

# Science Vocabulary Coverage For National Curriculum 2014 at Les Landes School

This document shows the progression of required vocabulary that the children should understand throughout each topic as a prerequisite for further learning. There is a separate table for working scientifically vocabulary progression provided at the end of this document.



|                          | Year 1   | Year 2   | Year 3   | Year 4   | Year 5   | Year 6   |
|--------------------------|--|--|--|--|--|--|
| Animals including humans | <p><u>Names of animal groups:</u> <b>fish, amphibians, reptiles</b>, birds, <b>mammals</b>.</p> <p><u>Animal diets:</u> <b>carnivore, herbivore, omnivore</b>.</p> <p><u>Human and animal body parts:</u> e.g. body, head, neck, arms, elbows, legs, knees, face, ears, eyes, nose, hair, mouth, teeth, hands, feet, tail, wings, feathers, fur, beak, fins, gills.</p> <p><u>Human senses:</u> <b>sight, hearing, touch, smell, taste</b>.</p> <p><u>Exploring senses:</u> loud, quiet, soft, rough.</p> <p><u>Other:</u> human, animal, pet.</p> | <p><u>Being born and growing:</u> <b>Young, offspring, live young</b>, grow, <b>develop</b>, change, hatch, lay, fly, crawl, talk.</p> <p><u>Young and adult names:</u> e.g. lamb and sheep, kitten and cat, duckling and duck.</p> <p><u>Life cycle stages:</u> e.g. baby, toddler, child, teenager, <b>adult</b>; frogspawn, tadpole, froglet, frog.</p> <p><u>Survival and staying healthy:</u> basic needs, survive, food, air, <b>exercise, diet, nutrition</b>, healthy, balanced diet, <b>hygiene, germs</b>.</p> <p><u>Food groups:</u> fruit and vegetables, proteins, dairy and alternatives, carbohydrates, oil and spreads, fat, salt, sugar.</p> <p>Previously introduced vocabulary: <b>water</b>.</p> | <p><u>Food groups and nutrients:</u> fibre, fats (<b>saturated and unsaturated</b>), vitamins, minerals.</p> <p><u>Skeletons and muscles:</u> skeleton, <b>muscles, tendons, joints</b>, protection, support, organs, voluntary muscles, involuntary muscles, biceps, triceps, contract, relax, bone, cartilage, shell, <b>vertebrate, invertebrate</b>, endoskeleton, exoskeleton, hydrostatic skeleton.</p> <p><u>Names of human bones:</u> e.g. skull, spine, backbone, vertebral column, ribcage, pelvis, clavicle, scapula, humerus, ulna, pelvis, radius, femur, tibia, fibula.</p> <p><u>Other:</u> <b>energy</b>.</p> <p>Previously introduced vocabulary: movement.</p> | <p><u>Digestive system:</u> <b>digest</b>, digestion, tongue, teeth, saliva, salivary glands, <b>oesophagus, stomach</b>, liver, pancreas, gall bladder, <b>small intestine, duodenum, large intestine, rectum</b>, anus, faeces, organ.</p> <p><u>Types of teeth and dental care:</u> <b>molar, premolar, incisor, canine</b>, wisdom teeth, tooth decay, plaque, enamel, baby (milk) teeth.</p> <p><u>Food chains and animal diets:</u> decomposer, food web.</p> <p>Previously introduced vocabulary: <b>producer, consumer, prey, predator, excretion, habitat</b>.</p>  | <p><u>Process of reproduction:</u> <b>gestation</b>, sperm, egg, cells, clone.</p> <p><u>Changes and life cycle:</u> embryo, foetus, uterus, <b>prenatal, adolescence, puberty, menstruation, adulthood, menopause, life expectancy</b>, old age, hormones, sweat.</p> <p><u>Changing body parts:</u> e.g. breasts, penis, larynx, ovaries, genitalia, pubic hair.</p> <p>Previously introduced vocabulary: reproduction, <b>reproduce</b>, types of animals and animal groups, <b>fertilisation</b>.</p>    | <p><u>Circulatory system:</u> circulation, <b>heart</b>, pulse, heartbeat, heart rate, lungs, breathing, <b>blood vessels</b>, blood, pump, transported, <b>oxygenated blood, deoxygenated blood</b>, oxygen, arteries, veins, capillaries, chambers, plasma, platelets, white blood cells, red blood cells.</p> <p><u>Lifestyle:</u> <b>drug, alcohol</b>, smoking, disease, calorie, energy input, energy output.</p> <p><u>Other:</u> water transportation, nutrient transportation, waste products.</p> <p>Previously introduced vocabulary: carbon dioxide.</p> |
| Plants                   | <p><u>Names of common plants:</u> <b>wild plant, garden plant, evergreen tree, deciduous tree</b>, common flowering plant, <b>weed</b>, grass.</p> <p><u>Name some features of plants:</u> e.g. <b>flower</b>, vegetable, <b>fruit</b>, berry, <b>leaf/leaves</b>, blossom, <b>petal, stem</b>, trunk, branch, <b>root, seed, bulb</b>, soil.</p> <p><u>Name some common types of plant:</u> e.g. sunflower, daffodil.</p>   | <p><u>Growth of plants:</u> <b>germination, shoot, seed dispersal</b>, grow, food store, life cycle, die, wilt, seedling, sapling.</p> <p><u>Needs of plants:</u> <b>sunlight, nutrition</b>, light, healthy, space, air.</p> <p><u>Name different types of plant:</u> e.g. bean plant, cactus.</p> <p><u>Names of different habitats:</u> e.g. rainforest, desert.</p> <p>Previously introduced vocabulary: <b>water, temperature</b>, warm, hot, cold, habitat.</p>  | <p><u>Water transportation:</u> transport, <b>evaporation, evaporate, nutrients</b>, absorb, anchor.</p> <p><u>Life cycle of flowering plants:</u> <b>pollination</b> (insect/wind), pollen, nectar, pollinator, seed formation, <b>seed dispersal</b> (animal/wind/water), reproduce, <b>fertilisation</b>, fertilise, <b>stamen</b>, anther, filament, <b>carpel (pistil)</b>, stigma, style, ovary, ovule, <b>sepal</b>, carbon dioxide.</p> <p>Previously introduced vocabulary: life cycle.</p>   |  |  |  |
| Humans                   |  | <p><u>Living or dead:</u> <b>living, dead, never living</b>, not living, alive, never been alive, healthy.</p> <p><u>Habitats including microhabitats:</u> <b>depend</b>, shelter, safety, <b>survive</b>, suited, space, minibeast, air.</p> <p><u>Life processes:</u> movement, sensitivity, growth, reproduction, nutrition, excretion, respiration.</p> <p><u>Food chains:</u> <b>food sources</b>, food, producer, consumer, predator, prey.</p> <p><u>Names of habitats and microhabitats:</u> e.g. under leaves, woodland, rainforest, sea shore, ocean, urban, local habitat.</p> <p>Previously introduced vocabulary: senses, <b>carnivore, herbivore, omnivore, seed, water</b>, names of materials.</p>   |  | <p><u>Living things:</u> <b>organisms, specimen, species</b>.</p> <p><u>Grouping living things:</u> <b>classification</b>, classification keys, classify, <b>characteristics</b>.</p> <p><u>Names of invertebrate animals:</u> snails and slugs, worms, spiders, insects.</p> <p><u>Invertebrate body parts:</u> e.g. wing case, abdomen, thorax, antenna, segments, mandible, proboscis, prolegs.</p> <p><u>Environmental changes:</u> <b>environment</b>, environmental dangers, adapt, natural changes, climate change, deforestation, pollution, urbanisation, invasive species, <b>endangered species, extinct</b>.</p> | <p><u>Reproduction:</u> <b>asexual reproduction, sexual reproduction, gestation, metamorphosis</b>, gametes, tuber, runners/side branches, plantlet, cuttings, embryo, adolescent, penis, vagina, egg, pregnancy, gestation.</p> <p>Previously introduced vocabulary: <b>life cycle, pollination</b>, offspring, <b>fertilise</b>, fertilisation, sepal, filament, anther, stamen, pollen, petal, stigma, style, ovary, carpel, ovule, stem, bulb, roots, mammal, adult, baby, sperm, cells, live young.</p> | <p><u>Classifying:</u> Carl Linnaeus, Linnaean system, flowering and non-flowering plants, variation.</p> <p><u>Microorganisms:</u> <b>bacteria</b>, single-celled, microbes, microscopic, virus, fungi, fungus, mould, antibiotic, yeast, ferment, <b>microscope</b>, decompose.</p>  |

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|                           |  |  |  | Previously introduced vocabulary: carbon dioxide, <b>fish, bird, mammal, amphibian, reptile, skeleton, bone, vertebrate, invertebrate</b> , backbone, names for animal body parts, names of common plants, photosynthesis. |  |  |
| Evolution and Inheritance |  |  |  |  |  | <p><b>Evolution and inheritance:</b> evolve, <b>adaptation</b>, inherit, <b>natural selection, adaptive traits, inherited traits</b>, mutations, theory of evolution, ancestors, biological parent, chromosomes, genes, Charles Darwin.</p> <p><u>Other:</u> selective breeding, artificial selection, breed, cross breeding, genetically modified food, cloning, DNA.</p> <p>Previously introduced vocabulary: classification, <b>offspring, characteristics, habitat, environment</b>, adapt, <b>variations</b>, human, <b>fossil</b>, suited, cells, names of different habitats, names of animals and their body parts, species, <b>sedimentary rock, lava, igneous rock, metamorphic rock, magma</b>, heat, <b>fossilisation</b>.</p> |
| Seasons                   | <p><b>Seasons:</b> <b>spring, summer, autumn, winter</b>, seasonal change.</p> <p><b>Weather:</b> e.g. sun, rain, snow, sleet, frost, ice, fog, cloud, hot/warm, cold, storm, wind, thunder, weather forecast.</p> <p><u>Measuring weather:</u> temperature, rainfall, wind direction, thermometer, rain gauge.</p> <p><u>Day length:</u> night, day, <b>daylight</b>.</p> |  |  |  |  |  |
| Forces                    |  |  | <p><u>How things move:</u> move, movement, <b>surface</b>, distance, strength.</p> <p><u>Types of forces:</u> push, pull, contact force, non-contact force, <b>friction</b>.</p> <p><b>Magnets:</b> <b>magnetic, magnetic field</b>, magnetic force, bar magnet, horseshoe magnet, ring magnet, magnetic poles (north pole, south pole), <b>attract, repel</b>, compass.</p> <p><u>Magnetic and non-magnetic materials:</u> e.g. iron, nickel, cobalt.</p> <p>Previously introduced vocabulary: metal, names of materials.</p> |  | <p><u>Types of forces:</u> <b>air resistance, water resistance, buoyancy, upthrust, Earth's gravitational pull, gravity</b>, opposing forces, driving force.</p> <p><b>Mechanisms:</b> levers, pulleys, gears/cogs.</p> <p><u>Measurements:</u> <b>weight</b>, mass, kilograms (kg), Newtons (N), scales, speed, fast, slow.</p> <p><u>Other:</u> <b>streamlined</b>, Earth.</p> <p>Previously introduced vocabulary: air, heat, moon.</p> |  |
| Light                     |  |  | <p><b>Light and seeing:</b> <b>dark</b>, absence of light, <b>light source</b>, illuminate, visible, <b>shadow, translucent</b>, energy, block.</p> <p><b>Light sources:</b> e.g. candle, torch, fire, lantern, lightning.</p>   |  |  | <p><u>Reflection:</u> periscope.</p> <p><u>Seeing light:</u> <b>visible spectrum, prism</b>.</p> <p><u>How light travels:</u> light waves, wavelength, straight line, <b>refraction</b>.</p>   |

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|                 |   |  | <p><b>Reflective light:</b> reflect, reflection, surface, ray, scatter, reverse, beam, angle, mirror, moon.</p> <p><b>Sun safety:</b> dangerous, glare, damage, UV light, UV rating, sunglasses, direct.</p> <p>Previously introduced vocabulary: <b>opaque, transparent</b>, sunlight, sun.</p>  |   |  | Previously introduced vocabulary: names and properties of materials, absorb.  |
| Sound           |   |  |   | <p><b>Parts of the ear:</b> eardrum.</p> <p><b>Making sound:</b> vibration, vocal cords, particles.</p> <p><b>Measuring sound:</b> pitch, volume, amplitude, sound wave, quiet, loud, high, low, travel, distance.</p> <p><b>Other:</b> soundproof, absorb sound.</p>   |  |   |
| Earth and Space |   |  |   |   | <p><b>Solar system:</b> star, planet.</p> <p><b>Names of planets:</b> Mercury, Venus, Earth, Mars, Jupiter, Saturn, Neptune, Uranus.</p> <p><b>Shape:</b> spherical bodies, sphere.</p> <p><b>Movement:</b> rotate, axis, orbit, satellite.</p> <p><b>Theories:</b> geocentric model, heliocentric model, astronomer.</p> <p><b>Day length:</b> sunrise, sunset, midday, time zone.</p> <p>Previously introduced vocabulary: <b>Sun, moon, shadow</b>, day, night, heat, light, reflect.</p> |   |
| Electricity     |   |  |   | <ul style="list-style-type: none"> <li>• <b>Electricity:</b> mains-powered, battery-powered, mains electricity, plug, appliances, devices.</li> <li>• <b>Circuits:</b> circuit, simple series circuit, complete circuit, incomplete circuit.</li> <li>• <b>Circuit parts:</b> bulb, cell, wire, buzzer, switch, motor, battery.</li> <li>• <b>Materials:</b> electrical conductor, electrical insulator.</li> <li>• <b>Other:</b> safety.</li> </ul> <p>Previously introduced vocabulary: names of materials.</p> |  | <ul style="list-style-type: none"> <li>• <b>Flow and measure of electricity:</b> voltage, amps, resistance, electrons, volts (V), current.</li> <li>• <b>Circuits:</b> symbol, circuit diagram, component, function, filament.</li> <li>• <b>Variations:</b> dimmer, brighter, louder, quieter.</li> <li>• <b>Types of electricity:</b> natural electricity, human-made electricity, solar panels, power station.</li> <li>• <b>Other:</b> positive, negative.</li> </ul> |
| Materials       | <ul style="list-style-type: none"> <li>• <b>Names of materials:</b> wood, plastic, glass, metal, water, rock, paper, cardboard, rubber, fabric.</li> <li>• <b>Properties of materials:</b> hard, soft, shiny, dull, stretchy, rough, smooth, bendy, not bendy, transparent, opaque, waterproof, not waterproof, absorbent, not absorbent, sharp, stiff.</li> <li>• <b>Other:</b> object.</li> </ul> | <ul style="list-style-type: none"> <li>• <b>Changing shape:</b> squash, bend, twist, stretch.</li> <li>• <b>Properties of materials:</b> e.g. strong, flexible, light, hard-wearing, elastic.</li> <li>• <b>Other:</b> suitability, recycle, pollution.</li> </ul> | <ul style="list-style-type: none"> <li>• <b>Types of rock:</b> sedimentary rock, igneous rock, metamorphic rock.</li> <li>• <b>Properties of rocks:</b> permeable, semi-permeable, impermeable, durable.</li> <li>• <b>Names of rocks:</b> e.g. marble, chalk, granite, sandstone, slate.</li> <li>• <b>Formation of rocks and fossils:</b> natural, human-made, magma, lava, molten rock, sediment, erosion, fossilisation, layers, bone, fossil.</li> </ul> | <ul style="list-style-type: none"> <li>• <b>States of matter:</b> solids, liquids, gases, particles.</li> <li>• <b>State change:</b> evaporate, condense, melt, freeze, heat, cool, melting point, freezing point, boiling point, water vapour.</li> <li>• <b>Water cycle:</b> precipitation, evaporation, condensation, ground run-off, collection, underground water, bodies of water (sea, river, stream), water droplets, hail.</li> <li>• <b>Other:</b> atmosphere.</li> </ul>                               | <ul style="list-style-type: none"> <li>• <b>Properties of materials:</b> thermal conductor/insulator, magnetism, electrical resistance, transparency.</li> <li>• <b>Mixtures and solutions:</b> dissolving, substance, soluble, insoluble.</li> <li>• <b>Changes of materials:</b> reversible change, physical change, irreversible change, chemical change, burning, new material, product.</li> <li>• <b>Separating:</b> sieving, filtering, magnetic attraction.</li> </ul>               |   |

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|----------------|---|---|--|--|--|--|
|                |   |   | <ul style="list-style-type: none"> <li>• <b>Soil:</b> sandy, chalky, clay, peaty, loamy, topsoil, subsoil, bedrock, mineral, organic matter, compost.</li> <li>• <b>Other: palaeontology.</b></li> </ul> <p>Previously introduced vocabulary: soil, <b>water</b>, air.</p>   | <ul style="list-style-type: none"> <li>• Previously introduced vocabulary: temperature, rain, cloud, snow, wind, sun, hot, cold, absorb, carbon dioxide.</li> </ul>  | Previously introduced vocabulary: electrical <b>conductor/insulator</b> , bulb, <b>translucent</b> . |  |
| Sustainability | <ul style="list-style-type: none"> <li>•</li> </ul> | <ul style="list-style-type: none"> <li>• <b>Minibeast:</b> insect, <b>invertebrate</b>, bumblebee, honey bee, earthworm (and other specific names)</li> <li>• <b>Environment:</b> local environment, <b>habitat, microhabitat, biodiversity, ecosystem</b>, conservation, protect, <b>depend</b>, advantages</li> <li>• <b>Pollination:</b> <b>pollinator</b>, nectar, pollen</li> <li>• Food chain: consumer, predator, prey, food source, <b>predator minibeast</b></li> <li>• Decomposer: <b>decompose</b>, nutrients, healthy, unhealthy, food waste, natural materials, compost, leaf litter</li> <li>• <b>Basic needs:</b> shelter, suitable temperature</li> <li>• Previously introduced vocabulary: <b>carnivore, omnivore, herbivore</b>, plant, tree, plant part names (e.g. <b>flower</b>), soil, water</li> </ul> | <ul style="list-style-type: none"> <li>• <b>Climate: climate change, greenhouse gas, greenhouse effect</b>, global warming, <b>carbon footprint</b></li> <li>• <b>Reduce, reuse, recycle: waste, landfill, sustainable, biodegradable</b></li> <li>• <b>Materials:</b> litter, single-use plastic</li> <li>• <b>Energy: renewable, non-renewable</b></li> <li>• <b>Other:</b> nutrients</li> </ul> <p>Previously introduced vocabulary: material, <b>pollution</b></p> | <ul style="list-style-type: none"> <li>• <b>Climate: climate change, greenhouse gas, greenhouse effect</b>, global warming, <b>carbon footprint</b></li> <li>• <b>Reduce, reuse, recycle: waste, landfill, sustainable, biodegradable</b></li> <li>• <b>Materials:</b> litter, single-use plastic</li> <li>• <b>Energy: renewable, non-renewable</b></li> <li>• <b>Other:</b> nutrients</li> </ul> <p>Previously introduced vocabulary: material, <b>pollution</b></p> |  |  |

### Progression of Vocabulary – Working Scientifically

| KS1   | LKS2   | UKS2   |  |
|---|--|--|--|
| aim<br>answers<br>block diagrams<br>changes<br>compare<br>comparative test<br>data<br>describe<br>difference<br>different<br>do<br>equipment<br>explore<br>findings<br>gather<br>group<br>identify (name)<br>identifying, grouping and classifying<br>investigate<br>measure<br>notice<br>observe | observing over time<br>patterns<br>pattern seeking<br>pictogram<br>plan<br>questions<br>record<br>researching<br>review<br>same<br>scientific enquiry<br>secondary sources<br>similarity<br>sort<br>sorting diagrams<br>table<br>tally chart<br>test<br>What will we do? (plan)<br>What do you think will happen? (prediction)<br>What happened? (results)<br>What have we found out? (conclusion) | accurate<br>bar chart<br>chart<br>classify<br>conclusion (What have we found out?)<br>criteria<br>data<br>develop<br>diagram<br>evaluate<br>evidence<br>explanation<br>key<br>making a test fair<br>method<br>observations<br>practical enquiry<br>prediction (What do you think will happen?)<br>primary sources<br>questioning<br>reasoning<br>relationships<br>results (What happened?)<br>secondary sources<br>standard units<br>What do we change, what do we keep the same, what are we measuring? | accuracy<br>causal relationship<br>justify<br>line graph<br>precision<br>readings<br>refute<br>repeat readings<br>scatter graph<br>support<br>variables<br>control variable (What do we keep the same?)<br>independent variable (What do we change?)<br>dependent variable (What do we measure?) |