



# Neroche Primary School

## Science Vocabulary & Enquiry Skills



### EYFS

\*Vocabulary organised by theme rather than topic titles, due to daily exposure to science-led Early Learning Goals as part of independent child initiated activities.

Acorns and Ash	General	Places	Objects	Materials	Living things – plants	Living things – animals	Environments	Changes
<b>Key vocabulary</b>	<ul style="list-style-type: none"> <li>Natural, wild, wildlife, native.</li> </ul>	<ul style="list-style-type: none"> <li>Habitats - Woodland, desert, ocean, jungle, Arctic.</li> <li>Microhabitats: - Log, stone, tree, dead leaves, soil.</li> <li>Seaside.</li> </ul>	<ul style="list-style-type: none"> <li>British Autumn fruits and vegetables (e.g. apples, pears, beetroot, carrots, potatoes, butternut squash, sweetcorn, cauliflower).</li> <li>Bread: - Mix, knead, prove, rise.</li> </ul>	<ul style="list-style-type: none"> <li>Object, material, properties, suitable, pipette, recycling.</li> <li>Properties - Waterproof, strong/weak, dense/less dense, hard/soft.</li> <li>Materials Bubble wrap, foil, plastic, fabric, paper, straw, sticks, bricks, metal, glass.</li> </ul>	<ul style="list-style-type: none"> <li>Grow</li> <li>Lifecycle: - Roots, shoots, stem, leaves, buds, flower</li> <li>Water, light, warmth, temperature, soil, compost</li> </ul>	<ul style="list-style-type: none"> <li>Body parts.</li> <li>Backbone, skeleton, soft body, shell.</li> <li>Adapted, hibernate, migrate.</li> <li>Predator, prey.</li> <li>Nocturnal.</li> <li>Adult/parent, baby.</li> <li>Lifecycle: - Egg, caterpillar, chrysalis, butterfly.</li> <li>Birds (owl, duck), insects/bugs/ minibeasts (lacewing, ladybird, woodlouse, bee, wasp, spider, tarantula, earthworm, snail, locust, cricket, millipede, butterfly, caterpillar), fish, reptiles (snake, tortoise, gecko), amphibians, mammals (mouse, shrew, vole, hare, fox).</li> <li>What animals give us - Meat, milk/cheese/ butter, wool, eggs, honey.</li> </ul>	<ul style="list-style-type: none"> <li>Environment</li> <li>Woodland, valley.</li> <li>Playground.</li> <li>Recycling, compost.</li> </ul>	<ul style="list-style-type: none"> <li>Seasons: - Spring (growth, baby animals) - Summer - Autumn (Harvest) - Winter</li> <li>Weather: - Sun, rain, wind, snow, ice, frost, sleet, hail. - Cold/warm/hot</li> <li>Day length, day light.</li> </ul>
<b>Enquiry Skills</b>	<ul style="list-style-type: none"> <li>I question why things happen</li> <li>I have my own ideas</li> <li>I test my ideas</li> <li>I begin to use science words</li> <li>I notice similarities and differences</li> <li>I can use my senses and look closely</li> <li>I use equipment and tools carefully</li> <li>I can create simple representations of people and objects</li> <li>I can talk about things like plants, animals, natural and found objects</li> </ul>							

## KS1

### Ongoing working scientifically vocabulary for Key Stage 1:

Question, answer, observe, observing, equipment, identify, classify, sort, diagram, chart, map, data, compare, contrast, describe, biology, chemistry, physics, group, record.

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
<b>Elm</b>	<b>Seasonal Changes</b> *to be taught throughout the year as a focus each half term		<b>Animals including humans</b>	<b>Materials</b>	<b>Plants</b>	
<b>Key vocabulary</b>	Weather (sunny, rainy, windy, snowy etc.), seasons (Winter, Summer, Spring, Autumn), sun, sunrise, sunset, day length, monsoon, khareef, thunder storm.		Head, body, eyes, ears, mouth, teeth, leg, tail, wing, claw, fin, scales, feathers, fur, beak, paws, hooves.  Senses, touch, see, smell, taste, hear, fingers (skin), eyes, nose, ear and tongue.	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.	Leaf, flower, blossom, petal, fruit, berry, root, seed, trunk, branch, stem, bark, stalk, bud.	
<b>Enquiry Skills</b>	<ul style="list-style-type: none"><li>• I use simple scientific language</li><li>• I ask simple questions</li><li>• I perform simple tests</li><li>• I recognise that questions can be answered in different ways</li><li>• I can compare things. I sort and group them</li><li>• I observe closely</li><li>• I use simple equipment to make measurements</li><li>• I gather and record simple data in different ways</li><li>• I talk about what I have found out</li></ul>					

Beech	Living things and their habitats		Animals including humans	Use of everyday materials	Plants
<b>Key vocabulary</b>	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.		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).	Names of materials – increased range from year 1.  Properties of materials - as for year 1 plus opaque, transparent and translucent, reflective, non-reflective, flexible, rigid, shape, push/pushing, pull/puling, twist/twisting, squash/squashing. Bend/bending, stretch/stretching.	As for year 1 plus - light, shade, sun, warm, cool, water, grow, healthy, germinate.
<b>Enquiry Skills</b>	<ul style="list-style-type: none"> <li>• I use simple scientific language</li> <li>• I ask simple questions</li> <li>• I perform simple tests</li> <li>• I recognise that questions can be answered in different ways</li> <li>• I can compare things. I sort and group them</li> <li>• I observe closely</li> <li>• I use simple equipment to make measurements</li> <li>• I gather and record simple data in different ways</li> <li>• I talk about what I have found out</li> </ul>				

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
<b>Poplar</b>	<b>Scientific Enquiry Skills</b>	<b>Rocks</b>	<b>Animals including humans</b>	<b>Plants</b>	<b>Forces and Magnets</b>	<b>Light</b>
<b>Key vocabulary</b>	<p><b>Research:</b> relevant questions, scientific enquiry, comparative and fair test, systematic, careful observation, accurate measurements</p> <p><b>Equipment:</b> thermometer, data logger</p> <p><b>Data:</b> gather, record, classify, present</p> <p><b>Record:</b> drawings, labelled diagrams, keys, bar charts, tables, oral and written explanations, conclusion, predictions, differences, similarities, changes, evidence, improve, secondary sources, guide, keys, construct, interpret.</p>	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.	Nutrition, nutrients, carbohydrates, sugars, protein, vitamins, minerals, fibre, fat, water, skeleton, bones, muscles, support, protect, move, skull, ribs, spine, muscles, joints.	Photosynthesis, pollen, insect/wind pollination, seed formation, seed dispersal – wind dispersal, animal dispersal, water dispersal.	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.	Light, light source, dark, absence of light, transparent, translucent, opaque, shiny, matt, surface, shadow, reflect, mirror, sunlight, dangerous.
<b>Enquiry Skills</b>	<ul style="list-style-type: none"> <li>• I set up my own simple tests</li> <li>• I make careful observations</li> <li>• I use different equipment to measure accurately in standard units</li> <li>• I ask my own questions and I use different ways to answer them</li> <li>• I suggest improvements and raise further questions</li> <li>• I use relevant scientific language</li> <li>• I draw simple conclusions and make predictions for new values</li> <li>• I explain what I have found out using speaking and writing</li> <li>• I gather, record, classify and present data in different ways including drawings, labelled diagrams, keys, bar charts and tables</li> </ul>					

Willow	Scientific Enquiry Skills	States of matter	Animals including humans	Living things and their habitats	Electricity	Sound
<p style="text-align: center;"><b>Key vocabulary</b></p>	<p><b>Research:</b> relevant questions, scientific enquiry, comparative and fair test, systematic, careful observation, accurate measurements</p> <p><b>Equipment:</b> thermometer, data logger</p> <p><b>Data:</b> gather, record, classify, present</p> <p><b>Record:</b> drawings, labelled diagrams, keys, bar charts, tables, oral and written explanations, conclusion, predictions, differences, similarities, changes, evidence, improve, secondary sources, guide, keys, construct, interpret.</p>	<p>Solid, liquid, gas, state change, melting, freezing, melting point, boiling point, evaporation, temperature, water cycle.</p>	<p>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.</p>	<p>Classification, classification keys, environment, habitat, human impact, positive, negative, migrate, hibernate.</p>	<p>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.</p>	<p>Sound, source, vibrate, vibration, travel, pitch (high, low), volume, faint, loud, insulation.</p>
<p><b>Enquiry Skills</b></p>	<ul style="list-style-type: none"> <li>• I set up my own simple tests</li> <li>• I make careful observations</li> <li>• I use different equipment to measure accurately in standard units</li> <li>• I ask my own questions and I use different ways to answer them</li> <li>• I suggest improvements and raise further questions</li> <li>• I use relevant scientific language</li> <li>• I draw simple conclusions and make predictions for new values</li> <li>• I explain what I have found out using speaking and writing</li> <li>• I gather, record, classify and present data in different ways including drawings, labelled diagrams, keys, bar charts and tables</li> </ul>					

Pine	Scientific Enquiry Skills	Properties and changes of materials	Animals including humans	Living things and their habitats	Earth and Space	Forces
<p style="text-align: center;"><b>Key vocabulary</b></p>	<p>Plan, variables, measurements, accuracy, precision, repeat readings  <b>Record data:</b>  scientific diagrams, labels, classification keys, tables, scatter graphs, bar graph and line graphs, predictions, further comparative and fair test, report and present conclusions, causal relationships, explanations, degree of trust, oral and written display and presentation  <b>Evidence:</b>  support, refute ideas or arguments, identify, classify and describe, patterns, systematic, quantitative measurements.</p>	<p>Thermal/electrical insulator/conductor, change of state, mixture, dissolve, solution, soluble, insoluble, filter, sieve reversible/non-reversible change, burning, rusting, new material.</p>		<p>Life cycle, reproduce, sexual, sperm, fertilises, egg, live young, metamorphosis, asexual, plantlets, runners, bulbs, cuttings.</p>	<p>Earth, Sun, Moon, (Mercury, Jupiter, Saturn, Venus, Mars, Uranus, Neptune) spherical, solar system, rotates, star, orbit, planets.</p>	<p>Force, gravity, Earth, air resistance, water resistance, friction, mechanisms, simple machines, levers, pulleys, gears.</p>
<p><b>Enquiry Skills</b></p>	<ul style="list-style-type: none"> <li>• I use relevant scientific language and illustrations</li> <li>• I use results to make predictions and set up more tests (including fair tests)</li> <li>• I ask different kinds of questions</li> <li>• I plan different types of scientific enquiries to answer questions</li> <li>• I can set up fair tests when necessary</li> <li>• I decide what observations and measurements to make</li> <li>• I use different scientific equipment to measure with precision. I take repeat readings when appropriate</li> <li>• I decide how to record data and results. I can use scientific diagrams, labels, classifications, keys, tables and scatter/bar/line graphs</li> <li>• I report and present findings using speaking and writing including displays and presentations</li> </ul>					

Oak	Scientific Enquiry Skills	Evolution and inheritance	Animals including humans	Living things and their habitats	Light	Electricity
<p style="text-align: center;"><b>Key vocabulary</b></p>	<p>Plan, variables, measurements, accuracy, precision, repeat readings  <b>Record data:</b>  scientific diagrams, labels, classification keys, tables, scatter graphs, bar graph and line graphs, predictions, further comparative and fair test, report and present conclusions, causal relationships, explanations, degree of trust, oral and written display and presentation  <b>Evidence:</b>  support, refute ideas or arguments, identify, classify and describe, patterns, systematic, quantitative measurements.</p>	<p>Offspring, sexual reproduction, vary, characteristics, suited, adapted, environment, inherited, species, fossils.</p>	<p>Heart, pulse, rate, pumps, blood, blood vessels, transported, lungs, oxygen, carbon dioxide, nutrients, water, muscles, cycle, circulatory system, diet, exercise, drugs and lifestyle.</p>	<p>Vertebrates, fish, amphibians, reptiles, birds, mammals, invertebrates, insects, spiders, snails, worms, flowering and non-flowering.</p>	<p>Light, light source, dark, absence of light, transparent, translucent, opaque, shiny, matt, surface, shadow, reflect, mirror, sunlight, dangerous, straight lines, light rays.</p>	<p>Circuit, complete circuit, circuit diagram, circuit symbol, cell, battery, bulb, buzzer, motor, switch, voltage.</p> <p><b>*NB:</b> Children do not need to understand what voltage is but will use volts and voltage to describe different batteries. The words cells and batteries are now used interchangeably.</p>
<p><b>Enquiry Skills</b></p>	<ul style="list-style-type: none"> <li>• I use relevant scientific language and illustrations</li> <li>• I use results to make predictions and set up more tests (including fair tests)</li> <li>• I ask different kinds of questions</li> <li>• I plan different types of scientific enquiries to answer questions</li> <li>• I can set up fair tests when necessary</li> <li>• I decide what observations and measurements to make</li> <li>• I use different scientific equipment to measure with precision. I take repeat readings when appropriate</li> <li>• I decide how to record data and results. I can use scientific diagrams, labels, classifications, keys, tables and scatter/bar/line graphs</li> <li>• I report and present findings using speaking and writing including displays and presentations</li> </ul>					