

Science Vocabulary Ladder

In year	
Year 6	<u>Living things and their habitats</u> vertebrates, fish, amphibians, reptiles, birds, mammals, invertebrates, insects, spiders, snails, worms, flowering, non-flowering
	Animals, including humans heart, pulse, rate, pumps, blood, blood vessels, transported, lungs, oxygen, carbon dioxide, nutrients, water, muscles, cycle, circulatory system, diet, exercise, drugs, lifestyle
	<u>Evolution and inheritance</u> offspring, sexual reproduction, vary, characteristics, suited, adapted, environment, inherited, species, fossils
	<u>Light</u> light, light source, dark, absence of light, transparent, translucent, opaque, shiny, matt, surface, shadow, reflect, mirror, sunlight, dangerous <u>Year 3 plus straight lines, light rays</u>
	Electricity circuit, complete circuit, circuit diagram, circuit symbol, cell, battery, bulb, buzzer, motor, switch, voltage
Year 5	<u>Living things and their habitats</u> life cycle, reproduce, sexual, sperm, fertilises, egg, live young, metamorphosis, asexual, plantlets, runners, bulbs, cuttings
	Animals, including humans puberty, human, development, growth, mass, life expectancy, gestation, length, toddler, child, teenage, adult, elderly
	Properties and changes of material thermal/electrical insulator/conductor, change of state, mixture, dissolve, solution, soluble, insoluble, filter, sieve, reversible/non-reversible change, burning, rusting, new material
	<u>Earth and space</u> Earth, Sun, Moon, (Mercury, Jupiter, Saturn, Venus, Mars, Uranus, Neptune), spherical, solar system, rotates, star, orbit, planets















Forces

force, gravity, Earth, air resistance, water resistance, friction, mechanisms, simple machines, levers, pulleys, gears

Year 4 <u>Living things and their habitats</u>

classification, classification keys, environment, habitat, human impact, positive, negative, migrate, hibernate

Animals, including humans

digestive system, digestion, mouth, teeth, saliva, oesophagus, stomach, small intestine, nutrients, large intestine, rectum, anus, teeth, incisor, canine, molar, premolars, herbivore, carnivore, omnivore, producer, predator, prey, food chain

States of matter

solid, liquid, gas, state change, melting, freezing, melting point, boiling point, evaporation, temperature, water cycle

Sound

sound, source, vibrate, vibration, travel, pitch (high, low), volume, faint, loud, insulation

Electricity

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 3 Animals including humans

nutrition, nutrients, carbohydrates, sugars, protein, vitamins, minerals, fibre, fat, water, skeleton, bones, muscles, support, protect, move, skull, ribs, spine, muscles, joints

Plants

photosynthesis, pollen, insect/wind pollination, seed formation, seed dispersal (wind dispersal, animal dispersal, water dispersal)

Rocks

rock, stone, pebble, boulder, grain, crystals, layers, hard, soft, texture, absorb water, soil, fossil, marble, chalk, granite, sandstone, slate, soil, peat, sandy/chalk/clay soil

Light











Respect



Ambition Self-Esteem Perseverance Independence



light, light source, dark, absence of light, transparent, translucent, opaque, shiny, matt, surface, shadow, reflect, mirror, sunlight, dangerous

Forces and 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

Year 2 Living Things and their habitats

Living, dead, never been alive, suited, suitable, basic needs, food, food chain, shelter, move, feed

- Names of local habitats e.g. pond, woodland etc.
- Names of micro-habitats e.g. under logs, in bushes etc

Animals including humans

offspring, reproduction, growth, child, young/old stages (examples - chick/hen, baby/child/adult, caterpillar/butterfly), exercise, heartbeat, breathing, hygiene, germs, disease, food types (examples – meat, fish, vegetables, bread, rice, pasta)

Plants

leaf, flower, blossom, petal, fruit, berry, root, seed, trunk, branch, stem, bark, stalk, bud names of trees in the local area

names of garden ad wild flowering plants in the local area

Year 1 vocabulary plus light, shade, sun, warm, cool, water, grow, healthy

Uses of everyday materials

Names of materials – wood, metal, plastic, glass, brick, rock, paper, cardboard Properties of materials – 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 1 plus opaque, transparent and translucent, reflective, nonreflective, flexible, rigid Shape, push/pushing, pull/puling, twist/twisting, squash/squashing, bend/bending, stretch/stretching

Year 1 Animals including humans

head, body, eyes, ears, mouth, teeth, leg, tail, tall, wing, claw, fin, scales, feathers, fur, beak, paws, hooves

Names of animals experienced from each vertebrate group Sense – touch, smell, see, taste, hear, fingers (skin), eyes, nose, ear, tongue

Parts of the body linked to PSHE

Plants











Respect



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leaf, flower, blossom, petal, fruit, berry, root, seed, trunk, branch, stem, bark, stalk, bud names of trees in the local area

names of garden ad wild flowering plants in the local area

Everyday materials

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

Seasonal changes

Weather (sunny, rainy, windy, snowy etc.) Seasons (winter, summer, spring, autumn) Sun, sunrise, sunset, day length

Reception

Living things and 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

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, 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

Seasonal changes

Model and encourage children to use vocabulary such as: 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

Materials, including changing 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

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

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

Expose children to supplementary vocabulary such as: force, rotate, solid, liquid, gravity

Sound

Model and encourage children to use vocabulary such as: sound, noise, listen, hear, music, voices, bird song, traffic, sirens, thunder, high, low, loud, quiet, soft, volume, crackle, thunder, hum, buzz, roar Expose children to supplementary vocabulary such as: source, crescendo, vibration, pitch

Earth and space

Model and encourage children to use vocabulary such as: Sun, Moon, Earth, star, planet, sky, day, night, space, round, light, heavy, fall, bounce, float, rise, fall, air

Expose children to supplementary vocabulary such as: sunrise, sunset, astronaut, astronomer, constellation, orbit, nocturnal, slow-motion, magnify

Nursery

Animals, excluding humans

Model and encourage children to use vocabulary such as: 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

Expose children to supplementary vocabulary such as: life cycle, mane, webbed feet

Humans

Model and encourage children to use vocabulary such as: grow, change, baby, toddler, child, adult, old person, smell, taste, touch, feel, hear, see, blind, deaf Expose children to supplementary vocabulary such as: life cycle, senses, elderly, die (if appropriate)











Respect



Ambition Self-Esteem Perseverance Independence



Living things and their habitats

Model and encourage children to use vocabulary such as: natural, plant, animal, leaves, seeds, conkers, acorns, twigs, bark, shells, feathers, pebbles, stones, same, different, pattern Expose children to supplementary vocabulary such as: living, dead, similar

Plants

Model and encourage children to use vocabulary such as: plant, leaf, stem, trunk, branch, root, bark, flower, petal, seed, berry, fruit, vegetable, bulb, plant, hole, dig, water, weed, grow, shoot, die, dead, soil

Expose children to supplementary vocabulary such as: seedling, healthy, unhealthy, strong, sturdy, wilting, decay, mould, life cycle

Materials, including changing materials

Model and encourage children to use vocabulary such as: 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

Expose children to supplementary vocabulary such as: solid, liquid, rigid, stronger, weaker

Electricity

Model and encourage children to use vocabulary such as: battery, plug, socket, electricity, wire, sound, light, move

Expose children to supplementary vocabulary such as: mains electricity, device, appliance, electrical

Light

Model and encourage children to use vocabulary such as: light, torch, bulb, lamp, spotlight, shiny, brighter, brightest, Sun, shine, glow, mirror

Expose children to supplementary vocabulary such as: light source, reflective, non-reflective, dim, dimmer, dimmest

Forces

Model and encourage children to use vocabulary such as: object, float, sink, water, up, down, top, bottom, push, pull, magnet, spring, squash, bend, twist, stretch, turn, spin, smooth, rough, fast, slow

Expose children to supplementary vocabulary such as: rising, falling, attract, repel, faster, slower, pulley, gear, elastic

<u>Sound</u>

Model and encourage children to use vocabulary such as: sound, noise, loud, quiet, high, low, music, bang, blow, pluck, soft, hard, fast, slow, names of instruments

Expose children to supplementary vocabulary such as: musician, notes, vibrate, vibration, pitch, rhythm, pulse, volume













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