



HAYES MEADOW PRIMARY SCHOOL

VOCABULARY PROGRESSION

SCIENCE



	EYFS	KS1	LKS2	UKS2
Working scientifically	Children will develop their ability to question, answer, observe. Observing using equipment to identify, sort, group, compare, and explain, differences and similarities. They will describe, use measurements, test, gather results, consult secondary sources, and record using diagrams and charts.		Children will become confident to give oral and written explanations including conclusions, predictions, and reason. They will use criteria to classify and record changes, data, contrasting evidence to improve, and include secondary sources. Children will create guides and keys to construct and interpret research. They will learn to ask relevant questions. Children will use equipment such as thermometers, gather data, recording in standard units, classify, present, and record their findings – drawings, labelled diagrams, keys, bar charts, tables.	Children will plan, observe variables, record measurements, measure accuracy and precision. They will repeat readings, make predictions, become further comparative and plan for a fair test. Children will identify, classify, and describe, observing patterns and recording systematic and quantitative measurements to report data. They will draw scientific diagrams using labels, classification keys, tables, scatter graphs, bar graph and line graphs report correctly. Children will present their findings discussing conclusions, casual relationships and give their explanations allowing for a degree of trust. Children will use oral and written displays to presentation evidence. They will support, refute, ideas or arguments. Children will work under the single science headings biology, physics, chemistry.
Animals including humans	Human, animal, fish, birds, head, face, hair, leg, elbow, back, toes, hands, fingers eyes, nose, mouth, ears, feet, foot, arm, neck, animal	Carnivore, omnivore, herbivore, amphibian, reptile, mammal, sense, senses, wing, beak, see, hear, smell, touch, feel, taste, alive, living, not alive, tall, tallest, taller, like, similar to, different, same, body, bodies, change, short, shorter, shortest, grow, move, adult, young, baby, toddler, child, teenager, elderly, diet, healthy, hygiene	Diet – Nutrition, water, hydration, oxygen, feed, feeding, growth, activity, food groups, vegetables, meat, fish, cereals, sugars, fats, fruits, starches, tooth, teeth, incisor, molar, canine, diet, healthy, unhealthy, root, decay, food, balanced diet. The body – Skeleton, bone, bones, ribs, spine, skull, vertebrate, contract relax, contraction, joint, move, muscles, muscle, support, protect, move	Insect, timeline, difference, process, puberty function, womb, foetus, embryo, adolescence, Evolution – Earth, fossils, offspring, adapt, environment, evolution Classification – classify, observable characteristics, similarities Heart and circulatory system – circulatory system, heart, valve, blood vessel, vein, artery transport, oxygenated, deoxygenated, lifestyle, drugs, function
Plants	Observe, describe, similarity, difference, tree, leaf, flower, trunk, stem, seed, bulbs, grow, fruit, berry, petal, roots, branch, twig.	Review EYFS vocabulary in addition to; Trees - deciduous, evergreen, ash, birch, beech, rowan, common lime, oak, sweet	Parts of a flower – petal, stamen (anther + filament), carpel (stigma + style + ovary + ovule)	Processes – pollination, fertilisation, germination,

		<p>chestnut, horse chestnut, apple, willow, sycamore, fir, pine, holly, etc.</p> <p>Wild flowering plants - cleavers, coltsfoot, daisy, dandelion, garlic mustard, mallow, moonwort, plantain, red clover, self-heal, shepherd's purse, sorrel, spear thistle, white Campion, white deadnettle and yarrow.</p> <p>Garden plants – crocus, daffodil, bluebells, etc.</p> <p>Need of plants – water, light, heat, temperature, growth, height, healthy,</p>	<p>Processes – decompose, life cycle, transportation</p>	
Living things and their habitats	Garden, forest, wood, water	<p>Classify, living, dead, never lived, habitat, food chain, micro habitat, pond, meadow, log pile, woodland, river, lake, beach, cliff</p> <p>Organism – plant, animal, scales, feathers, skin, hair</p>	<p>Specimen, characteristics, organisms, life processes, respiration, sensitivity, endangered, extinct</p> <p>Nutrition, environment, keys, condition, consumer, producer, organism, predator, prey, similar, different, change, endanger, life processes, micro-organism, microbe, germ, virus, decay, mould, feed, grow, reproduce, bacteria</p>	<i>Opportunities to reinforce vocabulary through stories and poems</i>
Evolution and Inheritance				<p>Evolution, evolve, natural selection, adaptation, genetics, survival, reproduction, offspring, parents, siblings, environment, variation, fossils; ammonites, belemnites, micrasters etc.</p>
Seasonal Changes	Summer, Spring, Autumn, Winter, change	<p>Day, warm, warmth, hot, cold, temperature, thermometer, anemometer, degrees, Celsius, rain, wind, sleet, hail, damp, thunder, lightning, storm, draught, flood, snow, sun, fog, precipitation</p> <p>Conductor, insulator, thermal, thermal conductor, thermal insulator, conduct, insulate, measure, room temperature</p>	<i>Opportunities to reinforce vocabulary through stories and poems</i>	
Forces			<p>Force – attract, repel, magnetic, magnetic field, magnet, bar and horseshoe, north pole, south pole</p> <p>Movement – direction, distance, further, furthest, fast, faster, fastest, slow, slower, slowest, higher, highest, speed up, slow down, change direction, change shape, twist, squeeze, stretch, pull, twist</p>	<p>Types of forces: gravity, friction, air resistance, up thrust, weight, water resistance</p> <p>Measuring forces: Newton Meter, Newton (N), particles, surface area, push, pull, balance, mass – grams and kilograms – gears, levers, pulleys, springs</p> <p>Resists, metal, iron, copper, aluminium, steel, brass, non-magnetic, attraction,</p>

				repulsion, elastic, pull towards, push away from, stretch, squash, compress
Light			<p>Simple comparisons: light, dark, dull, bright, very bright</p> <p>Comparative vocabulary: brighter, duller, and darker</p> <p>Superlative vocabulary: brightest, dulllest, and darkest</p> <p>Opaque, translucent, transparent</p> <p>Shadow – block, absence of light</p> <p>Reflect – bounce, mirror, reflection</p> <p>See – light source</p> <p>Sun – sunset, sunrise, position</p> <p>Day, night translucent, object material</p>	<p>Direction, light travels, beam, reflect, visible, reflected, spectrum, prism, travel, block, shiny surface, incident ray, reflected ray.</p> <p>The law of reflection and refraction.</p> <p>Optical instruments: periscope, telescope, binoculars, mirror, magnifying glass</p>
Sound	Loud, quiet, volume, sound	<p><i>Opportunities to reinforce vocabulary through cross-curricular links to the teaching of Music</i></p> <p>Ways to create sound – bang, blow, shake, and pluck</p> <p>Loudness – quiet, quieter, quietest, loud, louder, and loudest</p> <p>Pitch – low, lower, lowest, high, higher, and highest</p>	<p>Vibration, vibrate, source, sound wave, volume, tone, insulation, soundproof, vacuum, changing sounds, sounds, volume, absorb, ear, eardrum, distance, particles</p>	<p><i>Opportunities to reinforce vocabulary through cross-curricular links to the teaching of Music</i></p>
Earth and Space	Earth, Moon, planet, space, Sun, star	<p><i>Opportunities to reinforce vocabulary through stories and poems</i></p>	<p><i>Opportunities to reinforce vocabulary through stories and poems</i></p>	<p>Day and night - Earth, axis, spin, rotate, revolve, orbit, Sun, moon, sunrise, sunset, north, south, east, west</p> <p>Solar system – Stars/Planets, Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus, Neptune (Pluto was classified as Dwarf planet in 2006), asteroid belt</p> <p>Phases of the Moon - full moon, gibbous moon, half moon, crescent moon, new moon, waxing, waning</p> <p>Moon's orbit: 29.5 days, lunar month, sphere, spherical</p>
Electricity		<p><i>Opportunities to reinforce vocabulary through picture books and stories</i></p> <p>Common electrical appliances: fridge, freezer, TV, computer, iron, kettle, plug, charger, socket, switch</p>	<p>Electricity, electrical, series circuit, component, battery, lamp, light, crocodile clip, buzzer, motor, conduct, conductor, insulate, insulator, power, bright, brightness, function, switch, break, dim, batteries, connection, wire, mains, break</p> <p>Effects of electricity: Light, sound, movement, heat</p> <p>Switches – open, close</p>	<p>Volt, voltage, diagram, symbol, cells – link to brightness and volume</p>

<p>Materials</p> <p>States of matter</p> <p>Properties and changes</p>	<p>Material, metal, plastic, wood, paper, glass, clay, rock, fabric, sand, hard, soft, rough, shiny, smooth, freeze, melt</p>	<p>Types of materials: wood, plastic, glass, metal, water, rock, brick, fabric, sand, paper, flour, butter, milk, soil</p> <p>Properties of materials: hard/soft, stretchy/not stretchy, shiny/dull, rough/smooth, bendy/not bendy, transparent/not transparent, sticky/not sticky, strong/weak</p> <p>Verbs associated with materials: crumble, squash, bend, stretch, twist</p> <p>Senses: touch, see, hear, smell and taste</p>	<p>Temperature, change of state, evaporation, condensation, water cycle</p> <p>States of matter - solid, liquid and gas</p> <p>Examples of gases (at room temperature) – oxygen, hydrogen, helium, carbon dioxide, methane</p> <p>Examples of liquids (at room temperature) – water, milk, juice, petrol, oil</p> <p>Examples of solids (at room temperature) – wood, rocks, metal, plastic, glass, wool, leather, etc.</p> <p>Processes – melting, condensation, evaporation, solidifying, freezing, water cycle, water vapour, steam, heating, cooling</p>	<p>Compare, group, properties e.g., hardness, solubility, change, reversible, irreversible, new material</p> <p>Thermal conductivity – thermal conductor, thermal insulator</p> <p>Electrical conductivity – electrical conductor, electrical insulator</p> <p>Dissolving – solvent, solution, solute, soluble, insoluble, solid, liquid, particles, suspensions</p> <p>Separating materials – sieve, filter, evaporate, condense</p>
<p>Rocks and soils</p>			<p>Appearance, physical, properties, fossils, formation, soil, sedimentary, metamorphic, igneous, rock</p> <p>Names of rocks – chalk, limestone, granite, basalt, sandstone, flint, slate, shale, marble</p> <p>Types of rock – sedimentary, metamorphic, igneous</p> <p>Types of minerals – calcite, feldspar, topaz, diamond, talc, corundum</p> <p>Properties of rocks – hard/soft, permeable/impermeable</p> <p>Processes – heat, pressure, erosion, transportation, deposition, melt, solidify</p> <p>Size of rocks – grain, pebbles, crystals</p> <p>Early areas of land and formations – Gondwana, Pangea, plates, volcanoes, mountains, valleys</p>	<p><i>Opportunities to reinforce vocabulary through cross-curricular links to the teaching of History/Geography</i></p>
<p>Environment and sustainability</p>	<p>Waste, recycle, reduce, reuse, litter, healthy living</p>	<p>Environment, climate change, energy, energy efficient, pollution, biodiversity, natural resource</p>	<p>Carbon dioxide, greenhouse gas, conservation, renewable, solar, wind turbine</p>	<p>Carbon footprint, fossil fuel, global warming, global citizenship, waste – refusing, repairing</p>