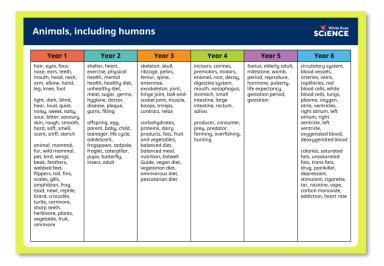
Vocabulary progression document

September 2024



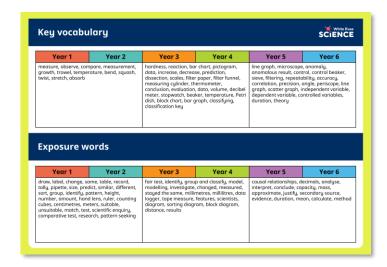
Introduction

The use of accurate scientific vocabulary is essential for children's understanding and communication of scientific concepts. This document presents a detailed mapping of scientific vocabulary progression, illustrating how language skills in science develop over time.



The aim of this document is to give an at-a-glance guide to the progression of vocabulary throughout the curriculum. Vocabulary is broken down into Years 1 – 6 for the topic areas from the National Curriculum and sustainability blocks. Working scientifically vocabulary is broken down into the primary phases.

Words are listed in order of where they appear in the scheme of learning. To save repetition of vocabulary, the words are documented where they are first introduced. For example, the word 'carnivore' is used throughout the schemes, however, it is tracked in Year 1 as this is the year group this word is first introduced in.



The working scientifically section has been split into two categories. This includes key vocabulary from the schemes and exposure words. Children are not expected to use every word in the exposure words list, but they can hear correct scientific language verbally through teacher discussion and instruction.

Animals, including humans



Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
hair, eyes, face, nose, ears, teeth, mouth, head, neck, arm, elbow, hand, leg, knee, foot light, dark, blind, hear, loud, quiet, noisy, sweet, salty, sour, bitter, savoury, skin, rough, smooth, hard, soft, smell, scent, sniff, stench animal, mammal, fur, wild mammal, pet, bird, wings, beak, feathers, webbed feet, flippers, tail, fins, scales, gills, amphibian, frog, toad, newt, reptile, lizard, crocodile, turtle, carnivore, sharp teeth, herbivore, plants, vegetable, fruit, omnivore	shelter, heart, exercise, physical health, mental health, healthy diet, unhealthy diet, meat, sugar, germs, hygiene, doctor, disease, plaque, gums, filling offspring, egg, parent, baby, child, teenager, life cycle, adolescent, frogspawn, tadpole, froglet, caterpillar, pupa, butterfly, insect, adult	skeleton, skull, ribcage, pelvis, femur, spine, antennae, exoskeleton, joint, hinge joint, ball-and-socket joint, muscle, biceps, triceps, contract, relax carbohydrates, proteins, dairy products, fats, fruit and vegetables, balanced diet, balanced meal, nutrition, Eatwell Guide, vegan diet, vegetarian diet, omnivorous diet, pescatarian diet	incisors, canines, premolars, molars, enamel, root, decay, digestive system, mouth, oesophagus, stomach, small intestine, large intestine, rectum, saliva producer, consumer, prey, predator, farming, overfishing, hunting	foetus, elderly adult, milestone, womb, period, reproduce, hormone, puberty, life expectancy, gestation period, gestation	circulatory system, blood vessels, arteries, veins, capillaries, red blood cells, white blood cells, lungs, plasma, oxygen, atria, ventricles, right atrium, left atrium, right ventricle, left ventricle, oxygenated blood calories, saturated fats, unsaturated fats, trans fats, drug, painkiller, depressant, stimulant, cigarette, tar, nicotine, vape, carbon monoxide, addiction, heart rate

Living things and their habitats



Year 2	Year 4	Year 5	Year 6
Arctic plants, hibernate, habitat, cactus, desert, rainfall, ocean, seagrass, woodland, fern, moss, microhabitat, spider, snail, diet, food chain, living, dead, never alive	vertebrate, invertebrate, soft- bodied invertebrate, flowering plant, non-flowering plant, seasonal changes, natural resources, rewilding, nature reserve	monotreme, mammary gland, metamorphosis, larva, chrysalis, hatchling, nestling, fledgling, fertilisation, embryo, sperm cells, egg cells, sexual reproduction, anther, stigma, style, filament, ovary, ovule, clone, runner, tuber, asexual reproduction, cutting, parent plant	organism, excretion, reproduction, mollusc, arachnid, classification, coniferous tree, microorganism, bacteria, virus, fungi, characteristics

Plants

Year 1	Year 2	Year 3
plant, flower, leaf, petals, stem, roots, branch, trunk, roots, wildflower, daisy, garden plant, sunflower, nettle, buttercup, dandelion, deciduous tree, horse chestnut, oak, sycamore, evergreen tree, pine, holly, needles, seed, soil, growth	sunlight, compost, herb, blossom, bulb, shoot	water transportation, seedling, seed coating, germination, stamen, pistil, pollen, reproductive organs, pollination, pollinators, wind dispersal, animal dispersal, water dispersal, explosion dispersal, seed dispersal

Materials



Year 1	Year 2	Year 5
material, shiny, dull, rock, heavy, light, object, wood, metal, plastic, glass, wool, solid, liquid, melt, freeze, ice, float, sink, absorb, transparent, opaque	natural material, human-made material, recycle, flexible, rigid, stone, pebble, brick, brittle, flexible, translucent, tough, lightweight, strong, breakable, waterproof	electrical conductor, electrical insulator, thermal insulator, properties, lifespan, dissolve, soluble, insoluble, solution, mixture, reversible changes, reverse, chemical reaction, irreversible change, burning, heating, vinegar, bicarbonate of soda

Rocks

Year 3

granite, pumice, sandstone, chalk, marble, gneiss, crystals, grains, layers, texture, hardness, weathering, fossil, shell, fossilisation, sediment, sandy soil, clay soil, peat soil, chalky soil, organic matter, nutrients, deforestation, habitat loss

States of matter



Year 4

solid, liquid, gas, states of matter, pouring solid, ooblek, flow, freezing, melting, boiling, condensation, evaporation, melting point, water cycle, precipitation, atmosphere, petri dish

Electricity

Year 4	Year 6
appliances, plug, socket, cell, electrocuted, circuit, switch, battery, buzzer, conductor, insulator	series circuit, voltage, current, complete circuit, incomplete circuit

Earth and space



Year 5

Solar System, orbit, Sun, planets, Pluto, celestial body, gravity, heliocentric model, geocentric model, rotate, axis, North Pole, South Pole, Earth, night, day, moon, gravitational force, satellite

Seasonal changes

Year 1

autumn, daylight, night, weather, season, rainfall, weather, rain gauge, winter, rainy, snowy, windy, cloudy, frosty, sunny, spring, summer

Sound



Year 4

vibration, sound, volume, pitch, outer ear, ear bones, cochlea, ear drum, ear canal, decibel, insulate, high-pitched, low-pitched, background noise

Light

Year 3	Year 6
light sources, natural light sources, artificial light sources, Sun, sunglasses, protect, reflection, shadow	retina, iris, pupil, lens, ray diagram, solar eclipse, refraction, medium, rainbow, prism, coloured filter, spectrum of light

Forces and magnets



Year 3	Year 5
push, pull, force, contact force, friction, magnet, magnetic, poles, magnetic force, non-metal, iron, aluminium, steel, attract, repel	frictional force, motion, air resistance, parachute, surface area, water resistance, streamlined, non-contact force, gravity, weight, lever, gear, pulley, machine

Evolution and inheritance

Year 6

variation, species, inheritance, desirable characteristics, polar habitat, desert habitat, adaptations, evolution, common ancestor, natural selection, finch, Galapagos Islands, decompose, Charles Darwin, palaeontologist, Mary Anning

Working scientifically



Key vocabulary



Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
measure, observe, com growth, trowel, tempero twist, stretch, absorb		hardness, reaction, bardata, increase, decrease dissection, scales, filter measuring cylinder, the conclusion, evaluation, meter, stopwatch, bealdish, block chart, bar g classification key	se, prediction, paper, filter funnel, ermometer, data, volume, decibel ker, temperature, Petri	line graph, microscope result, control, control repeatability, accuracy precision, angle, perisc scatter graph, indepen dependent variable, co duration, theory	y, correlation, cope, line graph, dent variable,

Exposure words

Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
draw, label, change, sa tally, pipette, size, pred sort, group, identify, po amount, hand lens, rule centimetres, meters, su match, test, scientific er test, research, pattern s	lict, similar, different, attern, height, number, er, counting cubes, itable, unsuitable, nquiry, comparative	fair test, identify, group modelling, investigate, stayed the same, millin logger, tape measure, diagram, sorting diagr distance, results	changed, measured, netres, millilitres, data features, scientists,	causal relationships, de interpret, conclude, cap approximate, justify, se evidence, duration, me	pacity, mass, econdary source,

Sustainability



Sustainability



	ear 5 Year 6
Earth, helpful, harmful, recycle, reuse, crops, farmer, cook single-use plastic, wildlife, nature, local food waste, landfill, food waste recycling, edible, inedible, biodiversity, rewilding, endangered, extinct single-use plastic, wildlife, nature, local food waste, landfill, food waste recycling, edible, inedible, biodiversity, rewilding, energy, energy usage, habitat destruction, palm oil, sustainable global waste, landfill, food waste, landfill, food waste, landfill, food waste recycling, edible, inedible, biodiversity, rewilding, energy, energy usage, habitat destruction, palm oil, sustainable global waste, landfill, food waste, landfill, food waste, landfill, food waste recycling, edible, inedible, biodiversity, rewilding, energy, energy usage, habitat destruction, palm oil, sustainable	solar power, wind power, solar panels, wind turbine, migration, glare, light pollution, light trespass, skyglow, urban, rural, light