



## Progression in Vocabulary

Adapted from PLAN progression document to focus on Nursery to Year 6 only.

### Introduction

- Bullet points denote statements from [Science Programme of Study: Key Stage 3: National Curriculum in England](#) or [Development Matters](#).
- The vocabulary included for Nursery and 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 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

Year-group(s)	Vocabulary/Statement(s)
<b>Nursery &amp; Reception</b>	look closely, observe, watch, touch, feel, smell, listen, same, different, compare, ask questions, record, sort, group
<b>Years 1 &amp; 2</b>	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, resources, magnifying glass, hand lens, ruler, tape measure, metre stick, pipette, syringe, spoon, teaspoon, answer questions, interpret results, scientific enquiry, pattern seeking, comparative testing, observing over time, classifying, researching using secondary sources
<b>Years 3 &amp; 4</b>	practical work, fair testing, relationships, accurate, thermometer, data logger, 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
<b>Years 5 &amp; 6</b>	variables, independent variable, dependent variable, control variable, evidence, justify, argument (science), causal relationship, accuracy, precision, scatter graphs, bar graphs, line graphs, force meter

## Plants

Year-group(s)	Vocabulary/Statement(s)
<b>Birth to 3</b>	<ul style="list-style-type: none"> <li>Explore natural materials, indoors and outside.</li> </ul>
<b>Nursery</b>	plant, leaf, stem, branch, root, bark, flower, petal, seed, berry, fruit, vegetable, bulb, plant, hole, dig, water, weed, grow, shoot, die, dead, soil, names of plants they grow
<b>Reception</b>	tree, bush, herb, names of plants they see (Reception - Living things and their habitats)
<b>Year 1</b>	leaf, flower, blossom, petal, fruit, berry, root, seed, trunk, branch, stem, bark, stalk, bud, names of trees in the local area, names of garden and wild flowering plants in the local area
<b>Year 2</b>	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)
<b>Year 3</b>	photosynthesis, pollen, insect/wind pollination, male, female, seed formation, seed dispersal (wind dispersal, animal dispersal, water dispersal), air, nutrients, minerals, soil, absorb, transport
<b>Year 4</b>	classification, classification keys (Y4 - Living things and their habitats)
<b>Year 5</b>	life cycle, reproduce, sexual, fertilises, asexual, plantlets, runners, tubers, cuttings (Y5 - Living things and their habitats)
<b>Year 6</b>	flowering, non-flowering, mosses, ferns, conifers (Y6 - Living things and their habitats)

## Living things and their habitats

Year-group(s)	Vocabulary/Statement(s)
<b>Birth to 3</b>	<ul style="list-style-type: none"> <li>Explore natural materials, indoors and outside.</li> </ul>
<b>Nursery</b>	<p>natural, plant, animal, leaves, seeds, conkers, acorns, twigs, bark, shells, feathers, pebbles, stones, same, different, pattern</p> <p>plant, leaf, stem, branch, root, bark, flower, petal, seed, berry, fruit, vegetable, bulb, plant, hole, dig, water, weed, grow, shoot, die, dead, soil (Nursery - Plants)</p>
<b>Reception</b>	<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>
<b>Year 1</b>	<p>names of garden and wild flowering plants in the local area (Y1 - Plants)</p> <p>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)</p> <p>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)</p>
<b>Year 2</b>	<p>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</p> <p>light, shade, Sun, warm, cool, water, space, grow, healthy, bulb, germinate, shoot, seedling (Y2 - Plants)</p> <p>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)</p>
<b>Year 3</b>	<p>photosynthesis, pollen, insect/wind pollination, male, female, seed formation, seed dispersal (e.g. wind dispersal, animal dispersal, water dispersal), air, nutrients, minerals, soil, absorb, transport</p>
<b>Year 4</b>	<p>classification, classification keys, environment, habitat, human impact, positive, negative, migrate, hibernate</p> <p>herbivore, carnivore, omnivore, producer, predator, prey (Y4 - Animals, including humans)</p>
<b>Year 5</b>	<p>life cycle, reproduce, sexual, sperm, fertilises, egg, live young, metamorphosis, asexual, plantlets, runners, cuttings</p>
<b>Year 6</b>	<p>vertebrates, fish, amphibians, reptiles, birds, mammals, warm-blooded, cold-blooded, invertebrates, insects, spiders, snails, worms, flowering, non-flowering, mosses, ferns, conifers</p>

## Animals, including humans

Year-group(s)	Vocabulary/Statement(s)
<b>Birth to 3</b>	<ul style="list-style-type: none"> <li>Explore natural materials, indoors and outside.</li> <li>Make connections between the features of their family and other families.</li> <li>Notice differences between people.</li> </ul>
<b>Nursery</b>	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, fly, patterns, spots, stripes, grow, change, baby, toddler, child, adult, old person, smell, taste, touch, feel, hear, see, blind, deaf
<b>Reception</b>	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
<b>Year 1</b>	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 the school's RSE policy, senses, touch, see, smell, taste, hear, fingers, skin, eyes, nose, ears, tongue
<b>Year 2</b>	<p>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)</p> <p>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)</p>
<b>Year 3</b>	nutrition, nutrients, carbohydrates, sugars, protein, vitamins, minerals, fibre, fat, water, skeleton, bones, muscles, joints, support, protect, move, skull, ribs, spine
<b>Year 4</b>	digestive system, digestion, mouth, teeth, saliva, oesophagus, stomach, small intestine, large intestine, rectum, anus, incisor, canine, molar, premolar, herbivore, carnivore, omnivore, producer, predator, prey
<b>Year 5</b>	<p>puberty, the vocabulary to describe sexual characteristics in line with the school's RSE policy</p> <p>life cycle, foetus, baby, child, adolescent, adult, reproduce, sexual, sperm, fertilises, egg, live young (Y5 - Living things and their habitats)</p>
<b>Year 6</b>	heart, pulse, rate, pumps, blood, blood vessels, transported, lungs, oxygen, carbon dioxide, cycle, circulatory system, diet, drugs, lifestyle

## Evolution and inheritance

Year-group(s)	Vocabulary/Statement(s)
<b>Birth to 3</b>	<ul style="list-style-type: none"> <li>• Make connections between the features of their family and other families.</li> <li>• Notice differences between people.</li> </ul>
<b>Nursery</b>	natural, plant, animal, leaves, seeds, conkers, acorns, twigs, bark, shells, feathers, pebbles, stones, same, different, pattern (Nursery - Living things and their habitats)
<b>Reception</b>	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)
<b>Year 1</b>	leaf, flower, blossom, petal, fruit, berry, root, seed, trunk, branch, stem, bark, stalk, bud (Y1 - Plants)
<b>Year 2</b>	<p>light, shade, Sun, warm, cool, water, space, grow, healthy, bulb, germinate, shoot, seedling (Y2 - Plants)</p> <p>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)</p>
<b>Year 3</b>	<p>photosynthesis, pollen, insect/wind pollination, male, female, seed formation, seed dispersal (e.g. wind dispersal, animal dispersal, water dispersal), air, nutrients, minerals, soil (Y3 - Plants)</p> <p>soil, fossil, bone, flesh, minerals (Y3 - Rocks)</p>
<b>Year 4</b>	<p>environment, habitat, human impact, positive, negative, migrate, hibernate (Y4 - Living things and their habitats)</p> <p>herbivore, carnivore, omnivore, producer, predator, prey (Y4 - Animals, including humans)</p>
<b>Year 5</b>	life cycle, reproduce, sexual, fertilises, asexual, plantlets, runners, tubers, cuttings (Y5 - Living things and their habitats)
<b>Year 6</b>	offspring, sexual reproduction, vary, characteristics, adapted, inherited, species, evolve, evolution

## Seasonal changes

Year-group(s)	Vocabulary/Statement(s)
<b>Birth to 3</b>	<ul style="list-style-type: none"> <li>Explore natural materials, indoors and outside.</li> </ul>
<b>Nursery</b>	<p>grow, shoot, die, dead (Nursery - Plants)</p> <p>egg, chick, bird, caterpillar, cocoon, chrysalis, butterfly, frog spawn, tadpole, froglet, frog, grow, change, die, names of animals and their young (Nursery - Animals, excluding humans)</p>
<b>Reception</b>	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
<b>Year 1</b>	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
<b>Year 2</b>	
<b>Year 3</b>	
<b>Year 4</b>	
<b>Year 5</b>	
<b>Year 6</b>	

## Materials

Year-group(s)	Vocabulary/Statement(s)
<b>Birth to 3</b>	<ul style="list-style-type: none"> <li>Explore materials with different properties.</li> <li>Explore natural materials, indoors and outside.</li> </ul>
<b>Nursery</b>	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
<b>Reception</b>	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
<b>Year 1</b>	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
<b>Year 2</b>	opaque, transparent, translucent, reflective, non-reflective, flexible, rigid, shape, push/pushing, pull/pulling, twist/twisting, squash/squashing, bend/bending, stretch/stretching
<b>Year 3</b>	<p>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)</p> <p>magnetic force, magnet, attract, magnetic material, metal, iron, steel (Y3 - Forces and magnets)</p>
<b>Year 4</b>	<p>solid, liquid, gas, heating, cooling, state change, melting, freezing, melting point, boiling, boiling point, evaporation, condensation, temperature, water cycle</p> <p>electrical conductor, electrical insulator, metal, non-metal (Y4 - Electricity)</p>
<b>Year 5</b>	thermal insulator/conductor, change of state, mixture, dissolve, solution, soluble, insoluble, filter, sieve, reversible/non-reversible change, burning, rusting, new material
<b>Year 6</b>	

## Rocks

Year-group(s)	Vocabulary/Statement(s)
Birth to 3	<ul style="list-style-type: none"> <li>Explore materials with different properties.</li> <li>Explore natural materials, indoors and outside.</li> </ul>
Nursery	natural, shells, pebbles, stones
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

## Light

Year-group(s)	Vocabulary/Statement(s)
Birth to 3	<ul style="list-style-type: none"> <li>Repeat actions that have an effect.</li> </ul>
Nursery	light, torch, bulb, lamp, spotlight, shiny, bright, brighter, brightest, Sun, shine, glow, mirror
Reception	Sun, sunny, light, shadow, shady, clouds, torch, see-through, not see-through, source, light source
Year 1	<p>senses, see, eyes (Y1 - Animals, including humans)</p> <p>shiny, dull, see-through, not see-through (Y1 - Materials)</p>
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

## Forces

Year-group(s)	Vocabulary/Statement(s)
<b>Birth to 3</b>	<ul style="list-style-type: none"> <li>Repeat actions that have an effect.</li> </ul>
<b>Nursery</b>	object, float, sink, water, up, down, top, bottom, push, pull, magnet, spring, squash, bend, twist, stretch, turn, spin, smooth, rough, fast, slow
<b>Reception</b>	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
<b>Year 1</b>	
<b>Year 2</b>	flexible, rigid, shape, push/pushing, pull/pulling, twist/twisting, squash/squashing, bend/bending, stretch/stretching (Y2 - Uses of everyday materials)
<b>Year 3</b>	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
<b>Year 4</b>	
<b>Year 5</b>	force, gravity, Earth, air resistance, water resistance, friction, mechanisms, simple machines, levers, pulleys, gears
<b>Year 6</b>	

## Sound

Year-group(s)	Vocabulary/Statement(s)
<b>Birth to 3</b>	<ul style="list-style-type: none"> <li>Repeat actions that have an effect.</li> </ul>
<b>Nursery</b>	sound, noise, loud, quiet, high, low, music, bang, blow, pluck, soft, hard, fast, slow, names of instruments
<b>Reception</b>	sound, noise, listen, hear, music, voices, bird song, traffic, sirens, thunder, high, low, loud, quiet, soft, volume, crackle, thunder, hum, buzz, roar
<b>Year 1</b>	senses, hear, ear (Y1 - Animals, including humans)
<b>Year 2</b>	
<b>Year 3</b>	
<b>Year 4</b>	sound, source, vibrate, vibration, travel, pitch (high, low), volume, faint, quiet, loud, insulation
<b>Year 5</b>	
<b>Year 6</b>	

## Electricity

Year-group(s)	Vocabulary/Statement(s)
Birth to 3	<ul style="list-style-type: none"> <li>Repeat actions that have an effect.</li> </ul>
Nursery	battery, plug, socket, electricity, wire, sound, light, move
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	
Year 6	circuit diagram, circuit symbol, voltage

## Earth and space

Year-group(s)	Vocabulary/Statement(s)
Birth to 3	<ul style="list-style-type: none"> <li>Explore and respond to different natural phenomena in their setting and on trips.</li> </ul>
Nursery	
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	