Science Curriculum Key Vocabulary Progression Chart

Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Working Scientifically question, answer, observe, observing, equipment, identify, sort, group, compare, differences, similarities, describe, find out.	**Working Scientifically** question, answer, observe, observing, equipment, identify, sort, group, compare, differences, similarities, describe, measurements, test, results, secondary sources **record** – diagram, chart		**Working Scientifically** oral and written explanations, conclusion, predictions, criteria, classify, changes, data, contrast, evidence, improve, secondary sources, guides, keys, construct, interpret **research** – relevant question **equipment** – thermometer, **data** – gather, standard units, record, classify, present **record** – drawings, labelled diagrams, keys, bar charts, tables		**Working Scientifically** plan, variables, measurements, accuracy, precision, repeat readings, predictions, further comparative and fair test, identify, classify and describe, patterns, systematic, quantitative measurements **report data** – scientific diagrams, labels, classification keys, tables, scatter graphs, bar graph and line graphs **report and present** – conclusions, casual relationships, explanations, degree of trust, oral and written display and presentation **evidence** – support, refute, ideas or arguments biology, physics, chemistry	
Animals, excluding humans Model and encourage children to use vocabulary such as: names of animals, live, on land, in water, jungle, desert, North Pole, South Pole, sea, hot, cold, wet, dry, snow, ice Expose children to supplementary vocabulary such as: environment, polar regions, ocean, camouflage **Humans** Model and encourage children to use vocabulary such as: hair (black, brown, dark, light, blonde,	**Animals including humans** amphibians, fish, reptiles, mammals, birds (+ 1 example of each) herbivore, omnivore, carnivore head, nose, ear, mouth, teeth, neck, shoulder, arm, elbow, wrist, hand, back, chest, hip, leg, knee, ankle, foot wing, beak, tail, fin, claw, scales, hooves, feathers, fur, beak, paws sight, smell, touch, taste, hearing.	**Animals including humans** survival, water, air, food reproduce, adult, baby, child, young/old, offspring, stages (examples - chick/hen, baby/child/adult, caterpillar/butterfly), kitten, calf, puppy food chain, prey, predator, camouflage, protection exercise, breathing, heartbeat, hygiene, balanced diet germs, disease, food types (examples – meat, fish, vegetables, bread, rice, pasta)	**Animals including humans** skeleton, skull, ribs, spine, bones, muscles, joints, protect, movement, support, protection, nutrition, nutrients, carbohydrates, sugars, protein, vitamins, minerals, fibre, fat, water,	**Animals including humans** Digestive system, digestion, mouth, saliva, tongue, teeth, incisor, canine, molar, premolars, oesophagus, stomach, small intestine, large intestine, rectum, anus, nutrients, absorb, canine, incisor, molar producer, consumer, herbivore, carnivore, omnivore, predator, prey, food chain	**Animals including humans** womb, foetus, embryo, gestation, baby, toddler, teenager, elderly growth, development, puberty	**Animals including humans** function, circulatory system, heart, pulse rate, valve, blood vessel, vein, artery transport, oxygenated, oxygen, deoxygenated, carbon dioxide, nutrients, lifestyle, drug

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 Expose children to supplementary vocabulary such as: bald, elderly, wrinkles, male, female, freckles						
Living things & their habitats Model and encourage children to use vocabulary such as: plant, tree, bush, flower, vegetable, herb, weed, animal, names of plants and animals they see, name of a contrasting environment e.g. beach, forest Expose children to supplementary vocabulary such as: environment	**Plants** deciduous, evergreen, tree, leaf, flower (blossom), petals, fruit, berry, bulb, seed, roots, stem, trunk, branch, bark, bud, names of trees in local area Names of garden and wild flowering plants in the local area.	**Plants** growth, germinate, light, temperature reproduce, lifecycle, shade, sun, warm, cool, water, grow, healthy	**Plants** air, water, transportation, nutrients, soil, reproduction, seed formation, seed Photosynthesis, pollen, insect/wind pollination, seed formation, seed dispersal (wind dispersal, animal dispersal, water dispersal)	**Living things & their habitats** vertebrates, invertebrates (+ 1 example of each) environment, habitat, classification, classification key human impact, positive, negative, migrate, hibernate	**Living things & their habitats** Life cycle, life process, reproduce, reproduction, offspring, sexual, sperm, fertilises, egg, live young, metamorphosis, asexual, plantlets, runners, bulbs, cuttings	**Living things & their habitats** characteristic, classification, organism, micro-organism, vertebrates, fish, amphibians, reptiles, birds, mammals, invertebrates, insects, spiders, snails, worms, flowering, non-flowering

Everyday materials Model and encourage children to use vocabulary such as: 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 Expose children to supplementary vocabulary such as: solid, liquid, gas, most suited	**Everyday materials** object, material, wood, plastic, glass, paper, metal, rock, fabric, elastic, foil, card, cardboard, rubber, wool, clay, hard, soft, rough, smooth, shiny, dull, bendy, stretchy, stiff, floppy, waterproof, absorbent breaks/tears, see-through, not see-through	**Everyday materials and their uses** brick, fabric, elastic, foil properties, solid, waterproof, absorbent, opaque, transparent, translucent, flexible, bounce, reflective, flexible, rigid, Shape, push/pushing, pull/pulling, twist/twisting, squash/squashing, bend/bending, stretch/stretching	**Rocks** Rock, stone, pebble, boulder, grain, crystals, layers, hard, soft, texture, absorb water, soil, fossil, soils, organic matter, sandstone, granite, marble, pumice absorbent, crumble sedimentary, layer, sediment, igneous, magma, lava, gas bubbles (tiny holes/spaces) metamorphic, change, squeeze, pressure	**States of matter** solid, liquid, gas, state change, melting, freezing, heating, melting point, boiling point, evaporation, condensation, particle, temperature, freezing, heating, water cycle	**Properties and changes to materials** hardness, transparency, conductivity (electrical, thermal) soluble, solubility, solution, dissolve, filter, evaporate, sieve, reversible, irreversible, non-reversible changes, change of state, burning, rusting, new material	**Evolution & Inheritance** adaptation, evolution, characteristic, reproduction, genetics, survival vary, suited, adapted, environment, inherited, species, fossils
Light Model and encourage children to use vocabulary such as: Sun, sunny, light, shadow, shady, clouds, torch, see-through, non-see-through, source, light source Expose children to supplementary vocabulary such as: casting a shadow, pale, dark, transparent, opaque **Seasonal change** Model and encourage children to use vocabulary such as:	**Seasonal change** seasons, spring, summer, autumn, winter, month, year, day, night, sun, moon, light, dark Weather (sunny, rainy, windy, snowy etc.) Sun, sunrise, sunset, day length.	**Living things & their habitats** living, dead, never been alive, suited, suitable, basic needs, food, food chain, shelter, move, feed, habitat, woodland, meadow, hedgerow, pond microhabitat e.g. under logs, in bushes,	**Light** light source, dark, absence of light, mirror, reflect, reflective, reflection, reflect, mirror, sunlight, dangerous shadow, blocked transparent, translucent, opaque shiny, matt, surface,	**Sound** Vibrate, vibration, travel, wave, volume, pitch, tone, insulation sound, source, pitch (high, low), volume, faint, loud,	**Earth & Space** Earth, sun, moon, solar system, axis of rotation, day, night, phases of the moon, waxing, waning, star, constellation, Planets, (Mercury, Jupiter, Saturn, Venus, Mars, Uranus, Neptune), spherical, rotates, star, orbit	**Light** refraction, reflection, spectrum, rainbow light rays, straight lines

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 Expose children to supplementary vocabulary such as: hibernate, migrate, snowflake						
Forces Model and encourage children to use vocabulary such as: 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 Expose children to supplementary vocabulary such as: force, rotate, solid, liquid, gravity			**Forces & magnets** Force, push, pull, twist, contact force, non-contact force, magnetic force, magnet, strength, bar magnet, ring magnet, button magnet, horseshoe magnet, attract, repel, magnetic material, metal, iron, steel, poles, north pole, south pole	**Electricity** Electricity, electrical appliance/device, component, battery power, main power, circuit, series, cell, battery, positive, negative, wire, crocodile clip, bulb, bulb holder, switch, buzzer, motor, complete circuit, break in circuit, short circuit, conductor, insulator, metal, non-metal, symbol. **N.B.** Children in Year 4 do not need to use standard symbols for electrical components, as this is taught in Year 6.	**Forces** Force, air resistance, water resistance, friction, gravity, Earth, Newtons mechanisms, simple machines, levers, pulleys, gears	**Electricity** circuit - series, parallel voltage, volts, amps, circuit diagram, circuit symbol