

Science Curriculum Map

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
EYFS						
Year 1	Animals including Humans Children learn to describe common animals, compare features and diets, identify human body parts and senses and discuss similarities and differences between animals and humans. 		Plants Children identify common plants and trees, learn flowering plant parts and functions, compare wild and garden plants, observe growth, classify foods by plant part and develop simple enquiry skills. 	Seasonal Change Children explore seasonal changes in day length, weather and nature. They investigate effects on plants, animals and humans, using observation, sorting, classification and data recording to identify patterns. 		Materials Children investigate why exercise is important, compare how different activities affect the heart and learn how healthy food, hygiene and daily choices help keep the body well. 
Year 2	Animals including Humans Children learn what animals and humans need to survive, explore growth and life cycles, investigate exercise and understand how healthy food, hygiene and daily choices support wellbeing. 		Seasonal Change Children explore seasonal patterns, cycles and day length, learning how plants, animals and humans respond through hibernation, migration, adaptation, growth and rest while developing enquiry skills. 	Materials Children learn about everyday materials, their properties and uses. They investigate why materials suit different objects and explore how some can change by squashing, bending, twisting and stretching. 	Living things and habitats Children learn about living things and habitats, classify things as living, dead or never alive, explore microhabitats, investigate woodlice habitats, examine adaptation and study food chains. 	Plants Children explore seeds, bulbs and germination, observe plant growth over time, compare plants, investigate what they need to stay healthy and use enquiry skills to make predictions.
Year 3	Forces and Magnets Children investigate pushes, pulls and friction, then explore how magnets attract, repel and behave at a distance through magnetic poles. 	Rocks Children classify rocks and soils, explore how some rocks form and learn what fossils are and how they form in rock.	Animals including Humans During this unit of work, children will learn about the structure of the human skeleton and how the muscles also work alongside the skeleton to support and protect the human body. They will then look at how skeletons differ in different animals. Finally, children will look at nutrition and the importance of eating a healthy diet.		Light Children learn about light, dark, reflection, Sun safety and shadows. They investigate shadow-making materials, explore mirrors and test how light source height affects shadow length.	Plants Children learn how plant parts help survival, investigate water transport and growth, explore flower structure and pollination and understand how seed dispersal helps plants spread. 
Year 4	Sound Children learn how sounds are made, travel and change in pitch and loudness. They investigate sound muffling; pinnae size and how vibrations reach the ear.	States of Matter Children classify solids, liquids and gases, explore changes of state, learn about the water cycle and investigate melting, evaporation and how temperature affects evaporation rates.	Living things and their habitats Children learn the seven life processes shared by all living things. They sort living things using different criteria and develop scientific vocabulary to describe the features of animals and plants. Children carry out a local habitat search and use classification keys to identify unknown living things. They also consider how environmental change affects the local area and suggest ways humans can help prevent further damage. 		Animals including Humans Children learn about digestion, teeth and tooth decay, using models, diagrams and research. They also construct and interpret food chains, identifying producers, consumers, predators and prey. 	Electricity Children sort electrical appliances, build simple circuits, identify complete and incomplete circuits, fix faults, investigate insulators and design, make and test switches.
Year 5	Forces Children deepen their understanding of forces, including gravity, friction, air resistance and water resistance, through investigations. They also explore how levers, pulleys and gears make jobs easier. 	Materials Children classify materials, investigate insulation, dissolving and separation methods, recover salt from water and compare reversible and irreversible changes using evidence to justify their ideas. 	Earth and Space Children learn about the solar system, planetary movement, day and night, the Sun's apparent movement, Moon phases and how the Moon moves around Earth. 	Animals including Humans Children learn about the human life cycle, exploring key stages from birth to old age, including development in the womb, puberty and changes in later life.	Living things Children learn how living things grow, change and reproduce. They explore plant life cycles, including sexual and asexual reproduction, and learn how pollination, fertilisation, seed dispersal and germination support growth. Children compare the life cycles of insects, amphibians, birds and mammals, describing key stages and how animals care for their young. They also learn that some animals hatch from eggs, while mammals give birth to live young. 	
Year 6	Light Children revisit light sources, reflection and shadows, investigate how light, objects and shadows interact, learn how the eye works and explore rainbows, prisms and bending light in water.	Evolution Children explore adaptation, evolution, natural selection, inheritance and variation. They investigate beak shapes, consider environmental effects and learn how fossils support the theory of evolution.	Animals including Humans Children learn how the circulatory system works, investigate how exercise affects heart rate and use evidence to understand how diet, drugs and lifestyle choices affect health. 	Living things and habitats Children learn how living things are classified, create classification keys, explore microorganisms, investigate yeast respiration and consider helpful and harmful microorganisms in food and medicine. 	Electricity Children consolidate and extend Year 4 learning by building simple series circuits and drawing them with scientific symbols. They investigate how voltage affects bulb brightness and the function of other components, planning tests, recording results and writing clear conclusions. Children also research renewable and non-renewable energy sources online and present their findings in a leaflet. 	
	Biology Content		Chemistry Content		Physics Content	

Science **Vocabulary** Map

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
EYFS						
Year 1	Animals including Humans		Plants	Seasonal Change		Materials
	hear, smell, touch, taste, see, beak, wing, paw, feathers, claw, talons, herbivore, carnivore, omnivore, mammal, living, bird, fish, reptile, amphibian		tree, daisy, birch, dandelion, fir tree, buttercup, wild plant, pine tree, fruit, flower, nettle, oak tree, holly, vegetable, weed, sycamore tree	Autumn, spring, winter, summer, seasons, grow, new life, year, change, tree, plant, shadow		fragile, heavy, light, hard, soft, smooth, rough, squidgy, waterproof, strong, weak, bumpy, stretchy, see-through, breakable, plastic, wood, rubber, fabric, metal, brick, rock, glass, paper, material, cotton, wool, fleece
Year 2	Animals including Humans		Seasonal Change	Materials	Living things and habitats	Plants
	illness, medicine, exercise, hygiene, healthy, diet, fit, nutrition, unhealthy diet, survive, living, movement, respiration, growth, basic needs, reproduction, excretion, life process, offspring, life cycle, baby, child, teenager, adult, elderly			fragile, heavy, light, hard, soft, smooth, rough, squidgy, waterproof, strong, weak, bumpy, stretchy, see-through, breakable, plastic, wood, rubber, fabric, metal, brick, rock, glass, paper, material, cotton, wool, fleece	alive, conditions, adapted, animals, plants, living, dead, survive, basic needs, life process, food chain, carnivore, herbivore, omnivore, woodland forest, jungle, polar region, desert, mountain, habitat, microhabitat	compost, sunlight, temperature, plant, tree, deciduous, evergreen, parts of a plant, flower, roots, stem, leaf, bulb, seed, seedling
Year 3	Forces and Magnets	Rocks	Animals including Humans		Light	Plants
	contact, non-contact, iron, force, pull, push, magnet, poles, attract, repel, magnetic, non-magnetic, metal, stronger, weaker, movement, bigger, smaller force	rocks, soils, stone, pebbles, slate, marble, chalk, granite, sandstone, clay, hard, soft, permeable, appearance, acid, sedimentary, metamorphic, igneous, magma, bedrock, fossil.	skeleton, muscle, bone, skull, ribs, spinal column, backbone, joints, sockets, femur, collarbone, humerus, ulna, radius, hip, pelvis, fibula, tibia, kneecap, shoulder blade, movement, support, protection, contract, relax, vertebrates, invertebrates, insects, minibeasts, mammals, reptiles, fish, birds, amphibians, food, growth, healthy, unhealthy, nutrition, exercise, balanced diet, sugar, fruit, vegetables, protein, carbohydrates, fat, dairy, vitamins, minerals			vegetable, plant, pollen, pollination, pollinators, formation, dispersal, reproduce, root, branch, seed, flower, leaf, seedling, stem, bulb, fruit, flower, blossom, trunk, compost, nutrients, grow, air, light, soil
Year 4	Sound	States of Matter	Living things and their habitats		Animals including Humans	Electricity
	vibrate, vibration, travel, sound, source, tension, particle, air, pinna, cochlea, eardrum, ear, quiet, loud, soft, loudness, volume, muffle, faint, noise, pitch, high, low	temperature, group, property, compare, particle, thermometer, research, change, degrees Celsius, observe, solid, liquid, gas, state of matter, carbon dioxide, oxygen, helium, natural gas, air, solidify, heat, measure, condensation, boiling, cool, condense, evaporation, evaporate, melt/melting, freeze/freezing, water cycle, run-off, precipitation, collection, condensation, evaporation, droplet	carnivore, herbivore, omnivore, digestion, large intestines, oesophagus, peristalsis, predator, prey, producer, saliva, small intestines, stomach, adaptation, pollution, habitats, environment, environmental change, exoskeleton, carnivore, herbivore, omnivore, mammal, reptile, bird, amphibian, key, classify, vertebrate, invertebrate, pigeon, eagle, gull, minibeast, insect, movement, respiration, growth, reproduction, excretion, nutrition, sensitivity		canines, incisor, molars, premolars	appliance, battery, conductor, circuit, components, current, electrical, insulator, mains power, portable, pylon, switch
Year 5	Forces	Materials	Earth and Space	Animals including Humans	Living things	
	gear, lever, pull, newton meter, surface area, push, pull, movement, grip, contact, streamlined, repel, upthrust, buoyancy, friction, air resistance, gravity, drag	change, reversible, irreversible, saturation, insulation, solid, liquid, gas, flexible, soluble, insoluble, durable, thermal, magnets, magnetic, permeable, absorbent, dissolving, evaporating, sieving, filtration, heat, boiling, condensing, evaporation, freezing, melting, chemical change, physical change	day, month, year, gravity, shadow, time zones, revolve, orbit, spin, rotate, axis, reflect, Neptune, Mercury, Venus, Mars, Jupiter, Saturn, Uranus, Earth, Sun, Moon, planet, star, space, solar system, waning gibbous, waxing gibbous, waxing crescent, waning crescent, last quarter, full Moon, first quarter, new Moon	baby, toddler, child, teenager, adult, senior, death, puberty, fertilise, egg, sperm, conception, foetus, womb, birth, develop, grow, change	mammal, reptile, bird, fish, amphibian, insect, nutrition, movement, respiration, reproduction, excretion, growth, sensitivity, egg, life cycle, womb, fertilisation, pollination, pollen, stamen, pistil, seed dispersal	
Y5 ear 6	Light	Evolution	Animals including Humans	Living things and habitats	Electricity	
	dark, absence of light, luminous, scattering, absorption, refraction, travel, direction, straight lines, bend, reflective, mirror, reflection, reflect, block, shadow, cast, rainbow, colours see, eyes, torch, light beam, Sun, light, light source, light ray, opaque, translucent, transparent	environment, gene, natural selection, organism, evolution, change over time, species, population, features, trait, inherited, characteristics, reproduce, offspring, variation, mutation, survive, survival of the fittest, adaptation	heart, heartbeat/heart rate, pulse, muscle, blood vessel, lungs, oxygen, oxygenated blood, deoxygenated blood, circulate, vein, artery, diet, exercise, unhealthy, harmful, healthy, nutrients, water, transport, hygiene, smoking, alcohol, overweight	characteristics, classify, environment, compare, features, classification key, key, flowering plant, non-flowering plant, vertebrate, invertebrate, exoskeleton, vascular, non-vascular, taxonomy, herbivore, carnivore, omnivore, mammal, reptile, amphibian, bird, pigeon, eagle, seagull, fish, microorganism, bacteria, virus, fungi	appliance, battery, conductor, circuit, components, current, electrical, insulator, mains power, pylon, renewable energy, non-renewable energy	