

Knowledge Progression	EYFS		Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
	Nursery	Reception						
Animals including humans	<p>Model and encourage children to use vocabulary such as:</p> <p>egg, chick, bird, caterpillar, cocoon, chrysalis, butterfly, frog, spawn, tadpole, froglet, frog, grow, change, die, names of animals and their young, fur, feathers, scales, tail, wings, beak, claws, paws, hooves, swim, walk, run, jump, jump, fly, patterns, spots, stripes</p> <p>grow, change, baby, toddler, child, adult, old person, smell, taste, touch, feel, hear, see, blind, deaf</p> <p>Expose children to supplementary vocabulary such as:</p> <p>life cycle, mane, webbed feet</p> <p>senses, elderly, die (if appropriate)</p>	<p>Model and encourage children to use vocabulary such as:</p> <p>names of animals, live, on land, in water, jungle, desert, North Pole, South Pole, sea, hot, cold, wet, dry, snow, ice</p> <p>hair (black, brown, dark, light, blonde, ginger, grey, white, long, short, straight, curly), eyes (blue, brown, green, grey), skin (black, brown, white), big/tall, small/short, bigger/smaller, baby, toddler, child, adult, old person, old, young, brother, sister, mother, father, aunt, uncle, grandmother, grandfather, cousin, friend, family, boy, girl, man, woman</p> <p>Expose children to supplementary vocabulary such as: environment, polar regions, ocean, camouflage</p> <p>bald, elderly, wrinkles, male, female, freckles</p>	<p>head, body, eyes, ears, mouth, teeth, leg, arm</p> <p>sense, touch, taste, smell, see, hear, skim, eyes, nose, tongue, hearing, eyesight, ear, feel</p> <p>tail, wing, claw, fin, scales, feathers, fur, beak, paw, hoof / hooves, animal diets, carnivores, herbivores, omnivores</p>	<p>offspring, reproduction, life cycle, life stage, growth, child, young/old stages adolescent, caterpillar, (examples - chick/hen, baby/child/adult, caterpillar/butterfly),</p> <p>basic needs, survival, food, water, air, oxygen</p> <p>exercise, heartbeat, breathing, hygiene, germs, disease, diet, protein, carbohydrate, fat, nutrient, energy, food types (examples – meat, fish, vegetables, bread, rice, pasta)</p>	<p>protein, carbohydrate, fat, nutrient, nutrition, sugars, protein, vitamins, minerals, fibre, fat, water,</p> <p>skeleton, bones, skull, cranium, ribs, rib cage, spine, vertebrae, scapula, joints, femur, radius, ulna, tibia, fibula, patella, pelvis, sternum, support, protect / protection, move / movement, muscle, contract relax,</p>	<p>digestive system, digestion, mouth, teeth, saliva, oesophagus, stomach, small intestine, large intestine, nutrients, rectum, anus,</p> <p>teeth, incisor, canine, molar, premolar, dental health, milk teeth, wisdom teeth, gums, enamel, dentin, pulp, cementum, crown</p> <p>herbivore, carnivore, omnivore, producer, predator, prey, apex predator, food chain, food web</p>	<p>puberty, adolescents, adolescence, elderly, foetus, gestation period, adulthood, develop, development, maturity</p>	<p>heart, pulse, pump, rate, blood, blood vessel, artery, arteries pulmonary artery, vein, pulmonary vein, aorta, vena cava, transported, left ventricle, right ventricle, right atrium, left atrium, valve, lungs, oxygenated, deoxygenated, oxygen, carbon dioxide</p> <p>digestive system, digestion, mouth, teeth, saliva, oesophagus, stomach, small intestine, large intestine, nutrients, rectum, anus,</p> <p>protein, carbohydrate, fat, nutrient, nutrition, sugars, protein, vitamins, minerals, fibre, fat, water, muscles, circulatory system, diet, drugs, lifestyle, exercise</p>
Everyday Materials	Model and encourage	Model and encourage children	object, material, wood, plastic, glass,	object, material, wood, plastic, glass, metal,			thermal conductor, thermal insulator,	

	<p>children to use vocabulary such as:</p> <p>mix, stir, cook, hot, oven, microwave, change, burn, melt, hard, runny, set, freeze, freezer, cold, blended, hard, soft, bendy, stiff, wobbly, wood, plastic, paper, card, fabric</p> <p>Expose children to supplementary vocabulary such as:</p> <p>solid, liquid, rigid, stronger, weaker</p>	<p>to use vocabulary such as:</p> <p>ice, water, frozen, icicle, snow, melt, wet, cold, slippery, smooth, big, bigger, biggest, smaller, smaller, smallest, hard, soft, bendy, rigid, wood, plastic, paper, card, metal, strong, weak, hot, apply heat, waterproof, soggy, not waterproof, best, change, change back</p> <p>Expose children to supplementary vocabulary such as:</p> <p>solid, liquid, gas, most suited</p>	<p>metal, rock, brick, paper, fabric, elastic, foil, rubber, wool, card / cardboard</p> <p>physical properties, hard, soft, stretchy, stiff, bendy, waterproof, absorbent, brittle, shiny, dull, breaks/tears, rough, smooth, see-through, not see-through</p>	<p>rock, brick, paper, fabric, elastic, foil, rubber, wool, card / cardboard</p> <p>physical properties, hard, soft, stretchy, stiff, bendy, waterproof, absorbent, brittle, shiny, dull, transparent, opaque, reflective, non-reflective, translucent, plasticity, rigid, shape, push/pushing, pull/puling, twist/twisting, squash/squashing, bend/bending, stretch/stretching</p>			<p>electrical conductor, electrical insulator, change of state</p> <p>mixture, dissolve, solute, solvent, solution, insoluble, filter, filtration, sieve, evaporation, evaporation technique, soluble, reversible change, irreversible change, burning, rusting</p>	
Light	<p>Model and encourage children to use vocabulary such as:</p> <p>light, torch, bulb, lamp, spotlight, shiny, bright, brighter, brightest, Sun, shine, glow, mirror</p> <p>Expose children to supplementary vocabulary such as:</p> <p>light source, reflective, non-reflective, dim, dimmer, dimmest</p>	<p>Model and encourage children to use vocabulary such as:</p> <p>Sun, sunny, light, shadow, shady, clouds, torch, see-through, non-seethrough, source, light source</p> <p>Expose children to supplementary vocabulary such as:</p> <p>casting a shadow, pale, dark, transparent, opaque</p>			<p>light, light source, luminous, non-luminous, dark, absence of light, transparent, translucent, opaque, shiny, matt, shadow, reflect, reflector surface, mirror, sunlight, dangerous, angle of incidence, visible spectrum</p>			<p>light, light source, luminous, non-luminous, moonlight, reflected sunlight, dark, periscope, mirror, transparent, translucent, opaque, shiny, matt, shadow, reflect, straight lines, ray diagram, light rays, angle of incidence, visible spectrum, convex lense, concave lens</p>
Electricity								

	<p>Model and encourage children to use vocabulary such as:</p> <p>battery, plug, socket, electricity, wire, sound, light, move</p> <p>Expose children to supplementary vocabulary such as: mains electricity, device, appliance, electrical</p>				<p>electricity, electrical appliance/device, mains, plug</p> <p>electrical circuit, complete circuit, open circuit, cell, battery, electrode, positive, negative, connect / connection, loose connection, short circuit, crocodile clip, bulb, bulb holder, switch, buzzer, motor, component, conductor, insulator, wire, metal, non-metal, circuit symbol</p> <p>N.B. Children in Year 4 do not need to use standard symbols for electrical components, as this is taught in Year 6.</p>		<p>electricity, appliance, mains, plug</p> <p>circuit, complete circuit, open circuit, cell, battery, electrode, positive, negative, connection, crocodile clip, bulb, bulb holder, switch, buzzer, motor, component, conductor, insulator, wire, metal, non-metal, circuit symbol, circuit diagram, voltage, current</p> <p>N.B. Children do not need to understand what voltage is but will use volts and voltage to describe different batteries. The words “cells” and “batteries” are now used interchangeably.</p>
Seasonal changes	<p>Model and encourage children to use vocabulary such as:</p> <p>spring, summer, autumn, winter, seasons, sunny, cloudy, hot, warm, cold, shower, raining, storm, thunder, lightning, hail, sleet, snow, icy, frost, puddles, windy, rainbow, animals, young, plants, flowers</p> <p>Expose children to supplementary vocabulary such as:</p> <p>hibernate, migrate, snowflake</p>	<p>season, winter, spring, summer, autumn, weather, climate, windy, sunny, rainy, hail, sleet, fog, snowy, temperature, tornado, lightning, thunder, rainfall. thermometer, rain gauge</p> <p>sunrise, sunset, horizon, day length, day light, night-time, seasonal change</p>					
Plants	<p>Model and encourage children to use vocabulary such as:</p>	<p>leaf, flower, blossom, petal, fruit, berry, root, seed,</p>	<p>leaf, flower, blossom, petal, fruit, berry, root, seed, trunk, branch,</p>	<p>roots, stem/trunk, leaves, photosynthesis,</p>			

	<p>plant, leaf, stem, trunk, branch, root, bark, flower, petal, seed, berry, fruit, vegetable, bulb, plant, hole, dig, water, weed, grow, shoot, die, dead, soil</p> <p>Expose children to supplementary vocabulary such as:</p> <p>seedling, healthy, unhealthy, strong, sturdy, wilting, life cycle</p>		<p>trunk, branch, stem, bark, stalk, bud, bulb, germination,</p> <p>deciduous trees, evergreen trees</p> <p>Names of trees in the local area</p> <p>Names of garden and wild flowering plants in the local area</p>	<p>stem, bark, stalk, bud, bulb,</p> <p>Names of trees in the local area</p> <p>Names of garden and wild flowering plants in the local area</p> <p>germination, shade, nutrient, light, sun, warm, cool, water, grow, healthy</p>	<p>flowers, attracting pollinators, anther, filament, stigma, style, ovule, ovary, fertilisation, stomata, transpiration, xylem</p> <p>flowering plants, pollen, pollination, insect/wind pollination, seed formation, seed dispersal (wind dispersal, animal dispersal, water dispersal)</p>			
Living things and their habitats	<p>Model and encourage children to use vocabulary such as:</p> <p>natural, plant, animal, leaves, seeds, conkers, acorns, twigs, bark, shells, feathers, pebbles, stones, same, different, pattern</p> <p>Expose children to supplementary vocabulary such as:</p> <p>living, dead, similar</p>	<p>Model and encourage children to use vocabulary such as:</p> <p>plant, tree, bush, flower, vegetable, herb, weed, animal, names of plants and animals they see, name of a contrasting environment e.g. beach, forest</p> <p>Expose children to supplementary vocabulary such as: environment</p>		<p>living, dead, never been alive,</p> <p>excretion, reproduction, respiration, basic needs, shelter, move, feed</p> <p>habitat, grassland, forest, pond, woodland, desert, ocean, polar, microhabitat, mountains, river, suited, suitable,</p> <p>Names of local habitats e.g. pond, woodland etc.</p> <p>Names of micro-habitats e.g. under logs, in bushes etc</p> <p>food, food chain, predator, prey</p>		<p>grouping, grouped, classification, classification key, identify, identification, invertebrates, vertebrates, fish mammals, bird amphibian, reptile</p> <p>deforestation, meteor strike, pollution human impact, positive, environment, habitat, negative, migrate, migration, hibernate, endangered, extinct</p>	<p>life cycle, reproduction, sexual reproduction, sperm, fertilises, fertilisation, egg, live young, metamorphosis,</p> <p>asexual reproduction, plantlets, runners, pollen, pollination, stigma, seed, bulb, cutting, propagation, budding, grafting, seed dispersal (wind, water, animal, gravity, explosion)</p> <p>larva, pupa, chrysalis, imago</p>	<p>vertebrates, invertebrates, fish, amphibians, reptiles, birds, mammals, insects, spiders, snails, worms, micro-organisms, bacteria, yeast, toadstools, mushrooms, flowering, non-flowering, aorta, diaphragm, DNA, taxonomy</p>
	Rocks							

					rock, stone, pebble, boulder, grain, sedimentary, igneous, metamorphic, fossil, soil, porous, absorb water, weathering, mineral, crystal, texture, hardness, drainage layers, hard, soft, texture, marble, chalk, granite, sandstone, slate, peat, sandy/chalk/clay soil, organic matter			
Forces	<p>Model and encourage children to use vocabulary such as:</p> <p>object, float, sink, water, up, down, top, bottom, push, pull, magnet, spring, squash, bend, twist, stretch, turn, spin, smooth, rough, fast, slow</p> <p>Expose children to supplementary vocabulary such as:</p> <p>rising, falling, attract, repel, faster, slower, pulley, gear, elastic</p>	<p>Model and encourage children to use vocabulary such as:</p> <p>float, sink, up, down, top, bottom, surface, move, roll, drop, fly, turn, spin, fall, fast, slow, faster, slower, fastest, slowest, further, furthest, wind, air, water, blow, bounce</p> <p>Expose children to supplementary vocabulary such as:</p> <p>force, rotate, solid, liquid, gravity</p>			<p>force, push, pull, twist, contact force, non-contact force</p> <p>magnetism, magnet, attract, magnetic force, strength, repel, magnetic material, metal, iron, steel, neodymium, magnet, friction magnetic field, bar magnet, ring magnet, button magnet, horseshoe poles, north pole, south pole</p>		<p>force, push, pull, twist, contact force, non-contact force, friction, gravity, Earth, air resistance, water resistance,</p> <p>mechanisms, simple machines, machine, lever, pulley, gears,</p>	
Sound	<p>Model and encourage children to use vocabulary such as:</p>	<p>Model and encourage children to use vocabulary such as:</p>				<p>sound, source, vibrate, vibration, travel, pitch (high, low), frequency, volume, faint, loud, insulation, solid,</p>		

	<p>sound, noise, loud, quiet, high, low, music, bang, blow, pluck, soft, hard, fast, slow, names of instruments</p> <p>Expose children to supplementary vocabulary such as:</p> <p>musician, notes, vibrate, vibration, pitch, rhythm, pulse, volume</p>	<p>sound, noise, listen, hear, music, voices, bird song, traffic, sirens, thunder, high, low, loud, quiet, soft, volume, crackle, thunder, hum, buzz, roar</p> <p>children to supplementary vocabulary such as:</p> <p>source, crescendo, vibration, pitch</p>				liquid, gas, dissipate, spread		
States of matter						<p>state of matter, change of state, solid, liquid, gas, melting, freezing, solidify, melting point, boiling point, evaporation, condensation, temperature, water cycle, precipitation, cloud</p>		
Earth and Space		<p>Model and encourage children to use vocabulary such as:</p> <p>Sun, Moon, Earth, star, planet, sky, day, night, space, round, bounce, float</p> <p>Expose children to supplementary vocabulary such as:</p> <p>sunrise, sunset, astronaut, astronomer, constellation, orbit,</p>					<p>Sun, Moon, planets, Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus, Neptune, spherical, elliptical, solar system, rotates / rotation, star, orbit, clockwise, anticlockwise</p>	

		nocturnal, slow-motion, magnify						
Evolution and inheritance								Sexual reproduction, asexual reproduction, offspring, reproduction, vary / variation, characteristics, adaption, environment, inherited, evolution, species, fossils, suited