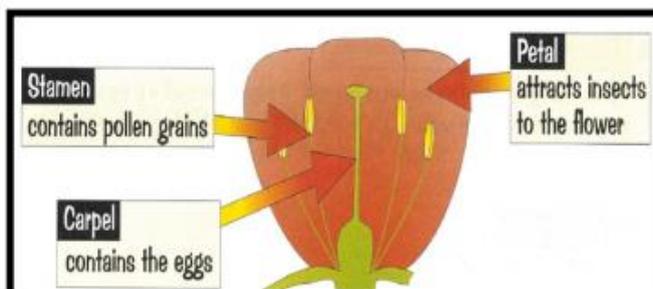
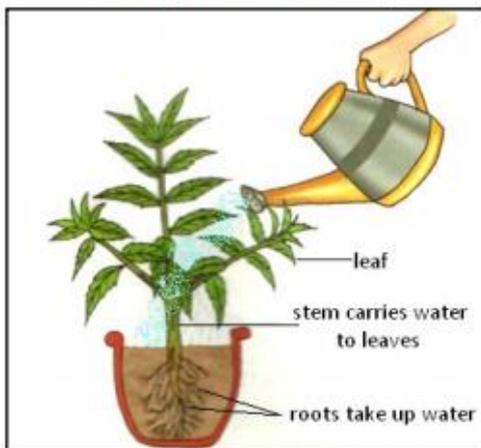
Begin to make systematic and careful observations and, where appropriate, take accurate measurements using standard units, using a range of equipment, including thermometers and data loggers. Begin to look for naturally occurring patterns and relationships and decide what data to collect to identify them. Help to make decisions about what observations to make, how long to make them for and the type of simple equipment that might be used. Learn to use some new equipment appropriately (eg data loggers). Begin to see a pattern in my results. Begin to choose from a selection of equipment. Begin to observe and measure accurately using standard units including time in minutes and seconds.

### Key Vocabulary

Petal	One of the coloured segments of a flower.
Stamen	The male part of a flower containing Pollen
Carpel	The female part of a flower containing an egg.
Fertilisation	When Pollen and an egg join together to make a seed.
Dispersal	Spreading things over a wide area.
Pollen	A powdery yellow substance from the male part of a flower.
Nectar	A sweet fluid in flowers that attracts insects.

### Diagrams and Symbols

How a plant takes in water.



### Key Questions

Compare the factors that affect plant growth, e.g. the amount of light, amount of water... Using microscopes to explore parts of flowers. Investigating ways to speed up pollination with own flowers. Investigating fruits and trying to grow our own fruit trees from seeds.

Why are bees important to plants?

What are the benefits and negatives of using fertilisers?

What would happen if plants didn't reproduce?

PE focus	Basketball and Tennis
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.	Pupils will learn how to hold the racket safely and understand why it is important that they control the ball when playing a shot.
The focus of the learning is to introduce passing and receiving in order to keep possession of the ball as a team.	Pupils will develop an understanding of the game tennis and begin to show why they hit the ball into a space.
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.	Pupils will develop their technique when using the forehand shot.
Key Skills	
<p><b>Basketball</b> 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 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 basketball hoop. To show an understanding of attacking and defending principles.</p> <p><b>Tennis</b> To develop my hand eye coordination and agility through tennis. To develop my personal control with a racket and ball i.e balancing, keepy ups, under arm throw. To explore hitting a tennis ball with a forehand shot.</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.
Forehand shot	A type of shot used in tennis.
Control	Keeping the ball close to our racket or returning the ball into a space.
Foot Work	Always be on our toes, what ways can we travel around a tennis court i.e backwards or sideways
Baseline	An area on a tennis court.

### Basketball

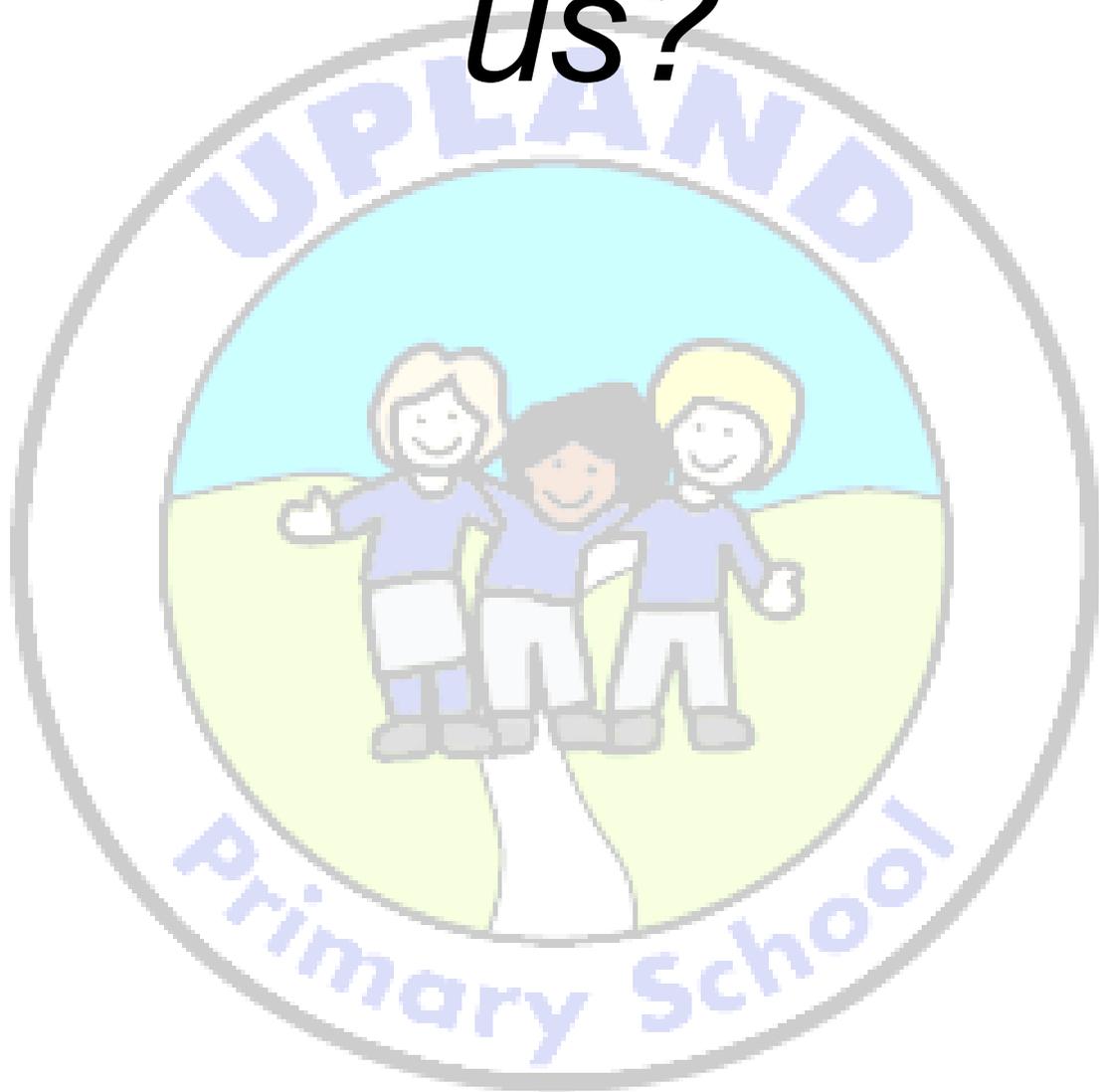
What do we do when we receive the ball? When and where do we dribble? Why do we dribble? What happens if we lose possession of the ball? If we stop dribbling what must we do? Can we dribble with alternate hands? Can we change direction at speed? How do we pass in basketball? When should we bounce/chest pass? Why should we 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?

### Tennis

What does close control look like? How do i hold the racket? Why? Why do we try to hit the ball with control and accuracy? Why is it important to stand in line with the ball? Why do we hit the ball into a space? Why do we not stand still in tennis? Why do we need to return (recover) to the middle of the court (baseline) to be ready? What does the ready position look like? Why must we be able to control the ball with a racket when hitting the ball?



# *What did the Romans do for us?*



History Focus	Roman invasion in Britain
National Curriculum objective	The Roman Empire and its impact on Britain
Historical Background	
<p>Roman Britain was a province of the Roman Empire from 43 to 409. Before the invasions the tribes of Britain had already established cultural and economic links with continental Europe, but the Roman invaders introduced new developments in agriculture, urbanisation, industry, and architecture. After the initial rebellions of Caratacus and Boudicca, the Romans controlled the lands south of Hadrian's Wall in relative peace &amp; a distinctively RomanoBritish culture developed. From 400 Britain suffered repeated attacks from barbarian invasions and in c. 409 Roman officials departed. Over the next 150 years most of the Roman cities fell into ruins, nevertheless, the legacy of Roman rule was felt for many centuries.</p>	
Key Knowledge: When? Timeline of events	
August 55 BC:	Julius Caesar attempted to invade Britain for the first time. They had an advantage but the weather meant they had to leave.
July-August 54 BC:	Julius Caesar attempted to invade Britain for the second time. The Romans this time successfully conquered Britain, but Caesar was forced to leave to deal with problems in France (Gaul).
51BC:	Defeat of Caratacus
61BC:	Iceni revolt led by Boudicca
122AD:	Construction of Hadrian's wall
200AD:	Introduction of Christianity
306:	Constantine proclaimed emperor in York
406:	Suevi, Alans, Vandals and Burgundians attack Gaul and break contact between Rome and Britain: Remaining Roman army in Britain mutinies
408:	Devastating attacks by the Picts, Scots and Saxons
409:	Britons expel Roman officials and fight for themselves
410:	Britain is independent .
440-500	Civil war and famine in Britain; Pictish invasions: Many towns and cities are in ruins
c.480-550:	Arrival of Anglo-Saxons
Key Skills	
<p>Place the time studied on a timeline. sequence events or artefacts. use dates related to the passing of time. Find out about everyday lives of people in time studied. compare with our life today. identify reasons for and results of people's actions. Understand why people may have had to do something. Identify and give reasons for different ways in which the past is represented. Distinguish between different sources and evaluate their usefulness. Look at representations of the period – museum, cartoons etc. Use a range of sources to find out about a period. Observe small details – artefacts, pictures. select and record information relevant to the study. Begin to use the library, e-learning for research. Ask and answer questions about and using sources.</p>	
Key Vocabulary	

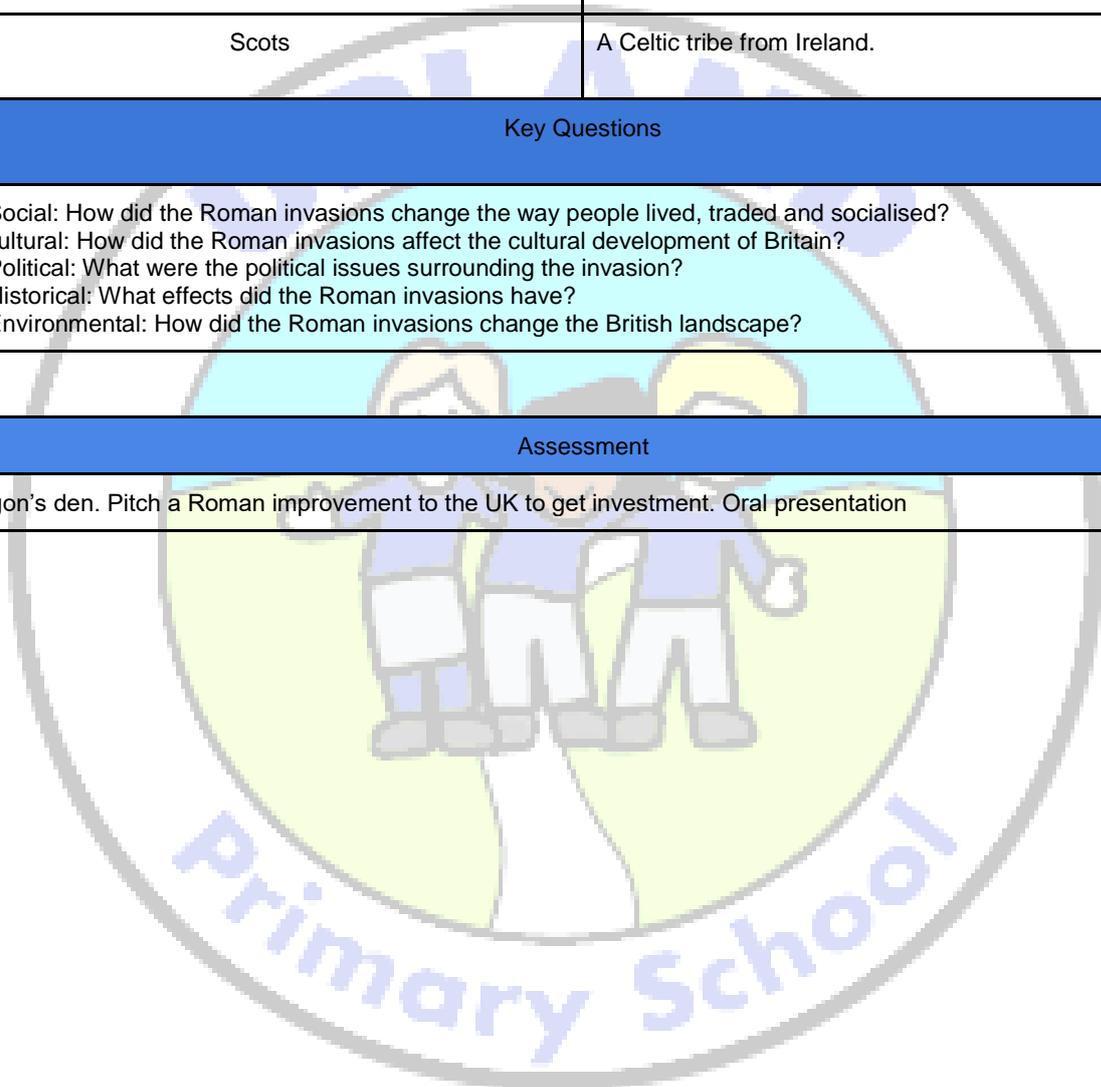
AD	Anno Domini – The time after the birth of Jesus Christ.
Aqueduct	A structure, like a bridge, which is used to carry water.
Auxiliary troops	Soldiers who were not citizens of Rome, but fought for the Roman army.
BC	Before Christ. The time before the birth of Jesus Christ.
Celtic tribes	The tribes (Celts) that lived in Britain during the Iron age. They also lived on mainland Europe.
Chariot	A vehicle with two wheels pulled by horses or ponies.
Scots	A Celtic tribe from Ireland.

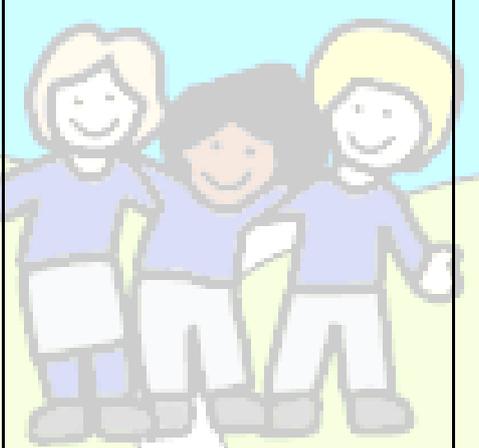
**Key Questions**

- (1) Social: How did the Roman invasions change the way people lived, traded and socialised?
- (2) Cultural: How did the Roman invasions affect the cultural development of Britain?
- (3) Political: What were the political issues surrounding the invasion?
- (4) Historical: What effects did the Roman invasions have?
- (5) Environmental: How did the Roman invasions change the British landscape?

**Assessment**

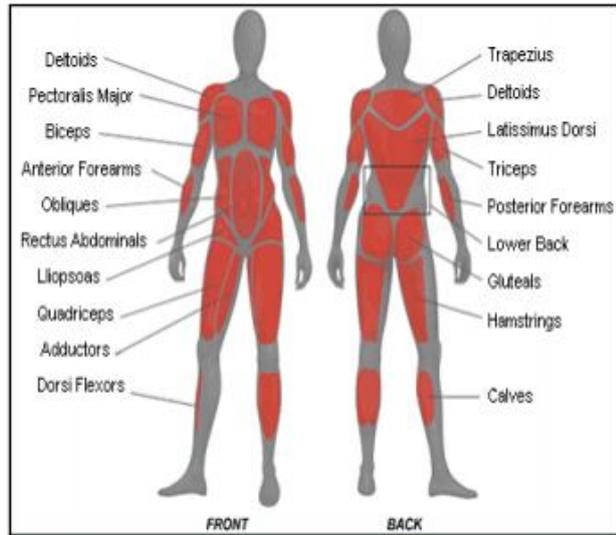
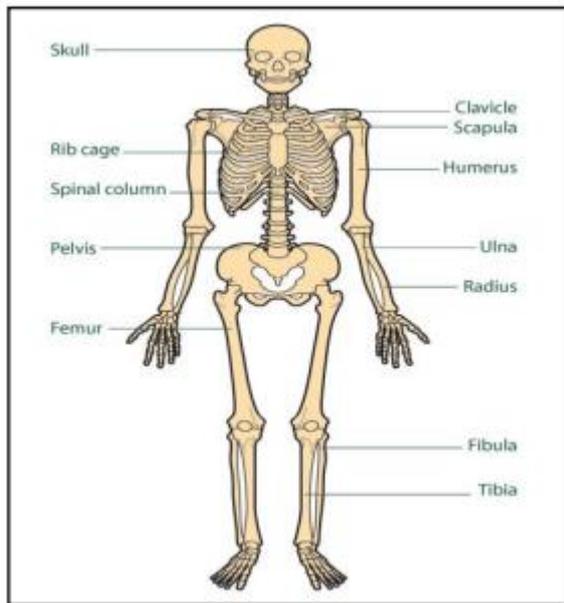
Dragon's den. Pitch a Roman improvement to the UK to get investment. Oral presentation



Design and technology focus	Food theme Roman	
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 dishes the Romans made	
The Journey		
Key Knowledge	Outcomes	Parameters
<p>The history of Roman foods brought to Britain, Collect information about Roman food from different sources <b>(Strange Histories, The Romans p.14-15)</b> Look at pictures of Roman food, kitchen utensils, food shops, markets, etc. Discuss what sort of things the Romans ate: grapes, grain, meat, fermented anchovies, lentils, onions, olives, dates, oranges, apples, pears Research eating patterns of the Romans (dinner parties, Thermapholias etc) Give the chn different foods to taste: bread dipped in vinegar &amp; bread dipped in anchovy sauce.</p> <p>Begin to understand how to use a range of techniques such as peeling, chopping, slicing, grating, mixing, spreading, kneading and baking.</p>	<p>Roman Carrots in Sweet &amp; Sour Sauce with Roman bread</p> 	<p>Children make the dough Children prepare and make the dish Children evaluate the dish thinking about taste and texture Children compare the dish to modern day dishes</p>
Key Skills		
<p>Start to 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 so how this would have limited the Roman diet). Understand how to prepare and cook a variety of predominantly savoury dishes safely and hygienically including, where appropriate, the use of a heat source. Begin to understand how to use a range of techniques such as peeling, chopping, slicing, grating, mixing, spreading, kneading and baking.</p>		

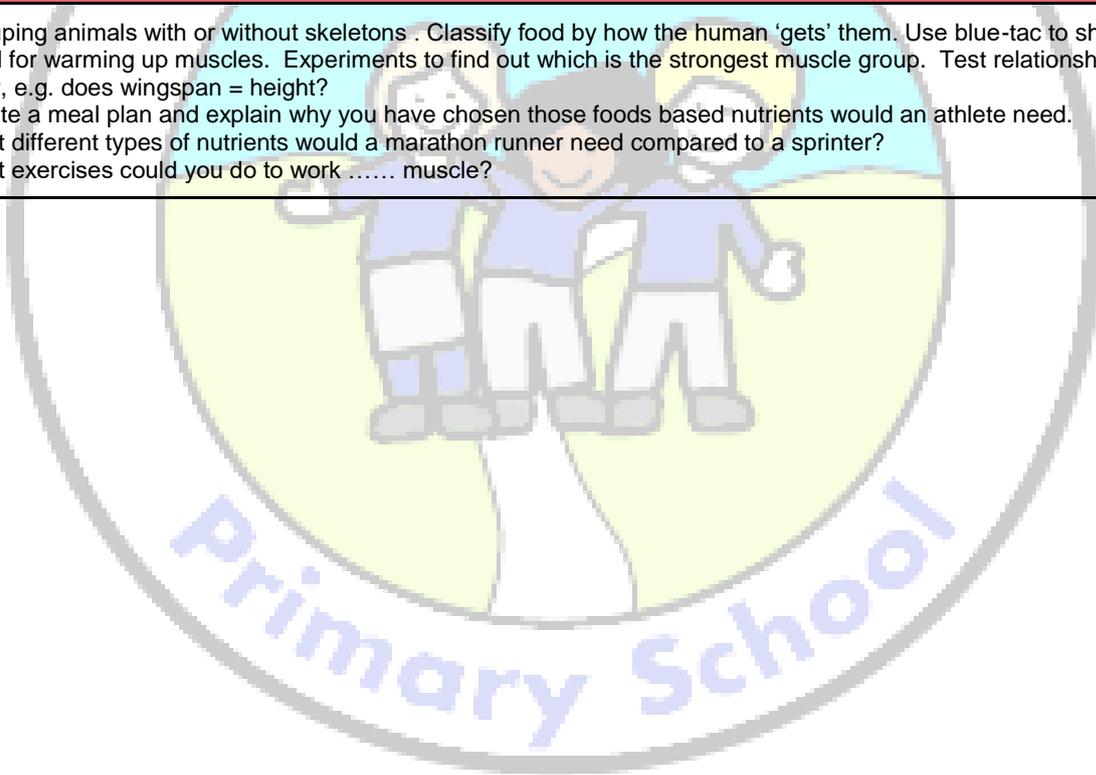
Design and technology focus		Italy - the fashion capital of the world!	
National Curriculum objective		<p>Generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design</p> <p>Select from and use a wider range of materials and components, including construction materials, textiles and ingredients, according to their functional properties and aesthetic qualities</p> <p>Evaluate their ideas and products against their own design criteria and consider the views of others to improve their work</p>	
Challenge		<p>In fashion!</p> <p>To design and make an item of clothing using a t-shirt as a base model (e.g. new football kit, new school top, something to wear to the next school disco)</p>	
The Journey			
Key Technical knowledge	Design	Make	Evaluate
<p>How has fashion developed over time? Create a class timeline of popular fashion since 1900 and important influences on the fashion industry.</p> <p>How can we join fabrics together? Stitching Gluing Stapling</p> <p>How can we add colour to our fabrics? Fabric pens Fabric paints Dyeing</p> <p>How can we add shape to our clothing? Learn different cuts of clothing Learn how to cut clothing to add detail (ripped jeans)</p>	<ol style="list-style-type: none"> <li>1. Clearly understand the criteria for the project</li> <li>2. Explore a range of existing colouration, cuts and detail on clothing</li> <li>3. With a partner, agree on what 'their' preferred style is</li> <li>4. Use computer paint package to create a number of design ideas in the preferred style</li> <li>5. Market research which design is preferred by other pupils in school</li> <li>6. Create prototype of design using paper, pens and mannequin</li> <li>7. Create a final design with jotting of materials needed and how each aspect of the piece will be achieved, e.g. "Staple patches here."</li> <li>8. Create a resource list of materials needed for the final design.</li> </ol>	<p>Skills Practice</p> <p>Learn how to colour patches of clothing using pens, paints and dies (with adult support where needed)</p> <p>Learn how to join items of clothing together using glue, staples and stitching</p> <p>Learn how to safely cut materials.</p> <ol style="list-style-type: none"> <li>1. Translate final design on to t-shirt base layer.</li> <li>2. Use colouring, cutting and joining skills to add detail to the base design.</li> <li>3. Create additional materials (e.g. patches) to be added to the base layer.</li> <li>4. Complete final article.</li> </ol>	<p>Before Making</p> <p>Explore and evaluate what is fashionable at present. Evaluate the prototype and make final design tweaks</p> <p>After Making</p> <p>Evaluate how effectively the final product meets the 'challenge'. What could have made the design even easier to make for mass production?</p>
Key Skills			
<p>Show awareness and name a range of different fabrics. Use a variety of techniques, e.g. printing, dyeing, weaving and stitching to create different textural effects. Apply decoration using beads, buttons, feathers etc. Continue to gain experience in applying colour with printing. Explore using resist paste and batik. Show further experience in changing and modifying threads and fabrics, knotting, fraying, fringing, pulling threads, twisting, plaiting. Use a sketchbook to plan, collect and develop ideas. To record textile explorations and experimentations as well as try out ideas. Demonstrate experience in looking at fabrics from other countries. Discuss own and others work, expressing thoughts and feelings, and using knowledge and understanding of artists and techniques. Identify changes they might make or how their work could be developed further</p>			

Science focus	Animals including Humans
National Curriculum objective	Identify that animals, including humans, need the right types and amounts of nutrition, and that they cannot make their own food; they get nutrition from what they eat Identify that humans and some other animals have skeletons and muscles for support, protection and movement
<b>Key Knowledge: Nutrition</b>	
Things animals need to survive	Water, Food, Air, Shelter
Things humans need to survive	Water, Food, Air, Shelter
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 Nutrition?	Nutrition means animals getting the food they need to grow and be healthy
Can we make our own food?	No. Humans and animals can't make their own food They get food by either growing it, hunting it or gathering it
What is meant by growing food?	Humans can grow their own food by planting seeds that they later harvest
What is meant by hunting food?	Humans can hunt other animals to eat
What is meant by gathering food?	Humans can find foods grown in the wild to eat
<b>Key Knowledge: Skeletons and Muscles</b>	
What is a skeleton?	A skeleton is a structure of bones that supports the body of a person or animal
12 common parts of the skeleton we should know	Skull, clavicle, scapula, rib cage, humerus, spinal column, pelvis, ulna, radius, femur, fibula and tibia (See diagram)
What is a muscle?	A soft tissue in the body that contracts and relaxes to cause movement of the skeleton
19 common muscles we should know	Front: Deltoids, pectoralis major, biceps, anterior forearms, obliques, rectus abdominals, iliopsoas, quadriceps, adductors and dorsi flexors Back: Trapezius, deltoids, latissimus dorsi, triceps, posterior forearms, lower back, gluteals, hamstrings and calves
<b>Key Skills</b>	
Begin to recognise when and how secondary sources might help to answer questions that cannot be answered through practical investigations.	
<b>Key Vocabulary</b>	
Tissue	Tissue is part of the body of that is made of similar cells
Contract	When a muscle becomes smaller, shorter and tighter



Key Questions

Grouping animals with or without skeletons . Classify food by how the human 'gets' them. Use blue-tac to show the need for warming up muscles. Experiments to find out which is the strongest muscle group. Test relationships in the body, e.g. does wingspan = height?  
 Create a meal plan and explain why you have chosen those foods based nutrients would an athlete need.  
 What different types of nutrients would a marathon runner need compared to a sprinter?  
 What exercises could you do to work ..... muscle?



Science focus	Forces and magnets
National Curriculum objective	compare how things move on different surfaces notice that some forces need contact between two objects, but magnetic forces can act at a distance Observe how magnets attract or repel each other and attract some materials and not others Compare and group together a variety of everyday materials on the basis of whether they are attracted to a magnet, and identify some magnetic materials Describe magnets as having two poles Predict whether two magnets will attract or repel each other, depending on which poles are facing
Key Knowledge: Forces	
What is a force?	A force is either: A push or A pull
Forces can make things...	Speed up Slow down Change shape Change direction
A force that speeds something up .	The child is pushing the car to speed it up 
A force that slows something down	The girl is pulling the dog to slow it down. 
A force that changes the shape of something	The can is being squeezed so that it changes shape and becomes smaller. 
A force that changes the direction of something	When the ball is hit with the racket, it will change direction. 
Key Knowledge: Magnet Forces	
Why is magnetism different?	All of the forces above needed contact between two objects for them to happen. <b>Magnetic forces can act at a distance.</b>
Magnets have a North Pole and a South Pole	<b>South Pole</b>  <b>North Pole</b>
Magnets attract or repel each other	<b>Attract:</b>  <b>Repel:</b>  North and South attract. But North and North or South and South will repel.
Types of magnets	Bar 

	<p>Ring</p>  <p>Button</p>  <p>Horseshoe</p> 
Can magnets only attract magnets?	No - Magnets can attract other things too. See the diagram on the opposite side.

**Key Skills**

Set up some simple practical enquiries, comparative and fair tests. Begin to recognise when a simple fair test is necessary and help to decide how to set it up. Begin to think of more than one variable factor.

**Key Vocabulary**

Squeezed	Firmly press (usually with the fingers)
Contact	Physically touching something
Magnetic	Can be attracted to a magnet
Attract	To come together
Repel	To force away/apart

**Diagrams and Symbols**

Magnets only attract certain types of metals, not such as glass, plastic and wood aren't attracted.



Metals such as iron, nickel and cobalt are attracted to magnets.



Most metals however are not attracted to magnets. These include copper, silver, gold, magnesium, platinum, aluminium and more.



**Key Questions**

Explore the uses of magnets in everyday objects. Group everyday objects into magnetic and nonmagnetic by testing with magnets. Design a mechanism that requires a magnet to enable it to work. What are magnets made of? How do you magnetise/ demagnetise a metal? What items at your house use magnets and how have they been used?

PE focus	Cricket and Athletics
National Curriculum Objective	Use running, jumping, throwing and catching in isolation and in combination  Play competitive games.  Develop strength, technique, control and balance (for example, through athletics)
<b>Key Knowledge</b>	
Pupils will develop an understanding of how, when and why to throw a ball overarm with power and distance.	To learn and understand the difference between running a distance and a sprint race.
The focus of the learning is to introduce striking the ball with intent away from fielders to score runs (points).	To consolidate & improve the quality, range & consistency of the techniques they use for particular activities.
Pupils will understand the objective of each team; batting and fielding.	To describe & evaluate the effectiveness of performances, & recognise aspects of performance that need improving.
<b>Key Skills</b>	
<p><b>Cricket</b> To develop overarm bowling with control and accuracy. To develop our fielding techniques and show an understanding why we need to field the ball quickly. To learn and understand where we need to hit the ball to gain runs. To understand the objective of both batting and fielding teams.</p> <p><b>Athletics</b> 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>	
<b>Key Vocabulary</b>	
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.
Bowling	To bowl the ball over arm with one bounce towards the stumps.
Fielding - Outs	Different ways to get the batting team out i.e caught, bowled, stumped.
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.
<b>Key Questions</b>	
<b>Cricket</b>	
<p>What is the difference between batting and fielding? 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?</p>	

## Athletics

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? 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?

