



Science Key Vocabulary



- The vocabulary included for Reception are words that children should be exposed to. They should use some correctly in a scientific context.
- The vocabulary included from Year 1 onwards are the words that children should know and use correctly in a scientific context. They should be able to define the specialist scientific vocabulary included.
- The vocabulary in **red** is from other linked topics. The topic they come from is indicated.
 - The vocabulary in **purple** is from our 'Exploratory Units' which make up our spiral curriculum.
- The working scientifically vocabulary identified in the first table of this document should be taught through the topics in each year-group during practical work or scientific enquiry.

Working Scientifically

<u>Year Group</u>	<u>Vocabulary</u>
Reception	look closely, observe, watch, touch, feel, smell, listen, same, different, compare, ask questions, sort, group.
Years 1 & 2	observe, changes, patterns, grouping, sorting, compare, same, different, identify (name), measure, data, record results, drawing, picture, table, tally chart, present, pictogram, block chart, Venn diagram, ask questions, test, investigate, explore, equipment, magnifying glass, hand lens, ruler, tape measure, metre stick, spoon, teaspoon, answer questions, results, scientific enquiry, observing over time, classifying.
Years 3 & 4	practical work, fair testing, relationships, accurate, thermometer, stopwatch, timer, estimate, data, diagram, identification key, chart, bar chart, prediction, similarity, difference, evidence, information, findings, criteria, values, properties, characteristics, conclusion, explanation, reason, evaluate, improve.
Years 5 & 6	variables, independent variable, dependent variable, control variable, evidence, justify, argument (science), accuracy, precision, scatter graphs, bar graphs, line graphs, Newton meter.

<u>PLANTS</u>	<u>Vocabulary</u>
Reception	tree, bush, herb, names of plants they see (Reception - Living things and their habitats)
Year 1	leaf, flower, blossom, petal, fruit, berry, root, seed, trunk, branch, stem, bark, stem, bud, names of trees in the local area, names of garden and wild flowering plants in the local area.
Year 2	light, shade, Sun, warm, cool, water, space, grow, healthy, bulb, germinate, shoot, seedling names of plants in local habitats and micro-habitats (Y2 - Living things and their habitats)
Year 3	photosynthesis, pollen, insect/wind pollination, male, female, seed formation, seed dispersal (wind dispersal, animal dispersal), air, nutrients, minerals, soil, absorb, transport.
Year 4	classification, classification keys (Y4 - Living things and their habitats)
Year 5	life cycle, reproduce, sexual, fertilises, asexual, plantlets, runners, tubers, cuttings (Y5 - Living things and their habitats)
Year 6	flowering, non-flowering, mosses, ferns, conifers (Y6 - Living things and their habitats)

<u>Living Things and their Habitats</u>	<u>Vocabulary</u>
Reception	plant, tree, bush, flower, vegetable, weed, animal, names of plants and animals they see, name of a contrasting environment (e.g. beach, forest)
Year 1	names of garden and wild flowering plants in the local area (Y1 - Plants) head, body, eyes, ears, mouth, teeth, leg, tail, wing, claw, fin, scales, feathers, fur, beak, paws, hooves, names of animals experienced first-hand from each vertebrate group (Y1 - Animals, including humans) weather, sunny, rainy, raining, shower, windy, snowy, cloudy, hot, warm, cold, storm, thunder, lightning, hail, sleet, snow, icy, frost, puddles, rainbow, seasons, winter, summer, spring, autumn, Sun, sunrise, sunset, day length (Y1 - Seasonal changes)
Year 2	living, dead, never been alive, suited, suitable, basic needs, food, food chain, shelter, move, feed, water, air, survive, survival, names of local habitats (e.g. pond, woodland etc.), names of

	micro-habitats (e.g. under logs, in bushes etc.), conditions, light, dark, shady, sunny, wet, damp, dry, hot, cold, names of living things in the habitats and micro-habitats studied. light, shade, Sun, warm, cool, water, space, grow, healthy, bulb, germinate, shoot, seedling (Y2 - Plants) offspring, reproduction, growth, baby, toddler, child, teenager, adult, old person, names of animals and their babies (e.g. chick/chicken, cat/kitten, caterpillar/butterfly) (Y2 - Animals, including humans)
Year 3	photosynthesis, pollen, insect/wind pollination, male, female, seed formation, seed dispersal (e.g. wind dispersal, animal dispersal), air, nutrients, minerals, soil, absorb, transport (Plants)
Year 4	classification, classification keys, environment, habitat, human impact, positive, negative, migrate, hibernate herbivore, carnivore, omnivore, producer, predator, prey (Y4 - Animals, including humans)
Year 5	life cycle, reproduce, sexual, sperm, fertilises, egg, live young, metamorphosis, asexual, plantlets, runners, cuttings
Year 6	vertebrates, fish, amphibians, reptiles, birds, mammals, warm-blooded, cold-blooded, invertebrates, insects, spiders, snails, worms, flowering, non-flowering, mosses, ferns, conifers

<u>Animals including Humans.</u>	<u>Vocabulary</u>
Reception	names of animals, live, on land, in water, jungle, desert, North Pole, South Pole, sea, hot, cold, wet, dry, snow, ice, hair (e.g. black, brown, dark, light, blonde, ginger, grey, white, long, short, straight, curly), eyes (e.g. blue, brown, green, grey), skin (e.g. 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.
Year 1	head, body, eyes, ears, mouth, teeth, leg, tail, wing, claw, fin, scales, feathers, fur, beak, paws, hooves, names of animals experienced first-hand from each vertebrate group, parts of the human body including those within JIGSAW, senses, touch, sight, smell, taste, hearing, fingers, skin, eyes, nose, ears, tongue.

Year 2	Offspring, reproduction, growth, baby, toddler, child, teenager, adult, old person, names of animals and their babies (e.g. chick/chicken, kitten/cat, caterpillar/butterfly), survive, survival, water, food, air, exercise, heartbeat, breathing, hygiene, germs, disease, food types (e.g. meat, fish, vegetables, bread, rice, pasta, dairy) living, dead, never been alive, suited, suitable, basic needs, food, food chain, shelter, move, feed, water, air, survive, survival (Y2 - Living things and their habitats)
Year 3	nutrition, nutrients, carbohydrates, sugars, protein, vitamins, minerals, fibre, fat, water, skeleton, bones, muscles, joints, support, protect, move, skull, ribs, spine.
Year 4	digestive system, digestion, mouth, teeth, saliva, oesophagus, stomach, small intestine, large intestine, rectum, anus, incisor, canine, molar, premolar, herbivore, carnivore, omnivore, producer, predator, prey.
Year 5	puberty, the vocabulary to describe sexual characteristics in line with RSE policy. life cycle, foetus, baby, child, adolescent, adult, reproduce, sexual, sperm, fertilises, egg, live young (Y5 - Living things and their habitats)
Year 6	heart, pulse, rate, pumps, blood, blood vessels, transported, lungs, oxygen, carbon dioxide, cycle, circulatory system, diet, drugs, lifestyle.

Evolution & Inheritance

Vocabulary

Reception	plant, tree, bush, flower, vegetable, herb, weed, animal, names of plants and animals they see, name of a contrasting environment (e.g. beach, forest) (Reception - Living things and their habitats)
Year 1	leaf, flower, blossom, petal, fruit, berry, root, seed, trunk, branch, stem, bark, stalk, bud (Y1 - Plants)
Year 2	light, shade, Sun, warm, cool, water, space, grow, healthy, bulb, germinate, shoot, seedling (Y2 - Plants) living, dead, never been alive, suited, suitable, basic needs, food, food chain, shelter, move, feed, water, air, survive, survival, conditions, light, dark, shady, sunny, wet, damp, dry, hot, cold (Y2 - Living things and their habitats)

Year 3	photosynthesis, pollen, insect/wind pollination, male, female, seed formation, seed dispersal (e.g. wind dispersal, animal dispersal), air, nutrients, minerals, soil (Y3 - Plants) soil, fossil, bone, flesh, minerals (Y3 - Rocks)
Year 4	environment, habitat, human impact, positive, negative, migrate, hibernate (Y4 - Living things and their habitats) herbivore, carnivore, omnivore, producer, predator, prey (Y4 - Animals, including humans)
Year 5	life cycle, reproduce, sexual, fertilises, asexual, plantlets, runners, tubers, cuttings (Y5 - Living things and their habitats)
Year 6	offspring, sexual reproduction, vary, characteristics, adapted, inherited, species, evolve, evolution.

<u>Seasonal Changes</u>	<u>Vocabulary</u>
Reception	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.
Year 1	weather, sunny, rainy, raining, shower, windy, snowy, cloudy, hot, warm, cold, storm, thunder, lightning, hail, sleet, snow, icy, frost, puddles, rainbow, seasons, winter, summer, spring, autumn, Sun, sunrise, sunset, day length.
Year 2	
Year 3	
Year 4	
Year 5	
Year 6	

<u>Materials</u>	<u>Vocabulary</u>
Reception	ice, water, frozen, snow, melt, wet, cold, slippery, smooth, big, bigger, biggest, smaller, smaller, smallest, hard, soft, bendy, wood, plastic, paper, card, metal, strong, weak, hot, soggy, best, change, change back.
Year 1	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.
Year 2	opaque, transparent, translucent, reflective, non-reflective, flexible, rigid, shape, push/pushing, pull/pulling, twist/twisting, squash/squashing, bend/bending, stretch/stretching.
Year 3	rock, stone, pebble, boulder, grain, crystals, layers, hard, soft, texture, absorbs water, fossil, bone, flesh, minerals, marble, chalk, granite, sandstone, slate, types of soil (e.g. peaty, sandy, chalky, clay) (Y3 - Rocks) magnetic force, magnet, attract, magnetic material, metal, iron, steel (Y3 - Forces and magnets)
Year 4	solid, liquid, gas, heating, cooling, state change, melting, freezing, melting point, boiling, boiling point, evaporation, condensation, temperature, water cycle electrical conductor, electrical insulator, metal, non-metal (Y4 - Electricity)
Year 5	thermal insulator/conductor, change of state, mixture, dissolve, solution, soluble, insoluble, filter, sieve, reversible/non-reversible change, burning, rusting, new material, electrical insulator/conductor.
Year 6	

<u>Rocks</u>	<u>Vocabulary</u>
Reception	
Year 1	object, material, rock, brick, clay, hard, soft, waterproof, absorbent, rough, smooth, shiny, dull, see-through, not see-through (Y1 -Everyday materials)
Year 2	opaque, transparent, translucent, reflective, non-reflective (Y2 - Uses of everyday materials)

Year 3	rock, stone, pebble, boulder, grain, crystals, layers, hard, soft, texture, absorbs water, fossil, bone, flesh, minerals, marble, chalk, granite, sandstone, slate, types of soil (e.g. peaty, sandy, chalky, clay)
Year 4	
Year 5	
Year 6	Evolution

<u>Light</u>	<u>Vocabulary</u>
Reception	sun, sunny, light, shadow, shady, clouds, torch, see-through, not see-through.
Year 1	senses, see, eyes (Y1 - Animals, including humans) shiny, dull, see-through, not see-through (Y1 - Materials) light, dark, shadow.
Year 2	opaque, transparent, translucent, reflective, non-reflective (Y2 - Uses of everyday materials)
Year 3	light, light source, dark, absence of light, surface, shadow, reflect, mirror, Sun, sunlight, dangerous.
Year 4	
Year 5	
Year 6	straight lines, light rays.

<u>Forces</u>	<u>Vocabulary</u>
Reception	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.
Year 1	Push, pull, roll, drop, spin, slow, slower, slowest, fast, faster, fastest, further, furthest, high, higher, highest, bouncy, bounciest, strong, stronger, strongest.
Year 2	flexible, rigid, shape, push/pushing, pull/pulling, twist/twisting, squash/squashing, bend/bending, stretch/stretching (Y2 - Uses of everyday materials)

Year 3	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.
Year 4	
Year 5	force, gravity, Earth, air resistance, water resistance, friction, mechanisms, simple machines, levers, pulleys, gears.
Year 6	

<u>Sound</u>	<u>Vocabulary</u>
Reception	sound, noise, listen, hear, music, voices, bird song, traffic, sirens, thunder, high, low, loud, quiet, soft, volume, crackle, thunder, hum, buzz, roar.
Year 1	senses, hear, ear (Y1 - Animals, including humans). Sound, faint, loud, quiet, near, far,
Year 2	
Year 3	
Year 4	sound, source, vibrate, vibration, soundwaves, travel, pitch (high, low), volume, faint, quiet, loud, insulation.
Year 5	
Year 6	Volume, pitch, high, low, waves, auditory.

<u>Electricity</u>	<u>Vocabulary</u>
Reception	
Year 1	
Year 2	
Year 3	

Year 4	electricity, electrical appliance/device, mains, plug, electrical circuit, complete circuit, component, cell, battery, positive, negative, connect/connections, loose connection, short circuit, crocodile clip, bulb, switch, buzzer, motor, conductor, insulator, metal, non-metal, symbol.
Year 5	electrical insulator/conductor (Properties and Changes of Materials)
Year 6	circuit diagram, circuit symbol, voltage

<u>Earth & Space</u>	<u>Vocabulary</u>
Reception	sun, Moon, Earth, star, planet, sky, day, night, space, round, bounce, float.
Year 1	
Year 2	
Year 3	light, light source, Sun, sunlight, dangerous (Y3 - Light)
Year 4	
Year 5	sun, Moon, Earth, planets (Mercury, Jupiter, Saturn, Venus, Mars, Uranus, Neptune), spherical, Solar System, rotate, star, orbit.
Year 6	