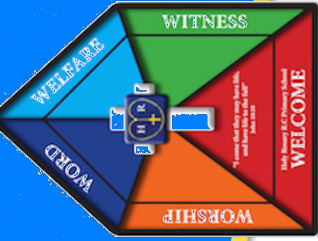


# Holy Rosary RC Primary



# Knowledge Organisers



# Working Historically



# Working Historically KS1

Key vocabulary			
<b>Here</b>	In this position or now in this moment in time.	<b>Artefact</b>	An object made by a human being, typically one of cultural or historical interest.
<b>Now</b>	At this present time or moment.	<b>Year</b>	The time taken for the Earth to make one revolution around the Sun (usually 365 days).
<b>Then</b>	At that moment in time.	<b>Month</b>	A unit of time referring to each of the twelve named periods into which a year is divided.
<b>Before</b>	During the period of time preceding a particular event or time	<b>Day</b>	Each of the twenty-four-hour periods, from one midnight to the next and corresponding to a rotation of the earth on its axis.
<b>After</b>	The period of time following an event.	<b>Similar</b>	Having a resemblance in appearance, character, or quantity, without being identical.
<b>Today</b>	This present day.	<b>Different</b>	Not the same as another or each other; unlike in nature, form, or quality.
<b>Yesterday</b>	The day before today.	<b>Era</b>	A long and distinct period of history.
<b>Last</b>	The most recent in time.	<b>Period</b>	A length or portion of time.
<b>Week</b>	A period of seven days.	<b>Decade</b>	A period of ten years.
<b>A long time ago</b>	A period of time far in the past.	<b>1900s</b>	Refers to the start of the 20th Century.
<b>Timeline</b>	A graphical representation of a period of time, on which important events are marked.	<b>1960s</b>	A decade in the 20 <sup>th</sup> Century.
<b>History</b>	The study of past events.	<b>2010s</b>	The last decade.
<b>Past</b>	Gone by in time and no longer existing.	<b>2020s</b>	The current decade.
<b>Present</b>	Happening now.	<b>Century</b>	A period of one hundred years.
<b>Evidence</b>	Anything directly related to some event, person, or period of the past.	<b>Research</b>	An investigation into and study of materials and sources in order to establish facts and reach new conclusions.
<b>Modern</b>	Relating to the present or recent times as opposed to the remote past.	<b>Photograph</b>	A picture made by using a camera.
<b>Chronological</b>	A record of events following the order in which they occurred.		



# Working Historically Lower KS2

Key vocabulary		
<b>BCE (Before the Common Era)</b>	Used when referring to a year before the birth of Jesus Christ when the Christian calendar starts counting years:	<b>CE (Common Era)</b> Common Era used to refer to the years that come after the birth of Jesus Christ.
<b>BC (Before Christ)</b>	Abbreviation for Before Christ, used to show that a year or century comes before the year in which Jesus Christ is thought to have been born	Used when referring to a year after Jesus Christ was born.
<b>Millennium</b>	A period of a thousand years, especially when calculated from the traditional date of the birth of Christ.	A person who studies human history and prehistory through the excavation of sites and the analysis of artefacts and other physical remains.
<b>Archaeology</b>	The study of human history and prehistory through the excavation of sites and the analysis of artefacts and other physical remains.	An original piece of information that contains history at the most basic level, and are used as clues in order to study history.
<b>Significance</b>	The importance that it has, usually because it will have an effect on a situation or shows something about a situation.	Something that is handed down from one period of time to another period of time
<b>First Hand Evidence</b>	An account of an event or topic that was created by people or things that were there at the time or event.	Information that was created later by someone who did not experience first-hand or participate in the events.
<b>Oral History</b>	The collection and study of historical information about individuals, families, important events, or everyday life using audiotapes, videotapes, or transcriptions of planned interviews	To reach an opinion or decide that something is true on the basis of information that is available
<b>Effects</b>	A change which is a result or consequence of an action or other cause.	A result or effect, typically one that is unwelcome or unpleasant.
<b>Cause/s</b>	A person or thing that gives rise to an action, phenomenon, or condition.	To put forward an idea for consideration.
<b>Historian</b>	An expert in history who could specialise in a particular period of History.	





# Working Historically Upper KS2

Key vocabulary		
<b>BCE (Before the Common Era)</b>	Used when referring to a year before the birth of Jesus Christ when the Christian calendar starts counting years:	<b>CE (Common Era)</b> Common Era used to refer to the years that come after the birth of Jesus Christ.
<b>BC (Before Christ)</b>	Abbreviation for Before Christ, used to show that a year or century comes before the year in which Jesus Christ is thought to have been born	Used when referring to a year after Jesus Christ was born.
<b>Millennium</b>	A period of a thousand years, especially when calculated from the traditional date of the birth of Christ.	A person who studies human history and prehistory through the excavation of sites and the analysis of artefacts and other physical remains.
<b>Archaeology</b>	The study of human history and prehistory through the excavation of sites and the analysis of artefacts and other physical remains.	An original piece of information that contains history at the most basic level, and are used as clues in order to study history.
<b>Significance</b>	The importance that it has, usually because it will have an effect on a situation or shows something about a situation.	Something that is handed down from one period of time to another period of time
<b>First Hand Evidence</b>	An account of an event or topic that was created by people or things that were there at the time or event.	Information that was created later by someone who did not experience first-hand or participate in the events.
<b>Oral History</b>	The collection and study of historical information about individuals, families, important events, or everyday life using audiotapes, videotapes, or transcriptions of planned interviews	To reach an opinion or decide that something is true on the basis of information that is available
<b>Effects</b>	A change which is a result or consequence of an action or other cause.	A result or effect, typically one that is unwelcome or unpleasant.
<b>Cause/s</b>	A person or thing that gives rise to an action, phenomenon, or condition.	To put forward an idea for consideration.
<b>Historian</b>	An expert in history who could specialise in a particular period of History.	A person who has seen something happen and can give a first-hand description of it.
<b>Culture</b>	A term which covers the social behaviour, institutions, norms found in human societies, the knowledge, beliefs, arts, laws, customs, capabilities, and habits of the individuals in these groups	



# Working Scientifically

# Working Scientifically KS1

## Key vocabulary

<b>Question</b>	A sentence or word that requires an answer.	<b>Differences</b>	Things that are not the same when sorting or comparing.
<b>Aim</b>	The purpose or reason for completing a task.	<b>Similarities</b>	Things that are the same when sorting or comparing.
<b>Hypothesis</b>	An explanation (guess) for a task or experiment.	<b>Describe</b>	Give details about what is happening or about certain aspects.
<b>Equipment</b>	Items used in an experiment or investigation.	<b>Measurement</b>	To find out the size, length or amount of a given something.
<b>Method</b>	The way in which an investigation is carried out.	<b>Test</b>	To find out an answer by using different ways of investigating.
<b>Results</b>	What is found at the end of an investigation.	<b>Source</b>	Where information or an item originates from.
<b>Conclusion</b>	A judgement based on the results from an investigation.	<b>Record</b>	To note/write down.
<b>Evaluation</b>	To summarise and judge the results of an investigation.	<b>Diagram</b>	A simple drawing to represent information.
<b>Answer</b>	What is stated when a question is asked.	<b>Chart</b>	Information that can be a graph, table or diagram.
<b>Observe</b>	To see or notice something.	<b>Graph</b>	A diagram that shows the relationship between two variables.
<b>Identify</b>	To spot or recognise something, e.g. a group.	<b>Classify</b>	To arrange (sort) into different classes or categories.
<b>Sort</b>	To put items in a group with the same or similar characteristics.	<b>Gather</b>	To collect items or data.
<b>Group</b>	Items that have the same or similar characteristics.	<b>Data</b>	Information, facts or number to be collected and looked at.
<b>Compare</b>	To estimate (best guess) or measure items in terms of similarities and differences.		



# Working Scientifically Lower KS2

## Key vocabulary

<b>Question</b>	A sentence or word that requires an answer.	<b>Secondary Sources</b>	Information created by someone later than when it happened.
<b>Aim</b>	The purpose or reason for completing a task.	<b>Guides</b>	To show or indicate what to do or where to go.
<b>Hypothesis</b>	An explanation (guess) for a task or experiment.	<b>Key</b>	A set of questions about the characteristics of different things.
<b>Equipment</b>	Items used in an experiment or investigation.	<b>Construct</b>	To make
<b>Method</b>	The way in which an investigation is carried out.	<b>Interpret</b>	To explain the meaning.
<b>Results</b>	What is found at the end of an investigation.	<b>Diagrams</b>	A simple drawing to represent information.
<b>Conclusion</b>	A judgement based on the results from an investigation.	<b>Bar charts</b>	A diagram in which the numerical values of variables are represented by the height or length of lines or rectangles of equal width.
<b>Evaluation</b>	To summarise and judge the results of an investigation.	<b>Table</b>	A way of presenting information or data using rows and columns.
<b>Oral and written Explanations</b>	To say and write to make something clear.	<b>Fair Test</b>	A test that controls all but one variable when attempting to answer a question.
<b>Criteria</b>	A standard on which something can be judged.	<b>Accurate</b>	Correct or precise.
<b>Changes</b>	To modify or alter.	<b>Evidence</b>	It provides reasons to either support or counter a scientific theory or hypothesis.
<b>Contrast</b>	To look for differences between two items.	<b>Improve</b>	To make or become better.





# Working Scientifically Upper KS2

## Key vocabulary

<b>Question</b>	A sentence or word that requires an answer.	<b>Quantitative</b>	To measure the quality of something instead of the quantity.
<b>Aim</b>	The purpose or reason for completing a task.	<b>Relationships</b>	The level in which things are connected or not.
<b>Hypothesis</b>	An explanation (guess) for a task or experiment.	<b>Support</b>	To give reasons or
<b>Equipment</b>	Items used in an experiment or investigation.	<b>Refute</b>	To prove a statement or theory wrong.
<b>Method</b>	The way in which an investigation is carried out.	<b>Arguments</b>	A reason or set of reasons given in support of an idea, action or theory.
<b>Results</b>	What is found at the end of an investigation.	<b>Casual</b>	Not regular or permanent
<b>Conclusion</b>	A judgement based on the results from an investigation.	<b>'Degree of Trust'</b>	The level of reliability in the results from an experiment or investigation.
<b>Evaluation</b>	To summarise and judge the results of an investigation.	<b>Line Graph</b>	Commonly drawn to show information that changes over time.
<b>Variables</b>	A feature or factor that is likely to change.	<b>Scatter Graph</b>	Uses dots to represent values for two different numeric variables.
<b>Precision</b>	To be accurate.	<b>Patterns</b>	A repeated arrangement in the results of an experiment.
<b>Repeat Readings</b>	To take readings of measurements numerous times.	<b>Systematic</b>	Done or acting according to a fixed plan or system; methodical.
<b>Comparative</b>	To observe the similarities or differences of two or more items.		





# Year 1 Science



# Everyday Materials - Chemistry



Key vocabulary			
Object	A material thing that can be seen and touched.	Rock	The solid mineral material forming part of the surface of the earth exposed on the surface or underlying the soil.
Material	Materials are what an object is made from.	Brick	A small rectangular block typically made of fired or sun-dried clay, used in building.
Everyday	Happening or used every day; daily.	Paper	A material manufactured from the pulp of wood.
Rough	If something is rough, it feels and looks uneven or bumpy.	Cardboard	A pasteboard or stiff paper.
Dull	Doesn't reflect light. Doesn't look bright or shiny.	Fabric	A cloth or other material produced by weaving or knitting fibres.
Stretchy	Can be pulled to make it longer or wider without breaking.	Absorbent	A material which is able to soak up liquid easily.
Shiny	Reflects light easily.	Bendy	A material that can be bent soft and flexible.
Wood	The material that forms the trunk or branches of a tree which is used for fuel or timber.	Smooth	A surface which is free from perceptible projections, lumps, or indentations.
Plastic	A synthetic material that can be moulded into shape while soft, and then set into a rigid form.	Stiff	A material that is not easily bent or changed in shape; rigid.
Glass	A hard, brittle substance, typically transparent or translucent, made by fusing sand with soda and lime and cooling rapidly.	Waterproof	A material that keeps out water.
Metal	A solid material which is typically hard and shiny.	Squashy	A material which is easily crushed or squeezed into a different shape; having a soft consistency.
Water	Water is composed of two parts hydrogen and one part oxygen.	Bumpy	A surface uneven, with many patches raised above the rest.
















# Everyday Materials - Chemistry

Did you know?  
Paper is made from trees.

Did you know?  
Space rocks land on Earth.

Key questions	Sticky knowledge
<p>Do you know the names of what objects are made from?</p>	 <b>metal</b>  <b>fabric</b>  <b>plastic</b>  <b>paper</b>  <b>glass</b>  <b>wood</b>  <b>water</b>  <b>rock</b>
<p>Can you find objects that are made from these materials?</p>	<p>hard, soft, shiny, dull stretchy smooth, rough, strong, bendy, absorbent, bumpy, flexible, waterproof, smooth.</p>    <p>Some smooth pebbles. The log has rough bark. A shiny silver spoon.</p>
<p>Can you name the simple properties of a variety of everyday materials?</p>	<p>hard, soft, shiny, dull stretchy smooth, rough, strong, bendy, absorbent, bumpy, flexible, waterproof, smooth.</p>

### Some simple properties

<b>hard</b>	<b>squashy</b>
<p>not easily broken or pierced</p>  <p>A hard diamond.</p>	<p>easily crushed or squeezed</p>  <p>The play dough is squashy.</p>
<b>absorbent</b>	<b>bumpy</b>
<p>able to soak up liquid</p>  <p>The sponge is absorbent.</p>	<p>uneven, raised patches</p>  <p>This shell is bumpy.</p>
<b>dull</b>	<b>brittle</b>
<p>lacking shine or brightness</p>  <p>The moth's wings are dull.</p>	<p>hard, but may break easily</p>  <p>The glass is brittle.</p>







# Seasonal Changes – Physics




Key vocabulary	
<b>Season</b>	Water the falls from clouds in small drops.
<b>Autumn</b>	The season after summer and before winter, in the northern hemisphere from September to November and in the southern hemisphere from March to May.
<b>Winter</b>	The coldest season of the year, in the northern hemisphere from December to February and in the southern hemisphere from June to August.
<b>Spring</b>	The season after winter and before summer, in which vegetation begins to appear, in the northern hemisphere from March to May and in the southern hemisphere from September to November.
<b>Summer</b>	The warmest season of the year, in the northern hemisphere from June to August and in the southern hemisphere from December to February.
<b>Rain</b>	Water the falls from clouds in small drops.
<b>Sun</b>	A star that provides light and heat to the Earth.
<b>Wind</b>	A current of air moving across the Earth's surface.
<b>Thunder</b>	A sudden loud noise that comes from the sky during a storm.
<b>Snow</b>	The small, soft, white pieces of ice that sometimes fall from the sky when it is cold.
<b>Cloudy</b>	When the sky is full of clouds which make it seem darker.
<b>Ice</b>	Frozen water.
<b>Sunny</b>	Bright with sunlight.
<b>Storm</b>	A violent disturbance of the atmosphere with strong winds and usually rain, thunder, lightning, or snow.
<b>Lightning</b>	The occurrence of a natural electrical discharge of very short duration and high voltage between a cloud and the ground or within a cloud, accompanied by a bright flash and typically also thunder.
<b>Temperature</b>	The degree or intensity of heat present in a substance or object, especially as expressed according to a comparative scale and shown by a thermometer or perceived by touch.
<b>Weather</b>	The state of the atmosphere at a particular place and time as regards heat, cloudiness, dryness, sunshine, wind, rain, etc.





# Seasonal Changes – Physics



Key questions	Sticky knowledge
Do you know the name of the four seasons?	<p>Winter Spring Summer Autumn</p> 
Do you know the weather pattern for each of the four seasons?	<p><b>Winter</b> - The weather is much colder. Sometimes it is cold enough to freeze, leaving frost and ice on the ground. Sometimes it snows.</p> <p><b>Spring</b> - The weather starts to get warmer. The leaves begin to grow on the trees and some trees blossom.</p> <p><b>Summer</b> - The weather gets hotter. The trees are full of leaves and there are lots of flowers, bees and butterflies.</p> <p><b>Autumn</b> - The weather begins to get colder. The leaves start to fall from the trees and the amount of daylight becomes less.</p>



Rainbows sometimes happen when the weather is raining and sunny. Usually in Spring.

**Lightening!**  
We sometimes get storms in the Summer.



Did you know?  
The seasons don't happen at the same time of the year for everyone. When the USA have their winter, Australia have their Summer.





# Common animals - Biology



Key vocabulary	
<b>Animals</b>	Amphibians live in the water as babies and on land as they grow up. They have smooth, slimy skin.
<b>Human</b>	Relating to or characteristic of humankind.
<b>Amphibians</b>	Amphibians live in the water as babies and on land as they grow up. They have smooth, slimy skin.
<b>Birds</b>	All birds have a beak, two legs, feathers and wings.
<b>Fish</b>	Fish live and breathe under water. They have scaly skin, fins to help them swim and they breathe through gills.
<b>Mammals</b>	Mammals are animals that breathe air, grow hair or fur and feed on their mother's milk as a baby.
<b>Reptiles</b>	All reptiles breathe air. They have scales on their skin.
<b>Carnivores</b>	Animals that mostly eat other animals (meat).
<b>Herbivores</b>	Animals that only eat plants are herbivores.
<b>Omnivores</b>	Animals that eat both plants and other animals are omnivores.
<b>Living</b>	Alive.
<b>Non - Living</b>	Not alive.

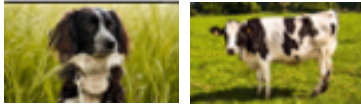




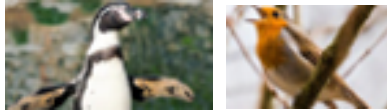
# Common animals - Biology



Mammals



Birds



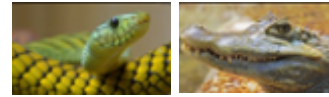
Fish



Amphibians

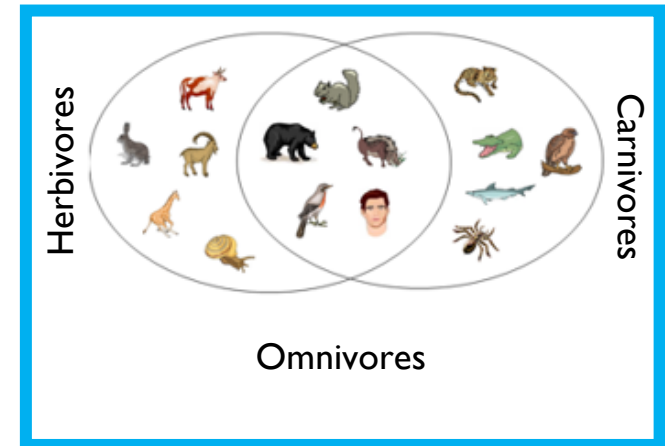


Reptiles



Did you know?  
The ostrich is the largest bird in the world.

Key questions	Sticky knowledge
Do you know a variety of common animals including, fish, amphibians, reptiles, birds and mammals?	<p><b>Mammals</b> – dog, cow, lion, monkey, mice, human, polar bear, elephant, cat, hamster.</p> <p><b>Fish</b> – goldfish, tuna, shark, eel, clown fish, stingray, blue tang, puffer, whale, dolphin.</p> <p><b>Amphibians</b> – frog, toad, newt, salamander.</p> <p><b>Birds</b> – penguin, chicken, seagull, robin, eagle, duck, flamingo, parrot, pelican, pigeon, stork.</p> <p><b>Reptiles</b> – snake, tortoise, lizard, alligator, dinosaur, chameleon, turtle, gecko.</p>
Do you know the names of a variety of common animals that are carnivores, herbivores and omnivores?	<p><b>Carnivores</b> – Lions, sharks, cheetahs, T-Rex.</p> <p><b>Herbivores</b> – giraffes, rhinos, sheep, goats.</p> <p><b>Omnivores</b> – bears, racoons, chickens, pigs.</p>
Can you sort living and non-living things?	<p><b>Living</b> Hens, pigs, trees, pigs, insects, gorillas, plants.</p> <p><b>Non-living</b> Pencil, tin, clock, newspaper, key, bowl.</p>
Are humans animals?	<p>Yes – humans are animals. Humans are mammals</p>







# Human body and senses - Biology

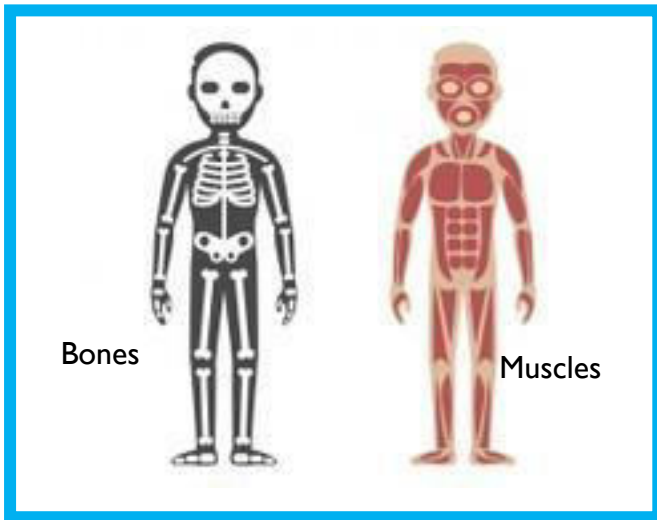


Key vocabulary			
<b>Human</b>	Relating to or characteristic of humankind.	<b>Shoulder</b>	The upper joint of each of a person's arms and the part of the body between this and the neck.
<b>Sense</b>	Includes sight, smell, hearing, taste, and touch.	<b>Elbow</b>	The joint between the forearm and the upper arm.
<b>Sight</b>	Your eyes let you see all the things around you.	<b>Hand</b>	The end part of a person's arm beyond the wrist, including the palm, fingers, and thumb.
<b>Hearing</b>	Your ears let you listen to all the things around you. Your brain is able to tell what different sounds are.	<b>Finger(s)</b>	Each of the four parts attached to either hand other than the thumb.
<b>Touch</b>	Your skin gives you the sense of touch. You can tell if something is warm, cold, smooth or rough without even looking at it!	<b>Thumb</b>	The short, thick first digit of the human hand.
<b>Taste</b>	Your sense of taste comes from your tongue. You can tell if something tastes bitter or sweet. You might have some tastes you like and some you don't.	<b>Knee</b>	The joint between the upper and the lower leg in humans and animals.
<b>Smell</b>	You smell using your nose. Your nose can tell if things smell nice or not nice.	<b>Leg</b>	The limbs on which a person or animal walks and stands.
<b>Head</b>	The upper part of the human body containing the brain, mouth, and sense organs.	<b>Foot</b>	The lower end of the leg below the ankle, on which a person stands or walks.
<b>Eye</b>	Organs of sight in the head.	<b>Toes</b>	Any of the five digits at the end of the human foot.
<b>Ear</b>	Organs of hearing and balance	<b>Bones</b>	Any of the pieces of hard whitish tissue making up the skeleton in humans and other vertebrates.
<b>Nose</b>	Organ of smell.	<b>Muscles</b>	A bundle tissue in a human or animal body that produces movement or maintains the position of parts of the body.
<b>Mouth</b>	A hollow organ where food and water goes and vocal sounds emitted.	<b>Organs</b>	A part of an animal which has a specific vital function.
<b>Teeth</b>	A set of hard, bony enamel-coated structures in the jaws of most vertebrates, used for biting and chewing.		

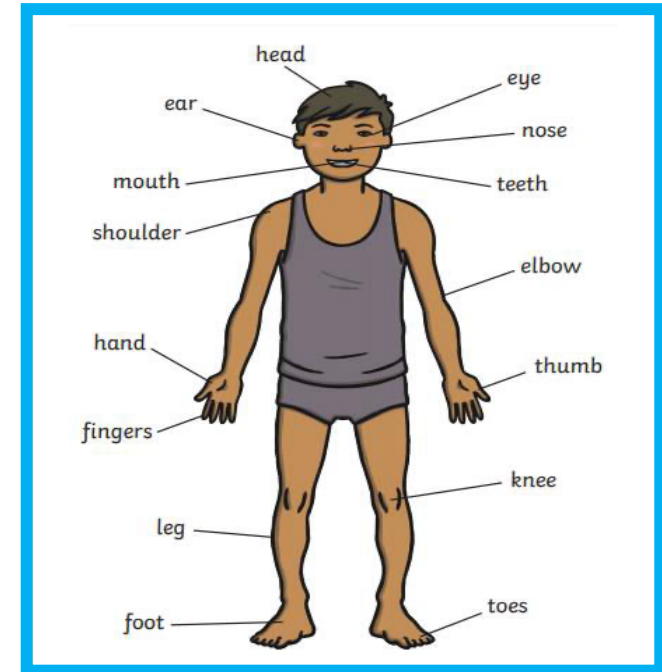














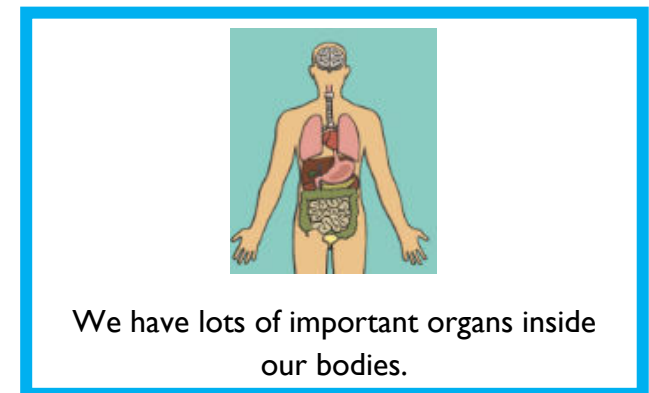
# Human body and senses - Biology



Did you know?  
 1. Human bodies have 206 bones!  
 2. Your ears and nose never stop growing!



Key questions	Sticky knowledge
Do you know the name of the basic parts of the human body? Can you label them?	Head, ear, mouth, shoulder, hand, fingers, leg, foot, toes, knee, thumb, elbow, teeth, nose, eye.
Do you know the 5 senses?	<p><b>5 SENSES</b></p> <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;">  TASTE                 </div> <div style="text-align: center;">  HEARING                 </div> <div style="text-align: center;">  SIGHT                 </div> <div style="text-align: center;">  SMELL                 </div> <div style="text-align: center;">  TOUCH                 </div> </div> <div style="display: flex; justify-content: space-around; margin-top: 10px;"> <div style="text-align: center;">  TASTE                 </div> <div style="text-align: center;">  HEARING                 </div> <div style="text-align: center;">  SIGHT                 </div> <div style="text-align: center;">  SMELL                 </div> <div style="text-align: center;">  TOUCH                 </div> </div>











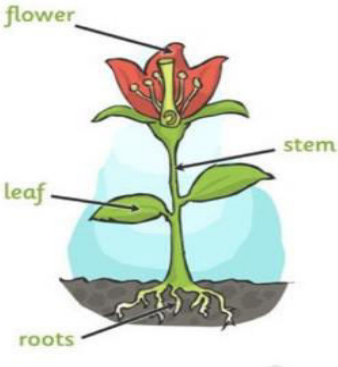
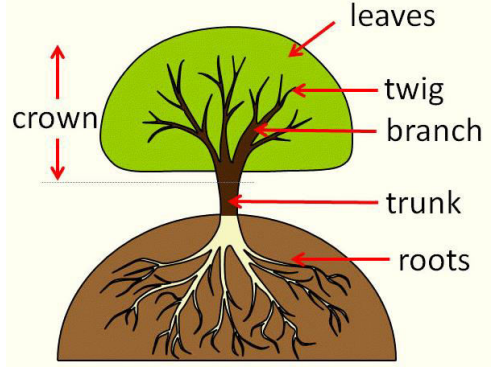


# Plants - Biology



Key vocabulary	
<b>Plants</b>	A living organism which can be trees, shrubs, herbs, grasses, ferns, and mosses, typically growing in a permanent site
<b>Wild Plants</b>	A wild plant seed grows where it falls. It doesn't need to be planted or cared for as it grows.
<b>Garden Plants</b>	Garden plants are plants that people choose to grow in their gardens.
<b>Weeds</b>	Weeds are wild plants that grow in places where people don't want them.
<b>Deciduous</b>	A deciduous tree loses its leaves each year.
<b>Evergreen</b>	An evergreen tree keeps its green leaves all year round, even in the winter.
<b>Trees</b>	A woody plant, with a single stem or trunk growing to a considerable height and bearing lateral branches at some distance from the ground.
<b>Common</b>	Found, or done often.
<b>Petal</b>	Each segments of a flower which are modified leaves
<b>Leaf</b>	A flattened structure of a higher plant that is attached to a stem directly or via a stalk.
<b>Stem</b>	The main body or stalk of a plant or shrub, typically rising above ground but occasionally
<b>Root</b>	The part of a plant which attaches it to the ground or to a support, typically underground,
<b>Trunk</b>	The main woody stem of a tree as distinct from its branches and roots.
<b>Branches</b>	A part of a tree which grows out from the trunk or from a bough.
<b>Leaves</b>	A flattened structure of a higher plant, typically green and blade-like, that is attached to a stem directly or via a stalk.

# Plants - Biology

Key questions	Sticky knowledge
<p>Do you know the name of a variety of wild and garden plants?</p>	<p style="color: red; text-align: center;"><b>Wild Plants</b></p> <div style="display: flex; justify-content: space-around; text-align: center;"> <div> dandelion</div> <div> daisy</div> <div> buttercup</div> <div> nettles</div> </div> <p style="color: blue; text-align: center;"><b>Garden Plants</b></p> <div style="display: flex; justify-content: space-around; text-align: center;"> <div> fuchsia</div> <div> pansy</div> <div> sweet pea</div> <div> sunflower</div> </div>
<p>Do you know the name of a variety of deciduous and evergreen trees?</p>	<div style="display: flex; justify-content: space-around;"> <div style="text-align: center;">  <p>Deciduous trees - Maple, oak, birch, horse chestnut, beech, ash.</p> </div> <div style="text-align: center;">  <p>Evergreen trees – Cedar, holly, Olive, laurel, pine, privet.</p> </div> </div>
<p>Do you know the basic structure of a variety of common flowering plants and trees?</p>	<div style="display: flex; justify-content: space-around;"> <div style="text-align: center;">  <p>flower leaf stem roots</p> </div> <div style="text-align: center;">  <p>leaves twig branch trunk roots crown</p> </div> </div>

**Did you know?**

The oldest tree in the world is almost 5000 years old. It is a bristlecone pine tree in California.








# Year 1 Geography



# Capital Cities of the UK



Key places and vocabulary	
United Kingdom (UK)	The UK is made up of 4 countries; England, Scotland, Wales and Northern Ireland.
4 Capital cities	England = <b>London</b> Wales = <b>Cardiff</b> Scotland = <b>Edinburgh</b> Northern Ireland = <b>Belfast</b> .
5 Surrounding seas	North Sea, Atlantic Ocean, Irish Sea, Celtic Sea, English Channel.
Holiday	A time when you go away to enjoy yourself or relax.
Tourist	A person who is visiting a place for pleasure and interest.
Town	A large group of houses, shops and buildings where people live and work. Towns are larger than villages but smaller than cities. Oldham is a town.
City	A large town. London is a city.





# Capital Cities of the UK



## Physical features

are natural features of the UK.

are natural features of the UK.

Pennie hills, Ben Nevis Mountains, Snowdon Mountains. River Thames, River Severn, Lake District, Bournemouth Beach.



## Human features

are something that is built by humans and would not have existed in nature without humans.

Wembley stadium, The Angel of the North, Edinburgh Castle, Roman Baths, Windsor Castle, Stonehenge.



**Did you know?**  
There were 67 million people living in the UK in 2019! We have 230 children at Holy Rosary.

## Key questions

Do you know the names of the 4 countries that make up the UK and the capital cities?

Do you know the name of the seas surrounding the UK?

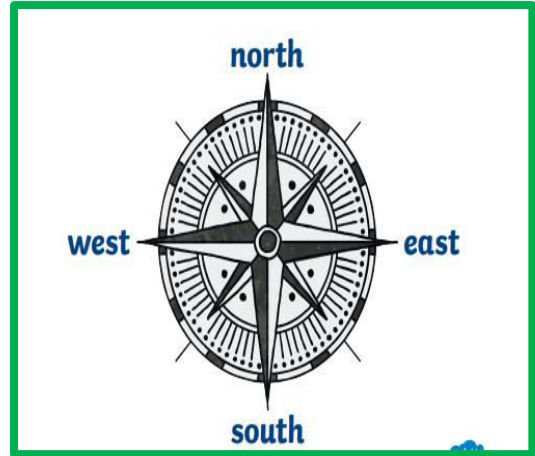
Can you find England, Wales, Scotland and Northern Ireland on a map?

## Sticky knowledge

England = London  
Wales = Cardiff  
Scotland = Edinburgh  
Northern Ireland = Belfast.

North Sea, Atlantic Ocean, Irish Sea, Celtic Sea, English Channel.

Use the flags on the map above to find them.





# Oldham



## Key places and vocabulary

Town	A place larger than a village but smaller than a city.
Community	A group of people living in the same area.
Oldham Athletic	The football club based in Oldham.
Daisy Nook and Alexandra park.	Country parks in Oldham.
Fitton Hill	The area where School is located. Our school is called Holy Rosary.
Places in Oldham	Chadderton, Hollinwood, Royton, Failsworth, Saddleworth.
Seaside town	A town located on the coast.
Map	A map shows where you are in the world and what you might see around you

### Seaside towns



Weymouth seaside



Blackpool seaside







# Oldham



## Physical features

are natural features of the Oldham.

Tandle Hills, Daisy Nook, Alexandra park, Dove Stones, Strinesdale Reservoir, Limeside Park, Rochdale Canal.



## Human features

are something that is built by humans and would not have existed in nature without humans.

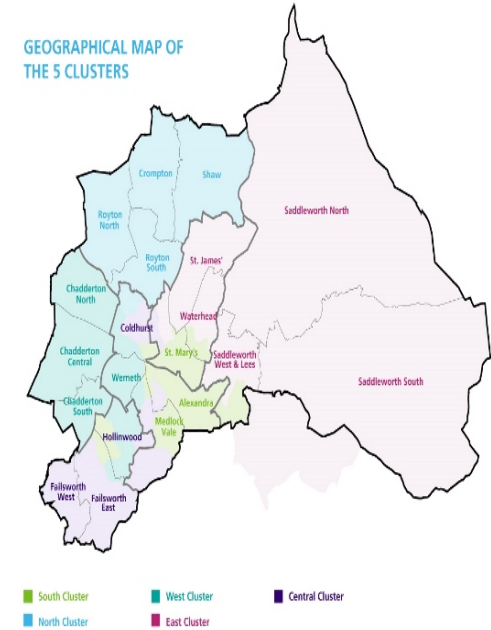
Oldham Town Hall, Holy Rosary Primary school, Spindle Shopping Centre, Park Cakes Bakery, Royal Oldham Hospital, Oldham Library, Queen Elizabeth Hall.



Did you know?  
Paul Scholes who used to play for Manchester United and Mark Owen from 'Take that' were both born in Oldham.



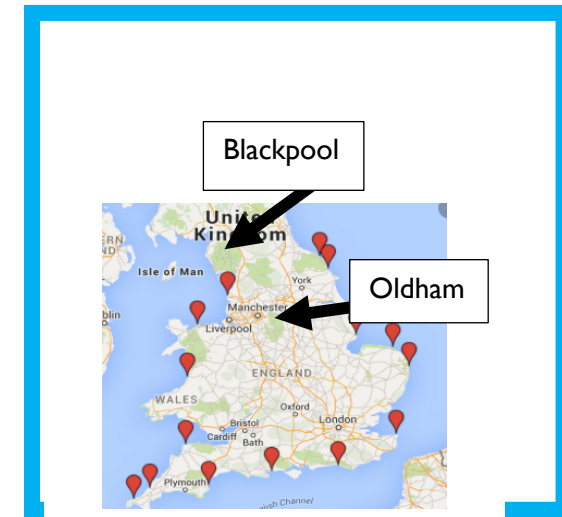
GEOGRAPHICAL MAP OF THE 5 CLUSTERS



## Key questions

## Sticky knowledge

<p>Do you know the difference between Blackpool and Oldham?</p>	<table border="1"> <tr> <td data-bbox="600 1098 1176 1141">Oldham</td> <td data-bbox="1176 1098 1608 1141">Blackpool</td> </tr> <tr> <td data-bbox="600 1141 1176 1184">Large town.</td> <td data-bbox="1176 1141 1608 1184">Seaside resort.</td> </tr> <tr> <td data-bbox="600 1184 1176 1227">Not a tourist attraction.</td> <td data-bbox="1176 1184 1608 1227">Is a tourist attraction.</td> </tr> <tr> <td data-bbox="600 1227 1176 1270">Has a large shopping centre.</td> <td data-bbox="1176 1227 1608 1270">Has a large shopping centre.</td> </tr> <tr> <td data-bbox="600 1270 1176 1300">Located in England.</td> <td data-bbox="1176 1270 1608 1300">Located in England.</td> </tr> </table>	Oldham	Blackpool	Large town.	Seaside resort.	Not a tourist attraction.	Is a tourist attraction.	Has a large shopping centre.	Has a large shopping centre.	Located in England.	Located in England.
Oldham	Blackpool										
Large town.	Seaside resort.										
Not a tourist attraction.	Is a tourist attraction.										
Has a large shopping centre.	Has a large shopping centre.										
Located in England.	Located in England.										
<p>Do you know the name of a seaside town?</p>	<p>Blackpool seaside.</p>										
<p>Can you name 6 features of a seaside town?</p>	<p>Physical features such as a coast, sand and a cliff. Human features such as a lighthouse, a pier and a harbour.</p>										
<p>Do you know why people would visit a seaside town?</p>	<p>On hot days, people enjoy going to the beach to cool off and swim in the sea. Many people also enjoy relaxing on a beach, eating ice-cream or fish and chips, playing in the amusements and having fun on the pleasure beach.</p>										







# Weather in the UK



**The four seasons**

Spring Summer  
Winter Autumn



**Did you know?**  
In 2019, there were around 165/365 days where 1mm or more of rain fell.

What is your favourite type of weather?

**Key questions**

Do you know the seasonal daily weather patterns in the United Kingdom?

Can you name the four seasons, in sequence?

**Sticky knowledge**

**Winter** - The weather is much colder. Sometimes it is cold enough to freeze, leaving frost and ice on the ground. Sometimes it snows.

**Spring** - The weather starts to get warmer. The leaves begin to grow on the trees and some trees blossom.

**Summer** - The weather gets hotter. The trees are full of leaves and there are lots of flowers, bees and butterflies.

**Autumn** - The weather begins to get colder. The leaves start to fall from the trees and the amount of daylight becomes less.

Winter Spring Summer Autumn

Weather forecasts use symbols:

- Sunny
- Sunshine and cloud
- Cloudy
- Raining
- Thunder
- Windy
- Snow





# Weather in the UK



Key vocabulary	
Rain	Water that falls from clouds in small drops.
Sun	A star that provides light and heat to the Earth.
Wind	A current of air moving across the Earth's surface.
Thunder	A sudden loud noise that comes from the sky during a storm.
Snow	The small, soft, white pieces of ice that sometimes fall from the sky when it is cold.
Cloudy	When the sky is full of clouds which make it seem darker.
Weather forecast	This tells us what the weather will be like today, the next day or for the next few days.







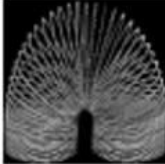





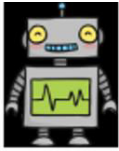




# Year 1 History



# Grandparents and I



Timeline				
1830s–1900s	1900–1940s	1960s–1980s	1990s–2000s	2010s–2020s
Victorian toys	Early 20 <sup>th</sup> century toys	Grandparents toys	Parents toys	Your toys
 	 	 	   	  

Key people	
<b>Grandparents</b>	Grandparents, known as grandmother and grandfather, are the parents of a person's father or mother
<b>Parent</b>	A parent is a caregiver of the offspring in their own species. In humans, a parent is the legal guardian of a child.
<b>Family</b>	A group of one or more parents and their children living together as a unit.

Did you know?

Toys were mainly made out of wood, paper and metal during the Victorian age.

Modern toys are mainly made from plastic. This is because it is usually safer.

Key vocabulary	
<b>Memory</b>	The way in which the mind stores and remembers information.
<b>Toy</b>	An object for a child to play with, typically a model or miniature replica of something.
<b>Birthday</b>	The anniversary of the day on which a person was born.
<b>Day</b>	A period of 24 hours from midnight to the next midnight.
<b>Month</b>	A period of time between two fixed dates.
<b>Year</b>	A period of 365 days (except a Leap year - 366)

Key questions	Sticky knowledge
How did your grandparents celebrate their birthday?	Parties weren't popular back then, so birthdays were celebrated with the family at home. Small gifts were received by family members. grandparents, toys, birthday, parent, family, memory, day, month, year
What toys did your grandparents play with?	Teddies, toy drum, dolls, slinky, Frisbee, pogo stick, circus sets, toy trains.







# Seaside now and then



Timeline				
1700s	1850s	1900s	1950s	Today
Beaches first started but only for the rich.	The railway was invented so that people could get to beaches.	Bathing machines were introduced.	The British seaside became a popular holiday destination.	People enjoy visiting the beach on a nice day. They enjoy ice-creams, fish and chips, the arcades and the fun fair.

### Key People

**Grace Darling** - She lived from 1815 -1842. She was a lighthouse keeper's daughter who famously rescued shipwrecked sailors.



### Did you know?



Punch and Judy is a funny puppet show that has been common at the seaside since Victorian times.

### Key vocabulary

<b>seaside</b>	A place by the sea especially a beach.
<b>cliff</b>	A steep rock face especially at the edge of the sea.
<b>pier</b>	A platform on pillars going out from the shore into the sea.
<b>arcade</b>	An indoor area containing coin operated game machines.
<b>city</b>	A large town.
<b>coast</b>	The part of the land that joins with the sea.
<b>beach</b>	An area covered in sand or small stones next to a body of water.
<b>holiday</b>	A time away from work sometimes called 'leisure time'.
<b>Victorian</b>	A person who lived during Queen Victoria's reign.

### Key questions

### Sticky knowledge

**What is the difference between the seaside now and in the Victorian times?**

**What was a seaside holiday like in the Victorian times?**

**How have holidays changed since the Victorian era?**

	THEN	NOW
	People got the train to the seaside. People often went into the sea fully clothed. People used to walk on the promenade and listen to a band.	People usually drive to the seaside. People wear shorts, bikinis or costumes in the sea. People enjoy the arcade machines and funfairs.
	Bathing machines were used by Victorians so they could change in private before getting into the sea. A horse would then pull it towards the sea and the women would lower themselves in to it without being seen. Punch and Judy is a funny puppet show that has been common at the seaside since Victorian times.	
	The working class people used to visit the seaside for day trips, whilst the rich people went for a week in the Summer. Then when the railway was built, they started to become more popular.	







# Year 2 Science

# Uses of Everyday Materials - Chemistry

Key vocabulary	
<b>Metal</b>	A solid material which is typically hard and shiny.
<b>Plastic</b>	A synthetic material that can be moulded into shape while soft, and then set into a rigid form.
<b>Charles Machintosh</b>	We know Charles Mackintosh for inventing mackintoshes which was a special type of coat. We use the word 'mac' today because of his invention
<b>Wood</b>	The material that forms the trunk or branches of a tree which is used for fuel or timber.
<b>Squashing</b>	Squashing is pushing things closely together.
<b>Bending</b>	Bending is changing the shape and direction of something.
<b>Twisting</b>	To twist something you move one part clockwise and the other part anticlockwise.
<b>Stretching</b>	Stretching is to change shape by pulling it to make it longer or wider
<b>Glass</b>	A hard, brittle substance, typically transparent or translucent, made by fusing sand with soda and lime and cooling rapidly.
<b>Brick</b>	A small rectangular block typically made of fired or sun-dried clay, used in building.
<b>Water</b>	Water is composed of two parts hydrogen and one part oxygen.
<b>Rock</b>	The solid mineral material forming part of the surface of the earth exposed on the surface or underlying the soil.
<b>Paper</b>	A material manufactured from the pulp of wood.
<b>Cardboard</b>	A pasteboard or stiff paper.
<b>Use</b>	To take, hold, or deploy something as a means of accomplishing or achieving something.
<b>Build</b>	To construct something by putting parts or material together.
<b>Make</b>	To form something by putting parts together or combining substances; create.
<b>Transparent</b>	To allow light to pass through so that objects behind can be distinctly seen.
<b>Iron</b>	A strong, hard magnetic silvery-grey metal, the chemical element of atomic number 26, much used as a material for construction and manufacturing, especially in the form of steel.
<b>Steel</b>	A hard, strong grey or bluish-grey alloy of iron with carbon and usually other elements, used as a structural and fabricating material.



# Uses of Everyday Materials - Chemistry

Did you know? Plastic was invented in 1907.



Key questions	Sticky knowledge
How is wood used?	Wood is used to make buildings and furniture and for making fires and heating.
How is paper used?	Most of the paper or cardboard we use came from trees and is used to create books.
How is plastic used?	Plastics are used to make many of the things we use in everyday life. They are used for toys, bicycle helmets, mobile phones, window frames and many other common items.
How is glass used?	Glass is usually transparent, which means you can see through it, but can also come in different colours. Glass is often used to make windows and bottles.
How is metal used?	Metals are very useful to people. They are used to make tools because they can be strong and easy to shape. Iron and steel have been used to make bridges, buildings, or ships
How can you change solid objects?	<p>Some objects can be changes by squashing, bending, twisting and stretching.</p> <p><b>Squashing, Bending, Twisting and Stretching</b></p> <p>Squash an object by pushing both hands together.</p> <p>Bend an object by grabbing both ends of the object and bringing the ends inwards together.</p> <p>Twist an object by turning your hands in opposite directions.</p> <p>Stretch an object by pulling your hands slowly and gently apart.</p>

## Properties



# Animals - Biology



Key vocabulary			
<b>Life - Cycle</b>	A life cycle describes the life of a living being from when it is born to when it grows up, including all the changes during this time. Look at these life cycles.	<b>Exercise</b>	Activity requiring physical effort, carried out to sustain or improve health and fitness.
<b>Offspring</b>	A person's child or children.	<b>Eating</b>	To put food into the mouth and chew and swallow it.
<b>Baby</b>	A very young child.	<b>Hygiene</b>	Conditions or practices conducive to maintaining health and preventing disease, especially through cleanliness.
<b>Child</b>	This is the stage you are at now. You are learning to be independent, which means there are more things you can do on your own.	<b>Young</b>	Having lived or existed for only a short time.
<b>Adult</b>	A person who is fully grown or developed.	<b>Old</b>	Having lived for a long time; no longer young.
<b>Older age</b>	Someone over the age of 65.	<b>Baby</b>	A very young child.
<b>Basic need</b>	Without basic needs, animals including humans would not survive.	<b>Reproduce</b>	To produce offspring.
<b>Exercise</b>	Exercise is moving and being active. You might feel tired or a little warm after exercising.	<b>Heart</b>	An organ that pumps the blood around the body.
<b>Survival</b>	the state or fact of continuing to live or exist, typically in spite of an accident, ordeal, or difficult circumstances.	<b>Muscles</b>	A bundle of tissue in a human or animal body that has the ability to produce movement or maintaining the position of parts of the body.
<b>Water</b>	A clear liquid.	<b>Lungs</b>	A pair of organs situated within the ribcage which air is breathe in so that oxygen can pass into the blood and carbon dioxide be removed.
<b>Food</b>	Substance that may contain protein, carbohydrate, fat, and other nutrients used in the body to provide growth and vital processes and to give energy.	<b>Breathing</b>	The process of taking air into and expelling it from the lungs.
<b>Air</b>	The invisible gaseous substance surrounding the earth, a mixture mainly of oxygen and nitrogen.	<b>Stronger</b>	Having the power to move heavy weights or perform other physically demanding tasks.



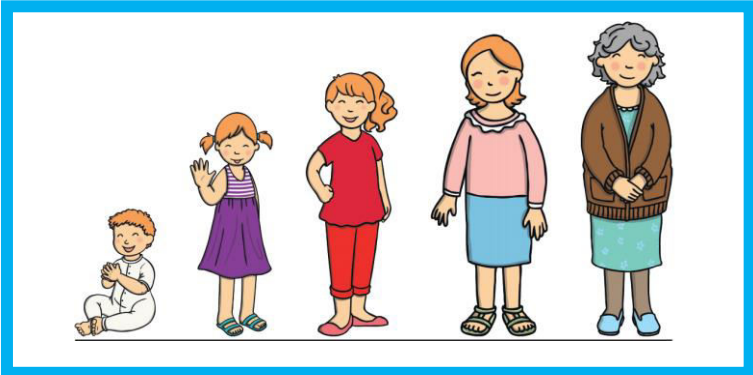




# Animals – Biology



**Did you know?**  
 The average human life is 70 years old, however the oldest person to live died at 122 years old!



Key questions	Sticky knowledge
Why do we need exercise?	Exercise is very important for the organs inside your body. Your heart becomes very strong when you are active and exercise. Your heart is a muscle. This means that the more active you are, the stronger your heart gets. Exercise is also very important for the rest of the muscles in your body. There are over 650 muscles in your body.
What do animals and humans need to survive?	There are many things that humans like to have to make their lives more enjoyable or more comfortable. But there are only a few things that we really need to survive: food, air and water. Animals also need food, air and water.
Do animals reproduce?	<p>Female animals reproduce offspring (babies).</p> <p>Lioness – cub      Rabiit – Kit      Elephant – Calf      Sheep – lamb      Pig - piglet</p>



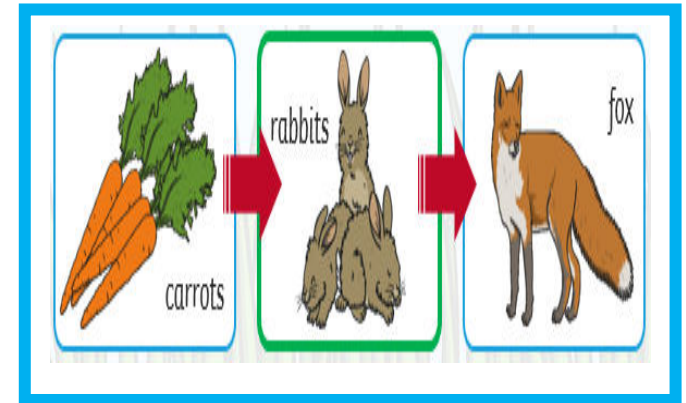


# Living things and their habitats - Biology

Key vocabulary	
<b>Predator</b>	An animal that naturally preys on others.
<b>Prey</b>	An animal that is hunted and killed by another for food
<b>Plant</b>	One of a large group of living things that use sunlight to make their own food. Most plants have leaves, stems, roots and either flowers or cones
<b>Animal</b>	Animals are living things. Like plants, animals need food and water to live. Unlike plants, which make their own food, animals feed themselves by eating plants or other animals
<b>Habitat</b>	There are many different sorts of habitats around the world from forests to grasslands and from mountain slopes to deserts.
<b>Micro-habitat</b>	A microhabitat is a small area which differs somehow from the surrounding habitat.
<b>Living</b>	Things which can grow, move, breathe and reproduce are called living thing
<b>Dead</b>	An animal that is no longer alive.
<b>Non-living</b>	Things which cannot grow, move, breathe and reproduce are called non-living things. They do not have any kind of life in them.
<b>Food</b>	Substances that animals eat to stay alive.
<b>Cycle</b>	Events that repeated in the same order.
<b>Predator</b>	An animal that preys on other animals for food.
<b>Prey</b>	An animal that is caught, killed and eaten for food.
<b>Plant</b>	A general term for living organisms that grow from seeds.
<b>Animal</b>	A living organism that breathes, eats and responds to stimuli.
<b>Depend</b>	To trust or rely on something or someone.
<b>Artic</b>	An area surrounding the North Pole.
<b>Desert</b>	An area of land with no or little rain.
<b>Sea</b>	A body of water smaller than an ocean.
<b>Rainforest</b>	A dense forest found in tropical areas with heavy rainfall.
<b>Shelter</b>	A place to protect from weather.



# Living things and their habitats - Biology



Key questions	Sticky knowledge			
What is a food chain?	A food chain shows how animals depend on other plants and animals for their food and survival. Grass → Rabbit → Fox      Strawberry → Insect → Mouse → Owl			
Can I name a variety of plants and animals in their habitats?	<table border="1"> <tr> <td> <b>Garden plants</b>  </td> <td> <b>Polar Animals</b>  </td> </tr> </table>	<b>Garden plants</b> 	<b>Polar Animals</b> 	
<b>Garden plants</b> 	<b>Polar Animals</b> 			
Can I name an animal's habitat?	<p><b>Arctic animals</b> such as polar bears and snow owls live in the Arctic where it is very cold.</p> <p><b>Desert animals</b> such as camels and lions live in very hot countries that have deserts.</p> <p><b>Sea animals</b> such as whales, fish and crabs live in the oceans around the world.</p> <p><b>Rainforest animals</b> such as snakes, tigers and lizards live in warm rainforests.</p>			
What is the differences between things that are living, dead, and things that have never been alive?	<table border="1"> <tr> <td> <b>Living</b> - There are certain things all living things do: move, make more of their own type (humans and other animals have babies), feed, get rid of waste (go to the toilet) and need oxygen.                 </td> <td> <b>Dead</b> - These were once a living thing but died from old age or a serious illness.                 </td> <td> <b>Never been alive</b> - Other things have never been alive. We know they have never been alive because they aren't made from something that could do all of the things living things can do.                 </td> </tr> </table>	<b>Living</b> - There are certain things all living things do: move, make more of their own type (humans and other animals have babies), feed, get rid of waste (go to the toilet) and need oxygen.	<b>Dead</b> - These were once a living thing but died from old age or a serious illness.	<b>Never been alive</b> - Other things have never been alive. We know they have never been alive because they aren't made from something that could do all of the things living things can do.
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**Did you know?**  
Fossils are the remains or traces of plants and animals that lived long ago, the oldest one found is estimated 3.5 billion years old.

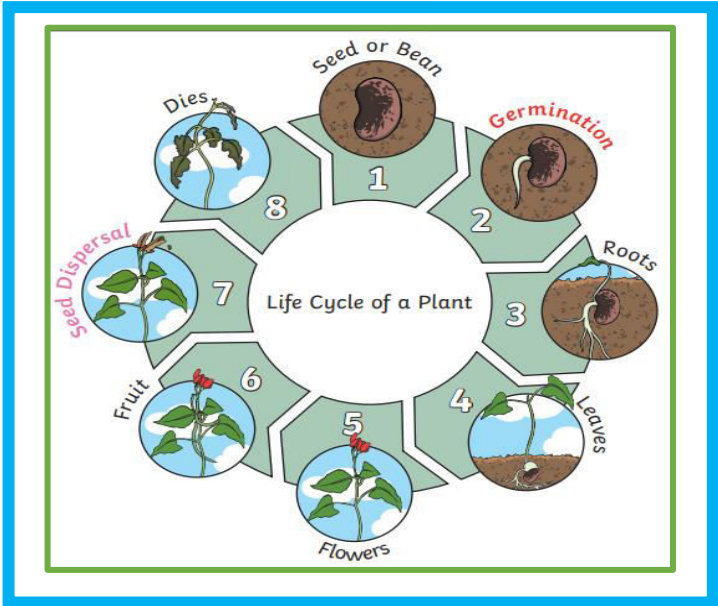
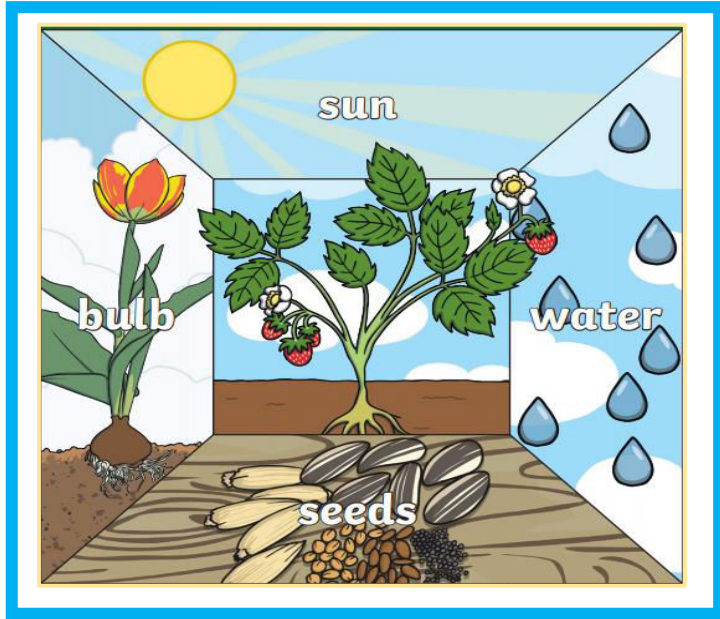


# Plants - Biology

Key vocabulary	
Germination	When the conditions are right, the seed soaks up water and swells. The tiny new plant bursts out of its shell. This is called germination.
Sprout	When a plant sprouts, it grows new shoots.
Shoot	A shoot grows upwards from the seed or plants to find sunlight.
Seed dispersal	Is when seeds move away from their parent plant. They can be moved by the wind or animals.
Sunlight	All plants need light from the sun to grow. Some plants need lots of sunlight, other only need a little.
Water	All plants need water to grow. Without water, seeds and bulbs won't germinate.
Temperature	How warm or cold something or somewhere is. Some plants like cooler temperature and some like warmer temperatures.
Nutrition	Food or nourishment. Plants make their own food in their leaves using sunlight.
Seeds	An object where a plant can grow from.
Bulbs	An object with a short stem where a plant can grow from.
Mature	Fully developed.
Light	Used to help plants grow through photosynthesis
Nutrition	The process of providing or obtaining the food necessary for health and growth.



# Plants - Biology



Did you know?  
We human beings use more than 2000 different types of plants to create various delicious food items in our meals



Key questions	Sticky knowledge	
What do plants need to grow healthily?	Plants need water to suck up nutrients from the soil. Nutrients are the good things in soil which will help a plant grow and be healthy.	The leaves of a plant need water to help it turn sunlight in to food.
	Leaves turn sunlight in to food for the whole plant. Without light, a plant won't be healthy	Seeds need the right temperature to start turning in to a plant. Plants also need the right temperature to be able to turn sunlight into food.
How do seeds and bulbs grow into plants?	First the seeds start to germinate as the plant grows out of the shell and roots begin to grow. The shoot grows up towards to sunlight, coming through the soil. Leaves begin to grow to collect the sunlight before the flowers grow.	







# Year 2 Geography





# Continents and Oceans



Features	
Asia	Largest continent with the largest population
Africa	Has the most countries and is the hottest continent
North America	Is the third largest continent and has 23 countries
South America	Has the longest mountains and the highest waterfalls
Antarctica	Coldest continent with the smallest population
Europe	The richest continent and is where we live.
Australia	Smallest continent made up of many smaller islands



**Did you know?**  
The most languages are spoken in Asia - over 2 300 languages!

**Did you know?**  
Antarctica is the only continent with no spiders

Key questions	Sticky knowledge
Where are the seven continents?	<ul style="list-style-type: none"> <li>• Antarctica is the most southern part of the planet                             <ul style="list-style-type: none"> <li>• North America is northern to South America</li> </ul> </li> <li>• Australia is an island continent found southeast of Asia                             <ul style="list-style-type: none"> <li>• Europe, Africa and Asia are all close together.</li> </ul> </li> </ul>
Where are the five oceans?	<ul style="list-style-type: none"> <li>• The Southern Ocean surrounds Antarctica                             <ul style="list-style-type: none"> <li>• The Arctic Ocean is at the most northern part of the world and is mostly ice                                     <ul style="list-style-type: none"> <li>• The Atlantic Ocean is between Africa and South America</li> </ul> </li> <li>• The Indian Ocean is the hottest ocean and is between Asia, Australia and Africa</li> <li>• The Pacific Ocean is the largest ocean and is between North and South America and Asia.</li> </ul> </li> </ul>





# Continents and Oceans



Key places and vocabulary	
Population	How many people live in a certain location
Continent	any of the world's main continuous expanses of land
Country	A nation with its own government
Sea	the expanse of salt water that covers most of the earth's surface
Ocean	a very large expanse of sea, in particular each of the main areas into which the sea is divided geographically. Pacific Ocean. Atlantic Ocean. Indian Ocean. Arctic Ocean. Antarctic (Southern) Ocean.
Island	a piece of land surrounded by water.
Hemisphere	a half of the earth, usually as divided into northern and southern halves by the equator

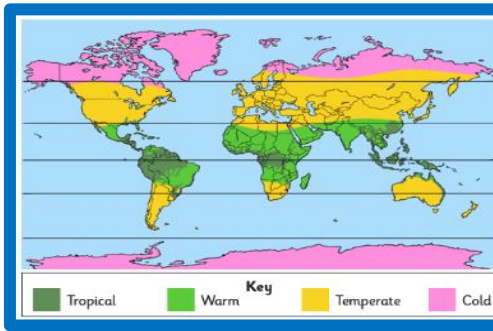


# Hot and Cold Areas in relation to the equator

Places	
Cold or Polar Climates	Finland, Arctic, Norway and Greenland.
Warm Climates	Australia, North Africa, Middle East and Mexico.
Tropical Climates	Philippines, Indonesia, India and Caribbean
Temperate Climates	United Kingdom, France, Spain and Turkey

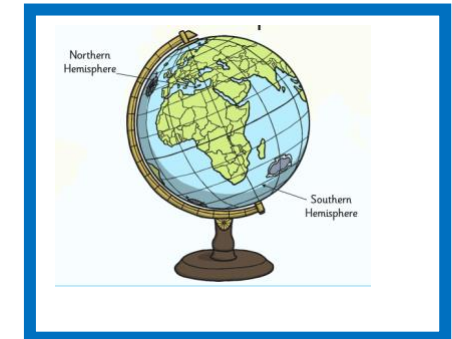


**Did you know?**  
The largest desert on earth is the Antarctic desert, covering the continent of Antarctica



Vocabulary	
Northern Hemisphere	The Northern Hemisphere is the half of Earth that is north of the Equator
Southern Hemisphere	The Southern Hemisphere is the half of Earth that is south of the Equator
Habitats	The natural home or environment of an animal, plant, or other organism
Weather	The day to day changes that we see happen. So, it can be sunny one day and rainy the next.
Climate	The average weather usually taken over 30 years for a particular place.
Temperature	A measure of how hot or cold something is

Key questions	Sticky knowledge		
Where are the hot and cold parts of the world in relation to the equator?	<p><b>Hotter Countries</b></p> <p>Countries, towns and cities located around the equator experience hot weather throughout the year. It is because the sun remains almost directly overhead every day.</p> <p>Africa, South America and Australia are the hotter continents, with Africa being the hottest.</p> <p><b>Burkina Faso is the hottest country in the world.</b></p>	<p><b>Colder countries</b></p> <p>Countries that are further North or South of the equator experience a change in seasons, when hot weather follows cold weather.</p> <p>Antarctica is the coldest continent. The southern parts of Asia are hotter than the more northern parts which can be quite cold.</p> <p><b>Russia is the coldest country in the world.</b></p>	
	Where are the North and South Poles?	Both the Arctic (North Pole) and the Antarctic (South Pole) are cold because they don't get any direct sunlight. However, the South Pole is a lot colder than the North Pole.	



# Hot and Cold Areas in relation to the equator

Vocabulary	
Northern Hemisphere	The Northern Hemisphere is the half of Earth that is north of the Equator
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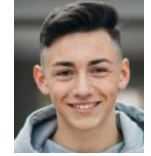
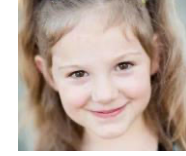




# Year 2 History



# My Lifetime



Timeline						
2011	2016	2017	2018	2019	2020	2020
Prince William and Princess Catherine were married	The Olympics were held in Rio	Prince Harry and Princess Meghan Markle were married	England came 4 <sup>th</sup> in the World Cup	Boris Johnson became Prime Minister	England left The European Union	Coronavirus came to England

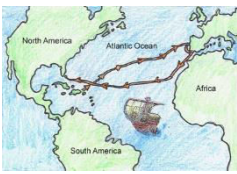
Key People	
Prince William and Harry	They are members of the royal family. They are the Queen's grandchildren.
Catherine Middleton	After marrying Prince William, is now a member of the Royal family. She is known as the Duchess of Cambridge.
Rishi Sunak	The Prime Minister of the UK lives at no.10 Downing Street, London.

Did you know?
1. England won 67 gold medals at the 2016 Olympics.
2. Kate and Williams wedding cake was 3 feet tall which is 91cm.
3. London is the biggest city in Britain.

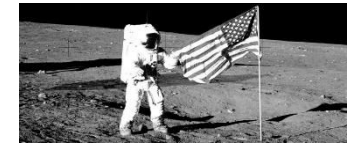
Key places and vocabulary	
London	The capital city of England.
Buckingham Palace	The queens official home in London.
Big Ben	This is the nickname for the Great Bell of the clock in London.
Coronavirus	It is a virus similar to a very bad cold.
Olympics	A collection of sporting competitions held around the world every 4 years.
Royal Family	The relations of a King or Queen.
King/Queen	Someone who is a ruler who has inherited their position through birth right
Prince/Princess	A son or daughter of a monarch.
Age	How old someone or something is.
Years	365 days = 1 year.
Lifetime	The duration of someone's life.

Key questions	Sticky knowledge
Where is London? What does it look like now?	London is in the United Kingdom (UK). It is the capital city of England and the United Kingdom. It has a large river running through the city called the River Thames. The queen and some of the royal family also live there in different buildings, including Buckingham Palace.
Do you know when Prince William married Catherine Middleton?	Prince William married Catherine Middleton on 29 <sup>th</sup> April 2011. This day became a national holiday for everyone, as they were given the day off to celebrate.
How many years have you lived for?	I have lived for ___ years. When it is my birthday, I will be 7 years old.





# Significant People



Timeline									
1451	1452	1564	1643	1820	1867	1901	1918	1926	1930
Christopher Columbus (born)	Leonardo da Vinci (born)	William Shakespeare (born)	Isaac Newton (born)	Florence Nightingale (born)	Marie Curie (born)	Queen Victoria (died)	Nelson Mandela (born)	Queen Elizabeth (born)	Neil Armstrong (born)

Key People	
Christopher Columbus	Christopher Columbus was an Italian explorer and navigator
Neil Armstrong	Neil Armstrong was the first person to walk on the moon. He was an astronaut
Michael Collins	Michael Collins is an American astronaut.
Buzz Aldrin	Buss Aldrin is an American astronaut.

### Did you know?

1. It takes more than 3 days to get to the moon.
2. There is no gravity in space
3. Columbus had 3 ships.

Key places and vocabulary	
<b>Ship</b>	A mode of transport to take people and things to different places.
<b>Voyage</b>	A long journey including oceans or space
<b>Explorer</b>	A person who explores or discovers a new place
<b>Discovery</b>	Finding something new
<b>Astronaut</b>	A person who is trained to travel into space
<b>Moon (landing)</b>	A spacecraft that has arrived on the moon.
<b>Apollo 11</b>	The spaceship that took humans to the moon for the first time
<b>Genoa</b>	A city in northern Italy with a port.
<b>Italy</b>	A European country in southern Europe.
<b>USA</b>	The country of the United States of America.

Key questions	Sticky knowledge
Who is Neil Armstrong and why is he famous?	Neil Armstrong was an astronaut who set off from Florida, in America on the 16th July 1969 to the moon. He was the first ever man to walk on the moon!
What was Armstrong's rocket called?	Their rocket was called Apollo 11. There were 10 Apollo rockets before the one they took to the moon.
What did Armstrong leave on the moon?	Armstrong left an American flag on the moon. He also left his footprints on the floor of the moon as there is no wind on the moon to blow them away.
Where did Christopher Columbus live?	Columbus lived near the busy part of Genoa, in Italy. He loved watching the ships arrive from faraway places.
What did Columbus take with him on his voyage?	Columbus loaded huge barrels of water and wine, huge crates of sea biscuits, salted beef and sacks bulging with flour, rice and lentils. He took enough food to last year.





# Victorians



Victorian  
Empire  
(World)

Timeline								
1837	1838	1840	1854-1856	1864	1870	1878	1888	1901
William IV dies and Victoria becomes Queen	Slavery is abolished in the British Empire	Queen Victoria marries Prince Albert	The Crimean War	It becomes illegal for children to work as chimney sweeps	The Education Act allows children to be schooled	Thomas Edison invents the lightbulb	The Football League starts	Queen Victoria dies

Inventions	Created
Christmas card	1843
Bicycle	1817
Camera	1816
Railway	1805
Telephone	1876

Did you know?

1. Oldham Hospital used to be a workhouse.
2. Holy Rosary is over 60 years old.
3. Alexandra Park was opened on 29th August 1865 (over 100 years old!)



Key places and vocabulary	
Queen Victoria	Victoria was Queen of the United Kingdom of Great Britain and Ireland from 1837 until her death in 1901. Her reign of 63 years and 216 days is known as the Victorian era.
Victorian	A person who lived when Queen Victoria was alive
Mill	A mill is a large building that many people used to work in to make things using machines.
Work house	A place where poor people lived and worked.
Oldham	A town in northern England which had many cotton mills.
School	An institution (place) to educate children.
Local	Related the area close by.



Key questions	Sticky knowledge
What did Oldham used to look like?	Oldham used to be described as the 'mill town' as it had so many mills which meant a lot of people used to work in mills too. Some buildings that you can see today were built more than 100 years ago including many mills, Oldham town hall, St Patricks church and Oldham Parish church. The roads back then wouldn't be full of traffic like we have today, instead people would use horse and carriages to travel.
How have schools changed?	Holy Rosary wasn't built during the Victorian era, however typical lessons at school included the three Rs - reading, writing and arithmetic. The children were also geography, history and singing once a week. Children also didn't have laptops or ipads to help them learn or a whiteboard, instead the classrooms would have a large chalkboard that the teacher wrote on. Children would normally sit in rows and if they broke any rules, the consequences were usually painful. At play times the children used to play with marbles, hoops and skipping ropes.



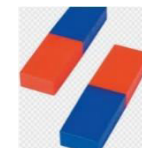




# Year 3 Science



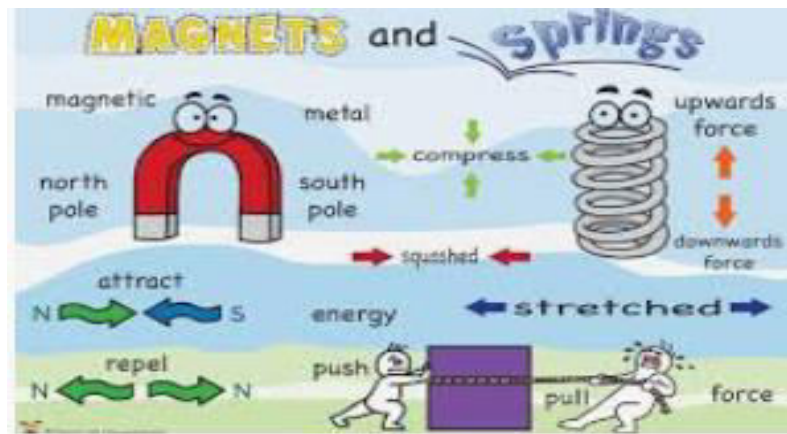
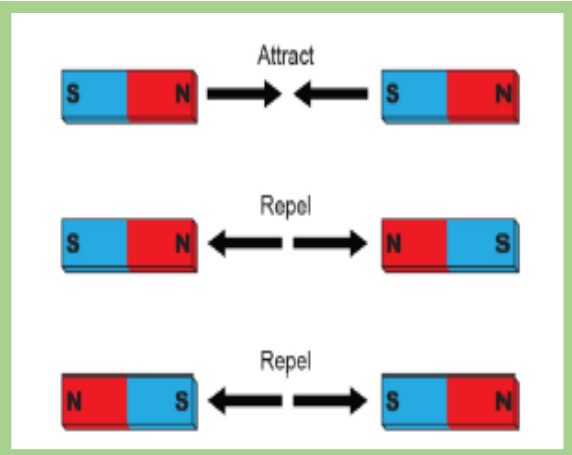
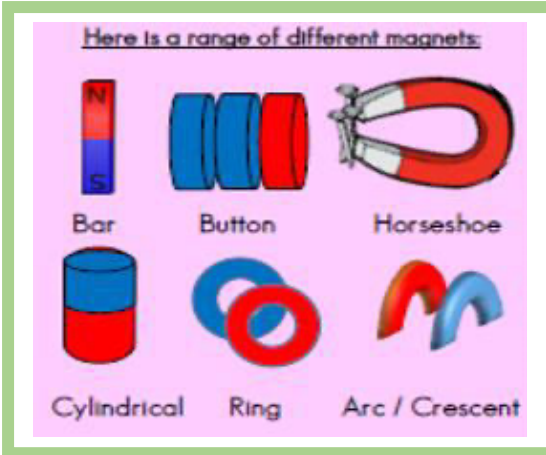
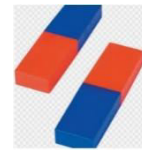
# Forces and magnets – Physics



Key vocabulary	
Attract	If one object <b>attracts</b> another object, it causes the second object to move towards it.
Repel	When a <b>magnetic</b> pole <b>repels</b> another <b>magnetic</b> pole, it gives out a <b>force</b> that pushes the other pole away.
Friction	The <b>resistance</b> of <b>motion</b> when there is contact between two <b>surfaces</b> .
Force	The <b>pulling</b> or <b>pushing</b> effect that something has on something else.
Gravity	The <b>force</b> which causes things to drop to the ground.
Magnet	A piece of iron or other material which <b>attracts magnetic</b> materials towards it.
Magnetic Field	An area around a <b>magnet</b> , or something functioning as a <b>magnet</b> , in which the <b>magnet's</b> power to <b>attract</b> things is felt.
Non-magnetic	An object that is not <b>magnetic</b> .
Resistance	A <b>force</b> which slows down a moving object or vehicle.
Pole	North and South ends of a <b>magnet</b> .
Predict	A prediction is a guess about what will happen before you have observed something.
Friction	The resistance that one surface or object encounters when moving over another.
Surface	The outside part or uppermost layer of something.
North and South	The opposite ends of a magnet.
Push and Pull	A force that changes the direction of an object towards you, would be a pull. On the other hand, if it moves away, it is a push.



# Forces and magnets – Physics

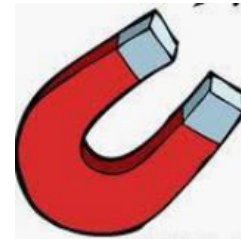


**Did you know?**

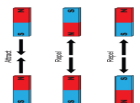
The most powerful magnets in the **universe** are stars known as the **Magnetars**.

Animals can be affected by magnetic pulls! Birds and turtles navigate (find their way) by them. Sharks are repelled by them!

The Earth's core (centre of the Earth) is believed to be filled with iron and nickel (metals which give it a magnetic field)

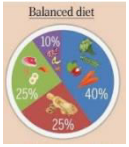


Key questions	Sticky knowledge
Do you know that some things move on different surfaces?	Different surfaces create different amounts of friction, this affects how objects move on them.
Do you know that some forces need contact between two objects but magnetic forces can act at a distance?	To push or pull an object contact is needed with the object. However, with magnets this isn't always needed.
Do you know how magnets attract or repel each other and attract some materials and not others?	Depending on which poles are facing the other magnet, the magnets will repel or attract each other. Iron, nickel or cobalt are the only metals that are attracted to magnets.
Do you know how to group together a variety of every day materials on the basis of whether they are attracted to a magnet, and identify some magnetic materials?	Every day materials, such as a paper clip or a sharpener, will be put into a group which shows if it was magnetic or not. By exploring different materials it will be discovered if they contain iron, nickel or cobalt.
Do you know that magnets have two poles (like and unlike)?	Magnets have a south and north pole.
Can you make a prediction about two magnets repelling or attracting?	A prediction is a guess about what will happen before you have observed something.





# Healthy Humans - Biology



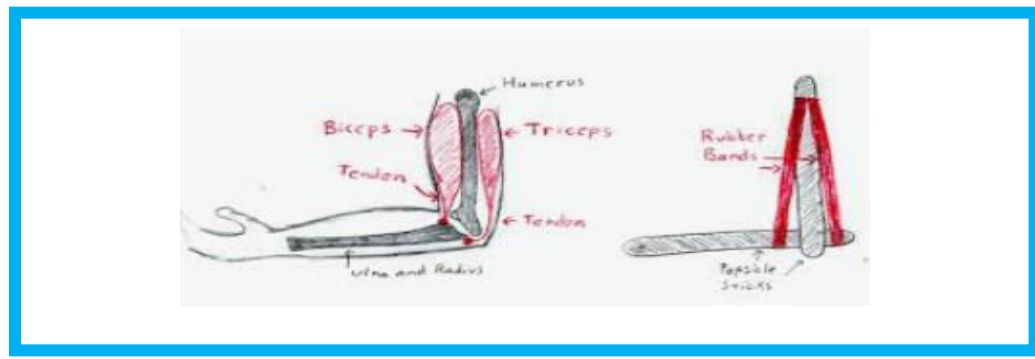
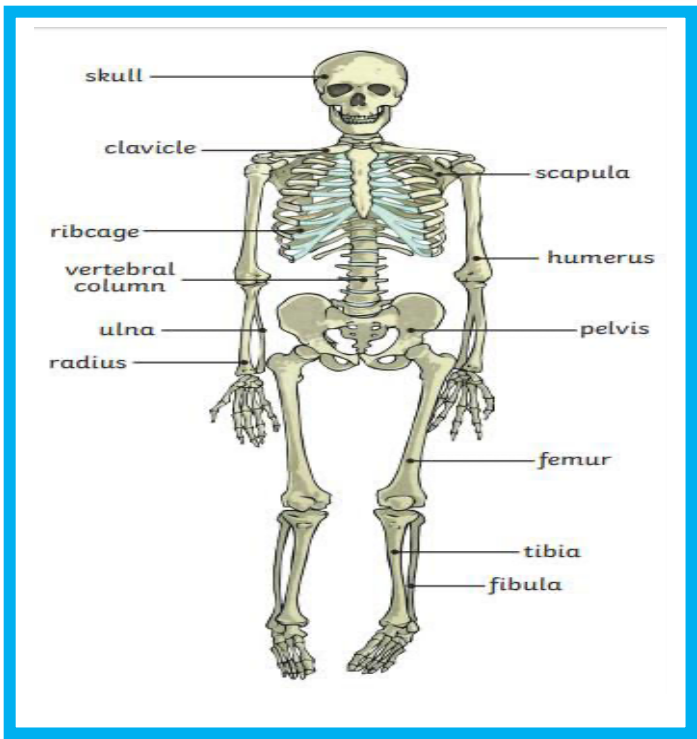
Key vocabulary	
Skeleton	The framework of bones to support your body.
Diet	The type and range of food that you regularly eat.
Nutrition	The <b>process</b> of taking food into the body and absorbing the nutrients in those foods.
Balanced diet	Eating the right amount of food from each food group.
Nutrients	The substance that helps animals and plants grow.
Food groups	Foods that provide different nutrients for the body.
Skull	The skeleton of the head, it protects the brain.
Muscle	It connects two bones in your body which you use when you move.
Backbone/ spine	A column of small linked bones down the middle of your back.
Joint	The junction between two or more bones.
Eat	To put food into the mouth and chew and swallow it.
Health	The state of being free from illness or injury.
Drink	Take a liquid into the mouth and swallow.
Choices	An act of choosing between two or more possibilities.





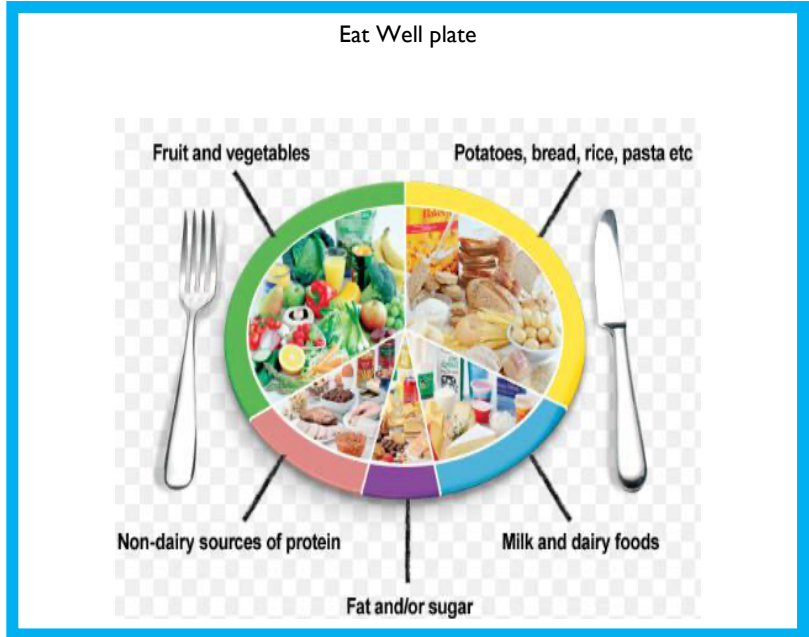


# Healthy Humans - Biology



**Did you know?**  
 Your fingernails grow 4 x faster than your toenails!  
 Babies have more bones than adults when they are born (94 more!)  
 The smallest bone in your body is in your ear.  
 Food spends up to 6 hours in the stomach being digested.

Key questions	Sticky knowledge
Do you know that animals, including humans, need the right types and amount of nutrition?	In order to grow and maintain a healthy body humans need to eat the correct, balanced diet. The Eat Well plate is a good guide for this.
Do you know that humans cannot make their own food; they get nutrition from what they eat?	Humans, unlike plants, cannot make their own food. All their nutrition comes from what they eat.
Do you know that a varied diet is beneficial to health (along with a good supply of air/ clean water)?	A varied diet helps to maintain a healthy diet as different foods provide different functions in the body.
Do you know that exercise is beneficial to health (focus on energy in versus energy out Include information on making informed choices)?	Exercise is beneficial to the body as it helps to develop and maintain muscles. It helps the heart to be healthy and it helps to promote good mental health.



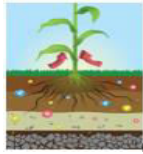


# Plants - Biology

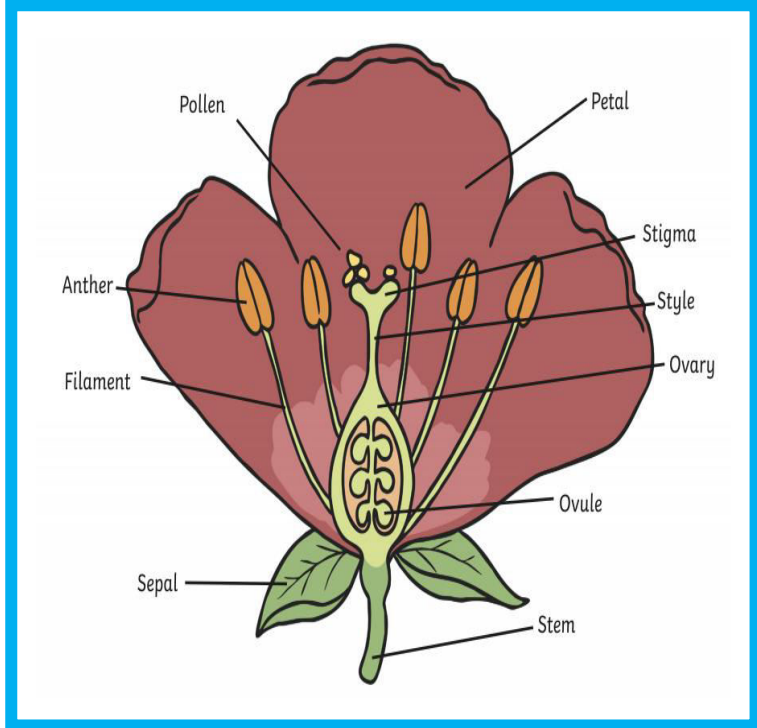
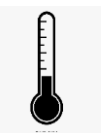


Key vocabulary	
Roots	These anchor the plant into the ground and absorb water and nutrients from the soil.
Stem	This holds the plant up and carries water and nutrients from the soil to the leaves. A trunk is the stem of a tree.
Flowers	These make seeds to grow into new plants. Their petals attract pollinators to the plant.
Seed Dispersal	A method of moving the seeds away from the parent plant so that the seeds have the best chance of survival.
Fertilisation	When the male and female parts of the flower have mixed in order to make seeds for new plants.
Pollination	When pollen (a fine powdery substance produced by a flowering plant) is moved from the male anther of a flower to the female stigma.
Stamen	The male parts of the flower.
Carpel	The female parts of the flower.
Germination	When a seed starts to grow.
Plants	A living organism which can be trees, shrubs, herbs, grasses, ferns, and mosses, typically growing in a permanent site
Trunk	The main woody stem of a tree as distinct from its branches and roots.
Air	The invisible gaseous substance surrounding the earth, a mixture mainly of oxygen and nitrogen.
Light	The natural agent that stimulates sight and makes things visible.
Water	A colourless, transparent, odourless liquid that forms the seas, lakes, rivers, and rain and is the basis of the fluids of living organisms.
Nutrients	A substance that provides nourishment essential for the maintenance of life and for growth.
Soil	The upper layer of earth in which plants grow, a black or dark brown material typically consisting of a mixture of organic remains, clay, and rock particles.
Room	Space that can be occupied or where something can be done.
Grow	A living thing undergo natural development by increasing in size and changing physically.





# Plants - Biology



### How Water Moves through a Plant

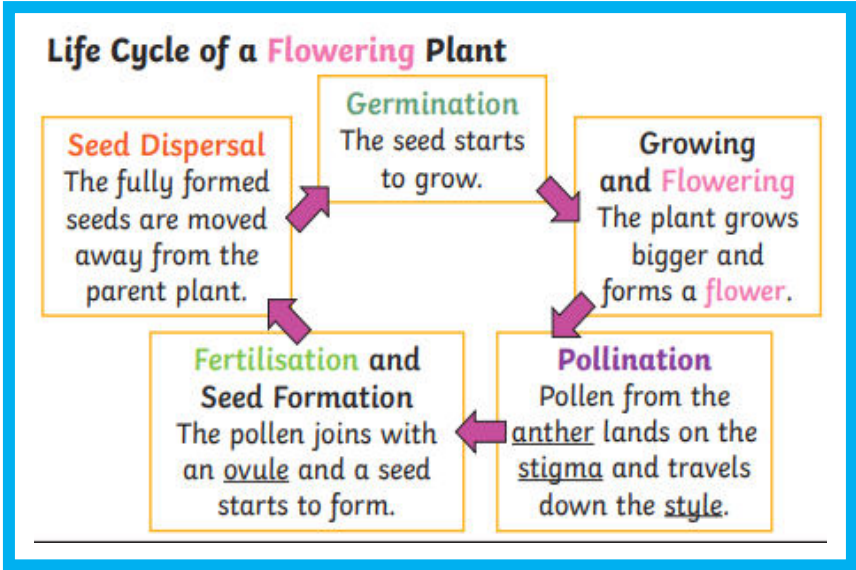
1. The **roots** absorb water from the soil.
2. The **stem** transports water to the **leaves**.
3. Water **evaporates** from the **leaves**.
4. This **evaporation** causes more water to be sucked up the **stem**.

The water is sucked up the **stem** like water being sucked up through a straw.

A diagram of a sunflower with blue arrows indicating the path of water: from the soil into the roots, up the stem, and out of the leaves into the air.

**Did you know?**  
 There are 80,000 edible plants in the world.  
 70,000 plants are used to make medicines.  
 The wood from an average tree can make 170,100 pencils.

Key questions	Sticky knowledge
Do you know the names and can you locate and describe the functions of different parts of flowering plants: roots, stem/trunk, leaves and flowers?	Roots-make sure that plants stay in the ground. Stems- hold the plant up and transport water and nutrients around the plant. Leaves-produce the food for plants through photosynthesis. Flowers-attract pollinators to the plant.
Do you know what plants need for life and growth and how they vary from plant to plant?	Plants need air, light, water, nutrients from soil, and room to grow.
Do you know how water is transported within plants?	Water is sucked up from the ground by the stem which transports the water around the flower.
Do you know the part that flowers play in the life cycle of flowering plants, including pollination, seed formation and seed dispersal?	Flowers make the seeds which grow into new plants.





# Rocks - Chemistry



Key vocabulary	
Sedimentary rocks	Rocks that have been formed by layers of sediment being pressed down hard and sticking together.
Igneous rock	Rocks that have been formed from magma and lava
Metamorphic rocks	Rock that started out as igneous or sedimentary but changed due to be exposed to extreme pressure or heat.
Magma	Molten rock that's remains underground
Lava	Molten rock that comes out of the ground.
Sediment	Natural solid material that is moved and dropped off in a new place by water or wind, e.g sand.
Permeable	Allows liquid to pass through it.
Impermeable	Does not allow liquid to pass through it.
Fossilisation	The process by which fossils are made.
Palaeontology	The study of fossils.
Fossils	The remains or impression of a prehistoric plant or animal embedded in rock and preserved in petrified form.







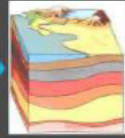
banded gneiss

# Rocks - Chemistry



## Three Groups of Rocks

- **Igneous** - form from the cooling of magma or lava
- **Sedimentary** - form when particles of rocks are pressed & cemented together
- **Metamorphic** - when existing rocks are changed by heat, pressure, or chemical reactions.



- Mary Annings is famous for finding many important fossils.
- She was born in 1779 in Dorset.



### Did you know?

Common phrases about rocks.

Phrase	Definition
Solid as a rock	Very strong and stable
On the rocks	Something that is broken and in ruins
Rock the boat	To cause a problem
Rock bottom	At such a low place, can't go any lower

### Key questions

### Sticky knowledge

Do you know how to group together different kinds of rocks on the basis of their appearance and simple physical properties?

Rocks come in many shapes and sizes. Some are smooth, some are rough. They can also be light or heavy. Some rocks are permeable and some are non-permeable. By exploring the different properties rocks can be put into different groups.

**Sedimentary rocks-** If you look closely these rocks have ripple marks which look like waves.

**Igneous rocks-** If you look closely you will see small crystals.

**Metamorphic rocks-** If you look closely you will see very fine layers.

Do you know how fossils are formed when things that have lived are trapped within rock.?

After an animal dies, the soft parts of its body decompose leaving the hard parts, like the skeleton, behind. This becomes buried by small particles of rock called sediment. As more layers of sediment build up on top, the sediment around the skeleton begins to compact and turn to rock.

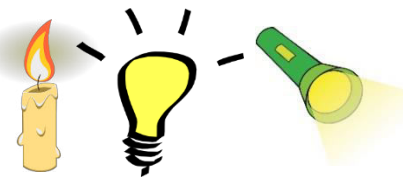
Do you know that soils are made from rocks and organic matter?

**Soil is formed** over long periods of time. It can take up to 1000 years to form just an inch of **soil**. **Soil is made** up of four things: rock fragments, dead and living things, water, and air.





# Light – Physics

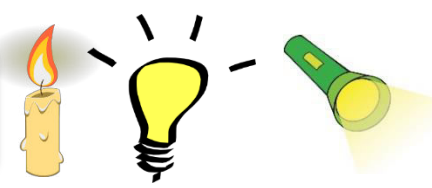


Key vocabulary	
Light	The brightness that lets you see things.
Dark	Absence of light.
Sun	A star at the centre of the Solar system
Reflection	The process where light hits the surface of an object and bounces back into our eyes.
Reflect	To bounce off a surface.
Opaque	You cannot see through it.
Translucent	Some light passes though.
Transparent	You can see through it.
Shadow	A dark shape that is made when light is blocked.
Light source	An object that makes its own light.
Straight Line	Light travels in a straight line from a light source.





# Light – Physics



### Did you know?

Shadows are longer in winter because of the angle of the sun.  
Light travels in a straight line.

Our eyes aren't designed to see well in the dark.  
Sundials were designed after people observed how shadows were formed.

Key questions	Sticky knowledge
Do you know that you need light in order to see things and that dark is the absence of light?	The reflection of <b>light</b> is what enables <b>us</b> to <b>see</b> everything around <b>us</b> . <b>Dark</b> occurs when there is an absence of light or the light source has been blocked.
Do you know that light is reflected from surfaces?	Rays of <b>light</b> reflect, or bounce off, objects just like a ball bounces on the ground, this is how we see.
Do you know that light from the sun can be dangerous and that there are ways to protect their eyes?	The sun is so bright that it can damage our eyes if we look directly at it. Wearing sunglasses helps to protect our eyes but we still shouldn't look directly at the sun.
Do you know that shadows are formed when the light from a light source is blocked by a solid object?	Light travels in a straight line. If a solid object blocks the light then shadows are formed.
Do you know how to find patterns in the way that the size of shadows can change?	When the distance of the light source changes the size of the shadow changes. As the position of the light source moves (or the solid object) the position of the shadow will also change.

As the earth spins, it makes the sun appear to rise in the east in the morning. Because the sun hits an object at an angle, the shadow is long.

As the earth continues to spin the sun is overhead by midday. Because the sun hits the object from above, the shadow is short.

As the earth spins and the sun sets in the west in the evening, the shadow is long.

Rainbows are formed when the sun shines through water particles (transparent) and when white light passes through, it 'bends' and splits into the range of colours which make white light

ROY G. BIV





# Year 3 Geography





# London



Key places and vocabulary	
Physical Geography	Natural features of land such as rivers and mountains.
Human Geography	Features of land that have been impacted by human activity such as airports and bridges.
River Thames	346km long river running through the city of London.
City	Where people live closely together and usually contains a cathedral.
Grid reference	A location on a map, identified by letters and numbers.
Compass	A tool to find directions-North, South, East and West.
Landmark	A building or feature which is easily recognised.
United Kingdom	England, Wales, Scotland and Northern Ireland,
Great Britain	England, Wales and Scotland.





# London



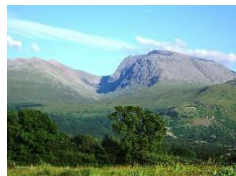
Physical features	
River Thames	The main river in London.
Hampstead Heath	A large parkland in North West London. It is 790 acres in size and has a hill named Parliament Hill
Parliament Hill	A hill that is 98 metres high. Famous for its view of London skyline
Human features	
Buckingham Palace	Buckingham Palace is the official residence of the monarch. It was built in 1703 and has 775 rooms!!
Big Ben	Big Ben is the name of the bell for the clock in the Elizabeth Tower. It is 97.5 metres high. It is situated on the North side of the Houses of Parliament
London Eye	Buckingham Palace is the official residence of the monarch. It was built in 1703 and has 775 rooms!!
Tower of London	The Tower of London is a 1,000 year old castle that protects the Crown Jewels.

**Did you know?**

- The National anthem is 'God save the Queen'.
- The lion is the national animal.
- The flag is the union flag.
- The furthest you can be away from the sea is 125 km.

Key questions	Sticky knowledge
Do you know about a region of the United Kingdom?	The United Kingdom is made up of 12 regions. A region is area that is divided by physical characteristics, We are learning about London.
Do you know about London?	London is the capital city of England. It is located in the county of Middlesex. It is 209 miles away from Oldham. It takes over 4 hours to drive there in a car. The River Thames is the main river in London.





# The UK vs Great Britain



Key places and vocabulary	
United Kingdom	England, Scotland, Wales and Northern Ireland.
Great Britain	England, Scotland and Wales
Island	A mass of land surrounded by water.
Maps	A diagram of an area of land.
Aerial photo	A photograph taken from an aircraft.
Digital map	A map made using IT software.
OS symbols	Small pictures, letters or lines to show features on a map.
Satellite image	Images of Earth taken from satellites in space.
4 figure coordinates	4 numbers used to find things on a map.



Giant's Causeway



# The UK vs Great Britain



Physical features	
Lakes	A basin filled with water, surrounded by land.
Loch	Scottish word for a lake.
Mountains	A large landform that rises above the surrounding land.
Sea	A body of water larger than a lake. Usually salt water.
Human features	
City	A large human settlement, usually where there is a cathedral
Cathedral	A large church that has a Bishop associated with it.
Railway	A network of tracks upon which trains travel
Airport	An area with runways which planes take off from and land. Passengers have facilities there.
Seaport	A city or town with a harbour for sea going ship.

### Did you know?

- Stonehenge is older than the pyramids.
- London has the largest library in the world.
- Scotland's national animal is the unicorn.
- The Welsh name for Wales is Cymru.
- The Titanic was built in Belfast.



Key questions	Sticky knowledge
Do you know the difference between what is meant by the UK and GB?	<p>The United Kingdom consists of England, Scotland, Wales and Northern Ireland. It is a sovereign state, which means there is a King or Queen.</p> <p>Great Britain consists of England, Scotland and Wales. Great Britain is an island, which means it is surrounded by water.</p>







# The United Kingdom



Key places and vocabulary	
London	The capital city of England
Edinburgh	The capital city of Scotland
Belfast	The capital city of Northern Ireland
Cardiff	The capital city of Wales
Union flag	The flag of all the countries of United Kingdom
National anthem	A song identified with a particular country
Capital City	Where people live closely together and usually contains a cathedral.
United Kingdom	England, Wales, Scotland and Northern Ireland
Compass	A tool to find directions-North, South, East and West







# The United Kingdom



Physical features	
Rivers	River Thames through London. River Severn in Wales, River Clyde in Scotland and the River Bann in Northern Ireland
Lochs	A body of water, found in Scotland. Loch Ness is the most famous-legend has it that a monster lives there!!!
Mountains	There are mountains in each country of the UK
Coastline	The UK is made up of many islands. We are never further than 125km from the coastline
Human features	
House of Parliament	The main place where parliament business takes place.
Palaces/Castles	Buckingham Palace is the Queen's main residence.
Parks	Each of the 4 countries have many parks.
Railways	The railway network is present in each country.

**Did you know?**  
 Each country has a separate flag. The Union flag represents all 4 countries.  
 United Kingdom has the longest coastline in Europe-12,430km.  
 The highest mountain in United Kingdom is Ben Nevis-1,345m high. It is located in Scotland

Places in the United Kingdom

 <p><b>London</b>                      London is the capital and largest city of England and the United Kingdom. London stands on the south-east coast of England on the River Thames. Famous landmarks include Big Ben and Buckingham Palace.</p>	 <p><b>Edinburgh</b>                      Edinburgh is the capital city of Scotland. The Scottish Government and Parliament is based here. It is often thought to be an extremely beautiful city. Famous landmarks include Edinburgh Zoo and Edinburgh Castle.</p>
 <p><b>Cardiff</b>                      Cardiff is the capital and largest city of Wales, and the 11th-largest city in the UK. It is where Wales' National Assembly is based, and is Wales' most visited city. The Principality Stadium is one of its most famous landmarks.</p>	 <p><b>Belfast</b>                      Belfast is the capital and largest city of Northern Ireland. Belfast is a major port. It was the place where The Titanic was built. Belfast was the scene of violence in 'The Troubles' of the 1980s/1990s, however it is now one of the UK's safest cities.</p>



**Key questions**

Do you know the names and can you locate 8 counties and 6 cities of the United Kingdom?

Do you know the physical and human features from each country in the UK?

**Sticky knowledge**

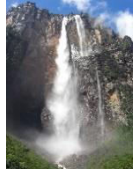
There are 48 counties in the United Kingdom. We live in Lancashire, where Preston is a city. Yorkshire is next door and York is a city there. London is our capital city and is found in the county of Middlesex. Edinburgh is a city in Midlothian. Cardiff is a city in Glamorgan. Belfast is a city in County Antrim. Cheshire is a county near us as is Greater Manchester.

A physical feature is the natural feature of the land, such as rivers or mountains. Snowden is a mountain range in Wales, Ben Nevis is a mountain in Scotland, Scafell Pike is a mountain in England, the Mourne mountain range is in Northern Ireland. Human features are made by humans. Heathrow is an airport in England, Belfast International Airport is in Northern Ireland, Aberdeen International Airport is in Scotland and Cardiff Airport is in Wales.





# The water cycle

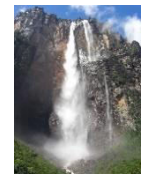


Key places and vocabulary	
Egypt	The source of the River Nile, the world's longest river.
London	The source of the River Thames, the most well-known river in England.
River Severn	Longest river in the U.K. (354km) through the city of Bristol
estuary	mouth of a large river, where the tide meets the stream
condensation	The process by which water vapour turns into liquid.
evaporation	The process where a liquid changes to a gas or vapour
precipitation	The release of water from the sky. It can be liquid-rain, or solid- sleet, hail or snow
transpiration	The evaporation of water from plants, especially leaves
infiltration	The process when precipitation or water soaks into the soil.





# The water cycle



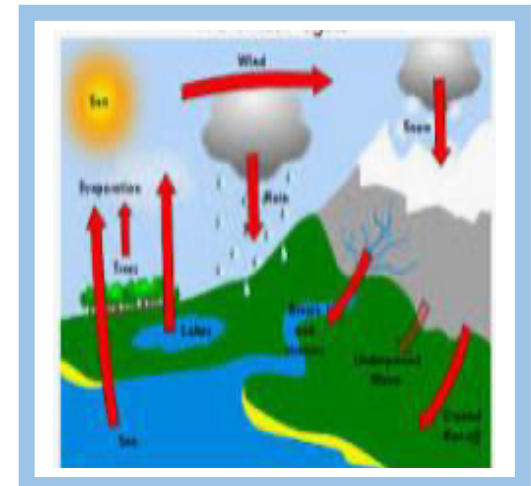
Features	
Source	The start of a river is its source. It is where it begins its journey. This could be a spring on a hillside, a mountain, a lake, or a bog or marsh. A river may have more than one source
Waterfall	An area where water flows over a vertical drop or a series of steep drops in the course of a river. Soft rock is eroded by water which leaves a hard rock ledge from which the water falls.
Meanders	A curve in a river which forms a snakelike pattern. The river erodes sediment on the outside of the curves and drops it on the inside of curves due to water moving fastest on the outside of a turn
Mouth	The end of a river where it flows into the sea, another river or a lake is known as the mouth of the river. Much of the river's gravel, sand, silt and clay are deposited here.
Delta	A wide muddy or sandy area where some rivers meet the sea at a very slow speed, or often in still/stagnant water. The river slows and drops all the sediment that it was carrying, creating a wide, marshy area

**Did you know?**

- The River Thames is 346km long.
- It runs through **London**, the capital city of England.
- It has more than 80 islands in it.
- 33 bridges cross the Thames river.
- It is the second longest river in United Kingdom.



Key questions	Sticky knowledge
Do you know the names and can you locate a number of the world's longest rivers?	Nile- 6695 km (Africa) Amazon- 6516 km (South America) Yangtze-6380 km (Asia) Mississippi/Missouri-5969 km (North America) Murray/Darling-3672 km (Australia)
Do you know the features of the water cycle?	<ul style="list-style-type: none"> <li>• <b>Water</b> evaporates into the air. The sun heats up <b>water</b> on land, in rivers, lakes and seas and turns it into <b>water</b> vapour. ...</li> <li>• <b>Water</b> vapour condenses into clouds. <b>Water</b> vapour in the air cools down and changes back into tiny drops of liquid <b>water</b>, forming clouds.                             <ul style="list-style-type: none"> <li>• <b>Water</b> falls as precipitation. ...</li> <li>• <b>Water</b> returns to the sea.</li> </ul> </li> </ul>
Do you know the main features of a river?	A river is the path that water takes as it flows along a channel downhill with banks on both sides and a bed at the bottom.







# Year 3 History



# The Great Plague



Europe

Timeline						
1333	1347	1348	1348	1349	1665	1666
The Black Death kills much of China's population	The Black Death arrives in Europe via trading ships	The disease arrives in Weymouth, England and kills many, including the daughter of King Edward III.	By the Winter, it reaches London and kills up to 20,000 people (30-40% of the population).	King Edward III orders the streets to be cleaned of dead bodies.	The Great Plague of London	The Great Fire of London

Key People	
<b>Charles II</b>	King of England at the time of the Great Plague
<b>John Lawrence</b>	The Mayor of London 1664 – 1665
<b>Samuel Pepys</b>	Famous diary writer. He wrote in his diary almost every day about what he saw.



**Did you know?**

1. A large red cross was nailed to the front door to warn others that those inside were infected.
2. 'God have mercy upon us' was written on the door.
3. The popular nursery rhyme, 'Ring-a-ring o' roses', is thought by some to be about the Great Plague.

Key questions	Sticky knowledge
What was London like before the Great Fire of London?	The houses and other buildings were all made from wood. The houses were built very close together. London was a very busy city with lots people living there. There were no toilets so human waste was thrown on the streets. There were a lot of rats. Before the Great Fire of London there has been a plague which killed over 100,000 people.
What was the plague and why it was a problem?	A bubonic plague, caused by infected rat fleas. Bubonic means 'A tender, painful black swelling in the armpit or groin'. There wasn't a cure and people didn't know what was causing it. As they didn't know the cause they couldn't stop it spreading.
Why did the Great Plague spread so quickly?	The plague was mainly spread by infected fleas from small animals. It also happened as a result of exposure to the body fluids from a dead plague-infected animal. In the bubonic form of plague, the bacteria enter through the skin through a flea bite.
What did the residents of London do during the Great Fire of London?	Some people left London, using the River Thames. Some people tried to put the fire out using chains of people. The houses were pulled down and water was thrown at the fire using water buckets and water squirters.
How did they put the fire out?	The houses were pulled down or blown up using gunpowder to create a firebreak.





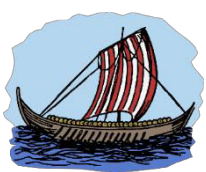
# The Great Plague



Europe

Key places and vocabulary	
<b>The Great Plague:</b>	In 1665 a devastating epidemic struck this country killing thousands of people.
<b>London:</b>	Capital city of Britain
<b>Weymouth:</b>	A harbour town in Dorset
<b>Sanitary conditions:</b>	Public health conditions
<b>Contagious:</b>	An illness likely to spread through contact with other people.
<b>Epidemic:</b>	A widespread occurrence of an infectious disease in a community at the same time.
<b>Quarantine:</b>	A place of isolation to protect people from or contain people with an infectious disease
<b>Plague Doctor:</b>	A doctor who treated people with the plague.
<b>The Great Fire of London:</b>	The Great Fire of London was a major conflagration that swept through central London from Sunday 2 September to Thursday 6 September 1666, gutting the medieval City of London
<b>River Thames:</b>	The River Thames is a river that flows through southern England including London.
<b>Diary:</b>	A diary is a written record with discrete entries arranged by date reporting on what has happened over the course of a day or other period.
<b>Rats:</b>	A rodent that resembles a large mouse, typically having a pointed snout and a long tail. Some kinds have become cosmopolitan and are sometimes responsible for transmitting diseases.
<b>Bubonic:</b>	Causing or characterised by swollen inflamed lymph nodes in the armpit or groin.
<b>Infection:</b>	The invasion and growth of germs in the body.





# The Vikings



Lindisfarne  
(England)



Danelaw  
(England)

Timeline								
700	789	793	865	866	876	886	1014	1066
The Viking Age begins	First recorded Viking attack	Viking raid on Lindisfarne	Viking army from Denmark invades England	Danes capture York (Jorvik)	Vikings from Denmark, Sweden and Norway settle permanently in England	King Alfred defeats the Vikings / Allows them to settle in East England	King Canute (Cnut) of Denmark / King of England	Battle of Hastings / William I King of England

Key People	
<b>Eric Bloodaxe (885-954)</b>	Eric Bloodaxe was king of the Viking kingdom of Jorvik between 947-948 and 952-954. Jorvik was a large Viking kingdom around York.
<b>Leif Erikson (c.970-1020)</b>	Leif Erikson was a famous Viking explorer from Iceland who sailed all the way to North America.
<b>King Canute (990-1035)</b>	Canute was the first Viking king of England, ruling from 1016-1035.
<b>Harald Hardrada (c.1015-1066)</b>	Harald Hardrada was the king of Norway. He led Viking armies into England but was defeated at the Battle of Stamford Bridge in York by King Harold II.
<b>Anglo - Saxons</b>	The people who lived in Britain over 1000 years ago. They were farmer/warriors.

## Did you know?

1. Some of the names of our towns and villages have a little bit of Norse language in them.
2. Any names with endings like these: '-by', as in Corby or Whitby, means 'farm' or 'town'.
3. Places that end in 'thorpe', as in Scunthorpe, means 'village'

Key questions	Sticky knowledge
<b>Do you know where the Vikings originated from?</b>	Vikings came from Norway, Sweden and Denmark. They came because it was hard to grow crops in their countries and more food was needed. The word 'Viking' means 'pirate'.
<b>Do you know how and when the Vikings first invaded Britain?</b>	They came in longboats across the sea, which was a very long journey. The first recorded raid in Britain was in 789.
<b>Do you know that the Vikings and the Anglo-Saxons were often in conflict?</b>	The Vikings raided Britain and the Anglo-Saxon people were not happy as they took their crops and animals. The Vikings tried to take control of Britain, which made the Anglo-Saxons very angry and this led to lots of conflict.
<b>Do you know who the Normans were?</b>	Some Vikings settled in northern France in a place called Normandy. They became known as Normans.
<b>Do you know that the Battle of Hastings was fought in 1066?</b>	In 1066 there was a big battle in a place called Hastings, which is in the South of England. The Normans came from France and fought a battle with King Harold and the people from Britain.







# The Vikings



Lindisfarne  
(England)



Danelaw  
(England)

Key places and vocabulary	
<b>Lindisfarne</b>	An island in the North East.
<b>Jorvik/York</b>	A settlement in the North East of England. It became the capital of the Kingdom of York.
<b>Norway, Sweden and Denmark</b>	Three countries that make up part of Scandinavia and were The Vikings originated from.
<b>Normandy</b>	An area in Northern France.
<b>The Vikings</b>	Vikings is the modern name given to seafaring people originally from Scandinavia (present-day Denmark, Norway and Sweden).
<b>Anglo - Saxons</b>	The Anglo-Saxons were a cultural group that inhabited much of what is now England in the Early Middle Ages, and spoke Old English. They traced their origins to settlers who came to Britain from mainland Europe in the 5th century.
<b>The Normans</b>	The Normans, who attacked England in 1066, came from Normandy in France but were originally Vikings from Scandinavia.
<b>Hastings</b>	A town in the South East
<b>Invasion</b>	To take over a place by force.
<b>King Harold</b>	He was the last crowned Anglo – Saxon King of England.
<b>Longboat</b>	A long, narrow boats that travel fast for long distances
<b>Raid</b>	A rapid, surprise attack by an enemy.
<b>1066</b>	The year of The Battle of Hastings which was won by William the Conqueror.





# Year 4 Science

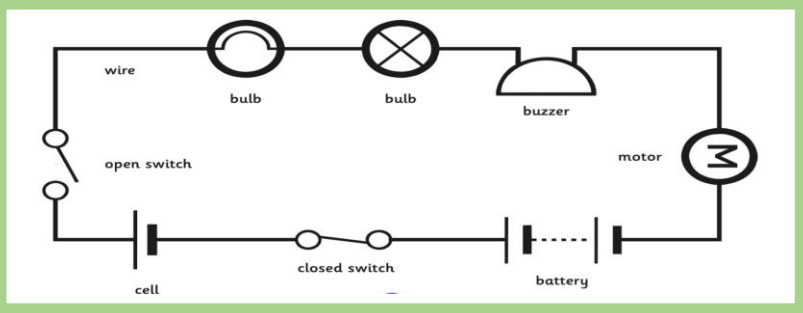
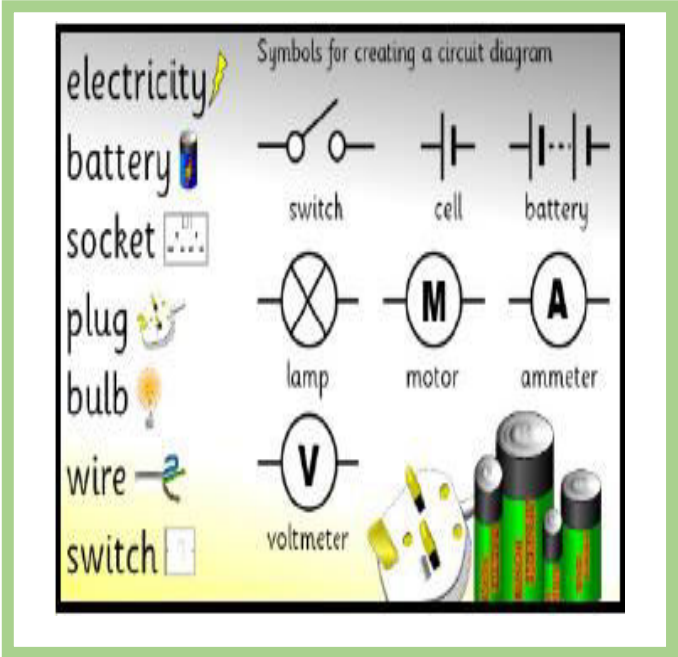
# Electricity – Physics

Key vocabulary	
<b>Circuit components</b>	A cell (battery), wire, bulb, bulb holder, buzzer, motor, switch (open/closed).
<b>Electricity</b>	Electricity is the name given when a number of atoms are together, and electrons are moving from one to the other in the same direction.
<b>Circuit</b>	a path or line through which an electrical current flows.
<b>Current</b>	A flow of electricity through a wire.
<b>Battery/Cell</b>	A small device that provides power for electrical items.
<b>Buzzer</b>	An electrical device that makes a buzzing sound.
<b>Switch</b>	A device for making and breaking the connection in an electric circuit.
<b>Motor</b>	A device that changes electrical energy into movement.
<b>Wire</b>	A long thin piece of metal that carries an electrical current often covered in plastic for safety.
<b>Voltage</b>	An electrical force that makes electricity move through a wire, measured in volts (V).
<b>Socket</b>	A device on a wall that you can plug electrical equipment into.
<b>Electrical conductor</b>	Any material that electricity can pass through or along.
<b>Bulb</b>	A device used to convert electricity into light,
<b>Metal</b>	Aa solid material which is typically hard, and shiny with good electrical and thermal conductivity.
<b>Appliances</b>	A device or piece of equipment designed to perform a specific task.
<b>Insulators</b>	A substance or device which does not readily conduct electricity.



# Electricity – Physics

- Did you know?
- Electricity travels at the speed of light - more than 186,000 miles per second!
  - A spark of static electricity can measure up to three thousand (3,000) volts.
  - A bolt of lightning can measure up to three million (3,000,000) volts, and it lasts less than one second!
  - Electricity always tries to find the easiest path to the ground.
  - Electricity can be made from wind, water, the sun and even animal poo!



Key questions	Sticky knowledge
<p><b>What is a simple series electrical circuit and how is one constructed?</b></p>	<p>A simple circuit is constructed using basic circuit components connected together correctly. They make a simple loop for the current to flow round (see diagram to the right).</p>
<p><b>Do I know that a switch opens and closes a circuit and can I associate this with whether or not a lamp will light in a simple series circuit?</b></p>	<p>For a lamp to light, there needs to be a continuous path of metal for the electric current to flow around. If there are any breaks in the circuit, the current could not flow.</p> <div style="display: flex; justify-content: space-around;"> <div style="width: 45%;"> <p>Open circuit – lamp won't light</p> </div> <div style="width: 45%;"> <p>Closed circuit – lamp will light</p> </div> </div>
<p><b>What makes good electrical conductors and good electrical insulators?</b></p>	<p>Many metals, such as copper, iron and steel, are good electrical <b>conductors</b>. For electricity to pass through they are always made of metal. Plastic, wood, glass and rubber are good electrical <b>insulators</b>. That is why they are used to cover materials that carry electricity.</p>
<p><b>What is meant by common appliances that run on electricity?</b></p>	<p>A electrical device, machine, or piece of equipment that is used in the house – e.g. - washer, microwave, fridge, TV, Hoover, toaster, hairdryer, dishwasher, electric toothbrush, laptop.</p>



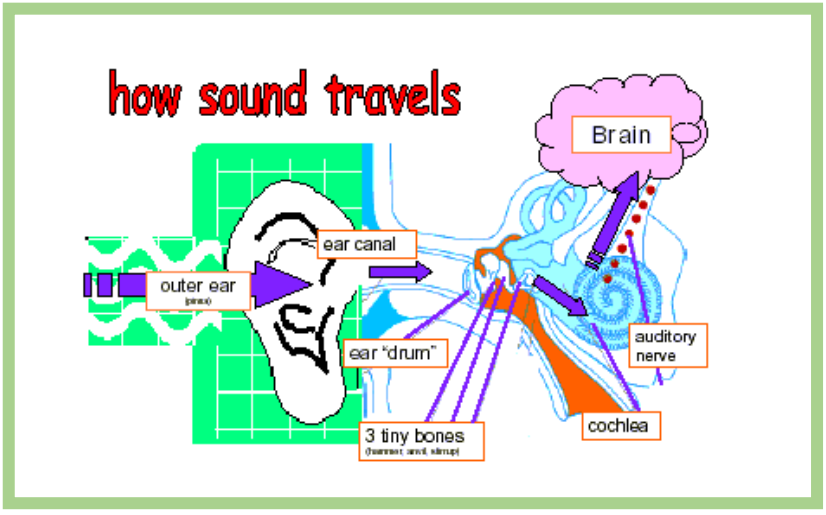
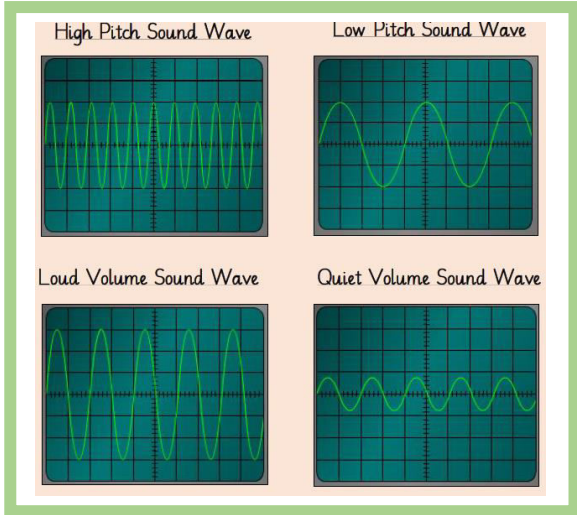
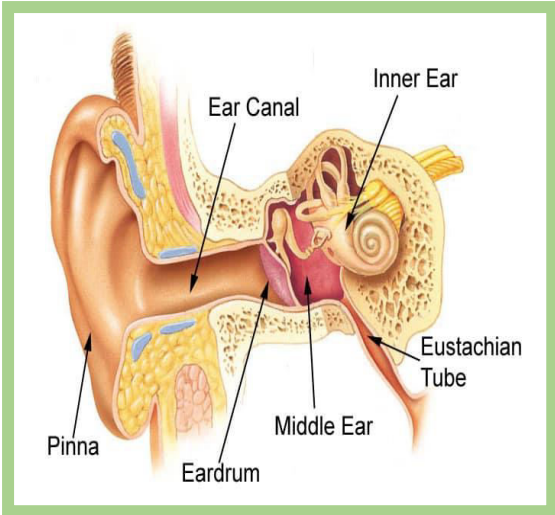


# Sound – Physics

Key vocabulary	
<b>Sound</b>	Vibrations that travel through the air or another medium and can be heard when they reach a person's or animal's ear.
<b>Vibration</b>	Quickly moving back and forth (or up and down).
<b>Volume</b>	The measure of how loud or quiet the sound is.
<b>Amplitude</b>	A measure of the strength or intensity of the wave. When looking at a sound wave, the amplitude will measure the loudness of the sound.
<b>Pitch</b>	A measure of how high or low the sound is.
<b>Sound waves</b>	Vibrating energy that looks like waves. They travel back and forth through solids, liquids and gases to get to another location.
<b>Medium</b>	Something (a solid, liquid or gas) that is needed for the sound waves to travel through to reach our ears and brain.
<b>Oscilloscope</b>	Scientific equipment that can be used to visually display sound waves.
<b>Pinna</b>	The external part of the ear in humans and other mammals; the auricle.
<b>Eardrum</b>	The membrane of the middle ear, which vibrates in response to sound waves; the tympanic membrane.
<b>Middle Ear</b>	The air-filled central cavity of the ear, behind the eardrum.
<b>Ear Canal</b>	The ear canal is a tube that runs from the outer ear to the eardrum.
<b>Inner Ear</b>	The part of the ear that contains organs of the senses of hearing and equilibrium.
<b>Eustachian Tube</b>	Connects the middle ear cavity with the nasopharynx.



# Sound – Physics



**Did you know?**

- Soundproofing is when a material is used to absorb loud sounds. Recording studios or night clubs might use them to stop sound escaping the room! Soft, spongy or pliable material is often best for this.
- Sound can travel through solids (like metal, stone and wood), liquids (like water) and gases (like air).

Key questions	Sticky knowledge
<b>How are sounds made?</b>	Sounds are made when objects vibrate.
<b>How do vibrations from sounds travel to the ear?</b>	Vibrations that travel through the air or another medium can be heard when they reach a person's or animal's ear.
<b>How do patterns between the volume of a sound and the strength of the vibrations that produced it, work?</b>	The volume of the sound is related to the strength of the vibration. When you hit a drum harder, the vibration is stronger and the sound is louder – larger vibrations give louder sounds.
<b>What happens to sounds as the distance from the sound source increases?</b>	As sound waves travel further away from their source, the more spread out their energy becomes. The same amount of energy is spread over a greater area, so the intensity and loudness of the sound is less. Even loud sounds fade away as you move further from the source.



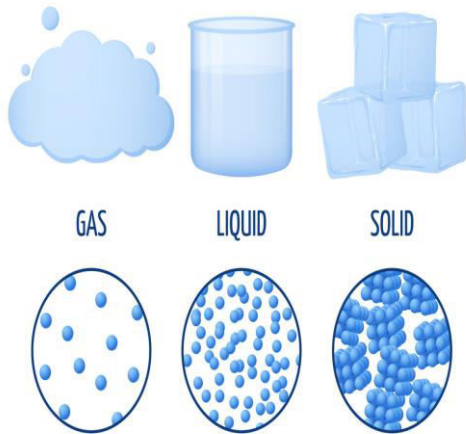
# States of matter - Chemistry

Key vocabulary	
<b>Matter</b>	Objects that take up space and have mass are called matter. Everything around you is made up of matter.
<b>Solid</b>	A solid holds its shape and has a fixed volume.
<b>Liquid</b>	A liquid fills up the shape of the bottom of a container. It forms a pool, not a pile and also has a fixed volume.
<b>Gas</b>	A gas can escape from an unsealed container. It fills up the space it is in, and does not have a fixed volume.
<b>Evaporation</b>	A physical process of changing from a liquid to a gas.
<b>Condensation</b>	A physical process of changing from a gas to a liquid.
<b>Temperature</b>	The degree or intensity of heat present in a substance or object and shown by a thermometer or perceived by touch.
<b>Celsius</b>	A scale of temperature on which water freezes at 0° (and boils at 100°) under standard conditions.
<b>Molecules</b>	The very tiny particles that make matter.
<b>Reversible</b>	Capable of being reversed so that the previous state is restored.
<b>Irreversible</b>	Not able to be undone or altered – a chemical change has occurred.
<b>State</b>	The particular condition that someone or something is in at a specific time.
<b>Particles</b>	A minute portion of matter.
<b>Heated</b>	Made warm or hot.
<b>Cooled</b>	Made less hot.
<b>Water Cycle</b>	The cycle of processes by which water circulates between the earth's oceans, atmosphere and land.
<b>Vapour</b>	A substance diffused or suspended in the air, especially one normally liquid or solid.
<b>Precipitation</b>	Rain, snow, sleet, or hail that falls to or condenses on the ground.



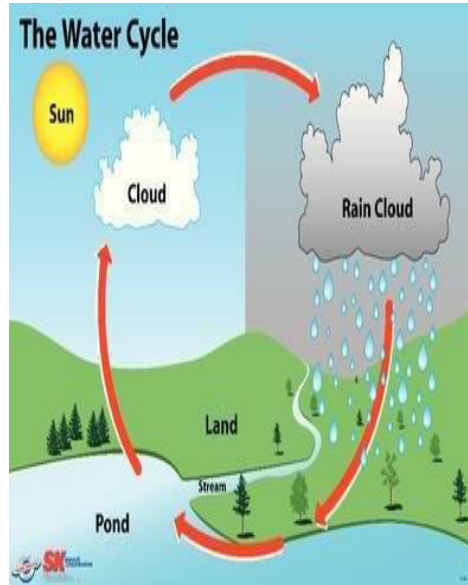
# States of matter - Chemistry

## STATES OF MATTER



### Did you know?

1. Humans are made of all the three main states of matter.
2. The air we breathe is made up of different gases, but it is mostly nitrogen and oxygen.
3. Water is the only common substance that is naturally found as a solid, liquid or a gas.



### The Water Cycle

Water evaporates from the surface of the earth when heated by the sun. The water vapour rises into the atmosphere, cools and condenses into rain or snow in clouds, and falls again to the surface as precipitation (rain or snow). The water falling on land collects in rivers and lakes, soil, and porous layers of rock, and much of it flows back into the oceans, where it will once more evaporate.

Key questions	Sticky knowledge
<b>What are the three states of matter?</b>	These are solids, liquids and gases. In a solid, molecules (particles) are packed together, and it keeps its shape. Liquids take the shape of the container. Gases spread out to fill the container.
<b>Diagrams of the Organisation of Particles in Materials</b>	
<b>How can I group materials together as a solid, a liquid or a gas?</b>	A variety of everyday materials can be grouped together on the basis of their simple physical properties.
<b>What happens to the state of materials when heated or cooled?</b>	Materials can change from one state to another at different temperatures. If water (liquid) is frozen it becomes ice (solid). If ice (solid) is heated it becomes water (liquid). If water (liquid) is heated it becomes water vapour (gas). If water vapour (gas) is cooled, it becomes water.
<b>How is the rate of evaporation affected by the temperature?</b>	The rate of evaporation depends on the liquid's exposed surface area (faster when increased), the humidity of surroundings (slower when increased), the presence of wind (faster when increased) and the temperature (faster when increased).





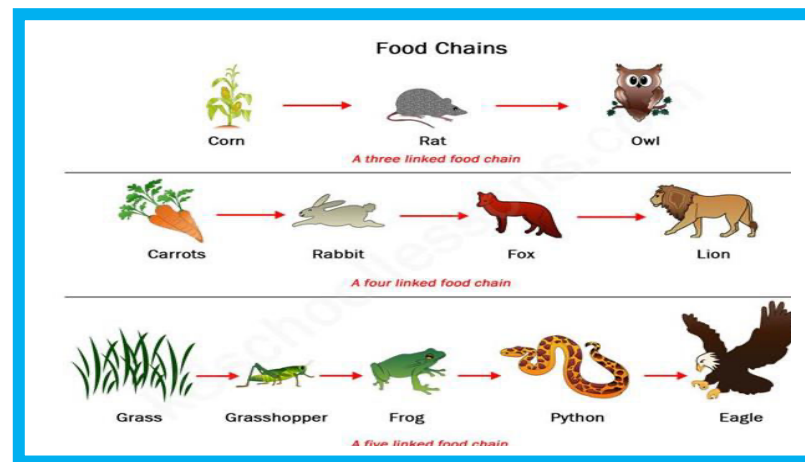
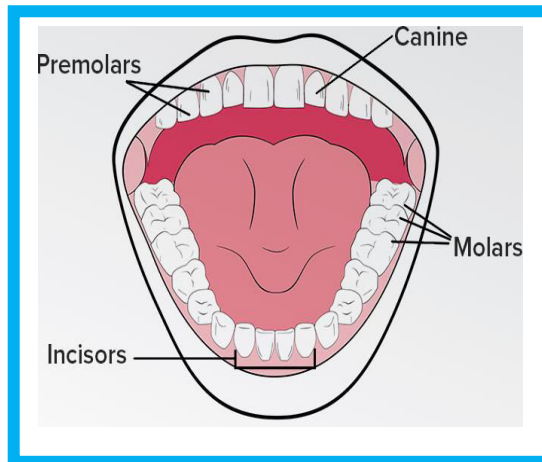
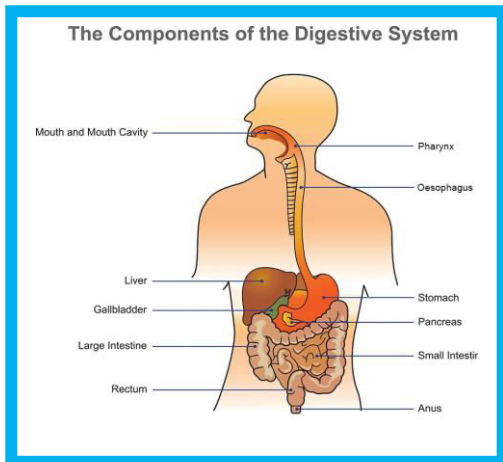
# Teeth and the Digestive System - Biology

## Key vocabulary

Key vocabulary	
<b>Digestive System</b>	The <b>system</b> of <b>organs</b> responsible for getting food into and out of the body and for making use of food to keep the body healthy.
<b>Oesophagus</b>	Tube of muscle which connects the mouth to the stomach.
<b>Teeth</b>	A set of hard, bony enamel-coated structures in the jaws of most vertebrates, used for biting and chewing.
<b>Stomach</b>	The organ inside your body where food is digested before it moves into the intestines.
<b>Intestines</b>	The tubes in your body through which food passes when it has left your stomach.
<b>Rectum</b>	The final section of the large intestine.
<b>Anus</b>	The opening at the end of the alimentary canal through which solid waste leaves the body.
<b>Incisors</b>	The teeth at the front of the mouth which have a flat edge designed for shearing or cutting.
<b>Canines</b>	The pointed teeth next to the incisors - adapted for tearing food.
<b>Pre Molars</b>	Have a flat surface with ridges for crushing and grinding food into smaller pieces - bigger than canines and incisors.
<b>Molars</b>	Large, flat teeth at the back of the mouth used primarily to grind food during chewing.
<b>Producer</b>	Organisms (living things) that make their own organic nutrients (food) - usually using energy from sunlight.
<b>Consumer</b>	Organisms (living things) that eat other organisms.
<b>Digestion</b>	A person's capacity to digest food.



# Teeth and the Digestive System – Biology



**Did you know?**

1. The muscles in your oesophagus act like a giant wave. That is what moves food or drinks down to your stomach.
2. Your body can move your food through the digestive system even while you are standing on your head. It is not connected to gravity because it works with muscles.

Key questions	Sticky knowledge		
<b>What are the different types of teeth in humans? What are their simple functions?</b>	Incisors – The four front teeth in both the upper and lower jaws. The primary function is to cut food. Canines – The sharpest teeth. Used for ripping and tearing food. Premolars – They have a flat biting surface. The function is to tear and crush food. Molars – These are at the back of the mouth. The function is to grind food.		
<b>How are animal teeth different to human teeth?</b>	Animal teeth can vary depending on the animal's classification (above) and its diet.		
<b>What are the basic parts of the digestive system in humans?</b>	Herbivores have more molars. They use these flat teeth for grinding branches, grasses and seeds. They use their front teeth like pruning shears to clip leaves and stems.		
<b>Do I know how to construct and interpret a variety of food chains?</b>	The main digestive system organs (in order of their function) are the mouth, oesophagus, stomach, small intestine, large intestine, rectum and anus.		
<b>Do I know how to construct and interpret a variety of food chains?</b>	A food chain shows the order in which living things depend on each other for food.		
<b>Do I know how to construct and interpret a variety of food chains?</b>	Producers make their own food. They make up the first level of every food chain. They are usually plants or one-celled organisms.	Prey is an animal that is hunted and killed by another animal for food.	A predator is an animal that hunts and eats other animals. The top predator in a food chain is an animal that doesn't get hunted for food by other animals.



# Living things and their habitats – Biology

## Key vocabulary

<b>Habitat</b>	The place where an organism lives.
<b>Organism</b>	An animal or a plant.
<b>Microorganism or Microbe</b>	An organism that is incredibly small. Usually, they cannot be seen by the naked eye.
<b>Characteristic</b>	A property that something has.
<b>Vertebrate</b>	An animal with a backbone.
<b>Invertebrate</b>	An animal without a backbone that has an external exoskeleton.
<b>Classify</b>	To group together, based on characteristics.
<b>Key</b>	Set of Yes / No questions, used for classification.
<b>Environmental dangers</b>	Anything within the habitat of a living organism that may cause harm or damage to it.
<b>Natural changes</b>	Naturally occurring changes to an environment.
<b>Man-made changes</b>	Changes to an environment, made by mankind.
<b>Extinct</b>	An organism is extinct when there are no living specimens left on Earth.
<b>Group</b>	A collection of things.



# Living things and their habitats - Biology

## Micro-habitats

Often, within some habitats there are **micro-habitats**, which are smaller areas with different characteristics. For example, a tree has different habitats: the branches, the bark, the root areas. Another example is the seaside, which has sandy shorelines with waves, and also may have shallow areas with rocks, being battered by the waves



Habitats

## MRS GREN

**M.R.S. G.R.E.N.** is a useful way to remember the necessary features of living organisms.

### MOVEMENT

It can change its position.

### RESPIRATION

It releases energy from a food source.

### SENSITIVITY

It responds to things (e.g. light).

### GROWTH

It can develop and get larger.

### REPRODUCTION

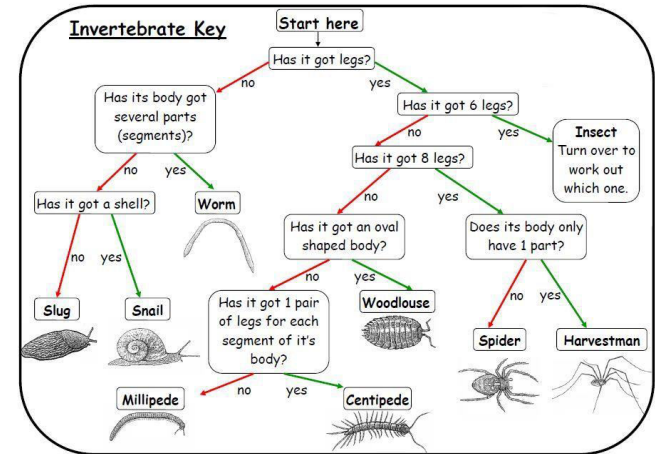
It can make copies of itself or produce offspring.

### EXCRETION

It can get rid of waste products.

### NUTRITION

It consumes chemical material / food.



### Did you know?

- Living things depend upon their habitats to give them everything they need, including food, water, air and a space to live and grow.
- Some animals can only survive in a particular habitat, such as rainforest, desert or marshland.
- Events like earthquakes, storms, floods, hurricanes, wildfires and droughts can have very serious consequences for living things. Habitats can be destroyed.

Key questions	Sticky knowledge
How can living things be grouped?	All living things can be put into groups based on features they have in common. The main groups are: Animals, Plants and Micro-organisms.
What are classification keys?	A series of questions about the organism's physical characteristics to identify an unknown organism.
How do environments pose a danger to living things?	Environments are continually changing due to many reasons. Human activities and natural forces causing these changes pose threats and sometimes extinction to many habitats.







# Year 4 Geography



# The European Union including Russia



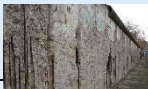

Key places and vocabulary	
<b>European Union (EU)</b>	A political and economic union of 28 member states that are located primarily in Europe. It was originally set up after World War II. It consisted of six countries - Belgium, France, Germany, Italy, Luxembourg and the Netherlands.
<b>Russia</b>	A country located partially in Europe (23%) and partially in Asia (77%). It is not named as one of the 27 member states.
<b>Climate</b>	The average measurements of temperature, wind, humidity, snow and rain in a place over the course of years.
<b>Population</b>	The amount of people who live in one area or country.
<b>Landmark</b>	An object or feature of a landscape or town that is easily seen and recognised from a distance. They enable someone to establish their location.
<b>Human features</b>	Features of land that have been impacted by human activity.
<b>Physical features</b>	The natural features of the Earth's surface, especially in its current aspects, including land formation, climate, currents, and distribution of flora and fauna.





# The European Union including Russia



Physical features	
<b>Mountain ranges</b>	<p>There are many mountain ranges across the European Union countries. The 3 major ranges are:</p> <ul style="list-style-type: none"> <li>• <b>Scandinavian Mountains:</b> 1,762 kilometres (1,095 miles)</li> <li>• <b>Carpathian Mountains:</b> 1,500 kilometres (900 miles)                             <ul style="list-style-type: none"> <li>• <b>Alps:</b> 1,200 kilometres (750 miles)</li> </ul> </li> </ul> <p>The highest mountain is Mount Elbrus (5642m) in Southern Russia.</p>
<b>Bodies of Water</b>	<p>Europe is bordered by the Arctic Ocean to the north, the Atlantic Ocean to the west, and the Mediterranean, Black, and Caspian Seas to the south. The five primary rivers in Europe are: the Danube, the Volga, the Loire, the Rhine and the Elbe.</p>
<b>Climate</b>	<p>There are many different climate zones found in Europe. These include the Marine West Coast climate zone, the Humid Continental climate zone, the Mediterranean climate zone, the Subarctic and Tundra climate zone, and the Highland climate zone.</p>
Human features	
<b>Population</b>	<p>As of 1<sup>st</sup> February 2020, the population of the EU is about 445 million people. There are around 110 million people in the European part of Russia.</p>
 <b>Berlin Wall</b>	<p>After WWII, Germany was split into different zones. Living conditions were soon better in West Germany compared to East Germany. A 100 mile guarded wall was built overnight in 1961 to stop people fleeing into West Germany. It came down in 1989.</p>
 <b>Colosseum</b>	<p>The Colosseum in Rome, built in 70 A.D., as one of many built throughout Italy during the time of the Romans. This huge amphitheatre could hold 50,000 spectators and was often the scene of chariot races, gladiator and animal battles along with executions.</p>

Key questions	Sticky knowledge			
How can I locate the world's countries, using maps to focus on Europe (including the location of Russia)?	World maps can be used to locate where countries are. They can show us areas of similar environmental regions, either desert, rainforest or temperate regions. Russia is the world's largest country. It stretches over a vast expanse of eastern Europe and northern Asia.			
Can I name 8 European capital cities?	Country	Capital City	Country	Capital City
	Russia	Moscow	Spain	Madrid
	Italy	Rome	Poland	Warsaw
	Germany	Berlin	Austria	Vienna
	Romania	Bucharest	Greece	Athens

**Did you know?**

1. Europe has 24 active languages being spoken with Russian and German being the most common first language but English being the most common second.
2. Russia is so large that it spans 11 time zones.
3. The European Union has its own flag, complete with twelve stars.
4. The existing capital of the European Union is set in Brussels, Belgium.





# A European Country that contrasts with England



Key places and vocabulary	
<b>United Kingdom</b>	The United Kingdom, made up of England, Scotland, Wales and Northern Ireland, is an island nation in North-Western Europe.
<b>France</b>	A republic country in Western Europe, between the English Channel, the Mediterranean, and the Atlantic: the largest country wholly in Europe
<b>English Channel</b>	An arm of the Atlantic between S England and N France, connected with the North Sea by the Strait of Dover. 350 miles (565 km) long; 20–100 miles (32–160 km) wide.
<b>London</b>	The capital and largest city of the United Kingdom, on the Thames River in southeast England. Greater London consists of 32 boroughs.
<b>Paris</b>	The capital and largest city of France; and international centre of culture and commerce.
<b>Climate</b>	The average course of weather conditions for a particular location.
<b>Landmarks</b>	An object or feature of a landscape or town that is easily seen and recognised from a distance. They enable someone to establish their location.







# A European Country that contrasts with England



Physical features	
<b>Mountains</b>	France highest – Mt. Blanc (4810m) which is in the Alps. UK highest – Ben Nevis (1345m) which is in the Grampian Mountains.
<b>Bodies of Water (Oceans, Seas, Lakes &amp; Rivers)</b>	France longest river – Loire (1012km); it flows from the south to the north and then east into the Atlantic Ocean UK longest – River Severn (354km); it begins its journey in the Cambrian Mountains of Wales and its journey ends at the Atlantic Ocean.
<b>Climate</b>	UK climate is influenced by the Atlantic Ocean. France has 3 types of climate: oceanic, continental, and Mediterranean.
Human features	
<b>Population – London 2020</b>	around 2.15 million people live in London
<b>Population – Paris 2020</b>	around 9.3 million people live in Paris.

**Did you know?**

- France and the UK are only separated by 18 miles of sea!
- The English Channel is a part of the Atlantic Ocean. It separates the island of Britain from Northern France. It joins the North Sea to the Atlantic Ocean.

Key questions	Sticky knowledge	
<b>What are the similarities and differences (contrasts) between London and Paris?</b>	In order to be able to contrast two regions, we need to understand the geographical similarities and differences of the human and physical geography of a small area of two different areas. (United Kingdom and France)	
	<p style="text-align: center;"><u>Similarities – Physical Geography</u></p> <p>Both capital cities have a major river running through them. London – River Thames – 346km long. Paris – River Seine – 777km long.</p>	<p style="text-align: center;"><u>Differences – Physical Geography</u></p> <p>London – River Thames – divides London into North London and South London Paris – River Seine – is just in the North west of Paris The United Kingdom is broken up into 4 countries and 9 official regions. France is broken up into 18 regions: 13 on the mainland and 5 overseas regions.</p>
	<p style="text-align: center;"><u>Similarities – Human Geography</u></p> <p><u>Famous Landmarks:</u> both iconic human features <b>Buckingham Palace</b> - The London residence and administrative headquarters of the monarchy of the United Kingdom. <b>Eiffel Tower</b> - A wrought-iron lattice tower on the Champ de Mars in Paris, France. Named after the engineer Gustave Eiffel, whose company designed and built the tower.</p>	<p style="text-align: center;"><u>Differences – Human Geography</u></p> <p>The UK has the British Pound for its currency. France has the Euro for its currency. UK has a parliamentary constitutional monarchy. France is a semi presidential republic.</p>



# Significant lines

Key places and vocabulary	
<b>Latitude</b>	A geographic coordinate that specifies the north–south position of a point on the Earth's surface
<b>Longitude</b>	The distance on the earth's surface, east or west of a defined meridian
<b>Northern Hemisphere</b>	The half of Earth that is north of the Equator
<b>Southern Hemisphere</b>	The half of Earth that is south of the Equator
<b>Meridian</b>	The half of an imaginary great circle on the Earth's surface
<b>Prime Meridian</b>	An imaginary line that runs from the North Pole to the South Pole and passes through Greenwich, England
<b>Equator</b>	An imaginary line around the middle of a planet



# Significant lines

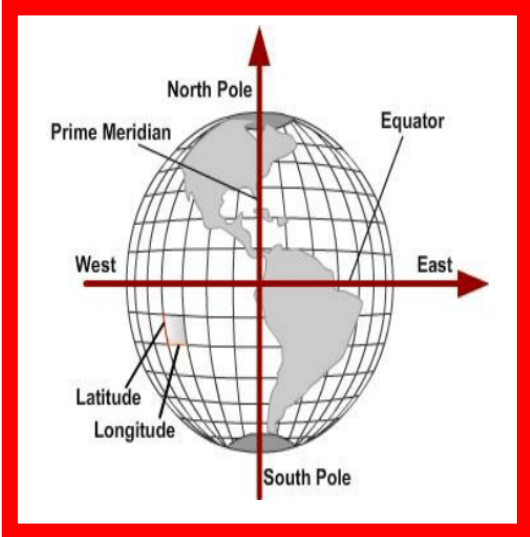
Features	
<b>Latitude and Longitude</b>	These lines allow you to quickly and accurately locate places and features on the earth's surface.
<b>Latitude</b>	An angle which ranges from 0° at the Equator to 90° (North or South) at the poles.
<b>Circles of Latitude</b>	The Antarctic Circle, Tropic of Capricorn, Tropic of Cancer, and Arctic Circle are all circles of latitude.
<b>The 7 major lines of Latitude</b>	North Pole. 90 degrees north; Arctic Circle. 66.5 degrees north; Tropic of Cancer. 23.5 degrees north; Equator. 0 degrees; Tropic of Capricorn. 23.5 degrees south; Antarctic circle. 66.5 degrees south; South pole. 90 degrees south.
<b>Lines of Longitude</b>	<ul style="list-style-type: none"> <li>These are called meridians. They run north-south, but provide east-west locational reference.</li> </ul>
<b>The Prime Meridian</b>	The line which runs through Greenwich in London is called the Greenwich Meridian or Prime Meridian. It is 0 degrees longitude. It passes through UK, France, Spain, Algeria, Mali, Burkina Faso, Tongo and Ghana.
<b>International Date Line</b>	This is 180 degrees East to West longitude. It passes through the Mid-Pacific Ocean.

**Did you know?**

1. The distance around the Equator is about 24,900 miles (40,000 kilometers)
2. The North Pole has the latitude coordinate of 90°N (North) and the South Pole has the latitude coordinate of 90°S (South).
3. Cities with a longitude of 0° include Greenwich and Cambridge (UK), Lleida (Spain) and Le Havre (France).



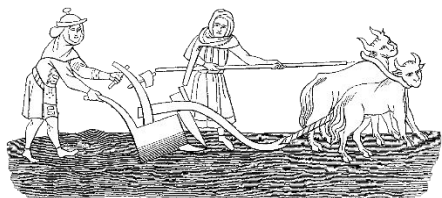
Key questions	Sticky knowledge
What is the position and significance of latitude?	In geography, <b>latitude</b> is a geographic coordinate that specifies the north–south position of a point on the Earth's surface. These imaginary lines run parallel to the <b>Equator</b> .
What is the position and significance of longitude?	In geography, <b>longitude</b> is a geographic coordinate that specifies the East–West position of a point on the Earth's surface. These imaginary lines run from the top of the Earth to the bottom.
What is the Equator?	The <b>Equator</b> is an imaginary circle around Earth. It divides Earth into two equal parts: the Northern Hemisphere and the Southern Hemisphere. It runs east and west halfway between the North and South poles.
What is the Northern Hemisphere?	The <b>Northern Hemisphere</b> is the half of Earth that is north of the Equator. About 68% of all the land on Earth is in the Northern Hemisphere. About 90% of the people in the world live in the Northern Hemisphere.
What is the Southern Hemisphere?	The <b>Southern Hemisphere</b> is the half of Earth that is south of the Equator. the Southern Hemisphere has less land and more water than the Northern Hemisphere.



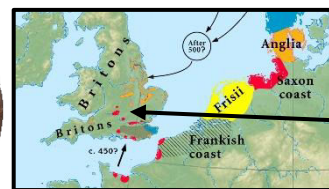


# Year 4 History





# Anglo-Saxons





England  
(Europe)

Timeline									
410	497	575	586	597	757	793	871	1016	1066
Romans left Britain leaving it unguarded	The kingdom of Wessex is formed	The kingdom of East Anglia was formed	The Kingdom of Mercia is formed	St Augustine introduces Christianity	Offa King of Mercia declares himself King of England	Vikings attack Lindisfarne	Alfred the Great rules	Canute the Great rules as first Viking	Battle of Hastings Normans defeat the Saxons

Key People	
<b>St Augustine (c.530-604)</b>	A Christian missionary sent from Rome to convert people from Anglo-Saxon paganism to Christianity. Responsible for the Christian faith throughout England.
<b>King Aethelbert (c.550-616)</b>	King of Kent. Created the first Germanic law code in the early 7th Century. The first English king to convert to Christianity.
<b>King Offa (c730-796)</b>	King of Mercia, and of most of England in the mid-8th Century. Regarded as the most powerful Anglo-Saxon king until Alfred the Great.
<b>King Alfred the Great (849-899)</b>	Defeated the Vikings in the Battle of Edington (878). Made an agreement with them (Danelaw). Known for improving the standard of living, legal and military systems and education.

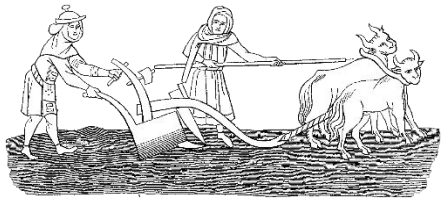
### Did you know?

1. The Anglo-Saxons were under constant attack from the Vikings who travelled from Scandinavia
2. The largest house belonged to the chief. It was big enough to house him and all his warriors, sometimes even the oxen!
3. In Sutton Hoo, a whole ship was used as a grave! An Anglo-Saxon king was buried inside the ship along with some of his possessions, such as his helmet and sword.

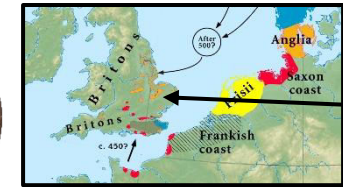



Key questions	Sticky knowledge
<b>Where did the Anglo-Saxons originate from?</b>	The Anglo-Saxons came from Denmark, Netherlands and northern Germany across the North Sea in wooden boats. They conquered England but failed to conquer Scotland, Wales and Cornwall (an area of south-west England).
<b>How did the Anglo-Saxons invade Britain?</b>	The warriors left their homes in Germany, the Netherlands and Denmark and sailed over to Britain on wooden boats. Sources say that the Saxon warriors were invited to come to the area now known as England, to help keep out invaders from Scotland and Ireland. Another reason may have been because their land often flooded and it was difficult to grow crops, so they were looking for new places to settle down and farm.
<b>What did Anglo-Saxon villages look like?</b>	The villages were made up of small wooden huts with a straw roof. Inside was just one room in which the whole family lived, ate, slept and socialised together. Each village was surrounded with a high fence to protect cattle from wild animals and to keep out their enemies, too! The largest house belonged to the chief and was big enough to house him and all his warriors – even the oxen!
<b>What was the county we live in known as during the Anglo-Saxon period in history?</b>	The county we live in today was known as Mercia. Mercia was one of the great seven Anglo-Saxon kingdoms of England. Based around its capital of Tamworth, Mercia went through rapid growth throughout the 6th and 7th centuries to be one of the 'big three' kingdoms of England.
<b>What was Manchester like during the 'Dark Ages'?</b>	The <b>Dark Ages</b> are estimated to have stretched from 500 to 1066 AD. <b>Manchester</b> was likely a place of much warfare, considering it fell under the control of many different kingdoms during that time. The city would have been very crowded and dirty.





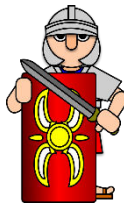
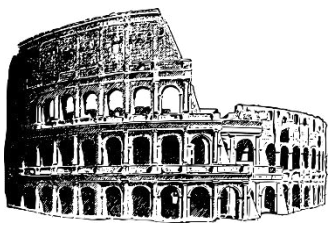
# Anglo-Saxons



England  
(Europe)

Key places and vocabulary	
<b>Anglo-Saxon</b>	The name given to the people who travelled from Germany and South Denmark and settled in Britain around AD 410.
<b>The Dark Ages</b>	The period of European history after the fall of the Western Roman Empire.
<b>Denmark</b>	A modern day country located in Northern Europe.
<b>Netherlands</b>	An area of land to the East of England over the sea.
<b>Northern Germany</b>	The upper-most part of modern Germany.
<b>North Sea</b>	The North Sea lies between Great Britain, Denmark, Norway, Germany, the Netherlands, Belgium and France.
<b>Mercia</b>	Was a Kingdom of central and southern England.
<b>Castle</b>	A castle is a large building with thick, high walls. Castles were built by important people, such as kings, in former times, especially for protection during wars and battles.
<b>Wattle-and-daub</b>	The weaving of small wooden branches with mud, straw, horse hair and dung to create walls.
<b>Sutton Hoo</b>	The Royal burial ground of an Anglo-Saxon King.
<b>Runes</b>	Alphabet consisting of between 26-33 letters used to write Old English ( j, q, and v are not included and the letters k and z are very rarely used) as well as three extra letters: þ ð æ
<b>Wooden Huts</b>	Rectangular huts made of wood with roofs thatched with straw.
<b>Saxons</b>	People from Northern and Central Germany who invaded Britain around AD 410.
<b>Straw</b>	Straw is dry stalks of cereal plants after grain and chaff have been removed.





# The Romans



Timeline								
<b>753 B.C.</b>	<b>264-146 B.C.</b>	<b>58-51 B.C.</b>	<b>54 B.C.</b>	<b>43</b>	<b>61</b>	<b>122</b>	<b>200</b>	<b>480-550</b>
Rome was founded	Three Punic Wars between the Romans and Carthaginians	The Gallic Wars take place	Julius Caesar attempts to invade Britain	Invasion ordered by Claudius is successful	Iceni revolt led by Boudicca in Britain	Hadrian's Wall built to separate Scotland and England	Christianity introduced	Arrival of the Anglo-Saxons in Britain

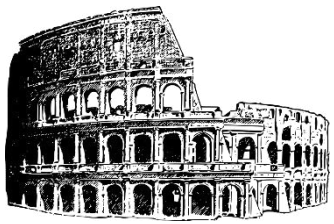
Key people	
<b>Julius Caesar (100 B.C. – 44 B.C.)</b>	Led an army into Rome to take over the government. Won many battles but was only emperor for a year. Killed by his political enemies on the Ides of March (15 <sup>th</sup> March). Invaded Britain twice but did not set up any forts.
<b>Caesar Augustus (63 B.C. - 14)</b>	Seen as the first real Roman Emperor when he took power in 27 BC. He was Julius Caesar's adopted son.
<b>Claudius (10 B.C. – 54)</b>	Led to the successful invasion of Britain. Responsible for building lots of new roads and aqueducts throughout the Empire.
<b>Constantine (272-337)</b>	The first Christian Emperor who tried to unite a split Empire.

### Did you know?

- There were 13 different types of gladiators to keep contests interesting they would have different armour, weapons and fighting styles.
- The Romans used to wash their clothes in their urine because it contains ammonia which is a powerful bleaching agent.
- Coins were used to trade but were also ways for the emperor to tell people about the great things they did (or wanted people to think they did).

Key questions	Sticky knowledge
<b>When did the Roman Empire begin?</b>	The Roman Empire began in 27BC. The first Emperor was Caesar Augustus.
<b>How did life change when the Romans invaded Britain?</b>	Many of the Roman towns in Britain crumbled away as people went back to living in the countryside. But even after they were gone, the Romans left their mark all over the country. They gave us new towns, plants, animals, a new religion and ways of reading and counting. Even the word 'Britain' came from the Romans.
<b>Who was Boudicca and what did she do?</b>	Boudicca or Boudicca (also known as Boadicea or Boudicea) is known for being a warrior queen of the Iceni people, who lived in what is now East Anglia, England. In 60–61 CE she led the Iceni and other peoples in a revolt against Roman rule. Although her forces massacred some 70,000 Romans and their supporters, they were ultimately defeated.
<b>How did the way the kingdoms were divided, lead to the creation of some of our county boundaries today?</b>	The Romans first divided Britain into regions (administrative areas) most likely following major geographical features such as rivers. They were trying to impose some kind of order on the warring tribes that squabbled over territory (land). They built walls, laid roads and drew charts in an attempt to contain the locals but it proved quite pointless (futile). Many county boundaries have been changed since Roman Britain.





# The Romans



Key places and vocabulary	
<b>Roman (s)</b>	A citizen or soldier of the ancient Roman Republic or Empire.
<b>Empire</b>	An empire is made up of several territories, states, countries and people that is ruled over by a single Emperor. These territories are usually created by conquest and controlled.
<b>Emperor</b>	Someone who rules an empire.
<b>Amphitheatre</b>	A place where Romans went to watch animals and people fight.
<b>Colosseum</b>	A huge oval amphitheatre built in Rome holding approx. 60,000 people to watch gladiators battle.
<b>Hadrian's Wall</b>	A defensive wall separating Scotland and England with forts every 5 miles, stretching for 80 miles.
<b>Gladiator</b>	A slave that was trained to fight in the amphitheatres. They entertained audiences in violent battles with gladiators, criminals and animals.
<b>Aqueduct</b>	Long stone waterways that delivered fresh water to cities, flowing into a holding tank (castellum).
<b>Regions</b>	The Roman provinces were the administrative regions of Ancient Rome outside Roman Italy that were controlled by the Romans under the Roman Empire. Each province was ruled by a Roman appointed as governor.
<b>Roads</b>	Roman roads were of several kinds, ranging from small local roads to broad, long-distance highways built to connect cities, major towns and military bases.
<b>Iceni</b>	A tribe of ancient Britons inhabiting an area of south-eastern England in present-day Norfolk and Suffolk.
<b>Boudicca</b>	Was a queen of the ancient British Iceni tribe, who led a failed uprising against the conquering forces of the Roman Empire







# Year 5 Science



# Animals - Biology

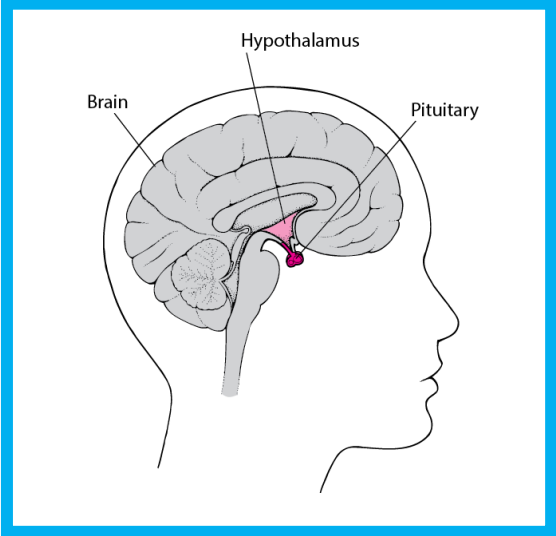
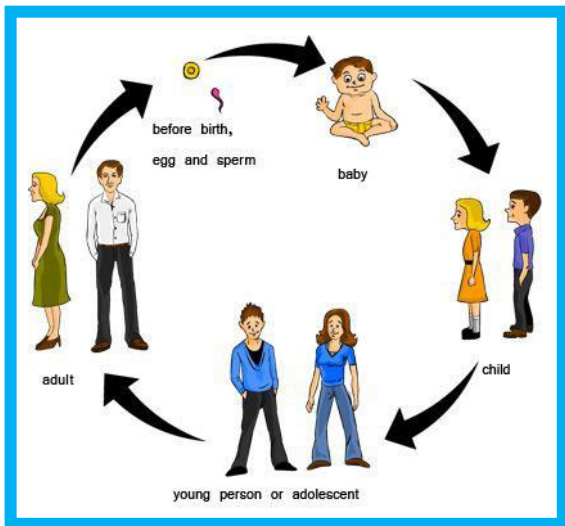


Key vocabulary	
Reproduction	The biological process by which new individual organisms - “offspring” – are produced from their parents.
Child	A young human being below the age of puberty.
Adolescent	A young person in the process of developing from a child into an adult.
Adulthood	The state of being fully grown or mature.
Puberty	The time of life when a child develops physically into an adult.
Hormones	Hormones are your body's chemical messengers. They travel in your bloodstream to tissues or organs. They work slowly, over time, to help you grow and develop.
Hypothalamus	Puberty occurs when a part of the brain called the hypothalamus begins to produce a puberty hormone.
Pituitary gland	The pituitary gland is stimulated by the puberty hormone produced by the hypothalamus. The pituitary gland then releases two more puberty hormones.





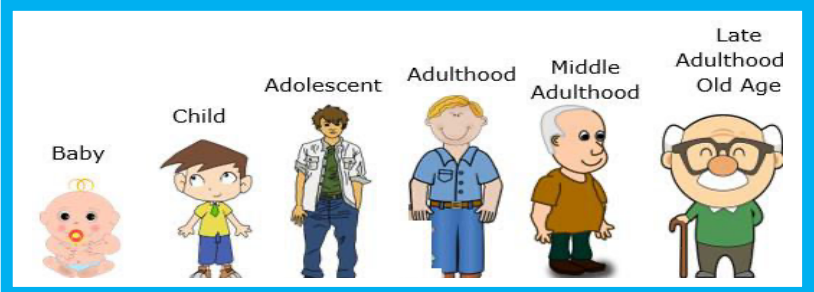
# Animals - Biology



**Did you know?**

Your fingernails grow 4 times as fast as your toe nails

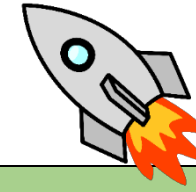
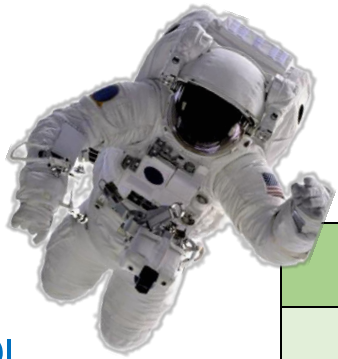
Babies are born with 300 bones – adults have 206!



Key questions	Sticky knowledge
<p>What are the changes as humans develop to old age?</p>	<p>Babies grow into children, children then go through puberty as adolescents and become adults. Adults then grown older and enter 'late adulthood', or old age.</p> <p><u>Puberty</u>                      Puberty is the time of life when a child develops, among other things, physical changes as they transition into adulthood. Physical changes usually begin as early as 8 years and as late as age 13 in girls, and between ages 9 and 14 for boys. During puberty, your body becomes able to reproduce (have children).</p>



# Earth and Space – Physics



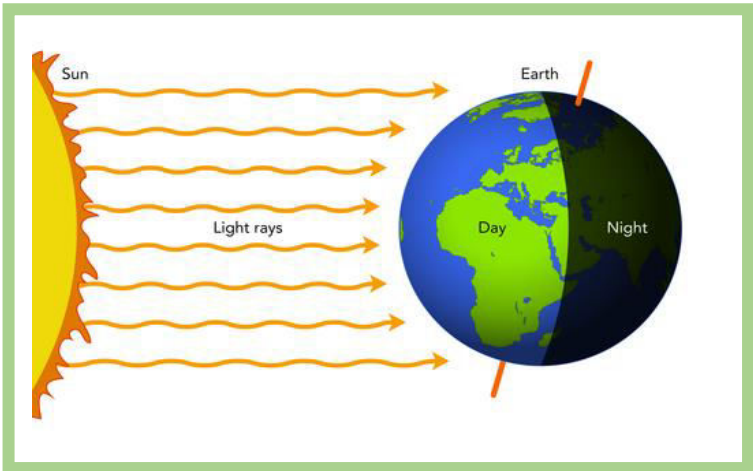
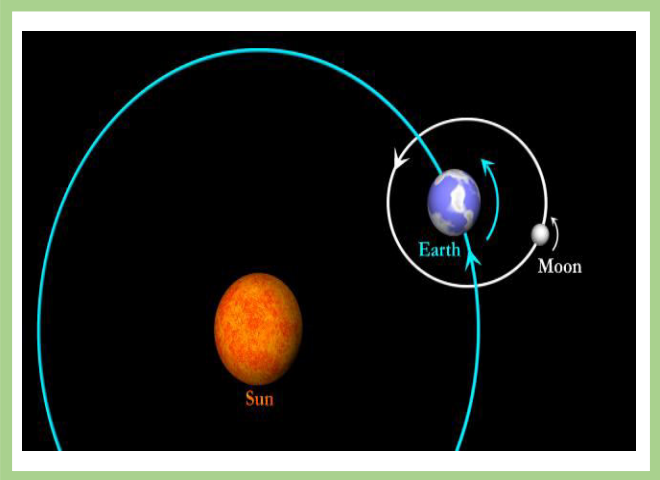
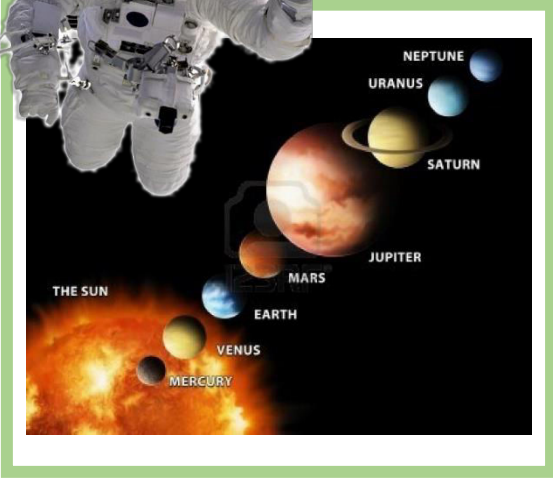
## Key vocabulary

<b>Earth</b>	The Earth is the planet that we live on. It is the third planet from the Sun.
<b>Space</b>	Space is the zone above and around our planet where there is no air to breathe or to scatter light. Space is also a vacuum.
<b>Planets</b>	A planet is a celestial body moving in an elliptical orbit around a star. There are 8 planets in our Solar System: Mercury, Venus, Mars, Jupiter, Saturn, Uranus, Neptune and Earth.
<b>Sun</b>	The Sun is a dwarf star. It is a hot ball of glowing gases at the heart of our Solar System.
<b>Moon</b>	The moon is an astronomical body orbiting our Earth. Some other planets also have moons.
<b>Solar system</b>	The Solar System is a gravitationally bound system of the Sun and the objects that orbit it.
<b>Spherical</b>	Shaped like a sphere.
<b>Rotation</b>	A rotation is a circular movement of an object around a centre point (axis).
<b>Axis</b>	An imaginary line around which a planet rotates.
<b>Orbit</b>	An orbit is a regular, repeating path that an object in space takes around another object.
<b>Day</b>	The period from sunrise to sunset in each twenty-four hours.
<b>Night</b>	The period from sunset to sunrise in each twenty-four hours.





# Earth and Space – Physics



**Did you know?**

It takes **24 hours** for the Earth to spin once on its axis.  
 It takes **28 days** for the Moon to orbit the Earth.  
 It takes **365 days ¼ days** for the Earth to orbit the Sun.  
 (Every 4 years there is a leap year due to the extra quarter – an extra day in February)  
 The Earth's tilt on its axis is what causes the 4 seasons. Sometimes it points towards the Sun and other times it points away from the Sun.

Key questions	Sticky knowledge
Can I describe the movement of the Earth, and other planets, relative to the Sun?	The Earth, and the other planets rotate on an axis. Whilst rotating, they move around the Sun on their own orbit.
Can I describe the movement of the Moon relative to the Earth?	As the Earth orbits the Sun, the Moon orbits the Earth.
What shape are the Sun, Earth and Moon?	Approximately spherical bodies.
Can I explain day and night and the apparent movement of the Sun across the sky?	We get day and night because the Earth spins (or rotates) on an imaginary line called its axis and different parts of the planet are facing towards the Sun or away from it.





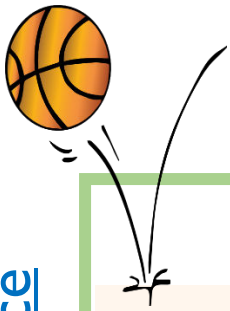
# Forces – Physics



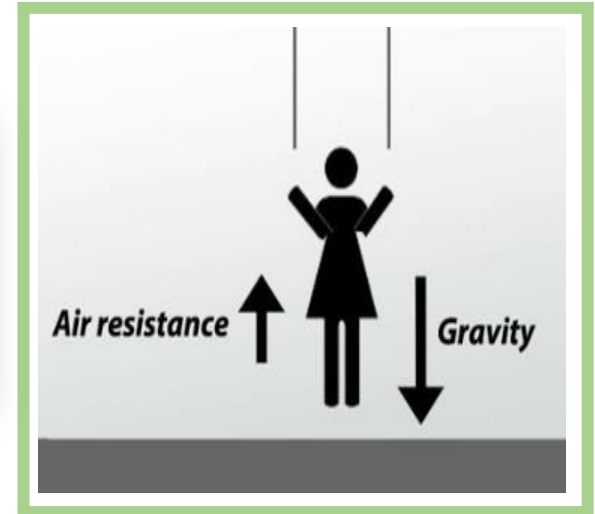
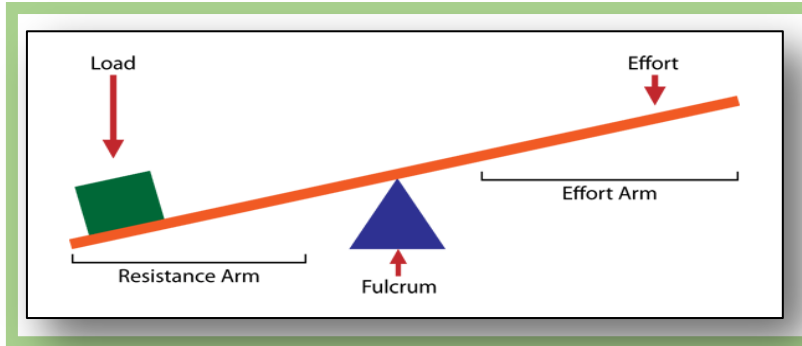
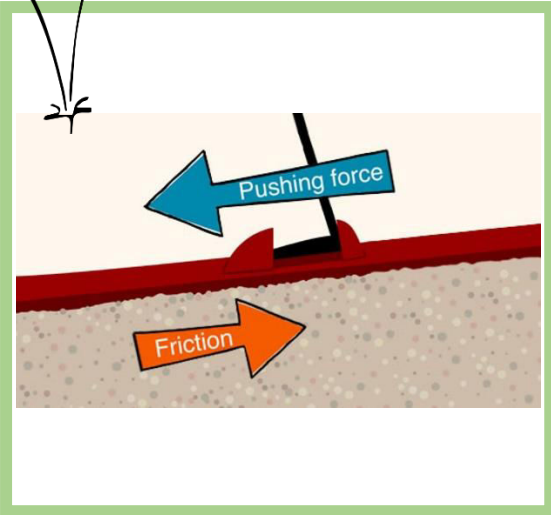
## Key vocabulary

<b>Force</b>	A force is any interaction that when unopposed, will change the motion of an object.
<b>Gravity</b>	A force that holds things to the Earth's surface and prevents things from floating off into the atmosphere.
<b>Air resistance</b>	Air resistance describes the forces that are in opposition to the relative movement of an object as it passes through the air.
<b>Water resistance</b>	Water resistance is a type of friction which can slow things down in the water.
<b>Friction</b>	Friction is a force between two surfaces that are sliding, or are trying to slide, across each other.
<b>Mechanism</b>	A mechanism is a system of parts working together in a machine.
<b>Lever</b>	A lever is a rigid bar resting on a pivot, used to move heavy or firmly fixed loads with one end, when pressure is applied to the other end.
<b>Pulley</b>	A pulley is a wheel on an axle or shaft that is designed to support movement and change of direction of a taut cable or belt.
<b>Gears</b>	A gear or cog, is a rotating machine part having cut teeth, or in the case of a cogwheel, inserted teeth, which mesh with another toothed part to create movement.
<b>Push and Pull</b>	A force that changes the direction of an object towards you, would be a pull. On the other hand, if it moves away, it is a push.
<b>Levers</b>	A rigid bar resting on a pivot, used to move a heavy or firmly fixed load with one end when pressure is applied to the other.
<b>Fulcrum</b>	The point against which a lever is placed to get a purchase, or on which it turns or is supported.
<b>Effort</b>	A vigorous or determined attempt.
<b>Load</b>	A weight or source of pressure borne by someone or something.



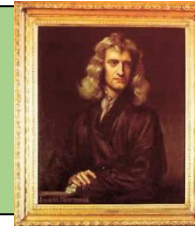


# Forces – Physics



## Did you know?

It is said that the famous scientist Isaac Newton was sitting under a tree when an apple fell on his head. He identified it was a force pulling the object down. We now measure gravity in Newtons (N) because of this!



Key questions	Sticky knowledge
Why do unsupported objects fall towards the Earth?	Unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling object.
What are the effects of air resistance, water resistance and friction that act between moving surfaces?	<p><i>Air resistance</i> - describes the forces that are in opposition to the movement of an object as it passes through the air, <b>slowing it down</b>.</p> <p><i>Water resistance</i> - is a type of friction which can <b>slow things down</b> in the water.</p> <p><i>Friction</i> - is a force between two surfaces that are sliding, or are trying to slide, across each other, <b>slowing it down</b>.</p>
How do levers, pulleys and gears have an effect?	Some mechanisms, including levers, pulleys and gears, work really well. They allow a smaller force to have a greater effect.

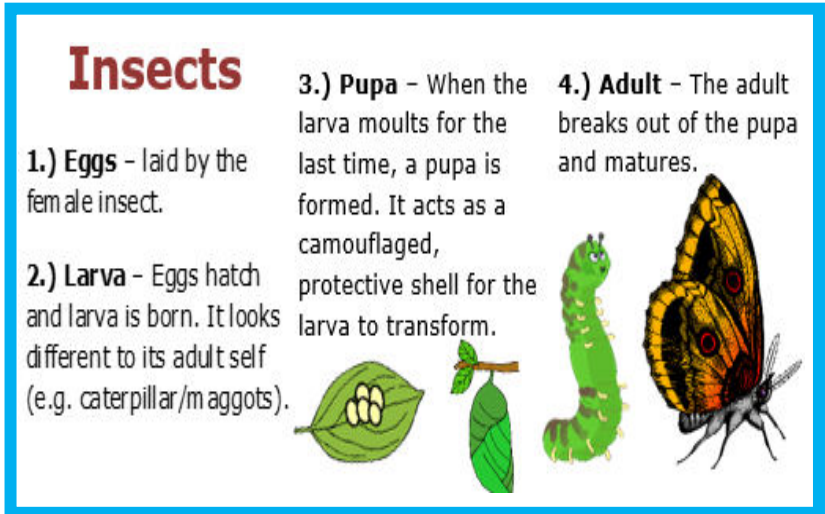
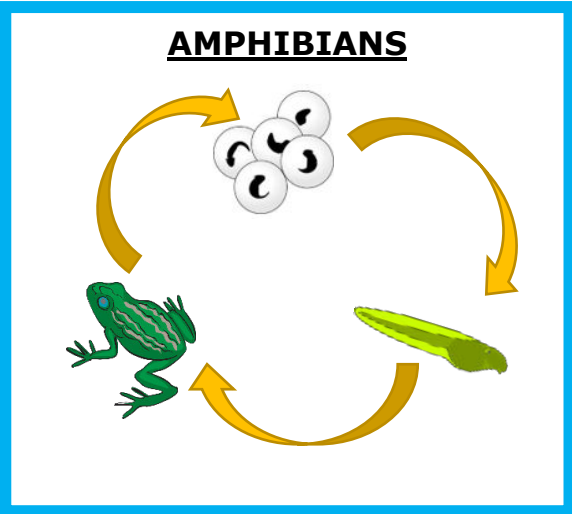
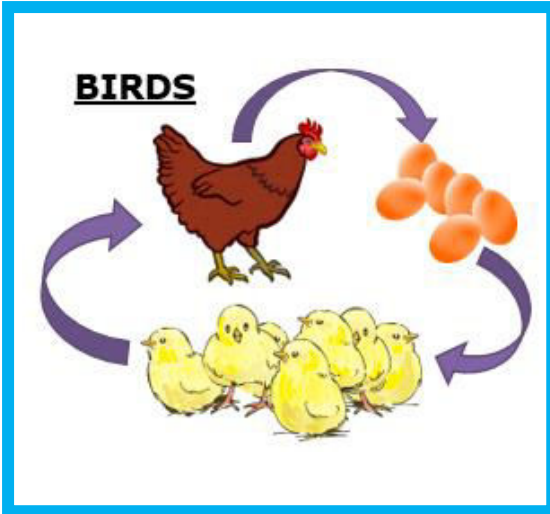


# Life cycles - Biology



Key vocabulary	
<b>Life cycle</b>	The series of changes in the life of an organism, including reproduction.
<b>Mammal</b>	An animal that breathes air, has a backbone, and grows hair at some point during its life. Female mammals have glands that produce milk.
<b>Amphibian</b>	They live the first part of their lives in water, and the second part on the land.
<b>Insect</b>	Insects are small animals with six legs and a hard, outer shell called an exoskeleton.
<b>Bird</b>	Birds are warm blooded and lay eggs. Their bodies are covered in feathers and they have wings.
<b>Reproduction</b>	The biological process by which new individual organisms – “offspring” – are produced from their parents.
<b>Stamen</b>	The stamen is the pollen producing reproductive organ of a flower.
<b>Pistil</b>	The pistil is the female reproductive part of the flower.
<b>Pollen (Pollination)</b>	A fine powdery substance, typically yellow, consisting of microscopic grains discharged from the male part of a flower.
<b>Fertilise</b>	To cause (an egg, female animal, or plant) to develop a new individual by introducing male reproductive material.
<b>Egg Cells (ovules)</b>	The part of the ovary of seed plants that contains the female germ cell and after fertilization becomes the seed.
<b>Seeds</b>	the unit of reproduction of a <u>flowering</u> plant, capable of developing into another such plant.
<b>Male and Female</b>	Female flowers have pistils and male flowers have stamens. An easy way to remember is that stamen has the word “men” in it. A pistil consists of three parts: the stigma, style, and ovary.
<b>Offspring</b>	The product or result of something.
<b>Born</b>	To come into existence as a result of birth.

# Life cycles – Biology



**Did you know?**  
It is the male seahorse that gets pregnant and carries the babies – it can carry up to 2000 at a time!

Key questions	Sticky knowledge
Can you describe the life cycle of a mammal, an amphibian, an insect and a bird?	<p><i>Mammal</i> – Adult has a baby, baby grows until they are an adult, the adult reproduces and another baby mammal is born.</p> <p><i>Amphibian</i> – Adult lays eggs, eggs grow into tadpoles, tadpoles grow into adults.</p> <p><i>Insect</i> – Adult insect lays eggs, eggs hatch and larva is born, a pupa is formed from the larva, adult insect breaks out of the pupa and matures.</p> <p><i>Bird</i> – bird, lays eggs, eggs hatch into baby birds, bird grows, lays eggs.</p>
What are the life processes of reproduction in some plants and animals?	<p><i>Plants</i> – Pollen is carried by insects or blown by the wind from one flower to another. This process is called pollination. Pollen reaches the new flower and travels to the ovary where it fertilises egg cells (ovules) to make seeds. This is fertilisation.</p> <p><i>Animals</i> – To reproduce, animals need a male and female.</p> <p>Together they can create offspring, or babies. Some animals, such as chickens, fish and snakes, lay eggs which contain their offspring. Other animals, including humans, tigers and sheep, grow their babies inside them until they are developed enough to be born.</p>







# Material properties - Chemistry



Key vocabulary	
<b>Hardness</b>	Hardness is a resistance to bending, scratching, abrasion or cutting.
<b>Solubility</b>	The ability of a substance (solute), to mix into a liquid (the solvent).
<b>Transparency</b>	Allowing light to pass through so that objects behind can clearly be seen.
<b>Conductivity</b>	The degree to which a specified material conducts heat or electricity.
<b>Magnetic</b>	Things that are magnetic are attracted to metal.
<b>Fair test</b>	A fair test is a test which controls all but one variable when attempting to answer a scientific question.
<b>Material</b>	The matter from which a thing is, or can be made.
<b>Metal</b>	A solid material which is typically hard and shiny with good electrical and thermal conductivity.
<b>Wood</b>	A hard fibrous material that forms the main substance of the trunk or branches of a tree or shrub.
<b>Plastic</b>	A synthetic material that can be moulded into shape while soft, and then set into a rigid or slightly elastic form.





# Material properties - Chemistry




**wood:**  
hard, stiff,  
strong, opaque,  
can be carved  
into any  
shape.




**plastic:**  
waterproof,  
strong, can  
be made to be  
flexible or stiff,  
smooth or rough.



**PROPERTIES OF METALS**

- usually strong when solid
- high melting and boiling points
- good conductors of heat
- good conductors of electricity
- flexible (bendy when thin)
- malleable (can be hammered into shape)



## Did you know?

**Thermal Insulators** – Do not let heat travel through easily such as fabrics, wood and plastics. Can keep heat in or out.

**Thermal Conductors** - Lets heat travel through easily such as metals.



Key questions	Sticky knowledge
What is the difference between every day materials on the basis of their properties, including their hardness, solubility, transparency, conductivity (electrical and thermal), and response to magnets?	Hardness – wood, plastic, metals, glass Solubility – salt, coffee (things that dissolve) Transparency – some plastics, glass Conductivity – (heat) metal (electricity) water, metal Magnetic – metal
Do I know and give reasons for the particular use of everyday materials, including metals, wood and plastic?	Metal – e.g.: radiators – strong, good conductor of heat. Wood – e.g. Bench – hard, can be carved Plastic – e.g. Bottle – waterproof, strong, flexible





# Materials - Chemistry



Key vocabulary	
<b>Dissolve</b>	When a substance dissolves, it might look like it has disappeared, but in fact it has just mixed with the water to make a transparent liquid called a solution.
<b>Solution</b>	A liquid mixture in which the minor component (the solute) is uniformly distributed within the major component (the solvent).
<b>Substance</b>	Any material that possesses physical properties is called a substance.
<b>Filtering</b>	Pass a liquid, gas, light or sound, through a device to remove unwanted material.
<b>Sieving</b>	A method in which two or more components of different sizes are separated from a mixture on the basis of difference in their sizes.
<b>Evaporating</b>	Turning from a liquid into a vapour.
<b>Reversible</b>	Capable of being returned to the previous state.
<b>Irreversible</b>	Incapable of being returned to the previous state.
<b>Mixture</b>	A substance made by mixing other substances together.
<b>Solid</b>	Firm and stable in shape.
<b>Liquid</b>	A substance that flows freely but is of constant volume.
<b>Gas</b>	A substance or matter in a state in which it will expand freely to fill the whole of a space.





# Materials - Chemistry



**Gas**

**Examples**  
Steam (water vapour), Hydrogen, Carbon Dioxide, Oxygen

**Liquid**

**Examples**  
Water, Milk, Washing up liquid, Juice

**Solid**

**Examples**  
Ice  
Wood  
Glass  
Diamond



**Did you know?**

When chocolate is melted it can solidify again. The change is reversible.

Cooking eggs, by frying, boiling, scrambling, poaching etc., is always an irreversible change.

Key questions	Sticky knowledge
<b>How do you recover a substance from a solution?</b>	You can recover a substance from a solution, by separating them. Separation can be achieved by sieving, filtering or evaporation.
<b>How might mixtures be separated, including through filtering, sieving and evaporating?</b>	Filtering – Pass a liquid, gas, light or sound, through a device to remove unwanted material. Sieving – A method in which two or more components of different sizes are separated from a mixture on the basis of difference in their sizes. Evaporating – Turning from a liquid into a vapour, by heating it.
<b>Are dissolving, mixing and changes of state reversible changes?</b>	Yes - dissolving, mixing and changes of state are reversible changes.
<b>Do some changes result in the formation of new materials?</b>	Yes - some changes result in the formation of new materials. This kind of change is not usually reversible, including changes associated with burning, and the action of acid on bicarbonate of soda.





# Year 5 Geography





# Food from the Local Area and Abroad



Key places and vocabulary	
Locally/ locality	Locality is the local area where you live.
Grown	Refers to food that is grown in the ground, usually in soil.
Crops	A crop is a plant, or a plant product that can be grown and harvested for profit or subsistence. Food crops are grown for human consumption.
Harvest	The process, or period, of gathering in the crops.
Subsistence	The action, or fact of maintaining or supporting oneself.
Farming	The activity or business of growing crops and raising livestock.
Livestock	Livestock are farm animals that are raised to produce food and other commodities such as wool.
Abroad	A foreign country or countries.





# Food from the Local Area and Abroad



## Physical Features

Climate	Different foods grow well in different climates. For example, tropical fruits need a tropical climate to grow.
Water/Rain	Water is key to food security. Crops and livestock need water to grow.

## Human Features

Agriculture	Agriculture is the art and science of cultivating the soil, growing crops and raising livestock.
Food miles	The distance food is transported from the time of its making until it reaches the consumer.
Fair trade	Trade between companies in developed countries and producers in developing countries in which fair prices are paid to the producers.

### Did you know?

- India produces, consumes and exports the most chilli peppers in the world.
- 49% of people in America eats a sandwich every day.
- Japan is home to some of the world's most expensive fruits!



### Key questions

Which foods are grown locally and which are imported from overseas?

### Sticky knowledge

#### Locally (England)

*Meat* – beef, lamb, chicken, turkey, pork  
*Cereals* – wheat, oats  
*Root vegetables* – such as potatoes, carrots  
*Pulse crops* – beans, peas  
*Forage crops* – such as cabbages, kale  
*Fruit* – strawberries, apples, raspberries, blackcurrants, pears, cherries, plums.

#### Overseas

Many of the popular foods that we eat come from other countries. Such as:  
*Salt* – China  
*Sugar* – The Caribbean  
*Cocoa (Chocolate!)* – South America  
*Tropical fruits such as bananas, mango, pineapples* – Tropical regions such as in Asia and South America





# North and South America



Key places and vocabulary	
Tropic of Cancer	The Tropic of Cancer, which is also referred to as the Northern Tropic, is the most northerly circle of latitude on Earth at which the Sun can be directly overhead.
Tropic of Capricorn	The Tropic of Capricorn, is the southern-most circle of latitude on Earth where the Sun can be directly overhead.
Position	A place where someone or something is located or has been put.
Region	An area, especially part of a country or the world, having definable characteristics but not always fixed boundaries.
North America	North America is a continent entirely in the Northern Hemisphere and almost always within the Western Hemisphere.
South America	South America is a continent in the Western Hemisphere, with a relatively small portion in the Northern Hemisphere.
Rainforest	A rainforest is an area of tall, mostly evergreen trees and a high amount of rainfall.
Amazon Basin	The Amazon Basin is the part of South America drained by the Amazon River and its tributaries. Most of the Basin is covered by the Amazon Rainforest.
Hemisphere	A half of the Earth, usually divided into the Northern and Southern Hemisphere, or the Western and Eastern Hemisphere.






# North and South America



Physical features	
Mountains and highlands	South <b>America's</b> primary <b>mountain</b> system, the Andes, is also the world's longest.
River Basins	The Amazon River Basin, in northern South America, is the largest in the world. The Amazon River and all of its tributaries drain an area more than 3 million square miles.
Coastal Plains	A coastal plain is a flat, low-lying piece of land next to the ocean. Coastal plains are separated from the rest of the interior by nearby landforms, such as mountains.
Caribbean	The Caribbean is a region within the continent of North America.
Climate	The climate in North America is mainly temperate (mild to warm summers, cool to cold winters) South America's climate is dominated by relatively warm regions.
Human features	
Population – North America	Over 368 million people live in North America.
Population – South America	Over 430 million people live in South America.

**Did you know?**  
The poison dart frog is the deadliest creature in the Amazon Rainforest!



Key questions	Sticky knowledge
Where are the Tropics of Cancer and Capricorn positioned?	 <p style="font-size: small;">© 2012 Encyclopaedia Britannica, Inc.</p>
	<p>The <b>Tropic of Cancer</b> is the most northern latitude on the Earth where the sun can appear directly overhead.</p> <p>The <b>Tropic of Capricorn</b> is the most southern latitude on the Earth where the sun can appear directly overhead.</p>
Do I know about a region within North or South America?	<p><u>Amazon Rainforest</u></p> <p>The Amazon rainforest is a rainforest in South America. It is the largest tropical rainforest in the world, famous for its biodiversity. The Amazon rainforest covers more than 3.4 million square miles.</p>





# The Rainforest



Key places and vocabulary	
Ecosystem	all of the living and non-living things in an area
Habitat	the place where a living thing makes its home
Climate	weather and temperature usually found in a particular area
Temperate	a climate with warm summers and cool winters
Humid	having a high level of moisture in the air
Equatorial	warm rainforests growing near the equator
Tropical	tropics are warm all year around and rainforests can grow
Indigenous	a living person or thing that belongs naturally to an area
Vegetation	the plant life growing in a certain area







# The Rainforest

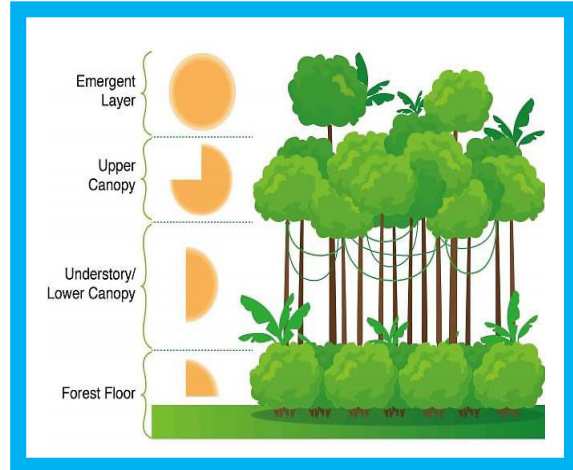


Physical features	
Emergent Layer	This layer receives the most sunlight and plenty of rain. There are plenty of animals such as birds and monkeys in this layer.
Upper Canopy	This layer still gets plenty of sunlight and rain but it is less windy. It is home to a range of wildlife (e.g. toucans, sloths, howler monkeys).
Understory / Lower Canopy	This layer only gets a small amount of light and is a damp and warm environment which provides shelter and food for other animals.
Forest Floor	This layer is dark, damp and very warm with virtually no sunlight reaching the floor. It is filled with rodents, insects and insect-eating animals.
Human features	
Deforestation	Deforestation is the clearing, or cutting down, of forests. The number of forests being lost through deforestation has grown enormously.
Ranching	Extensive cattle ranching is the number one culprit of deforestation in the Amazon rainforest.
Tribes	There are around 400 tribes living in the Amazon rainforest. Each tribe has its own language, culture and territory.

**Did you know?**  
 Every year about 18million hectares of forest – an area the size of England and Wales – is cleared through deforestation!

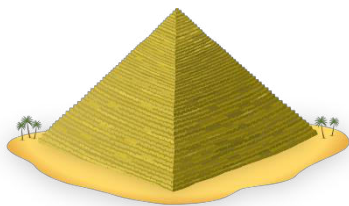


Key questions	Sticky knowledge	
What is a biome?	A biome is a large region of Earth that has a certain climate and certain types of living things. Major biomes include tundra, forests, grasslands, and deserts.	
	<u>Tundra</u> - cold, dry conditions – covered in snow for much of the year.	<u>Forests</u> - A biome filled with trees and plants.
	<u>Grasslands</u> - places that get enough rain for grasses to grow but not enough to support forests.	<u>Deserts</u> - very dry. Some deserts are mountainous. Others are dry expanses of rock, sand, or salt flats.
What are the features of a biome?	The plants and animals of each biome have traits that help them to survive in their particular biome. Plants and animals that live within smaller areas of a biome also depend on each other for survival. These smaller areas are called ecosystems. Each biome has many ecosystems.	
How is the rainforest changing and why?	Rainforests used to cover 14% of the Earth, it now only covers 6%. Rainforests are being threatened by deforestation, industry and climate change.	





# Year 5 History



# Ancient Egyptians



Egypt (Africa)

Timeline									
6000 B.C.	5000 B.C.	4500 B.C.	3500 B.C.	3000 B.C.	2500 B.C.	1500 B.C.	1325 B.C.	332 B.C.	30 B.C.
People settle near the River Nile	Farmed wheat, barley and cattle	Use of sails for the first time	First use of hieroglyphics	Buildings of mud brick	Sphinx and Giza Pyramids	Valley of the Kings tombs built	King Tutankhamun buried	Alexander the Great rules	Death of Cleopatra

Key People	
Cleopatra	An Egyptian Queen who was well known for her beauty.
King Tutankhamun	Became Pharaoh aged 9. He died aged 18.
Howard Carter	British archaeologist and Egyptologist who became world-famous after discovering the intact tomb of Tutankhamun.

### Did you know?

1. Ancient Egyptians believed that when they died, they would make a journey to another world where they would lead a new life.
2. The River Nile is the longest river in Africa!
3. The Egyptian alphabet contained more than 700 hieroglyphs!

Key places and vocabulary	
ancient	Belonging to the distant past and no longer in existence.
Egyptians	A native of modern or ancient Egypt.
mummy	A body prepared for burial according to ancient Egyptian practice.
sarcophagus	A stone coffin adorned with a sculpture or inscription containing a mummy.
irrigation	Using the Nile, Egyptians would use annual flooding to channel water to dry areas to helping crops grow.
tomb	A chamber or vault to protect the dead.
pyramids	Over 130 giant pyramids were created as tombs for pharaohs.

Key questions	Sticky knowledge
What are the key features of the Indus Valley, The Shang Dynasty, Ancient Sumer and Ancient Egyptians?	Indus Valley – Home to one of the world's first large civilisations. <b>Where</b> - an area of modern-day Pakistan and Northern India. <b>When</b> – 3300-1300 BC The Shang Dynasty – Earliest ruling dynasty of China. <b>Where</b> - North China Plain in Western China. <b>When</b> – 1600-1046 BC Ancient Sumer – Earliest known civilization in the historical region of southern Mesopotamia. <b>Where</b> – Now known as Southern Iraq. <b>When</b> – 4500-4000 BC Ancient Egyptians – A civilisation of ancient North Africa. <b>Where</b> – Egypt, concentrated along the lower reaches of the River Nile. <b>When</b> – 6000-30 BC
Why was the River Nile important to the Ancient Egyptians?	Most Egyptians lived near the Nile as it provided water, food, transportation and excellent soil for growing food. ... The ancient Egyptians could grow crops only in the mud left behind when the Nile flooded. So they all had fields all along the River Nile.
How was Ancient Egypt ruled and who were the Pharaohs?	Ancient Egypt was governed by Pharaohs. Pharaohs are basically Kings and/or Queens. The Pharaohs were the political and religious leaders. Ancient Egyptian Pharaohs generally lived in large, luxurious, royal palaces.
Why were the pyramids built?	The Egyptians believed that if the pharaoh's body could be mummified after death the pharaoh would live forever. The tombs <b>were</b> designed to protect the buried Pharaoh's body and his belongings.





# Islamic Civilization



Modern  
Iraq  
(Asia)

## Timeline

571	610	630	632	692	762	810	900	950	1258
Muhammed (pbuh) born in Mecca	Revelations of the Qu’ran – Islam begins	Mecca (Saudi Arabia) becomes centre of Islam	Muhammed (pbuh) dies. Abu Bakr 1st Caliph	The Dome of the Rock completed in Jerusalem	Baghdad (The Round City) built	Baghdad is centre of education, science and maths	Paper arrives from China	The decline of the Abbasid caliphate	Baghdad destroyed by Mongols

### Key People

Abbasid Dynasty	Ruled over most of the Islamic Empire during the Golden Age of Islam.
The Mongols	The Golden Age of Islam came to an abrupt end in 1258, when Baghdad was destroyed by the Mongols.
Al - Razi	Considered the greatest physician of the Islamic world or the ‘doctor’s doctor’.
Ibn al-Haytham	Known as the ‘father of optics’. He invented the world’s first camera.

### Did you know?

1. ‘The Round City’ was built as two large semicircles with a mosque at the centre and housed the caliph’s palace, libraries, government and military buildings. It also contained parks, gardens, squares and wide avenues.
2. Islamic scholars and inventors adopted the Hindi symbol for zero and style of numerals (1, 2, 3, 4, 5, etc.) which we still use today.
3. The River Tigris runs straight through Baghdad – making it a great trade link!

### Key places and vocabulary

Caliph	The chief Muslim civil and religious leader, regarded as the successor of Muhammed.
Baghdad	The capital city of modern day Iraq.
Golden Age	From 762-1258 when art, architecture, science, philosophy and Islamic culture flourished.
House of Wisdom	A huge library attracting thinkers from around the world who translated texts into Arabic.
Mosque	A place of worship for Muslims. The first mosque was considered to be built in Ka’bah, Mecca.
Qur’an	The central religious text of Islam (the recitation) believed to be the revelations from God.

### Key questions

### Sticky knowledge

What was Baghdad like in AD900?	In AD900, Baghdad was the largest city in the world. It was the centre of the Golden Age of Islam. It was a perfectly round city with all of the important buildings in the centre. Lots a new discoveries were made here during this time.
What does modern day Baghdad look like?	Baghdad is the capital city of Iraq. More recently, Baghdad has been the centre of different wars – including the Iran-Iraq war and the Gulf War.
Which discoveries and advancements were made during the Abbasid dynasty?	During the Abbasid dynasty, libraries and universities were established within Baghdad. These brought greater understanding of astronomy, machinery and medicine, amongst other things. Inventions and discoveries to come out of this time include the magnifying glass, the fountain pen and the camera!
Was Europe in the Dark Ages at this time?	Yes it was! The Dark Ages is referring to the time period from AD500 to AD1000. After the fall of the Roman Empire, a lot of the Roman culture and knowledge was lost. This included art, technology, engineering, and history. Because the knowledge was ‘lost’, the time after the Romans was ‘dark’ to historians.
Why did the Islamic Golden Age end?	During the 13 <sup>th</sup> -14 <sup>th</sup> century, the Mongol Empire conquered most of the Islamic caliphate. In 1258, the Mongols seized and destroyed Baghdad, burning down the House of Wisdom. This signified the end of the Islamic Golden Age.







# Year 6 Science



# The Circulatory System – Biology

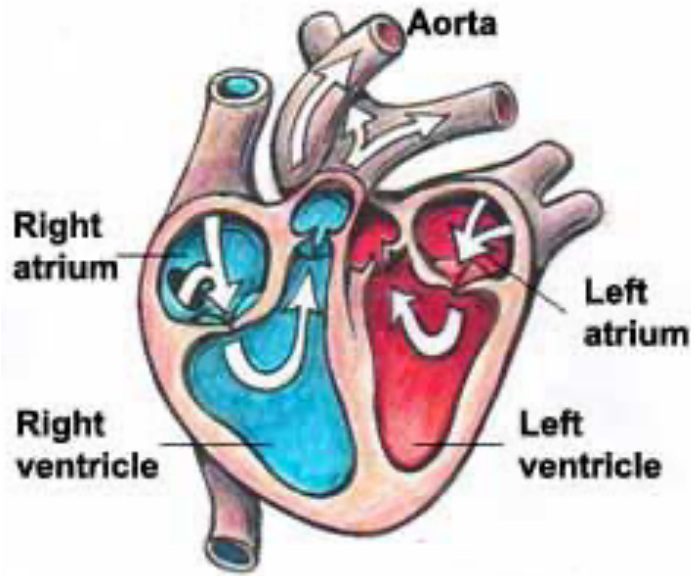
## Key vocabulary

<b>Heart</b>	The organ that pumps blood around the body.	<b>Nutrients</b>	A substance that provides nourishment essential for the maintenance of life and for growth.
<b>Blood vessels</b>	The narrow tubes through which your blood flows. This includes arteries (oxygenated), veins and capillaries.	<b>Blood Vessels</b>	A tubular structure carrying blood through the tissues and organs; a vein, artery, or capillary.
<b>Blood</b>	A red fluid that is pumped by the heart and supplies the body with nutrients and oxygen.	<b>Right and Left Atrium</b>	The right atrium receives oxygen-poor blood from the body and pumps it to the right ventricle. The left atrium receives oxygen-rich blood from the lungs and pumps it to the left ventricle.
<b>Capillaries</b>	Microscopic blood vessels found in the lungs and muscles.	<b>Right and Left Ventricle</b>	The right ventricle pumps the oxygen-poor blood to the lungs The left ventricle pumps the oxygen-rich blood to the body.
<b>Circulatory System</b>	The system that contains the heart and the blood vessels and moves blood throughout the body	<b>Diet</b>	The kinds of food that a person, animal, or community habitually eats.
<b>Lungs</b>	Two spongy organs inside the chest which fill with air when you breathe in. They remove carbon dioxide from the blood and replace with oxygen.	<b>Exercise</b>	Activity requiring physical effort, carried out to sustain or improve health and fitness.
<b>Carbon dioxide</b>	A gas produced by animals and people when breathing out.	<b>Organs</b>	A part of an organism which is typically self-contained and has a specific vital function.
<b>Veins</b>	Any tubes forming part of the circulation system that carries oxygen-depleted blood towards the heart.	<b>Muscles</b>	A band of fibrous tissue in a human or animal body that has the ability to contract, producing movement or maintain the position of parts of the body.
<b>Arteries</b>	Any tubes forming part of the circulation system that carries oxygenated blood away from the heart.	<b>Pumped</b>	An active transport mechanism in living cells by which specific ions are moved through the cell membrane against a concentration gradient.
<b>Capillaries</b>	The smallest type of blood vessel where the transfer of oxygen and carbon dioxide takes place.	<b>Transfer</b>	To move from one place to another.
<b>Oxygen</b>	A colourless gas that exists in large quantities in the air. All plants and animals need oxygen to live.	<b>Drugs</b>	A medicine or other substance which has a physiological effect when ingested or otherwise introduced into the body.
<b>Water</b>	A colourless, transparent, odourless liquid that forms the seas, lakes, rivers, and rain and is the basis of the fluids of living organisms.		



# The Circulatory System – Biology

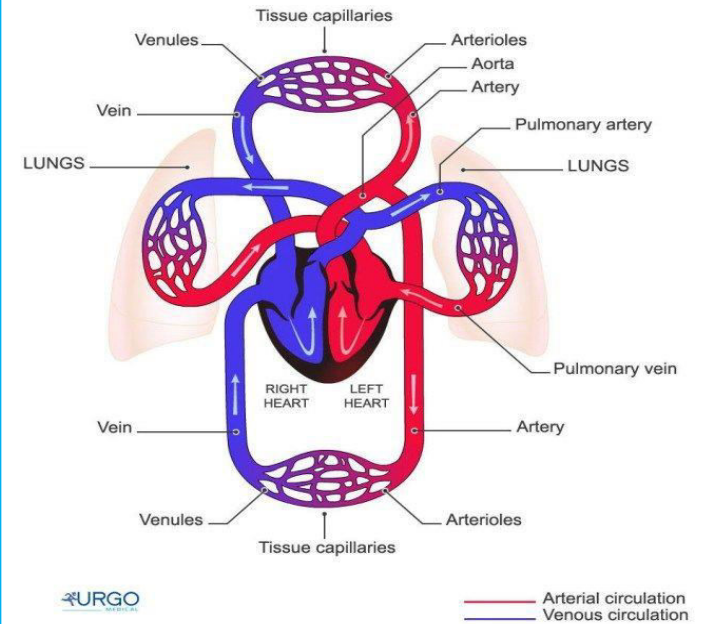
**The Heart**



Did you know?

The heart beats about 100,000 times per day (about 3 billion beats in a lifetime).

**The circulatory System**



**Key questions**

**Sticky knowledge**

<p><b>Can you name the main parts of the human circulatory system?</b></p>	<p>The human circulatory system is shown in the diagram above. The heart, lungs, veins, arteries and capillaries all have main parts in the system. All parts work together so that oxygen, water and nutrients reach where needed and carbon dioxide is removed.</p>
<p><b>What are the functions of the heart, blood vessels and blood?</b></p>	<p>The heart's main function is to pump blood around the body. The blood vessels (veins and arteries) function is to carry the blood to the different parts of the body including organs and muscles. The blood is the transporter which carries all the nutrients, oxygen, carbon dioxide and water around the body.</p>
<p><b>What is the impact of diet, exercise, drugs and lifestyle on the human body?</b></p>	<p>A healthy diet and regular exercise helps make the body 'fitter' including the heart, muscles and lungs; the body will then work more efficiently. An unhealthy diet coupled with no exercise will lead to an unhealthy body putting stress on the heart and lungs. This could also lead to disease and a higher risk of infection. Drugs can have either a positive or a negative effect on the body depending on their type, e.g. caffeine can give the body and brain a short injection of energy whereas alcohol can 'suppressed' the brain and body reducing feeling and affecting the senses.</p>
<p><b>How are nutrients and water transported around the bodies of humans and animals?</b></p>	<p>Water and nutrients are transported around the body in blood. The blood is pumped around the body by the heart and flows through capillaries in muscles and the lungs. In the capillaries in the different organs the nutrients or water is transferred with waste products which the blood now transports to other parts of the body to be removed.</p>



# Classifications - Biology

Key vocabulary	
<b>Classification</b>	The system of grouping animals, plants and micro-organisms based on similarities and differences
<b>Similarities</b>	Where animals, plants or micro-organisms have the same traits, e.g. lions and tigers are both cats.
<b>Differences</b>	Where animals, plants or micro-organisms have traits that are not the same.
<b>Vertebrates</b>	Vertebrates are animals that have a backbone, e.g. fish, snakes and frogs.
<b>Invertebrates</b>	Invertebrates are animals that do not have a backbone, e.g. spiders, lobsters and worms.
<b>Micro-organisms</b>	A living thing that can only be seen under a micro-scope. There are 3 types: viruses, bacteria and fungus.
<b>Species</b>	A group of organisms that can reproduced together.
<b>Characteristics</b>	A feature or quality belonging typically to a person, place, or thing and serving to identify them.
<b>Carl Linnaeus</b>	A Swedish plant biologist who is known as 'the father of modern taxonomy.



# Classifications – Biology

**Carl Linnaeus**



In about 350 B.C. Aristotle (a Greek philosopher) classified all things into 4 main groups – humans, animals, plants and non-living. **Carl Linnaeus** then simplified the naming of living things in 1735. Names of living things were often very long so he gave them a two-part (binomial) name. It was a mixture of genus and species (and in Latin) e.g. Human was Homo Sapien, Wolf was Canus Lupus and Lion was Felis Leo.

## Kingdoms

Scientists have now divided living things into five larger groups called Kingdoms.



- 1) Plants
- 2) Animals
- 3) Fungus (mushrooms, yeast, mould, mildew)
- 4) Protist (protozoans, amoeba, euglena)
- 5) Prokaryote (blue-green algae, bacteria)

### Did you know?

The 7 different levels of classification are (a mnemonic is given in brackets):  
 Kingdom (Keeping), Phylum (Precious), Class (Creatures), Order (Organised), Family (For), Genus (Grumpy), Species (scientists).

Key questions	Sticky knowledge
<b>How are living things, such as microorganisms, plants and animals, classified using characteristics?</b>	Different living things are classified in many different ways. Different scientists use different classification systems that based on different classifications such as life cycle or location of the specie. One of the most popular is 'The Linnaeus System' which uses seven different levels from 'Kingdom' to 'Species'. It was created in 1735 and is still used today.
<b>What reasons are there for classifying plants and animals?</b>	The main reason scientists classify living things is to understand the relationships between different organisms. Other reasons include to organise the different species into groups and to help them better understand plants, animals and micro-organisms whilst also discovering new species.



# Electricity – Physics

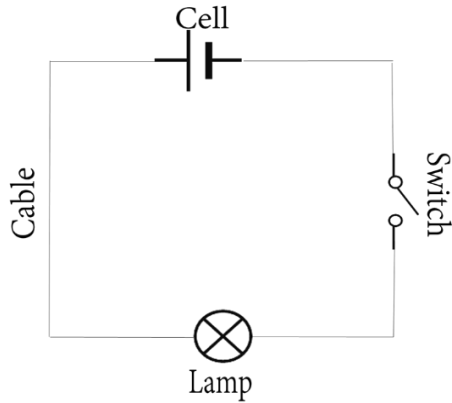


Key vocabulary	
Current	The amount of electricity flowing through the circuit. Current is measured in amps.
Voltage	This is the difference in electrical energy between two parts of a circuit. Voltage is measured in volts.
Conductor	A conductor lets electricity pass through it. It is usually metal but it also includes water.
Insulator	An insulator does not let electricity pass through it. This can include plastic and rubber.
Resistance	Resistance is a measure of the opposition to current flow in an electrical circuit.
Volume	How quiet or loud a sound is made.
Brightness	The quality or state of giving out or reflecting light.
Electricity	Electricity is the name given when a number of atoms are together, and electrons are moving from one to the other in the same direction.
Symbols	Images that represent different aspects of an electrical circuit
Battery	A small device that provides power for electrical items.
Switch	A device for making and breaking the connection in an electric circuit.
Volts	The SI unit of electromotive force which is measured by a voltmeter.
Voltmeter	A voltmeter is an instrument used for measuring electric potential difference between two points in an electric circuit.
Buzzer	An electrical device that makes a buzzing sound.
Bulbs	A device used to convert electricity into light,



# Electricity – Physics

## A Simple Circuit



Did you know?  
**Electricity travels at the speed of light – about 300,000 kilometres per second.**

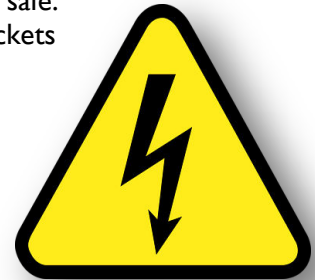
## Symbols used in a circuit

	Bulb		Buzzer
	Motor		Wire
	Voltmeter		Battery
	Switch		

Key questions	Sticky knowledge
Can you recognise the symbols in a simple circuit diagram?	The symbols used in circuit diagrams are simplified versions of the real items. See the diagram above for a full list of symbols.
What affects the brightness of a lamp or the volume of a buzzer?	If you make the wires longer, the bulb will get dimmer. This is because there is more resistance. If you add more bulbs, the bulbs get dimmer. This is because there is also more resistance. If you add more batteries, the bulbs will get brighter. This is because there is less resistance and a greater current.
What are the reasons for variations in how different components of a circuit work?	Different components will work in different ways depending on where they are placed in the circuit. An example is if the wire is longer then the bulbs will become dimmer. Another is, the more bulbs you place in a circuit the dimmer they become.

## Danger! High Voltage!

Electricity is everywhere so always be safe. Be careful of mains switches, open sockets and any signs to do with electricity. The human body is 80% water so it conducts electricity. If someone has had a shock always turn the electricity off first, then call for help!



# Evolution and inheritance - Biology



Key vocabulary	
<b>Adaption</b>	A change in a plant or animal's body to suit its location which can evolve over thousands of years in the most efficient way.
<b>Evolution</b>	Evolution means change over time. It is the reason we have so many species on earth. It happens when there is competition to survive (natural selection) and through differences within a species caused by inheritance and mutations.
<b>Inheritance</b>	Inheritance is when something is passed on to the next generation. Offspring are not identical to their parents and some characteristics are inherited (carried in offspring from parents) and other differences are new in the offspring – these are called mutations
<b>Variation</b>	Variation is the differences between individuals within a species. This can be caused by inherited or environmental factors. Variation can be continuous or discontinuous.
<b>Offspring</b>	Offspring are produced by parents that are a combination of traits received from their parents.
<b>Fossils</b>	Fossils are the remains of living things which inhabited the world millions of years ago.
<b>Environment</b>	The surroundings or conditions in which a person, animal, or plant lives or operates.
<b>Habitat</b>	The natural home or environment of an animal, plant, or other organism.
<b>Natural Selection</b>	The process whereby organisms better adapted to their environment tend to survive and produce more offspring.
<b>Mutations</b>	Any change in the DNA sequence of a cell. Mutations may be caused by mistakes during cell division, or they may be caused by exposure to DNA-damaging agents in the environment.
<b>Survive</b>	To continue to live or exist, especially in spite of danger or hardship.

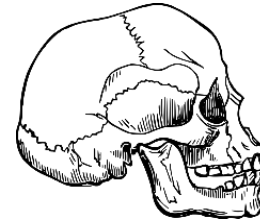
# Evolution and inheritance - Biology

**Charles Darwin (1809 – 1882)**

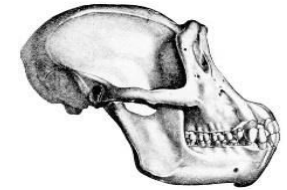


Charles Darwin is an English scientist best known for his theory of evolution. He was a geologist who went travelling in 1831 on the HMS Beagle. He saw many animals and plants and came up with the idea of natural selection (the strongest survive and evolve). His book 'Origin of the Species' was released in 1851 and was controversial with his peers, the public and the church.

**HUMAN SKULL**



**CHIMPANZE SKULL**



## Did you know?

The dodo was a flightless bird from Mauritius which failed to adapt to its new environment. Humans arrived, hunted it and introduced other animals and so became extinct in 1681.

Key questions	Sticky knowledge
What happens to living things over time?	<b>Evolution</b> is a change in the characteristics of living things over time. As living things evolve, they generally become better suited for their environment because they evolve adaptations.
What are fossils?	A fossil is the naturally preserved remains or traces of animals or plants that lived in the geologic past. Fossils include the remains of organisms that were once living and trace fossils are the signs that organisms were present (i.e. footprints, tracks and trails).
How do offspring vary from their parents?	Offspring vary from their parents through inherited traits via genes that are passed on – <b>inherited variation</b> . Some variation is the result of different surrounding – <b>environmental variation</b> .
How have animals and plants adapted to suit their environment?	Living things are adapted to their habitats. This means that they have special features that help them to survive – called <b>adaption</b> . Animals and plants in one habitat are suited to live there and may not be able to survive in other habitats. When a habitat changes, the animals and plants that live there are affected.



# Famous Scientists

**Stephen Hawking**



**Libbie Hyman**



## Key vocabulary

Scientist	A person who is studying or has expert knowledge of one or more of the natural or physical sciences.
Astrophysicist	An astrophysicist acts as a researcher, evaluating and analysing the physics of astronomy. An astrophysicist may perform research on the planets, the stars, other galaxies and the universe.
Zoologist	An expert in or student of the behaviour, physiology, classification, and distribution of animals.
Doctor	A person who is qualified to treat people who are ill.
Black Hole	A region of space having a gravitational field so intense that no matter or radiation can escape.
Taxonomy	The branch of science concerned with classification especially of organisms using systematics.
Anaesthetic	A substance that induces insensitivity to pain.

## Did you know?

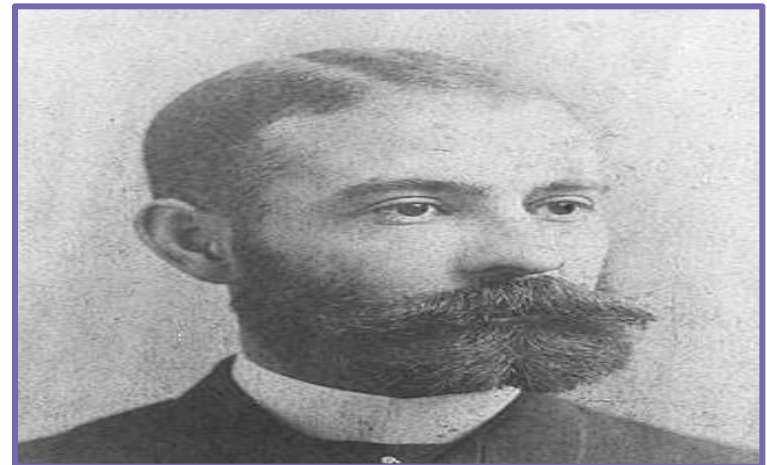
ALS: A motor neurone disease that causes muscle weakness, paralysis and respiratory failure. It is a degenerative disease, which means it gets worse over time. There is no cure.

## Key questions

## Sticky knowledge

<b>Why is Stephen Hawking famous?</b>	Stephen Hawking was a prominent scientist and theoretical astrophysicist who has developed <b>ALS</b> . Hawking developed theories about how black holes are formed, how they behave and where they can be found in the universe.
<b>Why is Libbie Hyman Famous?</b>	Libbie Hyman was a zoologist who researched vertebrates and invertebrates. She published highly detailed volumes of work about the characteristics and the taxonomy of invertebrates. Her work is regarded as an incredible achievement and is considered to be extremely important and useful for the study of different animals.
<b>Why is Dr Daniel Hale Williams famous?</b>	In 1893, he performed the world's first successful open-heart surgery, without blood transfusions, with unreliable anaesthetic and with no way of stopping the heart from beating while he operated. Dr Williams was also the first black person admitted to the American College of Surgeons.

**Dr Daniel Hale Williams**



# Light – Physics



Key vocabulary	
<b>Opaque</b>	This is the name given to objects which light cannot travel through. They block light and create shadows
<b>Translucent</b>	This is the name given to objects which some light can travel
<b>Transparent</b>	This is the name given to objects which light can travel through.
<b>Reflection</b>	Reflection is when light bounces off an object. If the surface is smooth and shiny, like glass, water or polished metal, the light will reflect at the same angle as it hit the surface.
<b>Shadow</b>	A shadow is a dark (real image) area where light from a light source is blocked by an opaque object.
<b>Source</b>	A place where light originates from, e.g. the sun, a torch or a candle.
<b>Refraction</b>	Is when the change of direction of a ray of light.
<b>Light Source</b>	Light sources are devices whose primary function is to produce visible or near-visible radiant energy for general illumination and sight.
<b>Straight Lines</b>	Light moves in straight lines because it is a wave and prefers to travel the smallest distance between the two points.



# Light – Physics

## Light Sources



## Did you know?

Light travels from its source or reflects off objects at 670 million mph!

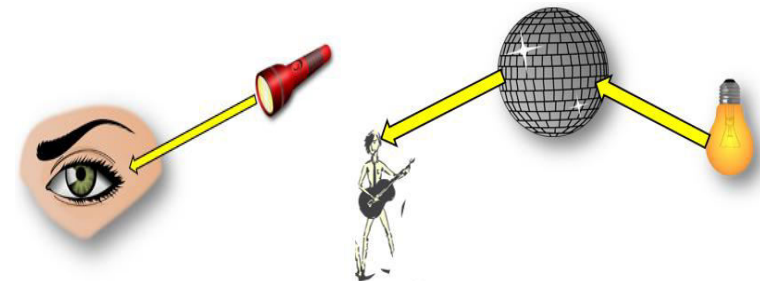
## Shadows

Because light travels in straight lines, when it hits an object, it is blocked. It can't bend around the object so it casts a shadow.



Key questions	Sticky knowledge
<b>How does light travel?</b>	Light always travels in straight lines from a light source. Examples of light sources can be seen in the diagram above.
<b>How are objects seen?</b>	Objects are seen because they give out light or because they reflect the light into our eyes.
<b>How do we see?</b>	To see objects and the world, light travels from sources into our eyes or from light sources to an object and then into our eyes.
<b>How are shadows formed?</b>	Light travels in a straight line and hits an opaque object which then blocks the light. The object then creates a shadow which is exactly the same shape.

Light travels in straight lines. It travels from the light source either directly into our eyes, or reflecting off objects.





# Year 6 Geography

# Earthquakes, Volcanos and Mountains

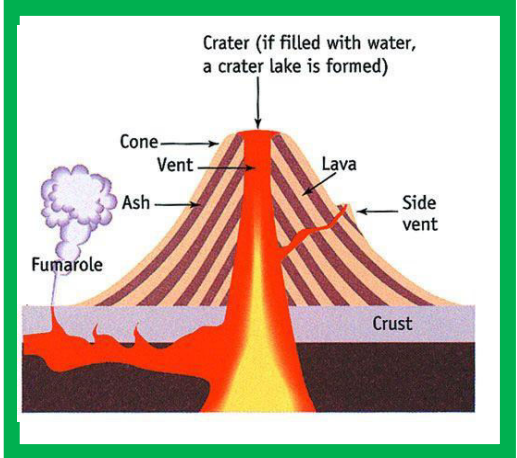
Key places and vocabulary	
Mount Everest: 8,848m	Is located on the border between Nepal and China (Asia) and is part of The Himalayas.
K2: 8,611m	Is located on the border between China and Pakistan (Asia) and is part of The Himalayas.
Kangchenjunga: 8,586m	Is located on the border between Nepal and India (Asia) and is part of The Himalayas.
Lhotse: 8,516m	Is located on the border between China and Tibet (Asia) and is part of The Himalayas.
Makalu: 8,481m	Is located on the border between Nepal and Tibet (Asia) and is part of The Himalayas.
Cho Oyu: 8,201m	Is located in Nepal (Asia) and is part of The Himalayas.
Dhaulagiri: 8,167m	Is located in Nepal (Asia) and is part of The Himalayas.
Manaslu: 8,156m	Is located in Nepal (Asia) and is part of The Himalayas.
Naga Parbat: 8,126m	Is located in Pakistan (Asia) and is part of The Himalayas.



# Earthquakes, Volcanos and Mountains

Features	
<b>Cone</b>	A triangle shaped hill formed as material from the eruptions piles up around the vent.
<b>Vent</b>	An opening at the Earth's surface of a volcanic conduit.
<b>Ash</b>	Fine particles of rock dust blown from an explosion vent.
<b>Lava</b>	Molten rock when it has erupted out of the crust.
<b>Side vent</b>	An opening in the side of the volcano through which volcanic materials erupt.
<b>Crust</b>	The outer layer of the Earth made up of plates.
<b>Fumarole</b>	An opening in the Earth's crust which emits steam and gas.
<b>Solidify</b>	When something liquid cools and turns to a solid.

**Did you know?**  
 Mount Everest: The peak was named after British surveyor George Everest in 1856?



Key questions	Sticky knowledge
<b>Can you describe what causes an earthquake?</b>	When tectonic plates move parallel to each other it causes friction that sticks them together. When they get unstuck, it can cause a violent jolt which causes an earthquake. Shockwaves spread out from the epicentre (the strongest point of the earthquake). Magnitude, measured on a Richter scale (1 is a small tremor and 9 is catastrophic), measures how strong an earthquake is. Earth quakes can cause extreme damage to buildings, roads and bridges.
<b>Can you label the different parts of a volcano?</b>	See diagram opposite. Parts to label: cone, vent, ash, lava, side vent, crust and fumarole.
<b>Can you name and locate the highest mountains?</b>	Mount Everest, K2, Kangchenjunga, Lhotse, Makalu, Cho Oyu, Dhaulagiri, Manaslu and Naga Parbat are the 9 highest mountains in the world all standing over 8,000m.



# Settlements

## Key places and vocabulary

<b>Settlement</b>	A place where people live and sometimes work.
<b>Hamlet</b>	A very small settlement with just a group of houses.
<b>Village</b>	Also a small settlement but may have houses, a primary school, a few shops, a Post Office and a village hall.
<b>Town</b>	Larger than a village, with lots of houses, schools and sometimes has a railway station and a shopping centre.
<b>City</b>	The largest type of settlement, containing lots of buildings and people. They usually have hospitals, universities, shops, offices, many houses and a cathedral.
<b>Industry</b>	Produces all the goods and services required by society and distributes them to consumers
<b>Fertile</b>	Land or soil that is fertile to support the growth of healthy plants.
<b>Irrigation</b>	The artificial supply of water to agricultural land.





# Settlements

## Physical features

<b>River</b>	A large natural stream of water flowing in a channel to the sea, a lake, or another river.
<b>Hill</b>	A naturally raised area of land, not as high or craggy as a mountain.
<b>Sea</b>	The expanse of salt water that covers most of the earth's surface and surrounds its land masses.
<b>Terrain</b>	A stretch of land, especially with regard to its physical features.
<b>Human features</b>	
<b>Building</b>	A structure with a roof and walls, such as a house or factory.
<b>Road</b>	A wide way leading from one place to another, especially one with a specially prepared surface which vehicles can use.
<b>Canals</b>	An artificial waterway constructed to allow the passage of boats or ships inland or to convey water for irrigation.
<b>Ports</b>	A town or city with a harbour or access to navigable water where ships load or unload.

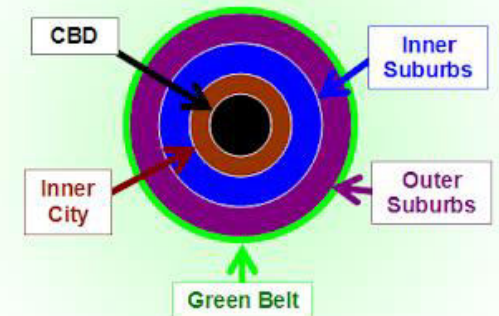


Did you know?

People who do not 'settle' in an area are called 'Nomadic'!



CBD = Central Business District



## Key questions

## Sticky knowledge

<b>What is a settlement?</b>	Settlements are places where people live and sometimes work. They can be small or large depending on how many people live there and how many facilities there are. Facilities are places where certain things happen, for example, schools for education, parks for playing or shops for selling things.
<b>What is a rural settlement?</b>	A rural settlement refers to areas in the country which are less densely populated. There are different types of rural areas, depending on how accessible they are from urban areas. These range from the rural urban fringe, to the extreme (remote) rural areas.
<b>What is an urban settlement?</b>	Urban areas are very developed, meaning there is a density of human structures such as houses, commercial buildings, roads, bridges, and railways. "Urban area" can refer to towns, cities, and suburbs. An urban area includes the city itself, as well as the surrounding areas.



# The World

## Key vocabulary

<b>Continent</b>	A continent is one of several very large landmasses on the Earth.
<b>Country</b>	A nation with its own government that occupies a certain area.
<b>City</b>	A city is a permanent large human settlement.
<b>County</b>	A county of the United Kingdom is used for the purposes of administrative, geographical and political demarcation.
<b>Atlas</b>	A book of maps.
<b>Map</b>	A diagrammatic representation of an area of land or sea showing physical features.
<b>Equator</b>	An imaginary line (or circle) around the middle of the Earth.
<b>Ocean</b>	A huge body of salt water.



# The World

Features	
The UK	The UK (United Kingdom) is made up of four countries: Scotland, England, Wales and Northern Ireland. It is also known as the United Kingdom of Great Britain and Northern Ireland.
Europe	Europe is a 'continent' that is made up of many different countries that are located close together.
North America	North America is a 'continent' that is made of the Caribbean Islands, USA, Mexico and Canada.
South America	South America is a 'continent' that includes countries such as Argentina, Peru and Brazil.
Capital City	The city or town that functions as the seat of government and administrative centre of a country or region.
Hemisphere	The world is split into 2 hemispheres by the equator; the northern and southern.



**Did you know?**  
There are over 7.8 billion people in the world!

Key questions	Sticky knowledge
Can you name 10 countries in Europe, North America and South America?	A selection of countries: <b>Europe:</b> Russia, Germany, France and United Kingdom. <b>North America:</b> United States of America, Mexico and Canada. <b>South America:</b> Brazil, Columbia and Argentina.
Can you name and locate 10 counties in the UK?	A selection of counties: <b>England:</b> Lancashire, Cumbria, Cornwall and Middlesex. <b>Scotland:</b> Perthshire and Aberdeenshire. <b>Northern Ireland:</b> Antrim and Tyrone. <b>Wales:</b> Powys and Dyfed,
Can you name 8 cities in the United Kingdom?	A selection of cities: <b>England:</b> Manchester, London, Birmingham and Newcastle. <b>Scotland:</b> Glasgow and Edinburgh. <b>Northern Ireland:</b> Belfast and Derry. <b>Wales:</b> Cardiff and Swansea.
Can you name 8 European capital cities?	A selection of capital cities: <b>Berlin</b> (Germany), <b>Paris</b> (France), <b>Madrid</b> (Spain), <b>Rome</b> (Italy), <b>Oslo</b> (Norway), <b>Stockholm</b> (Sweden), <b>Amsterdam</b> (Netherlands) and <b>Dublin</b> (Ireland).





# Year 6 History





# Ancient Greeks



Greece (Europe)

Timeline									
3000 B.C.	1200 B.C.	750 B.C.	770 B.C.	776 B.C.	600 B.C.	500 B.C.	431 B.C.	334 B.C.	146 B.C.
Minoan Civilization begins on Crete	The Trojan Wars	Greeks set sail to set up colonies	First Greek alphabet created	First Olympic Games	First Greek coins are used	Democracy used in Athens	The Peloponnesian Wars begin	Alexander the Great conquers	Greece becomes part of the Roman Empire

Key People	
<b>Socrates</b>	First of the great Greek Philosophers.
<b>Archimedes</b>	One of the great mathematicians and scientists.
<b>Alexander the Great</b>	The greatest military leader who never lost a battle.
<b>Homer</b>	A famous Greek poet who wrote the <i>Iliad</i> and the <i>Odyssey</i> .
<b>Aristotle</b>	A philosopher scientist who also taught Alexander the Great

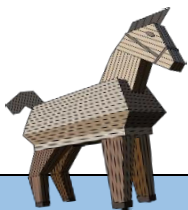
### Did you know?

- The **Peloponnesian Wars** took place between the city-states of Sparta and Athens between 431-404 B.C
- The Greeks had 12 main Gods and Goddesses called 'The Olympian Gods'.
- It was Rome that defeated Greece and ended their civilisation.

Key questions	Sticky knowledge
Can you name 5 sports from the Ancient Greek Olympics?	<b>Pentathlon:</b> running, jumping, discus throw, javelin and wrestling, <b>Penkration:</b> a combination of wrestling and boxing, <b>Equestrian:</b> horse racing and chariot races, <b>Other events:</b> running, wrestling and boxing
What was life like in Ancient Greece?	Men were classed as the only citizens and they could democratically vote. Only men could fight in armies, take part in sports and met in public. Women were expected to look after the house and the children. They were taught to cook and weave. Slaves were both women and men who came from the poorest homes.
What were the many stories called that the Greeks told?	<b>Greek Myths:</b> are a large collection of stories, started in Ancient Greece, that are about the beginning of the world, and the lives and adventures of gods, goddesses, heroes, and heroines.
What were the main characteristics of Athenians and Spartans?	<b>Athenians:</b> Government was ruled as a democracy and the city was built below the acropolis. Boys received a good education whereas girls were not seen as important and were not allowed to take part in education. <b>Spartans:</b> The city was ruled by a king who made all the decisions and the city was surrounded by mountains. Boys were not educated and were trained to be warriors for the army. Girls took part in the training but only to be 'fit' women so they produced healthy babies.







# Ancient Greeks

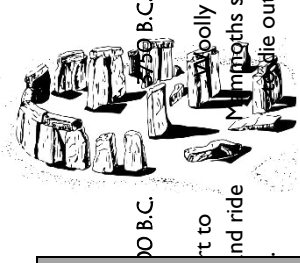


Greece  
(Europe)

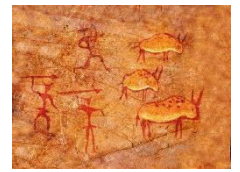
## Key places and vocabulary

<b>The Greeks</b>	a native or inhabitant of modern Greece,
<b>Democracy</b>	A system of government in which citizens are able to vote in order to make decisions.
<b>Myth</b>	a traditional story, especially one concerning the early history of a people or explaining a natural or social phenomenon, and typically involving supernatural beings or events.
<b>Oligarchy</b>	A small group of people having control of a country or organization.
<b>Olympics</b>	Athletes competing against each other which included religious festivals in honour of the God Zeus.
<b>Parthenon</b>	A temple dedicated to the goddess Athena.
<b>Athenians</b>	A native or citizen of Athens.
<b>Spartans</b>	A citizen of Sparta.
<b>Gods/Goddesses</b>	A generic terms for the many deities of ancient and modern polytheistic religions.
<b>Citizen</b>	An inhabitant of a particular town or city.
<b>Amphitheatre</b>	Outdoor theatre with seats on all sides where singing and dancing took place.
<b>Sports</b>	An activity involving physical exertion and skill in which an individual or team competes against another or others for entertainment.
<b>Hero/heroine</b>	A hero is a real person or a main fictional character who, in the face of danger, combats adversity through feats of ingenuity, courage, or strength. Like other formerly gender-specific terms, hero is often used to refer to any gender, though heroine only refers to women.
<b>Pentathlon</b>	an athletic event comprising five different events for each competitor
<b>Pankration</b>	Pankration was an unarmed combat sport introduced into the Greek Olympic Games in 648 BC.
<b>Equestrian</b>	Relating to horse riding.
<b>Running</b>	The action or movement of a runner.
<b>Boxing</b>	The action or movement of a runner.
<b>Wrestling</b>	It was a grappling combat sport practiced by the Ancient Greeks. A wrestler's objective (aim, goal) was to throw his opponent to the ground from a standing position.
<b>The Peloponnesian Wars</b>	The Peloponnesian War was an ancient Greek war fought between Athens and Sparta and their respective allies for the hegemony of the Greek world.





# Stone Age



Timeline							
15,000 B.C.	15,000 – 10,000 B.C.	8,200 B.C.	4,500 – 3,500 B.C.	4,000 – 3,000 B.C.	3750 B.C.	3,500 – 3,350 B.C.	2500 B.C.
Animal hide is used to make tents.	Cave paintings are recorded in The Lascaux Cave in France	Start of the Bronze Age	People begin to make simple pottery and farming starts	People start to domesticate and ride horses.	Woolly Mammoths start to die out.	The first image of a wheeled vehicle (a wagon) is dated.	Stone Age ends – people start to use metal and The Bronze Age begins.

### Key Places

Stonehenge	People built a religious monument made from Stonehenge on Salisbury plain which was probably (Scientists still unsure) for religious ceremonies.
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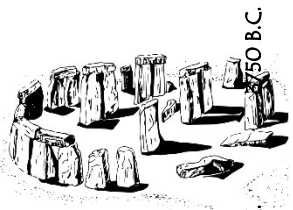
A photograph of Stonehenge as it stands today...

### Did you know?

1. The Stone Age lasted for around 7,700 years?
2. The Stone Age is split into 3 parts: Palaeolithic to 10,000BC, Mesolithic to 4,000BC and Neolithic to 2,300BC?
3. Woolly Mammoths could grow up to 3.4m tall?

Key questions	Sticky knowledge
What was life like after the Ice Age?	The Hunter-gathers had fires but used naturally occurring fire to bring to a campfire (e.g. a lightning strike) rather than making one by themselves. By the time it was the Neolithic Age, people stopped travelling and settled, becoming farmers and domesticating sheep, cattle and pigs. They learned how to soften leather to make warm, comfortable clothes and they used wool from sheep to spin, thread and weave into clothes. They built homes from wooden planks and covered it with wattle and daub. The roof was thatched using reeds. During this period, they also made clay pots for cooking, serving food and storing water. Huge tombs were made with dead remains.
What is meant by 'Hunter Gatherers'?	Early Stone Age Man was a <b>hunter-gatherer</b> , travelling around following food sources, setting up camps. Some lived in caves, although not many as this was dangerous. Scientists believe they had fires but used naturally occurring fire to bring to a campfire (E.g. a lightning strike) rather than making one by themselves.
When was Stonehenge built?	<b>Stonehenge</b> was built over many hundreds of years. Work began in the late Neolithic Age, around 3000 BC. Over the next thousand years, people made many changes to the monument. The last changes were made in the early Bronze Age, around 1500 BC.





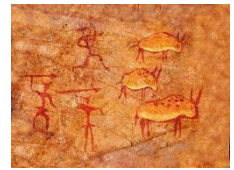
Timeline

15,000 B.C. 15,000 – 10,000 B.C. 8,200 B.C. 4,500 – 3,500 B.C. 4,000 – 3,000 B.C. 150 B.C.



Woolly Mammoths start to die out.  
 people start to domesticate and ride horses.

# Stone Age



Key places and vocabulary	
Domesticate	Tame or keep animals on a farm.
Hunter-gathers	A member of a nomadic people who live chiefly by hunting and fishing, and harvesting wild food.
Mesolithic Age	The Mesolithic or Middle Stone Age is the Old World archaeological period between the Upper Palaeolithic and the Neolithic.
Palaeolithic Age	The Palaeolithic, also called the Old Stone Age, is a period in human prehistory that is distinguished by the original development of stone tools, and which represents almost the entire period of human prehistoric technology.
Neolithic Age	Relating to or denoting the later part of the Stone Age, when ground or polished stone weapons and implements prevailed.
Stonehenge	Stonehenge is a prehistoric monument on Salisbury Plain in Wiltshire, England, two miles west of Amesbury. It consists of an outer ring of vertical sarsen standing stones, each around 13 feet high, seven feet wide, and weighing around 25 tons, topped by connecting horizontal lintel stones.
Nomadic	Early Stone Age people followed food sources and travelled.
Leather	A material made from the skin of an animal by tanning or a similar process.
Wool	The fine, soft curly or wavy hair forming the coat of a sheep, goat, or similar animal, especially when shorn and prepared for use in making cloth or yarn.
Woolly Mammoth	A now extinct animal roaming earth during the Ice Age.
Jewellery	Made from shells, teeth and bones.
Cave Paintings	Artwork of animals made from mineral pigments.

