

Long Term Plan Science

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Year One Scientific Enquiry Vocab	Question, answer, equipment, gather, measure, record, result, sort, group, test, explore, observe, compare, describe, similar/ities, different/ces, comparative test			Technical Vocab: beaker, pipette, hand lenses, egg timers, thermometers, magnets, iron, scales, pictogram, rain gauge,		
Year One Area of Study Vocab	body, head, neck, arms, elbows, legs, knees, face, ears, eyes, eyebrows, eyelashes, nose, hair, mouth, teeth, tongue, feet, toes, fingers, nails, ankle, calf, thigh, hips, waist, trunk, chest, shoulders, back, hands, wrist, senses, hearing, seeing, touching,	object, material, wood, plastic, glass, metal, water, rock, brick, paper, fabric, elastic, foil, cardboard, rubber, wool, clay, hard, soft, stretchy, stiff, bendy, waterproof, absorbent, tear, rough, smooth, shiny, dull, see through, not see through	object, material, wood, plastic, glass, metal, water, rock, brick, paper, fabric, elastic, foil, cardboard, rubber, wool, clay, hard, soft, stretchy, stiff, bendy, waterproof, absorbent, tear, rough, smooth, shiny, dull, see through, not see through, float, sink	names of: wild plants, garden pants, flowering plants, trees, leaf, flower, blossom, petal, fruit, berry, root, bulb, seed, trunk, branch, stem, bark, stalk, vegetable	season, spring, summer, autumn, winter, weather, hot, warm, cool cold, sunny, cloudy, windy, rainy, snowing, hailing, sleet, frost, fog, mist, icy, rainbow, thunder, lightning, storm, light, dark, day, night	tail, wing, claw, fin, scales, feathers, fur, hair, beak, carnivores, herbivores and omnivores, fish, amphibians, reptiles, birds and mammals
Year One Skills	<p><i>Collect evidence to try to answer a question.</i></p> <p><i>Make simple comparisons and groupings that relate to differences and similarities.</i></p> <p><i>Make observations using appropriate senses.</i></p> <p><i>Collect evidence to try to answer a question.</i></p> <p><i>Test ideas suggested to them and say what they think will happen.</i></p> <p><i>Draw simple conclusions and explain what they did.</i></p> <p><i>Make observations</i></p> <p><i>Make simple comparisons and groupings that relate to differences and similarities.</i></p> <p><i>Present some findings in simple tables and block graphs</i></p> <p><i>Say what their observations show, and whether it was what they expected;</i></p> <p><i>Draw simple conclusions and explain what they did</i></p> <p><i>Make observations</i></p> <p><i>Make simple comparisons and groupings that relate to differences and similarities.</i></p> <p><i>Present some findings in simple tables and block graphs</i></p>					
Year One Knowledge	<p>Senses</p> <p>Identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense</p>	<p>Toys</p> <p>Distinguish between an object and the material from which it is made.</p> <p>Describe the simple physical properties of a variety of everyday materials.</p>	<p>Castles</p> <p>Identify and name a variety of everyday materials, including wood, plastic, glass, metal, water, and rock compare and group together a variety of everyday materials on the basis of their simple physical properties</p>	<p>Growing Plants</p> <p>Identify and name a variety of common wild and garden plants, including deciduous and evergreen trees</p> <p>Identify and describe the basic structure of a</p>	<p>Weather Watch</p> <p>Observe changes across the 4 seasons</p> <p>Observe and describe weather associated with the seasons and how day length varies</p>	<p>A World of Animals</p> <p>Identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals</p> <p>Describe and compare the structure of a variety of common animals (fish, amphibians,</p>

	<p>Looking at the 5 senses in turn to investigate how our senses work. Opportunity to explore fruits and spices from around the world AT1 smelly box and feely bag to investigate using senses. Recording data using pictogram and bar</p>	<p>Look at a collection of toys and think about the materials used. Begin to recognise and name Fabric, wood, plastic. AT1 testing materials to find the best to use for a coat for teddy.</p>	<p>Describe the simple physical properties of a variety of everyday materials</p> <p>What materials were used to make castles and why? If a castle was built to day what would we use (link to the 3 wolves and the big bad pig) AT1 testing materials to make a tower Testing materials to make a knights armour What materials to make an arrow fly the furthest</p>	<p>variety of common flowering plants, including trees</p> <p>Look at leaves, seeds and nuts to identify trees growing in the UK. Sort trees in different ways introducing deciduous and evergreen. Consider why trees are important to the planet and environmental issues. Structure of trees and plants. Common plants and flowers. AT1 grow runner beans and observe and note the changes that take place. What grows first the root or the stem? Grow carrot tops, mustard and cress, pulses etc. Grow bulbs in water so that you can see the roots system.</p>	<p>Inventions that have used wind power Sail boats Windmills Wind turbines</p> <p>AT1 inventing a sail boat to travel across the water tub. Which material to use and the shape of the sails Capturing the wind</p>	<p>reptiles, birds and mammals including pets) Identify and name a variety of common animals that are carnivores, herbivores and omnivores</p> <p>Look at the animal groupings in turn. Opportunities to use the groupings to sort animals. Study some animals in more detail AT1 using snails to investigate the type of food snails like</p>
<p>Year Two Scientific Enquiry Vocab</p>	<p>Questions, answers, equipment, gather, measure, record, results, sort, group, test, explore, compare, describe, similar/ities, different/ces, observe, changes over time, notice, patterns, secondary sources, identify, classify, data, comparative test</p>			<p>Technical Vocab: beaker, pipette, hand lenses, egg timers, thermometers, pouters, magnets, scales, quadrant, stopwatch, measuring cylinder,</p>		
<p>Year Two Area of Study Vocab</p>	<p>offspring, life cycles, grow, change, adults, basic needs, water, food, air survival, exercise, food types (fruit and veg, bread, rice, pasta, milk, dairy, foods high in fat and sugar, meat, fish, eggs, beans), hygiene</p>	<p>suitable/unsuitable, use, object, material, property, wood, plastic, glass, metal water, rock, fabrics, hard, soft, stretchy, flexible, waterproof, absorbent, transparent, translucent, opaque, shape, change, twist, squash, bend, stretch, roll, squeeze, buoyant, speed,</p>	<p>seeds, bulbs, water, light, growth, healthy, shoot, seedling,</p>	<p>living, dead, never been alive, names of local habitats, lond, woodland, meadow, name micro habitats, under log, stony path, under bushes, suited, basic needs, depend, food, food chain, shelter</p>	<p>exercise, food types (fruit and veg, bread, rice, pasta, milk, dairy, foods high in fat and sugar, meat, fish, eggs, beans),</p>	
<p>Year Two Skills</p>	<ul style="list-style-type: none"> • to suggest some ideas and questions based on simple knowledge and say how they might find out about them; • to say what they think might happen to think about and discuss whether comparisons and tests are fair or unfair • to make simple comparisons, identifying similarities and differences between living things, objects and events; • to say what results show; • to say whether their predictions were supported; 					

- in some cases to use knowledge
- to explain what was found out and to draw conclusions;
- to explain what they did
- use the computer to recode results in a table, chart or pictogram
- to make observations; to make measurements of length in standard and non-standard measures;
- to make records of observations; and to present results in tables, drawings and block graphs

<p>Year Two Knowledge</p>	<p>Health - Plague</p> <p>Health and Hygiene</p> <p>Notice that animals, including humans, have offspring which grow into adults</p> <p>Find out about and describe the basic needs of animals, including humans, for survival (water, food and air)</p> <p>Describe the importance for humans of exercise, eating the right amounts of different types of food, and hygiene.</p>	<p>Great Fire of London</p> <p>Materials</p> <p>Identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for different uses</p> <p>Compare how things move on different surfaces.</p> <p>Find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching</p>	<p>Great Explorers - Aviation</p> <p>At1 Science investigations</p> <p>Paper planes Parachutes</p> <p>Compare how things move on different surfaces</p>	<p>Kings and Queens – Victorians</p> <p>Science investigations</p> <p>Materials – right materials for a range of purposes</p> <p>Which sponge is the best for mopping up spills? When squashed, which materials return to their original shape?</p> <p>What happens to materials when they are heated or cooled?</p> <p>Which surface does a cart roll down quickest?</p>	<p>Africa - Kenya</p> <p>Observe and describe how seeds and bulbs grow into mature plants</p> <p>Find out and describe how plants need water, light and a suitable temperature to grow and stay healthy.</p> <p>Keep a growing diary Grow in water so that you can see the roots system. Grow a bean plant and create a how-to-guide on how to look after it.</p> <p>Do shoots always grow up and roots always grow down? Do plants need light in order to grow? Will seeds grow in anything other than soil</p> <p>Find out about and describe the basic needs of animals, including humans, for survival (water, food and air)</p>	<p>Habitats</p> <p>Explore and compare the differences between things that are living, dead, and things that have never been alive</p> <p>Identify that most living things live in habitats to which they are suited and describe how different habitats provide for the basic needs of different kinds of animals and plants, and how they depend on each other</p> <p>Identify and name a variety of plants and animals in their habitats, including microhabitats</p> <p>Describe how animals obtain their food from plants and other</p>	<p>Diet and Exercise</p> <p>Describe the importance for humans of exercise, eating the right amounts of different types of food, and hygiene.</p>
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Year Three Scientific Enquiry Vocab	Questions, answers, equipment, gather, measure, record, results, sort, group, test, explore, compare, describe, similar/ities, different/ces, observe, changes over time, notice patterns, secondary sources, identify, classify, data, enquiry, comparative tests, fair tests, careful, accurate, observations, data, evidence, results, keys, bar chart, table, results, conclusions, predictions, support			Technical Vocab: beaker, pipette, hand lenses, egg timers, thermometers, pouters, magnets, scales, pie and bar charts, ferrous/non-ferrous metal, prism, Newton meters, torch, compass, goggles, text tubes, X-ray, rain gauge,			
Year Three Area of Study Vocab	rock, stone, pebble, boulder, soil, fossils, grains, crystals, texture, absorb water, im/permeable, marble, chalk, granite, sandstone, slate, sandy soil, clay soil, chalky soil, peat,	light, light source, darkness, reflect, reflective, mirror, shadow, block, direction, transparent, opaque, translucent,	force, contact force, non contact force, magnetic force, magnet, strength, bar/ring/button/horseshoe magnets, attract, repel, magnetic material, metal, iron, steel, non-magnetic, poles, north/south pole	leaf, flower, blossom, petal, fruit, root, bulb, seed trunk, branch, stem, water, light, air, nutrients, soil, fertiliser, grow, healthy, transported, life cycle, pollination, seed formation, seed dispersal	nutrition, food types, carbohydrates, protein, vitamins and minerals, fat, sugar, fruits and veg, dietary fibre, water, balanced diet, skeleton, muscle, support, protection, movement, names of bones, vertebrate, invertebrate, x-ray,	leaf, flower, blossom, petal, fruit, root, bulb, seed trunk, branch, stem, water, light, air, nutrients, soil, fertiliser, grow, healthy, transported, life cycle, pollination, seed formation, seed dispersal	
Year Three Skills	Collect evidence in a variety of contexts to answer a question or test an idea in a variety of contexts; to suggest questions and ideas and how to test them; Make predictions about what will happen; Think about how to collect sufficient evidence in some contexts; Consider what makes a test unfair or evidence sufficient and, with help, plan fair tests Make observations and comparisons; Measure length, volume of liquid and time in standard measures using simple measuring equipment effectively Present results in drawings, bar charts and tables Draw conclusions from results and begin to use scientific knowledge to suggest explanations for them; Make generalisations and begin to identify simple patterns in results presented in tables Collect data and use this to draw charts						
Year Three Knowledge	Stone Age Compare and group together different kinds of rocks on the basis of their appearance and simple physical properties. Describe in simple terms how fossils are formed when things that have lived are trapped within rock. Recognise that soils are made from rocks and organic matter.	Out of the Darkness Recognise that they need light in order to see things and that dark is the absence of light. Notice that light is reflected from surfaces. Recognise that light from the sun can be dangerous and that	Nottingham Compare how things move on different surfaces. Notice that some forces need contact between 2 objects, but magnetic forces can act at a distance. Observe how magnets attract or repel each other and attract some materials and not others. Compare and group together a variety of everyday materials on	Fairtrade Identify and describe the functions of different parts of flowering plants: roots, stem/trunk, leaves and flowers Investigate the way in which water is transported within plants Explore the part that flowers play in the life cycle of flowering	Humans and Animals Identify that animals, including humans, need the right types and amount of nutrition, and that they cannot make their own food; they get nutrition from what they eat Identify that humans and some other animals have skeletons and muscles for support,	Ancient Egyptians Explore the requirements of plants for life and growth (air, light, water, nutrients from soil, and room to grow) and how they vary from plant to plant.	

		<p>there are ways to protect their eyes.</p> <p>Recognise that shadows are formed when the light from a light source is blocked by a solid object. Find patterns in the way that the size of shadows change.</p>	<p>the basis of whether they are attracted to a magnet, and identify some magnetic materials. Describe magnets as having 2 poles. Predict whether 2 magnets will attract or repel each other, depending on which poles are facing.</p>	<p>plants, including pollination, seed formation and seed dispersal.</p> <p>Growing cress seeds to illustrate phototropism (growing towards the light)</p> <p>Split the stem of a carnation upwards and put each half in a different food colouring</p>	<p>protection and movement.</p>	
Year Four Scientific Enquiry Vocab	<p>Questions, answers, equipment, gather, measure, record, results, sort, group, test, explore, compare, describe, similar/ities, different/ces, observe, changes over time, notice patterns, secondary sources, identify, classify, data, enquiry, comparative tests, fair tests, careful, accurate, observations, data, evidence, results, keys, bar chart, table, results, conclusions, prediction, enquiry types, increase, decrease, identify, order, relationships, appearance, present results, support, dependent variable, independent variable, controlled variable</p>			<p>Technical Vocab: beaker, pipette, hand lenses, egg timers, thermometers, pouters, magnets, scales, pie and bar charts, acetic acid, bicarbonate of soda, data loggers, tuning forks, litmus PH, goggles, test tubes,</p>		
Year Four Area of Study Vocab	<p>states of matter, solid, liquid, gas, air, oxygen, powder, granular/grain, crystals, change state, ice/water/steam, water vapour, heating, cooling, temperature, degrees celcius, melt, freeze, solidify, melting point, boil, boiling point, evaporation, condensation, water cycle, precipitation, transpiration</p>	<p>sound, sound source, noise, vibration, travel, solid, liquid, gas, pitch, tune, high, low, volume, loud, quiet, fainter, muffle, strength of vibrations, insulation, instrument, percussion, strings, bass, woodwind, tuned instrument</p>	<p>electricity, appliance, device, mains, plug, electrical circuit, complete circuit, circuit diagram, circuit symbol, components, cell, battery, positive/negative, connect, connection, short circuit, wire, crocodile clip, bulb, bright/dim, switch, buzzer, motor, faster/slower, conductor, insulator, metal/non metal</p>	<p>digestive system, nutrition, mouth, teeth, canine, incisor, molar, pre-molar, saliva, tongue, rip, tear, chew, grind, cut, oesophagus (gullet), stomach, small intestine, large intestine, rectum, anus, carnivore, herbivore, omnivore, producer, consumer, predator, prey, food chain</p>	<p>classification keys, environment, fish, amphibians, reptiles, birds, mammals, vertebrates, invertebrates, names of them, human impact, positive/negative impact.</p>	
Year Four Skills	<p>Collect evidence in a variety of contexts to test an idea or prediction based on their scientific knowledge and understanding. Suggest questions that can be tested and make predictions about what will happen, some of which are based on scientific knowledge; Design a fair test or plan how to collect sufficient evidence. Identify simple trends and patterns in results presented in tables, charts and graphs and to suggest explanations for some of these. Explain what the evidence shows and whether it supports any prediction made. Link the evidence to scientific knowledge and understanding in some contexts</p>					
Year Four Knowledge	<p>Potions</p> <p>Solids, liquids and gases</p> <p>Compare and group materials together,</p>	<p>The Ruthless Romans</p> <p>The Water Cycle</p> <p>Identify the part played by evaporation and</p>	<p>Roman Remains</p> <p>Listen Up!</p> <p>Identify how sounds are made, associating some of them with something vibrating</p>	<p>Eco Heroes</p> <p>Electricity</p> <p>Identify common appliances that run on electricity</p>	<p>Anglo Saxons</p> <p>The Human Digestive System</p> <p>Describe the simple functions of</p>	<p>The Amazing Amazon</p> <p>Living things and their habitats</p> <p>Recognise that living things can be grouped in a variety of ways</p>

	<p>according to whether they are solids, liquids or gases</p> <p>Observe that some materials change state when they are heated or cooled, and measure or research the temperature at which this happens in degrees Celsius (°C)</p>	<p>condensation in the water cycle and associate the rate of evaporation with temperature.</p>	<p>Recognise that vibrations from sounds travel through a medium to the ear</p> <p>Find patterns between the pitch of a sound and features of the object that produced it</p> <p>Find patterns between the volume of a sound and the strength of the vibrations that produced it.</p> <p>Recognise that sounds get fainter as the distance from the sound source increases</p>	<p>Construct a simple series electrical circuit, identifying and naming its basic parts, including cells, wires, bulbs, switches and buzzers Identify whether or not a lamp will light in a simple series circuit, based on whether or not the lamp is part of a complete loop with a battery</p> <p>Recognise that a switch opens and closes a circuit and associate this with whether or not a lamp lights in a simple series circuit</p> <p>Recognise some common conductors and insulators, and associate metals with being good conductors.</p>	<p>the basic parts of the digestive system in humans</p> <p>Identify the different types of teeth in humans and their simple functions</p> <p>Life/food and lifestyle</p> <p>Saxon poo</p>	<p>Explore and use classification keys to help group, identify and name a variety of living things in their local and wider environment</p> <p>Recognise that environments can change and that this can sometimes pose dangers to living things.</p> <p>Construct and interpret a variety of food chains, identifying producers, predators and prey.</p>
Year Five Scientific Enquiry Vocab	<p>Questions, answers, equipment, gather, measure, record, results, sort, group, test, explore, compare, describe, similar/ities, different/ces, observe, changes over time, notice patterns, secondary sources, , identify, classify, order, data, enquiry, comparative tests, fair tests, careful, accurate, observations, data, evidence, results, keys, bar chart, table, results, conclusions, prediction, enquiry types, increase, decrease, identify, order, relationships, appearance, present results, support, dependent variable, independent variable, controlled variable</p>			<p>Technical Vocab: beaker, pipette, hand lenses, egg timers, thermometers, pouters, magnets, scales, pie and bar charts, line graphs, acetic acid, bicarbonate of soda, data loggers, litmus PH, orreries, filter paper, telescope, binoculars, Newton meters, pulley blocks, compass, ferrous/non-ferrous, goggles, test tubes,</p>		
Year Five Area of Study Vocab	<p>rigid, hard, soft, stretchy, flexible, waterproof, absorbent, electrical/thermal conductivity, dissolve, solution, insoluble, solute, solvent, particle, mixture, filtering, sieving, residue, reversible/non reversible changes, new material, burning, rusting</p>	<p>fall, Earth, gravity, weight, mass, force, lunar, orbit, solar, sol, ellipitcle, geo-centric, helio-centric, spherical, rotation, equater, hemisphere, Milky Way, Andromeda,</p>	<p>force, contact force, non contact force, magnetic force, magnet, strength, bar/ring/button/horseshoe magnets, attract, repel, magnetic material, metal, iron, steel, non-magnetic, poles, north/south pole, weight, mass, air resistance, water</p>	<p>life cycle, reproduction, sexual, asexual, germination, pollination, seed formation, seed dispersal, pollen, stamen, stigma, plantlets, runners, mammal, amphibian, insect, bird, fish, reptile, eggs, live young</p>	<p>gravity, Earth, weight, mass, friction, moving surfaces, mechanisms, levers, pulleys, gears, force, transference, fulcrum, distribution, load, block and tackle, gears, axle</p>	

				resistance, friction, moving surfaces		
Year Five Skills	<p>Make predictions of what will happen based on scientific knowledge and understanding, and suggest how to test these; Use knowledge and understanding to plan how to carry out a fair test or how to collect sufficient evidence to test an idea; Identify factors that need to be taken into consideration in different contexts Use the Internet to carry out scientific research. Make relevant observations; Consolidate measurement of volume, temperature, time and length; Measure pulse rate; Think about why observations and measurements should be repeated; Present results in bar charts and line graphs Decide whether results support any prediction; Begin to evaluate repeated results; Recognise and make predictions from patterns in data and suggest explanations for these using scientific knowledge and understanding; Interpret data and think about whether it is sufficient to draw conclusions; Draw conclusions indicating whether these match any prediction made Use the spreadsheet or multi-media to collect data and use this to draw charts, tables, graphs and explain findings</p>					
Year Five Knowledge	<p>The Vikings</p> <p>Grouping materials</p> <p>Compare and group together everyday materials on the basis of their properties, including their hardness, solubility, transparency, conductivity (electrical and thermal), and response to magnets Give reasons, based on evidence from comparative and fair tests, for the particular uses of everyday materials, including metals, wood and plastic</p>	<p>Atrocious Alchemy</p> <p>Changing materials</p> <p>Know that some materials will dissolve in liquid to form a solution, and describe how to recover a substance from a solution Use knowledge of solids, liquids and gases to decide how mixtures might be separated, including through filtering, sieving and evaporating</p> <p>Demonstrate that dissolving, mixing and changes of state are reversible changes</p> <p>Explain that some changes result in the formation of new materials, and that this kind of change is not usually reversible, including</p>	<p>Masters Of Space</p> <p>Describe the movement of the Earth, and other planets, relative to the Sun in the solar system</p> <ol style="list-style-type: none"> 1) Gravity 2) Movement of Earth and planets 3) Movement of moon 4) Day and night <p>Describe the movement of the Moon relative to the Earth</p> <p>Describe the Sun, Earth and Moon as approximately spherical bodies</p> <p>Use the idea of the Earth's rotation to explain day and night, and the apparent movement of the sun across the sky.</p>	<p>Magnificent Mayans</p> <p>Identify the effects of air resistance, water resistance and friction, that act between moving surface</p> <p>Air resistance Water resistance Friction (revise magnet work from Y3)</p>	<p>Careering Around the Commonwealth!</p> <p>Describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird Describe the life process of reproduction in some plants and animals.</p> <p>Describe the changes as humans develop to old age.</p> <ol style="list-style-type: none"> 1) Life cycle of mammal, amphibian, bird, insect. 2) Reproduction in plants and animals 3) Human life cycle 	<p>Magnificent Architecture(Industrial Revolution)</p> <p>Explain that unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling object</p> <p>Recognise that some mechanisms including levers, pulleys and gears allow a smaller force to have a greater effect</p> <p>Forces are transferred through: Gears Pulleys Levers Springs</p>

		changes associated with burning and the action of acid on bicarbonate of soda.				
Year Six Scientific Enquiry Vocab	Questions, answers, equipment, gather, measure, record, results, sort, group, test, explore, compare, describe, similar/ities, different/ces, observe, changes over time, notice patterns, secondary sources, , identify, classify, order, data, enquiry, comparative tests, fair tests, careful, accurate, observations, data, evidence, results, keys, bar chart, table, results, conclusions, prediction, enquiry types, increase, decrease, identify, order, relationships, appearance, present results, support, dependent variable, independent variable, controlled variable, opinion/fact, confidently			Technical Vocab: beaker, pipette, hand lenses, egg timers, thermometers, pouters, pie and bar charts, line graphs, data loggers, binoculars, prism, light box, concave/convex mirrors		
Year Six Area of Study Vocab	light, light source, darkness, reflect, reflective, shadow, block, absorb, direction, transparent, opaque, translucent	Electricity, appliance, device, electrical circuit, complete circuit, circuit diagram, circuit symbol, components, cell, battery, positive, negative, terminal, connection, short circuit, wire, crocodile clip, bulb, bright/dim, switch, buzzer, volume, motor, conductor, insulator, voltage, current, resistance,	evolution, suited/suitable, adapted, adaptation, offspring, reproduction, variation, inherit, genes/genetics, traits inheritance, fossils	Organism, micro-organism, fungus, mushrooms, classification keys, environment, fish, amphibians, reptiles, birds, mammals, vertebrates, invertebrates, arachnid, mollusc, insect, crustacean	circulatory system, heart, blood, blood vessels, pumps, oxygen, carbon dioxide, lungs, nutrients, water, diet, exercise, drugs, lifestyle,	
Year Six Skills	<p>Decide how to turn ideas into a form that can be tested and, where appropriate, to make predictions using scientific knowledge and understanding;</p> <p>Identify factors that are relevant to a particular situation;</p> <p>Choose what evidence to collect to investigate a question, ensuring the evidence is sufficient;</p> <p>Choose what equipment to use</p> <p>Use scientific websites to research scientific topics, including using on-line forums to share ideas with others.</p> <p>Make a variety of relevant observations and measurements using simple apparatus correctly;</p> <p>Decide when observations and measurements need to be checked, by repeating, to give more reliable data;</p> <p>Use tables, bar charts and line graphs to present results</p> <p>Make comparisons; to evaluate repeated results and to identify patterns in results and results that do not appear to fit the pattern;</p> <p>Use results to draw conclusions and to make further predictions;</p> <p>Suggest and evaluate explanations for these predictions using scientific knowledge and understanding; say whether the evidence supports any prediction made</p>					
Year Six Knowledge	<p>Crime and Punishment</p> <p>Light Recognise that light appears to travel in straight lines</p> <p>Use the idea that light travels in</p>	<p>Crime and Punishment</p> <p>Electricity Associate the brightness of a lamp or the volume of a buzzer with the number and voltage</p>	<p>Meet the Greeks</p> <p>Evolution and Inheritance Recognise that living things have changed over time and that fossils provide information about living things that</p>	<p>Meet the Greeks</p> <p>All Living Things (Micro organisms) Describe how living things are classified into broad groups according to common observable characteristics and based on similarities</p>	<p>Mountains and Rivers</p> <p>Animals including Humans</p> <p>Identify and name the main parts of the human circulatory system, and describe the functions of the heart, blood vessels and blood</p> <p>Recognise the impact of diet, exercise, drugs and lifestyle on the way their bodies function</p>	

	<p>straight lines to explain that objects are seen because they give out or reflect light into the eye</p> <p>Explain that we see things because light travels from light sources to our eyes or from light sources to objects and then to our eyes</p> <p>Use the idea that light travels in straight lines to explain why shadows have the same shape as the objects that cast them</p>	<p>of cells used in the circuit</p> <p>Compare and give reasons for variations in how components function, including the brightness of bulbs, the loudness of buzzers and the on/off position of switches</p> <p>Use recognised symbols when representing a simple circuit in a diagram.</p>	<p>inhabited the Earth millions of years ago</p> <p>Recognise that living things produce offspring of the same kind, but normally offspring vary and are not identical to their parents</p> <p>Identify how animals and plants are adapted to suit their environment in different ways and that adaptation may lead to evolution.</p>	<p>and differences, including micro-organisms, plants and animals</p> <p>Give reasons for classifying plants and animals based on specific characteristics.</p>	<p>Describe the ways in which nutrients and water are transported within animals, including humans.</p>
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