

Oldfield Primary School Science Progression



Science		
Three and Four-Year-Olds	Communication and Language	Understand 'why' questions, like: "Why do you think the caterpillar got so fat?"
	Personal, Social and Emotional Development	Make healthy choices about food, drink, activity and toothbrushing.
	Understanding the World	- Use all their senses in hands-on exploration of natural materials. - Explore collections of materials with similar and/or different properties. - Talk about what they see, using a wide vocabulary. - Begin to make sense of their own life-story and family's history. - Explore how things work. - Plant seeds and care for growing plants. - Understand the key features of the life cycle of a plant and an animal. - Begin to understand the need to respect and care for the natural environment and all living things. - Explore and talk about different forces they can feel. - Talk about the differences between materials and changes they notice.

Reception	Communication and Language	• Learn new vocabulary. • Ask questions to find out more and to check what has been said to them. • Articulate their ideas and thoughts in well-formed sentences. • Describe events in some detail. • Use talk to help work out problems and organise thinking and activities, and to explain how things work and why they might happen. • Use new vocabulary in different contexts.
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Reception Continued	Personal, Social and Emotional Development	• Know and talk about the different factors that support their overall health and wellbeing: • regular physical activity • healthy eating • toothbrushing • sensible amounts of 'screen time' • having a good sleep routine • being a safe pedestrian
	Understanding the World	• Explore the natural world around them. • Describe what they see, hear and feel while they are outside. • Recognise some environments that are different to the one in which they live. • Understand the effect of changing seasons on the natural world around them.

ELG	Communication and Language	Listening, Attention and Understanding	Make comments about what they have heard and ask questions to clarify their understanding.
	Personal, Social and Emotional Development	Managing Self	Manage their own basic hygiene and personal needs, including dressing, going to the toilet and understanding the importance of healthy food choices.
	Understanding the World	The Natural World	- Explore the natural world around them, making observations and drawing pictures of animals and plants. - Know some similarities and differences between the natural world around them and contrasting environments, drawing on their experiences and what has been read in class. - Understand some important processes and changes in the natural world around them, including the seasons and changing states of matter.

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Animals Including Humans						
Plants						
Living Things and Their						
Evolution and Inheritance						
Seasonal Changes						
Forces						

Light						
Sound						
Earth and Space						
Electricity						
Materials						
Scientists and Inventors						
Sustainability (All year groups)						

Animals including humans

Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Pupils should be taught to: identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each, naming the five senses. Explore the five senses	Pupils should be taught to: notice that animals, including humans, have offspring which grow into adults;	Pupils should be taught to: 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;	Pupils should be taught to: describe the simple functions of the basic parts of the digestive system in humans; identify the different types of teeth in humans and their	Pupils should be taught to: describe the changes as humans develop to old age	Pupils should be taught to: identify and name the main parts of the human circulatory system, and describe the functions of the heart, blood vessels and blood;

with particular focus on taste. Begin to look at how their body has changed such as growth, more hair, teeth changes. How were we different to when we were a baby? Identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals; (Linked to topic of animals such as local farm animals and then seaside animals in summer 2) Sea Animals Sum 2 Sorting - cod, salmon, mackerel, newt, toad, frog, sea turtle, seal, whale, otter, walrus, dolphin, gulls and gannets (sea birds) dolphin, walrus and sea otter Look at the teeth in relation to type of food they eat linking to carnivore etc.	find out about and describe the basic needs of animals, including humans, for survival (water, food and air); describe the importance for humans of exercise, eating the right amounts of different types of food, and hygiene.	identify that humans and some other animals have skeletons and muscles for support, protection and movement.	simple functions; construct and interpret a variety of food chains, identifying producers, predators and prey	recognise the impact of diet, exercise, drugs and lifestyle on the way their bodies function describe the ways in which nutrients and water are transported within animals, including humans
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identify and name a variety of common animals that are carnivores, herbivores and omnivores; describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals including pets)					
<u>Y1 AIH Vocab</u> Names of animal groups: fish, amphibians, reptiles, birds, mammals. Animal diets: carnivore, herbivore, omnivore. Human and animal body parts: e.g. body, head, neck, arms, elbows, legs, knees, face, ears, eyes, nose, hair, mouth, teeth, hands, feet, tail, wings, feathers, fur, beak, fins, gills.	<u>Y2 AIH Vocab</u> <u>Being born and growing:</u> Young, offspring, live young, grow, develop, change, hatch, lay, fly, crawl, talk. <u>Young and adult names:</u> e.g. lamb and sheep, kitten and cat, duckling and duck. <u>Life cycle stages:</u> e.g. baby, toddler, child, teenager, adult; frogspawn, tadpole, froglet, frog.	<u>Y3 AIH Vocab</u> Food groups and <u>nutrients:</u> fibre, fats (saturated and unsaturated), vitamins, minerals. <u>Skeletons and muscles:</u> skeleton, muscles, tendons, joints, protection, support, organs, voluntary muscles, involuntary muscles, biceps, triceps, contract, relax, bone, cartilage, shell,	<u>Y4 AIH Vocab</u> <u>Digestive system:</u> digest, digestion, tongue, teeth, saliva, salivary glands, oesophagus, stomach, liver, pancreas, gall bladder, small intestine, duodenum, large intestine, rectum, anus, faeces, organ. <u>Types of teeth and dental care:</u> molar, premolar, incisor,	<u>Y5 AIH Vocab</u> <u>Process of reproduction:</u> gestation, asexual reproduction, sexual reproduction, sperm, egg, cells, clone. <u>Changes and life cycle:</u> embryo, foetus, uterus, prenatal, adolescence, puberty, menstruation, adulthood, menopause, life	<u>Y6 AIH Vocab</u> <u>Circulatory system:</u> circulation, heart, pulse, heartbeat, heart rate, lungs, breathing, blood vessels, blood, pump, transported, oxygenated blood, deoxygenated blood, oxygen, arteries, veins, capillaries, chambers, plasma, platelets, white blood cells, red blood cells.

<u>Human senses:</u> sight, hearing, touch, smell, taste. <u>Exploring senses:</u> loud, quiet, soft, rough. <u>Other:</u> human, animal, pet	<u>Survival and staying healthy:</u> basic needs, survive, food, air, exercise, diet, nutrition, healthy, balanced diet, hygiene, germs. <u>Food groups:</u> fruit and vegetables, proteins, dairy and alternatives, carbohydrates, oil and spreads, fat, salt, sugar. Previously introduced vocabulary: water.	vertebrate, invertebrate, endoskeleton, exoskeleton, hydrostatic skeleton. <u>Names of human bones:</u> e.g. skull, spine, backbone, vertebral column, ribcage, pelvis, clavicle, scapula, humerus, ulna, pelvis, radius, femur, tibia, fibula. Other: energy. Previously introduced vocabulary: movement.	canine, wisdom teeth, tooth decay, plaque, enamel, baby (milk) teeth. <u>Food chains and animal diets:</u> decomposer, food web. Previously introduced vocabulary: producer, consumer, prey, predator, excretion, habitat.	expectancy, old age, hormones, sweat. <u>Changing body parts:</u> e.g. breasts, penis, larynx, ovaries, genitalia, pubic hair. Previously introduced vocabulary: reproduction, reproduce, types of animals and animal groups, fertilisation.	<u>Lifestyle:</u> drug, alcohol, smoking, disease, calorie, energy input, energy output. <u>Other:</u> water transportation, nutrient transportation, waste products. Previously introduced vocabulary: carbon dioxide.
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Materials, Rocks (y3), States of Matter (Y4) and Properties and Changes of Materials

Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
distinguish between an object and the material from which it is made; identify and name a variety of everyday materials, including	identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses;	Rocks Pupils should be taught to: Compare and group together different kinds of rocks on the basis of their	States of Matter Pupils should be taught to: compare and group materials together, according to whether they are solids,	Properties and Changes of Materials Pupils should be taught to: compare and group together everyday materials on the basis	

wood, plastic, glass, metal, water, and rock; describe the simple physical properties of a variety of everyday materials; such as finding a suitable pillow compare and group together a variety of everyday materials on the basis of their simple physical properties such as waterproof or absorbent	find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching	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	liquids or gases; 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); Identify the part played by evaporation and condensation in the water cycle and associate the rate of evaporation with temperature.	of their properties, including their hardness, solubility, transparency, conductivity (electrical and thermal), and response to magnets; 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; give reasons, based on evidence from comparative and fair tests, for the particular uses of everyday materials, including metals, wood and plastic;	
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				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 and the action of acid on bicarbonate of soda.	
<u>Y1 Materials Vocab</u> Names of materials: wood, plastic, glass, metal, water, rock, paper, cardboard, rubber, fabric. Properties of materials: hard, soft, shiny, dull, stretchy, rough, smooth, bendy, not bendy, transparent, opaque, waterproof, not waterproof, absorbent, not absorbent, sharp, stiff. Other: object.	<u>Y2 Materials Vocab</u> Changing shape: squash, bend, twist, stretch. Properties of materials: e.g. strong, flexible, light, hard-wearing, elastic. Other: suitability, recycle, pollution.	<u>Y3 Materials Vocab (Rocks)</u> Types of rock: sedimentary rock, igneous rock, metamorphic rock. Properties of rocks: permeable, semi-permeable, impermeable, durable. Names of rocks: e.g. marble, chalk, granite, sandstone, slate. Formation of rocks and fossils: natural, human-made, magma,	<u>Y4 Materials Vocab (States of Matter)</u> States of matter: solids, liquids, gases, particles. State change: evaporate, condense, melt, freeze, heat, cool, melting point, freezing point, boiling point, water vapour. Water cycle: precipitation, evaporation, condensation, ground run-off, collection, underground water, bodies of water (sea,	<u>Y5 Materials Vocab (Properties and Changes of Materials)</u> Properties of materials: thermal conductor/insulator, magnetism, electrical resistance, transparency. Mixtures and solutions: dissolving, substance, soluble, insoluble. Changes of materials: reversible change, physical change, irreversible change, chemical change,	<u>Y6</u>

		lava, molten rock, sediment, erosion, fossilisation, layers, bone, fossil. <u>Soil</u>: sandy, chalky, clay, peaty, loamy, topsoil, subsoil, bedrock, mineral, organic matter, compost. <u>Other</u>: palaeontology. Previously introduced vocabulary: soil, water, air.	river, stream), water droplets, hail. <u>Other</u>: atmosphere. Previously introduced vocabulary: temperature, rain, cloud, snow, wind, sun, hot, cold, absorb, carbon dioxide.	burning, new material, product. <u>Separating</u>: sieving, filtering, magnetic attraction. Previously introduced vocabulary: electrical conductor/insulator, bulb, translucent.	
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Light

Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
		Pupils should be taught to: 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			recognise 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 eye; explain that we see things because light travels from light sources to our eyes or

		there are ways to protect their eyes; recognise that shadows are formed when the light from a light source is blocked by an opaque object; find patterns in the way that the size of shadows change.			from light sources to objects and then to our eyes; use the idea that light travels in straight lines to explain why shadows have the same shape as the objects that cast them.
		<u>Y3 Light Vocab</u> <u>Light and seeing:</u> dark, absence of light, light source, illuminate, visible, shadow, translucent, energy, block. <u>Light sources:</u> e.g. candle, torch, fire, lantern, lightning. <u>Reflective light:</u> reflect, reflection, surface, ray, scatter, reverse, beam, angle, mirror, moon. <u>Sun safety:</u> dangerous, glare, damage, UV light,			<u>Y6 Light Vocab</u> <u>Reflection:</u> periscope. <u>Seeing light:</u> visible spectrum, prism. <u>How light travels:</u> light waves, wavelength, straight line, refraction. Previously introduced vocabulary: names and properties of materials, absorb.

		UV rating, sunglasses, direct. Previously introduced vocabulary: opaque , transparent , sunlight, sun.			
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Plants

Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Pupils should be taught to: • identify and name a variety of common wild and garden plants, including deciduous and evergreen trees; identify and describe the basic structure of a variety of common flowering plants, including trees.	Pupils should be taught to: • observe and describe how seeds and bulbs grow into mature plants; find out and describe how plants need water, light and a suitable temperature to grow and stay healthy.	Pupils should be taught to: • identify and describe the functions of different parts of flowering plants: roots, stem/trunk, leaves and flowers; • explore the requirements of plants for life and growth (air, light, water, nutrients from soil, and room to grow) and how they vary from plant to plant;			

		• investigate the way in which water is transported within plants; • explore the part that flowers play in the life cycle of flowering plants, including pollination, seed formation and seed dispersal.			
<u>Plants Vocab Y1</u> Pupils should be taught: <u>Names of common plants:</u> wild plant, garden plant, evergreen tree, deciduous tree, common flowering plant, weed, grass. <u>Name some features of plants:</u> e.g. flower, vegetable, fruit, berry, leaf/leaves, blossom, petal, stem, trunk, branch, root, seed, bulb, soil.	<u>Plants Vocab Y2</u> Pupils should be taught: <u>Growth of plants:</u> germination, shoot, seed dispersal, grow, food store, life cycle, die, wilt, seedling, sapling. <u>Needs of plants:</u> sunlight, nutrition, light, healthy, space, air. <u>Name different types of plant:</u> e.g. bean plant, cactus.	<u>Plants Vocab Y3</u> Pupils should be taught: <u>Water transportation:</u> transport, evaporation, evaporate, nutrients, absorb, anchor. <u>Life cycle of flowering plants:</u> pollination (insect/wind), pollen, nectar, pollinator, seed formation, seed dispersal (animal/wind/water), reproduce, fertilisation,			

<u>Name some common types of plant</u> e.g. sunflower, daffodil.	<u>Names of different habitats:</u> e.g. rainforest, desert. Previously introduced vocabulary: water , temperature , warm, hot, cold, habitat. Previously introduced: Warm and cold habitats.	fertilise, stamen , anther, filament, carpel (pistil) , stigma, style, ovary, ovule, sepal , carbon dioxide. Photosynthesis, oxygen, carbon dioxide, emit Previously introduced vocabulary: life cycle.			
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Living Things and Their Habitats

Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
	Pupils should be taught to: • explore and compare the differences between things that are living, dead, and things that have never been alive;		Pupils should be taught to: • recognise that living things can be grouped in a variety of ways; • explore and use classification keys to help group, identify and name a variety of living things in their local	Pupils should be taught to: • describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird; describe the life process of reproduction	Pupils should be taught to: • describe how living things are classified into broad groups according to common observable characteristics and based on similarities and

	• 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; • identify and name a variety of plants and animals in their habitats, including microhabitats; • 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.		and wider environment; recognise that environments can change and that this can sometimes pose dangers to living things.	in some plants and animals.	differences, including micro-organisms, plants and animals; give reasons for classifying plants and animals based on specific characteristics
Y1	<u>Y2 Habitats Vocab.</u> <u>Living or dead: living, dead, never living,</u>	Y2	<u>Y4 Habitats Vocab.</u>	<u>Y5 Habitats Vocab.</u> <u>Reproduction: asexual reproduction, sexual</u>	<u>Y6 Habitats Vocab</u> <u>Classifying: Carl Linnaeus, Linnaean</u>

	not living, alive, never been alive, healthy. <u>Habitats</u> including <u>microhabitats</u>: depend, shelter, safety, survive, suited, space, minibeast, air. <u>Life processes</u>: movement, sensitivity, growth, reproduction, nutrition, excretion, respiration. <u>Food chains</u>: food sources, food, producer, consumer, predator, prey. <u>Names of habitats and microhabitats</u>: e.g. under leaves, woodland, rainforest, sea shore, ocean, urban, local habitat. Previously introduced vocabulary: senses, carnivore, herbivore, omnivore, seed, water, names of materials.		<u>Living things</u>: organisms, specimen, species. <u>Grouping living things</u>: classification, classification keys, classify, characteristics. <u>Names of invertebrate animals</u>: snails and slugs, worms, spiders, insects. Local trees and plants - Beech, silver birch, sycamore, ash., oak and chestnut - leaf features and trees. Where they grow. Local wild flowers/plants - primrose, elder, foxglove, sea parsley. Heather, daisies and buttercups. <u>Invertebrate body parts</u>: e.g. wing case, abdomen, thorax, antenna, segments,	reproduction, gestation, metamorphosis, gametes, tuber, runners/side branches, plantlet, cuttings, embryo, adolescent, penis, vagina, egg, pregnancy, gestation. Previously introduced vocabulary: life cycle, pollination, offspring, fertilise, fertilisation, sepal, filament, anther, stamen, pollen, petal, stigma, style, ovary, carpel, ovule, stem, bulb, roots, mammal, adult, baby, sperm, cells, live young.	system, flowering and non-flowering plants, variation. <u>Microorganisms</u>: bacteria, single-celled, microbes, microscopic, virus, fungi, fungus, mould, antibiotic, yeast, ferment, microscope, decompose.
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			mandible, proboscis, prolegs. <u>Environmental changes:</u> environment, environmental dangers, adapt, natural changes, climate change, deforestation, pollution, urbanisation, invasive species, endangered species, extinct. Previously introduced vocabulary: carbon dioxide, fish, bird, mammal, amphibian, reptile, skeleton, bone, vertebrate, invertebrate, backbone, names for animal body parts, names of common plants, photosynthesis		
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Forces

Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
		Forces and Magnets Pupils should be taught to: • 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 the		Forces Pupils should be taught to: • explain that unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling object; • identify the effects of air resistance, water resistance and friction, that act between moving surfaces; recognise that some mechanisms including levers, pulleys and gears	

		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.		allow a smaller force to have a greater	
		<u>Y3 Forces Vocab.</u> <u>How things move:</u> move, movement, surface, distance, strength. <u>Types of forces:</u> push, pull, contact force, non-contact force, friction. <u>Magnets:</u> magnetic, magnetic field, magnetic force, bar magnet, horseshoe magnet, ring magnet, magnetic poles (north pole, south pole), attract, repel, compass.		<u>Y5 Forces Vocab.</u> <u>Types of forces:</u> air resistance, water resistance, buoyancy, upthrust, Earth's gravitational pull, gravity, opposing forces, driving force. <u>Mechanisms:</u> levers, pulleys, gears/cogs. <u>Measurements:</u> weight, mass, kilograms (kg), Newtons (N), scales, speed, fast, slow. <u>Other:</u> streamlined, Earth.	

		<u>Magnetic and non-magnetic materials:</u> e.g. iron, nickel, cobalt. Previously introduced vocabulary: metal, names of materials.		Previously introduced vocabulary: air, heat, moon.	
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Seasonal Changes (Y1)

Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Pupils should be taught to: • observe changes across the 4 seasons; observe and describe weather associated with the seasons and how day length varies.					
<u>Y1 SC Vocab</u> Seasons: spring, summer, autumn, winter, seasonal change. Weather: e.g. sun, rain, snow, sleet,					

frost, ice, fog, cloud, hot/warm, cold, storm, wind, thunder, weather forecast. <u>Measuring weather:</u> temperature, rainfall, wind direction, thermometer, rain gauge. <u>Day length:</u> night, day, daylight .					
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Evolution and Inheritance (Y6)

Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
					Pupils should be taught to: • 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 that adaptation may lead to evolution.
					<u>Y6 E&H Vocab</u> <u>Evolution and inheritance:</u> evolve, adaptation, inherit, natural selection, adaptive traits, inherited traits, mutations, theory of evolution, ancestors, biological parent, chromosomes, genes, Charles Darwin. <u>Other:</u> selective breeding, artificial selection, breed, cross breeding, genetically

					modified food, cloning, DNA. Previously introduced vocabulary: classification, offspring, characteristics, habitat, environment, adapt, variations, human, fossil, suited, cells, names of different habitats, names of animals and their body parts, species, sedimentary rock, lava, igneous rock, metamorphic rock, magma, heat, fossilisation.
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Sound (Y4)

Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
			Pupils should be taught: • identify how sounds are made, associating some of them with		

			something vibrating; • recognise that vibrations from sounds travel through a medium to the ear; • 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.		
			<u>Y4 Sound Vocab</u> <u>Parts of the ear:</u> eardrum. <u>Making sound:</u> vibration, vocal cords, particles.		

			<u>Measuring sound:</u> pitch, volume, amplitude, sound wave , quiet, loud, high, low, travel, distance . <u>Other:</u> soundproof, absorb sound .		
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Earth and Space (Y5)

Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
				Pupils should be taught to: • describe the movement of the Earth and other planets 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.	
				<u>Y5 Space Vocab.</u> <u>Solar system:</u> star, planet. <u>Names of planets:</u> Mercury, Venus, Earth, Mars, Jupiter, Saturn, Neptune, Uranus. <u>Shape:</u> spherical bodies, sphere. <u>Movement:</u> rotate, axis, orbit, satellite. <u>Theories:</u> geocentric model, heliocentric model, astronomer. <u>Day length:</u> sunrise, sunset, midday, time zone. Previously introduced vocabulary: Sun, moon, shadow , day, night, heat, light, reflect.	

Electricity

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
				Pupils should be taught to: • 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		Pupils should be taught to: • 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

				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.		simple circuit in a diagram.
				<u>Y4 Elec. Vocab</u> <u>Electricity:</u> mains-powered, battery-powered, mains electricity , plug, appliances , devices. <u>Circuits:</u> circuit , simple series circuit, complete circuit, incomplete circuit. <u>Circuit parts:</u> bulb, cell, wire, buzzer, switch, motor, battery .		<u>Y6 Elec. Vocab</u> <u>Flow and measure of electricity:</u> voltage , amps , resistance , electrons , volts (V), current . <u>Circuits:</u> symbol , circuit diagram, component, function, filament. <u>Variations:</u> dimmer, brighter, louder, quieter.

				<u>Materials:</u> electrical conductor , electrical insulator . <u>Other:</u> safety. Previously introduced vocabulary: names of materials.		<u>Types of electricity:</u> natural electricity, human-made electricity, solar panels, power station. <u>Other:</u> positive, negative
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Sustainability

<u>EYFS</u> <u>Test it out!</u> <u>Manipulate,</u> <u>compose and</u> <u>decompose.</u>	<u>Year 1</u> <u>Caring for</u> <u>Our World</u>	<u>Year 2</u> <u>Plastics</u> <u>Wildlife</u>	<u>Year 3</u> <u>Food Waste</u> <u>Biodiversity</u>	<u>Year 4</u> <u>Energy</u> <u>Deforestation</u>	<u>Year 5</u> <u>Global Warming</u> <u>Plastic Pollution</u>	<u>Year 6</u> <u>Renewable Energy</u> <u>Light Pollution</u>
test, material, object best, worst, fabric cardboard, water plastic, metal, hard soft, wet, heavy, build, sort, thick, thin, light, dry and waterproof	Earth - the planet that we live on • plant - a living thing that usually grows in soil • animal - a living creature • helpful - an action that is useful	plastic • human-made material - a material made by people • recycle - to change rubbish into a material that can be used again • single-use plastic - plastic that is used once and thrown away	• food waste - food that is safe to eat but is thrown away • landfill - a site where waste materials are collected and buried underground • food waste recycling - changing inedible food waste into useful materials	• electricity - energy that flows in wires • mains electricity - energy flowing to homes, businesses and schools through wires • appliance - a device used for a particular purpose, for example a fridge or an oven	• global warming - the gradual increase in the Earth's temperature • glacier - a mass of thick ice and snow • habitat - an area where plants and animals and plants live • carbon footprint - the amount of	• solar panels - devices that absorb light from the Sun and convert it into electricity • wind turbine - a machine that uses wind to generate electricity • greenhouse gases

	• harmful - an action that causes hurt or damage recycle - to change rubbish into a material that can be used again • reuse - to use again or use more than once	wildlife - animals and plants that are not looked after by humans • habitat - an area where animals and plants live • nature - wildlife and the world it lives in • local - in the nearby area	• edible - food that is safe to eat • inedible - food that is not safe to eat • biodiversity - the variety of living things in a habitat • endangered - when a type of living thing is at risk of becoming extinct • extinct - when a type of living thing no longer exists rewilding - improving biodiversity in a damaged habitat • habitat - an area where animals and plants live	• Earth - the planet we live on • energy usage - the amount of energy that is used in a home, school or business palm oil - made from the fruit of some palm trees, commonly used in food and cosmetic products • deforestation - clearing trees from a woodland or forest habitat so the land can be used by humans • extinct - when a type of living thing no longer exists • endangered - when a type of living thing is at risk of becoming extinct • sustainable - does not cause long-term damage to the environment	greenhouse gases released by an individual or group of people • climate change - long-term changes in the temperature and weather patterns of the Earth • plastic - an artificial material that is strong, lightweight and mouldable • plastic pollution - when humans add plastic into the environment • microplastics - pieces of plastic which are smaller than 5 millimetres • pollution - when humans add harmful materials to the environment	- gases that trap heat from the Sun and cause the Earth to warm up urban - characteristic of a city/town • rural - characteristic of a countryside environment • light emission - light released or given out in the world • appliance - a device or piece of equipment designed to perform a specific task • light pollution - unwanted effects of artificial light
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