## Developing Vocabulary in Science













**Recent research shows us that:** Science is a core subject and therefore provision should be equally as strong and frequent as literacy and maths. (Ofsted, 2019). There is currently an attainment gap in science at every stage: it is apparent at the end of KS1 and gets wider through primary and secondary education with the gap growing particularly strongly between the ages of 5-7. Strongest factor affecting pupils science is their literacy skills (difficulties understanding vocabulary in particular). There is strong evidence that the ability to reason scientifically – by having sound 'working scientifically' skills – is a strong predictor of later success in science. Pupils should therefore have ample opportunity to design and carry out their own experiments and investigations (EEF, 2019).

**Developing Science teaching and learning at Hindhayes -** Use of floorbooks (Spring 2020) Whole CLP Science project (2020-2022) Staff meetings focussing on curriculum development / coverage Outside providers to support Cultural Capital in science (e.g. STEM project, Bubbles Workshop, Life bus).

Vocabulary tier	Tier 1	Tier 2	Tier 3
Plants Identify and name a variety of common wild and garden plants, including deciduous and evergreen trees Identify and describe the basic structure of a variety of common flowering plants including trees.  Observe and describe how seeds and bulbs grow into mature plants Find out and describe how plants need water, light and a suitable temperature to grow	Leaf, flower, seed, die, dead, fruit, water, branch, dig, sun, mud, hot, cold	grow, growth, bark, petal, shoot, blossom, bug, hole, soil, light, cool, healthy	Germinate, photosynthesis, names of plants, pine cones, acorns, types of seeds (conker, sycamore seed etc), Parts of growing plants: roots, stem, stalk, bud, stamen, pollen
Animals, Including Humans Identify and name a variety of common animals including fish, amphibians, reptiles birds and mammals Identify and name carnivores, herbivores and omnivores. Describe and compare the structure of common animals. Identify, name, draw and label the basic parts of the human body and talk about the senses. Notice that animals have offspring Describe the basic needs of animals for survival Describe the importance of humans for exercise, diet and hygiene.	Head, body, eyes, ears, baby, grown-up, look, hear, see, feel, touch, smell, taste, sniff, food, mum, dad, baby  Basic animal vocabulary domestic animals: dog, cat, cow, sheep, pig, goat etc.  Basic descriptive words for animals e.g.: fluff, fur, paw, beak  Associated words for exercise: run, jump, skip etc.	Claw, paws, exercise, heart beat, pulse, germs, disease, group, chain, shelter, move, feed	Adult, toddler, offspring, talon, amphibian, reptile, carnivore, herbivore, omnivore, food group (e.g. carbohydrates, protein, meat etc), bird, mammal, senses, sight, hearing, vision, taste, hygiene Body vocabulary: skeleton, bones, organs, lungs, heart, wrist, knuckle etc. Classification words: feathers, scales, skin, talon MRS NERG: Movement, respiration, sensitivity, nutrition, excretion, reproduction, growth
Everyday Materials  Compare and group together a variety of common everyday materials based on their properties. Distinguish between natural and man made materials. Identify and name common materials e.g. wood, glass. Describe the simple properties of materials. Identify and compare the suitability of a variety of everyday materials. Find out how the shapes of solid objects made from materials can be changed by squashing, bending, twisting etc.	Hard, soft, squishy, squash, bendy, wobbly, ice, wood, glass, water, snow, plastic, shiny	Material, runny, bumpy, rough, stretchy, metal,	Material types: elastic, cotton, types of wood, types of metal Material properties: rigid, transparent, translucent, waterproof, water resistant, consistency, texture, elasticity, sponge, china.
Seasonal Changes Observe changes across the four seasons Observe and describe weather associated with the seasons and how day length varies.	Cold, hot, rain, wind, sun, snow, thunder, lightening, storm, puddles, rainbow	Spring, Summer, Autumn, Winter, spitting, lightening bolt, cloud, thunder clap, ice, season, day, night, day length, week, month (and names of months), year, light, dark	Fog, mist, hail, drizzle, mizzle, cloudy, sleet, frost, sunrise, sunset, dusk
Living things and their habitats  Compare the difference between things that are living, dead or have never been alive. Identify how habitats provide for the basic needs of animals and plants. Identify and name a variety of plants and animals in their habitats. Describe how animals obtain their food from plants and other animals using the idea of a simple food chain.	Animal, tree, flower Environmental words: beach, forest, park, house, home	Environment, suited, suitable, basic, needs, light, dark, damp, shady	MRS NERG: Movement, respiration, sensitivity, nutrition, excretion, reproduction, growth Food groups and associated vocabulary Living, dead, alive, Microhabitat vocabulary: pond, shady, damp etc