



Launton Church of England Primary School



Science curriculum provision plan EYFS

	Term 1	Term 2	Term 3	Term 4	Term 5	Term 6
Themes	Marvellous Me!	Colours of the Rainbow	Winter Wonderland	The Great Outdoors	Animal Kingdom	Under the Sea & Pirates
Nursery	Look at photographs of ourselves as babies – how have we changed?	Look at the colours in the environment and notice how they change.	Ice- melting and freezing. Hot and cold	Compare old trees and young trees within the school grounds	Share favourite toys. What are they made from?	Look at pictures of animals that live under the sea.
Continuous provision	<ul style="list-style-type: none"> Go for walks around the school to see what different materials we can find. Discuss different materials with the children. What materials can we name? Use natural resources in play. Make a seasonal tuff tray so children can explore a variety of natural items such as leaves, sticks, mud, pumpkins, flowers, bulbs. Have a variety of toys that children can explore Talk about life cycles with the children and show examples. Put these around the garden with appropriate resources for the children to explore. Push and pull games. Discussion and activities around wildlife and how we can take care of our environment. Talk about the recycling bin and help children to select the correct bin for recycling, composting or refuse. 					
Reception	Look at photographs of ourselves as babies – how have we changed? -how will we change as we get older?	Look at the colours in the environment and notice how they change. Talk about seasons	Notice what happens to ice in different places. Hot and cold	Compare different types of trees within the school grounds	Share favourite toys. What are they made from and how do they move?	Look at pictures of animals that live under the sea and learn the names of some of them.
Continuous provision	<ul style="list-style-type: none"> Go for walks around our local environment. Including the school grounds. Discuss months of the year and think about which season they fall into. Talk about seasons and collect words that help us explain/describe that season. 					

- Make pictures using seasonal colours and natural resources.
- Visit the forest corner within the school grounds and notice changes.
- Discuss how our immediate environment looks different at different points of the year.
- Talk about animals and what time of year we see them – butterflies in summer and lambs in spring.
- Talk about the recycling bin and help children to select the correct bin for recycling, composting or refuse.



Launton Church of England Primary School

Science long term plan Milestone 1 / KS1



	6 weeks	5 weeks	6 weeks	6 weeks	5 weeks	6 weeks	
Year group1	<p>Animals incl. Humans</p> <p>Identify, name a variety of common animals including fish, amphibians, reptiles, birds, mammals.</p> <p>Describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals, including pets)</p> <p>Identify and name a variety of common animals that are carnivores, herbivores and omnivores.</p> <p>Identify, name, draw and label the basic parts of the human body</p> <p>Notice that animals, including humans, have offspring which grow into adults.</p> <p>Investigate and describe the basic needs of animals, including humans, for survival. (water, food and air)</p> <p>Describe the importance for humans of exercise, different types of food, and hygiene.</p>	<p>Everyday materials</p> <p>Distinguish between an object and the material from which it is made.</p> <p>Identify and name a variety of everyday materials, including wood, plastic, glass, metal, water and rock</p>	<p>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 variety of common flowering plants, including roots, stem/trunk, leaves and flowers</p>	<p>Living things and their habitat</p> <p>Explore and compare the differences between things that are living, that are dead and 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 micro-habitats</p> <p>Describe how animals obtain their food from plants and other animals, using the idea of a simple food chain, and identify and name different sources of food</p>	<p>Plants</p> <p>Identify and name a variety of plants, wild plants and trees</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>Materials</p> <p>Find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching. Identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick/rock, and paper/cardboard for particular uses</p>	
Introducing Vocabulary	<p>Head, body, eyes, ears, mouth, teeth, leg, tail, wing,</p> <p>Names of animals experienced first-hand from each vertebrate group</p>	<p>Object, material, wood, plastic, glass, metal, water, rock, brick, paper, fabric, elastic, foil, card/cardboard,</p> <p>floppy, waterproof, absorbent, breaks/tears, rough, smooth, shiny, dull, see-through</p>	<p>Leaf, flower, blossom, petal, fruit, berry, root,</p> <p>Names of trees in the local area</p> <p>Names of garden and wild flowering</p>	<p>Living, dead, never been alive, suited, suitable,</p> <p>Names of local habitats e.g. pond, woodland etc. Names of micro-</p>	<p>Light, shade, sun, warm, cool, water, grow, healthy</p>	<p>Object, material, wood, plastic, glass, metal, water, rock, brick, paper, fabric, elastic, foil,</p> <p>stretchy, stiff, bendy, floppy, waterproof, absorbent, breaks/tears, rough, smooth, shiny, dull, see-through, not see-through</p>	

	claw, fin, scales, feathers, fur, beak, paws, hooves	Parts of the body Senses – touch, see, smell, taste, hear, fingers (skin), eyes, nose, ear and tongue	rubber, wool, clay, hard, soft, stretchy, stiff, bendy,	through, not see-through	seed, trunk, branch, stem, bark, stalk, bud	plants in the local area	basic needs, food, food chain, shelter, move, feed	habitats e.g. under logs, in bushes etc		card/cardboard, rubber, wool, clay, hard, soft,
Continuous provision	<p align="center">Homework activities based upon current topic</p> <p>Observe changes across the four seasons. Observe and describe weather associated with the seasons and how day length varies. Resources: books and pictures, planters in the school gardens, window boxes Activities: name that tree, animal Wiki, where did I begin (materials), how long is a day (sun tracking across the year)</p>									
Retrieval practice	Seasons/Weather	Animals inc. humans	Everyday materials	Plants	Living things and their habitats	Plants				
Year group 2 (Advancing/Deep)	<p>Animals incl. Humans</p> <p>Identify, name a variety of common animals including fish, amphibians, reptiles, birds, mammals.</p> <p>Describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals, including pets)</p> <p>Identify and name a variety of common animals that are carnivores, herbivores and omnivores.</p> <p>Identify, name, draw and label the basic parts of the human body</p> <p>Notice that animals, including humans, have offspring which grow into adults.</p> <p>Investigate and describe the basic needs of animals, including humans, for survival. (water, food and air)</p> <p>Describe the importance for humans of exercise, different types of food, and hygiene.</p>	<p>Everyday materials</p> <p>Distinguish between an object and the material from which it is made.</p> <p>Identify and name a variety of everyday materials, including wood, plastic, glass, metal, water and rock</p>	<p>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 variety of common flowering plants, including roots, stem/trunk, leaves and flowers</p>	<p>Living things and their habitat</p> <p>Explore and compare the differences between things that are living, that are dead and 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 micro-habitats</p> <p>Describe how animals obtain their food from plants and other animals, using the idea of a simple food chain, and identify and name different sources of food</p>	<p>Plants</p> <p>Identify and name a variety of plants, wild plants and trees</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>Materials</p> <p>Find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching. Identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick/rock, and paper/cardboard for particular uses</p>				

Consolidating Vocabulary	Head, body, eyes, ears, mouth, teeth, leg, tail, wing, claw, fin, scales, feathers, fur, beak, paws, hooves	Names of animals first-hand from each vertebrate group Parts of the body Senses – touch, see, smell, taste, hear, fingers (skin), eyes, nose, ear and tongue	Object, material, wood, plastic, glass, metal, water, rock, brick, paper, fabric, elastic, foil, card/cardboard, rubber, wool, clay, hard, soft, stretchy, stiff, bendy,	floppy, waterproof, absorbent, breaks/tears, rough, smooth, shiny, dull, see-through, not see-through	Leaf, flower, blossom, petal, fruit, berry, root, seed, trunk, branch, stem, bark, stalk, bud	Names of trees in the local area Names of garden and wild flowering plants in the local area	Living, dead, never been alive, suited, suitable, basic needs, food, food chain, shelter, move, feed	Names of local habitats e.g. pond, woodland etc. Names of micro-habitats e.g. under logs, in bushes etc	Light, shade, sun, warm, cool, water, grow, healthy	Object, material, wood, plastic, glass, metal, water, rock, brick, paper, fabric, elastic, foil, card/cardboard, rubber, wool, clay, hard, soft,	stretchy, stiff, bendy, floppy, waterproof, absorbent, breaks/tears, rough, smooth, shiny, dull, see-through, not see-through
Continuous provision	<p align="center">Homework activities based upon current topic</p> <p>Observe changes across the four seasons. Observe and describe weather associated with the seasons and how day length varies. Resources: books and pictures, planters in the school gardens, window boxes Activities: name that tree, animal Wiki, where did I begin (materials), how long is a day (sun tracking across the year)</p>										
Retrieval practice	Seasons/Weather	Animals inc. humans	Everyday materials	Plants	Living things and their habitats	Plants					

Launton Church of England Primary School



Science long term plan Milestone 2 / Lower KS2

	6 weeks	5 weeks	5 weeks	4 weeks	4 weeks	4 weeks	6 weeks	4 weeks
Year group 3 (Basic)	Animals, Including humans	Rocks	Light & Sound	States of matter	Electricity	Plants	Living things and their habitats	Forces and magnets
	<ul style="list-style-type: none"> -Identify that animals, including humans, need the right types and amounts of nutrition, that they cannot make their own food and they get nutrition from what they eat. -Construct and interpret a variety of food chains, identifying producers, predators and prey. -Identify that humans and some animals have skeletons and muscles for support, protection and movement. -Describe the simple functions of the basic parts of the digestive system in humans. -Identify the different types of teeth in humans and their simple functions. 	<ul style="list-style-type: none"> -Compare and group together different kinds of rocks on the basis of their simple, physical properties. -Relate the simple physical properties of some rocks to their formation (igneous or sedimentary). -Describe in simple terms how fossils are formed when things that have lived are trapped within sedimentary rock. -Recognise that soils are made from rocks and organic matter. -Describe the movement of the Earth relative to the Sun in the solar system -Describe the movement of the Moon relative to the Earth. 	<ul style="list-style-type: none"> -Recognise that light is required 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 there are ways to protect your eyes. -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 a shadow changes. -Identify how sounds are made, associating some of them with something vibrating. 	<ul style="list-style-type: none"> -Compare and group materials together, according to whether they are solids, liquids or gases. -Observe that some materials change state when they are heated or cooled, and measure the temperature at which this happens in degrees Celsius (°C), building on the teaching in mathematics. -Identify the part played by evaporation and condensation in the water cycle and associate the rate of evaporation with temperature. 	<ul style="list-style-type: none"> -Identify common appliances that run on electricity. -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. -Recognise that a switch opens and closes a circuit and associate this with whether or not a lamp lights in a simple series circuit. Recognise some common conductors and insulators, and associate metals 	<ul style="list-style-type: none"> - Identify and describe the functions of different parts of flowering plants: roots, stem, leaves and flowers. -Explore the requirements of plants for life and growth (air, light, water, nutrients -Investigate the way in which water is transported within plants 	<ul style="list-style-type: none"> -Recognise that living things can be grouped in a variety of ways. -Explore and use classification keys -Recognise that environments can change and that this can sometimes pose dangers to specific habitats. -Identify how plants and animals, including humans, resemble their parents in many features. -Recognise that living things have changed over time and that fossils provide information about living things that inhabited the Earth millions of years ago. -Identify how animals and plants are suited to and adapt to their environment in different ways. 	<ul style="list-style-type: none"> -Compare how things move on different surfaces. -Notice that some forces need contact between two objects, but magnetic forces can act at a distance. -Observe how magnets attract or repel each other and attract some materials and not others. -Compare and group together a variety of everyday materials on the basis of whether they are attracted to a magnet, and identify some magnetic materials. -Describe magnets as having two poles. -Predict whether two magnets will attract or repel

					-Recognise that vibrations from sounds travel through a medium to the ear.			with being good conductors.				each other, depending on which poles are facing.
Introducing Vocabulary	starch sugar diet balanced evidence conclusion permanent decay plaque gum skeleton bones joints muscles biceps triceps contracts relaxes food chain consumers predators prey	incisors canines molars roots gums milk teeth disease brace filling back bone spine	natural stones pebbles gravel manufactured texture minerals sieve clay sandy	crystals properties permeable sediments sedimentary magma igneous lava metamorphic particles	light source artificial opaque transparent translucent sundial sphere	materials properties strong hard flexible soft transparent stiff liquids solids volume measuring cylinder ml ice freezing temperature thermometer degrees Celsius	brittle absorbent gold aluminium waterproof product standards solidifying reversible changes freezing point melting point separate sieve filtering dissolves undissolved solution thermal insulator/ conductor	bulb electricity circuit wires battery switches mains conduct electrical conductors electrical insulators pins cable component dim	organisms roots stems leaves trunks irrigation prediction nutrients fertilisers	organism reproduce grow habitats pond dipping fair test	prediction evidence	magnet attract magnetic steel iron recycled repelling compress springs forces force meter Newtons or N friction lubricant lubrication water resistance streamlined
Continuous Provision	<p style="text-align: center;">Homework activities based upon current topic</p> <p>Resources: window shelf greenhouse and garden, books, nutrition wall/different food groups, electrical components, circuit kits, fossil and rock display.</p> <p>Activities: Plant doctor (looking after plants), world watch (threats to environment), Jurassic Park (fossils), Magnetic ice (freezing magnets)</p>											
Retrieval practice	Materials (KS1)	Animals including humans	Rocks	Light and sound	Living things and their habitats	Electricity	Plants	States of matter				
Year 4 (Advancing/ Deep)	Animals, Including humans	Rocks	Light & Sound	States of matter	Electricity	Plants	Living things and their habitats	Forces and magnets				
	-Identify that animals, including humans, need the right types and amounts of nutrition, that they cannot make their own food and they get nutrition from what they eat.	-Compare and group together different kinds of rocks on the basis of their simple, physical properties. -Relate the simple physical properties of some rocks to their formation (igneous or sedimentary).	-Recognise that light is required in order to see things and that dark is the absence of light. -Notice that light is reflected from surfaces.	-Compare and group materials together, according to whether they are solids, liquids or gases. -Observe that some materials change state when they are heated or cooled and measure the temperature at which this happens in degrees Celsius	-Identify common appliances that run on electricity. -Construct a simple series electrical circuit, identifying and naming its basic parts, including cells, wires,	- Identify and describe the functions of different parts of flowering plants: roots, stem, leaves and flowers. -Explore the requirements of	-Recognise that living things can be grouped in a variety of ways. -Explore and use classification keys -Recognise that environments can change and that this can sometimes pose dangers to specific habitats.	-Compare how things move on different surfaces. -Notice that some forces need contact between two objects, but magnetic forces can act at a distance.				

	<ul style="list-style-type: none"> -Construct and interpret a variety of food chains, identifying producers, predators and prey. -Identify that humans and some animals have skeletons and muscles for support, protection and movement. -Describe the simple functions of the basic parts of the digestive system in humans. -Identify the different types of teeth in humans and their simple functions. 		<ul style="list-style-type: none"> -Describe in simple terms how fossils are formed when things that have lived are trapped within sedimentary rock. -Recognise that soils are made from rocks and organic matter. -Describe the movement of the Earth relative to the Sun in the solar system -Describe the movement of the Moon relative to the Earth. 		<ul style="list-style-type: none"> -Recognise that light from the Sun can be dangerous and that there are ways to protect your eyes. -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 a shadow changes. -Identify how sounds are made, associating some of them with something vibrating. -Recognise that vibrations from sounds travel through a medium to the ear. 		<ul style="list-style-type: none"> (°C), building on the teaching in mathematics. -Identify the part played by evaporation and condensation in the water cycle and associate the rate of evaporation with temperature. 		<ul style="list-style-type: none"> 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. -Recognise that a switch opens and closes a circuit and associate this with whether or not a lamp lights in a simple series circuit. Recognise some common conductors and insulators, and associate metals with being good conductors. 		<ul style="list-style-type: none"> plants for life and growth (air, light, water, nutrients) -Investigate the way in which water is transported within plants 		<ul style="list-style-type: none"> -Identify how plants and animals, including humans, resemble their parents in many features. -Recognise that living things have changed over time and that fossils provide information about living things that inhabited the Earth millions of years ago. -Identify how animals and plants are suited to and adapt to their environment in different ways. 		<ul style="list-style-type: none"> -Observe how magnets attract or repel each other and attract some materials and not others. -Compare and group together a variety of everyday materials on the basis of whether they are attracted to a magnet, and identify some magnetic materials. -Describe magnets as having two poles. -Predict whether two magnets will attract or repel each other, depending on which poles are facing. 	
Consolidating Vocabulary	<ul style="list-style-type: none"> starch sugar diet balanced evidence conclusion permanent decay plaque gum skeleton bones joints muscles biceps triceps contracts relaxes food chain consumers predators prey 	<ul style="list-style-type: none"> incisors canines molars roots gums milk teeth disease brace filling back bone spine 	<ul style="list-style-type: none"> natural stones pebbles gravel manufactured texture minerals sieve clay sandy 	<ul style="list-style-type: none"> crystals properties permeable sediments sedimentary magma igneous lava metamorphic particles 	<ul style="list-style-type: none"> light source artificial opaque transparent translucent sundial sphere 	<ul style="list-style-type: none"> materials properties strong hard flexible soft transparent stiff liquids solids volume measuring cylinder ml ice freezing temperature thermometer degrees Celsius 	<ul style="list-style-type: none"> brittle absorbent gold aluminium waterproof product standards solidifying reversible changes freezing point melting point separate sieve filtering dissolves undissolved solution thermal insulator/ conductor 	<ul style="list-style-type: none"> bulb electricity circuit wires battery switches mains conduct electrical conductors electrical insulators pins cable component dim 	<ul style="list-style-type: none"> organisms roots stems leaves trunks irrigation prediction nutrients fertilisers 	<ul style="list-style-type: none"> organism reproduce grow habitats pond dipping fair test 	<ul style="list-style-type: none"> prediction evidence 	<ul style="list-style-type: none"> magnet attract magnetic steel iron recycled repelling compress springs forces force meter Newtons or N friction lubricant lubrication water resistance streamlined 				

Continuous Provision	<p style="text-align: center;">Homework activities based upon current topic</p> <p>Resources: window shelf greenhouse and garden, books, nutrition wall/different food groups, electrical components, circuit kits, fossil and rock display. Activities: Plant doctor (looking after plants), world watch (threats to environment), Jurassic Park (fossils), Magnetic ice (freezing magnets)</p>							
Retrieval Practice	Forces and magnets	Animals including humans	Rocks	Light and sound	Living things and their habitats	Electricity	Plants	States of matter



Launton Church of England Primary School



Science long term plan Milestone 3 / Upper KS2

	4 weeks	5 weeks	4 weeks	4 weeks	4 weeks	4 weeks	5 weeks	4 weeks
Year 5 (Basic)	Animals, Including humans	Light & Sound	Forces	Living things and their habitats	Earth and Space	Electricity	Evolution and inheritance	Properties and changes of materials
	<ul style="list-style-type: none"> -Describe the changes as humans develop to old age. -Identify and name the main parts of the human circulatory system, and describe the functions of the heart, blood vessels and blood. -Recognise the importance of diet, exercise, drugs and lifestyle on the way the human body functions. -Describe the ways in which nutrients and water are transported within animals, including humans. -Relate knowledge of plants to studies of evolution and inheritance. -Relate knowledge of plants to studies of all living things. 	<ul style="list-style-type: none"> -Understand that light appears to travel in straight lines. -Use the idea that light travels in straight lines to explain that objects are seen because they give out or reflect light into the eyes. -Use the idea that light travels in straight lines to explain why shadows have the same shape as the objects that cast them, and to predict the size of shadows when the position of the light source changes. -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. -Find patterns between the pitch of a sound and features of the object that produced it. -Find patterns between the volume of a sound 	<ul style="list-style-type: none"> -Describe magnets as having two poles -Predict whether two magnets will attract or repel each other, depending on which poles are facing. -Explain that unsupported objects fall towards the Earth because of the force of Gravity acting between the Earth and the falling object. -Identify the effect of drag forces such as air resistance, water resistance and friction that act between moving surfaces. -Describe, in terms of drag forces, why moving objects 	<ul style="list-style-type: none"> -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. -Describe how living things are classified into broad groups according to common observable characteristics. -Give reasons for classifying plants and animals based on specific characteristics. 	<ul style="list-style-type: none"> -Describe the movement of the Earth relative to the Sun in the solar system. -Describe the movement of the Moon relative to the Earth. -Describe the Sun, Earth and Moon as approximately spherical bodies. -Use the idea of the Earth's rotation to explain day and night and the apparent movement of the Sun across the sky. 	<ul style="list-style-type: none"> -Associate the brightness of a lamp or the volume of a buzzer with the number and voltage of cells used in the circuit. -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. -Use recognised symbols when representing a simple circuit in a diagram. 	<ul style="list-style-type: none"> -Recognise that living things have changed over time and that fossils provide information about living things that inhabited the Earth millions of years ago. -Recognise that living things produce offspring of the same kind, but normally offspring vary and are not identical to their parents. -Identify how animals and plants are adapted to suit their environment in different ways and how that adaptation may lead to evolution. 	<ul style="list-style-type: none"> -Compare and group together everyday materials based on evidence from comparative and fair tests, including their hardness, solubility, conductivity (electrical and thermal), and response to magnets. -Understand how 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. -Give reasons, based on evidence from comparative and fair tests, for the particular uses of everyday materials, including metals, wood and plastic. -Demonstrate that dissolving, mixing and changes of state are reversible changes. -Explain that some changes result in the formation of new materials, and that this

				and the strength of the vibrations that produced it. -Recognise that sounds get fainter as the distance from the sound source increases.		that are not driven tend to slow Understand that force and motion can be transferred through mechanical devices such as gears, pulleys, levers and springs. -Understand that some mechanisms, including levers, pulleys and gears, allow a smaller force to have a greater effect.							kind of change is not usually reversible, including changes associated with burning, oxidation and the action of acid on bicarbonate of soda.				
Introducing Vocabulary	fat carbohydrates sugar starch proteins fibre vitamins minerals calcium diet food groups balanced diet scurvy muscles bones contracts triceps	theory heart organ ribs contracts heartbeat arteries veins blood vessels pulse pulse rate relaxes medicines side effects addictive	beats per minute factors fair test prediction coronary arteries hear bypass heart disease pulse rate nicotine tar lung cancer illegal	vibrates larynx vocal cords vibration gas solids materials speed absorb ear plugs ear defenders ear protection ear canal ear drum ear bones auditory nerves	cochlea impulses pitch air column wind instruments image reflect solar eclipse lunar eclipse partial eclipse	forces friction force meter Newtons N weight gravity balanced stationary upthrust unbalance air resistance light source transparent shadow opaque translucent	prediction fertilisers nutrients key disperse food chain producers consumers gills herbivores carnivores predator prey pond dipping	virus bacteria fungi tooth decay food poisoning compost heap landfill sites yeast	Earth sphere observations evidence axis sundials dial year orbit North Pole Phases of the moon	components circuit battery electrical conductor electrical insulator buzzer mains electricity voltage electric shock recharged alternator solar cells wind turbine symbol cell	fruits flowering plants seeds reproduce germination seedling nutrients organs pollen grains stigma pollination nectar pollen tube style ovary ovum fertilisation runners	gestation time pregnancy extinct breed	properties solid melts liquid gases evidence grams balance observation predict matter states of matter helium nitrogen pigment vapour condensed condensation states	theory argon neon water vapour evaporation carbon monoxide natural gas volume natural gas evaporated evaporation water vapour melt freeze boiling water cycle			
Continuous Provision	Homework activities based upon current topic Selection of resources for children to devise their own experiments e.g. Balance scales, funnels, heart rate monitors, magnifiers, magnets. springs Activities: separating salt/sand and gravel, bee study in Summer months, rocket experiment																
Retrieval practice	States of matter			Animals including humans		Light & Sound		Forces		Living things and their habitats		Earth and Space		Electricity		Evolution and inheritance	

Year 6 (Advancing/ Deep)	Animals, Including humans	Light & Sound	Forces	Living things and their habitats	Earth and Space	Electricity	Evolution and inheritance	Properties and changes of materials
<ul style="list-style-type: none"> -Describe the changes as humans develop to old age. -Identify and name the main parts of the human circulatory system, and describe the functions of the heart, blood vessels and blood. -Recognise the importance of diet, exercise, drugs and lifestyle on the way the human body functions. -Describe the ways in which nutrients and water are transported within animals, including humans. -Relate knowledge of plants to studies of evolution and inheritance. -Relate knowledge of plants to studies of all living things. 	<ul style="list-style-type: none"> -Understand that light appears to travel in straight lines. -Use the idea that light travels in straight lines to explain that objects are seen because they give out or reflect light into the eyes. -Use the idea that light travels in straight lines to explain why shadows have the same shape as the objects that cast them, and to predict the size of shadows when the position of the light source changes. -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. -Find patterns between the pitch of a sound and features of the object that produced it. -Find patterns between the volume of a sound and the strength of the vibrations that produced it. -Recognise that sounds get fainter as the distance from the sound source increases. 	<ul style="list-style-type: none"> -Describe magnets as having two poles -Predict whether two magnets will attract or repel each other, depending on which poles are facing. -Explain that unsupported objects fall towards the Earth because of the force of Gravity acting between the Earth and the falling object. -Identify the effect of drag forces such as air resistance, water resistance and friction that act between moving surfaces. -Describe, in terms of drag forces, why moving objects that are not driven tend to slow Understand that force and motion can be transferred through mechanical devices such as gears, pulleys, levers and springs. -Understand that some mechanisms, including levers, pulleys and gears, allow a smaller force to have a greater effect. 	<ul style="list-style-type: none"> -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. -Describe how living things are classified into broad groups according to common observable characteristics. -Give reasons for classifying plants and animals based on specific characteristics. 	<ul style="list-style-type: none"> -Describe the movement of the Earth relative to the Sun in the solar system. -Describe the movement of the Moon relative to the Earth. -Describe the Sun, Earth and Moon as approximately spherical bodies. -Use the idea of the Earth's rotation to explain day and night and the apparent movement of the Sun across the sky. 	<ul style="list-style-type: none"> -Associate the brightness of a lamp or the volume of a buzzer with the number and voltage of cells used in the circuit. -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. -Use recognised symbols when representing a simple circuit in a diagram. 	<ul style="list-style-type: none"> -Recognise that living things have changed over time and that fossils provide information about living things that inhabited the Earth millions of years ago. -Recognise that living things produce offspring of the same kind, but normally offspring vary and are not identical to their parents. -Identify how animals and plants are adapted to suit their environment in different ways and how that adaptation may lead to evolution. 	<ul style="list-style-type: none"> -Compare and group together everyday materials based on evidence from comparative and fair tests, including their hardness, solubility, conductivity (electrical and thermal), and response to magnets. -Understand how 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. -Give reasons, based on evidence from comparative and fair tests, for the particular uses of everyday materials, including metals, wood and plastic. -Demonstrate that dissolving, mixing and changes of state are reversible changes. -Explain that some changes result in the formation of new materials, and that this kind of change is not usually reversible, including changes associated with burning, oxidation and the action of acid on bicarbonate of soda. 	

Consolidating Vocabulary	fat carbohydrates sugar starch proteins fibre vitamins minerals calcium diet food groups balanced diet scurvy muscles bones contracts triceps	theory heart organ ribs contracts heartbeat arteries veins blood vessels pulse pulse rate relaxes medicines side effects addictive	beats per minute factors fair test prediction coronary arteries hear bypass heart disease pulse rate pulse rate nicotine tar lung cancer illegal	vibrates larynx vocal cords vibration gas solids materials speed absorb ear plugs ear defenders ear protection ear canal ear drum ear bones auditory nerves	cochlea impulses pitch air column wind instruments image reflect solar eclipse lunar eclipse partial eclipse	forces friction force meter Newtons N weight gravity balanced stationary upthrust unbalance air resistance light source transparent shadow opaque translucent	prediction fertilisers nutrients key disperse food chain producers consumers gills herbivores carnivores predator prey pond dipping	virus bacteria fungi tooth decay food poisoning compost heap landfill sites yeast	Earth sphere observations evidence axis sundials dial year orbit North Pole Phases of the moon	components circuit battery electrical conductor electrical insulator buzzer mains electricity voltage electric shock recharged alternator solar cells wind turbine symbol cell	fruits flowering plants seeds reproduce germination seedling nutrients organs pollen grains stigma pollination nectar pollen tube style ovary ovum fertilisation runners	gestation time pregnancy extinct breed	properties solid melts liquid gases evidence grams balance observation predict matter states of matter helium nitrogen pigment vapour condensed condensation states	theory argon neon water vapour evaporation carbon monoxide natural gas volume natural gas evaporated evaporation water vapour melt freeze boiling water cycle	
Continuous Provision	<p style="text-align: center;">Homework activities based upon current topic</p> <p>Selection of resources for children to devise their own experiments e.g. Balance scales, funnels, heart rate monitors, magnifiers, magnets, springs</p> <p>Activities: separating salt/sand and gravel, bee study in Summer months, rocket experiment</p>														
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