Science Vocabulary Progression Map

Year 1

A progression map of science vocabulary across topics

Topic	Words children should already know	Tier 2 Vocabulary	Tier 3 Vocabulary
Seasons and Weather / Day and Night	sun, rain, snow, cloud, day, night	dawn, dusk, mild, rotate, soaked, weather	month, season, spring, summer, autumn, winter
Plants, including trees	plant, tree, fruit, flower, roots, leaf, garden, living, grow	bud, trunk, branch, bark, seed, wild	nutrients, stem, deciduous, evergreen
Animals, including humans	animal, human, living, plant	blood, senses, young, feathers, fur, scales	mammal, amphibian, reptile, herbivore, carnivore, omnivore
Everyday Materials	hard, soft, stretch, bend	absorb, rough, smooth, waterproof, metal, plastic	materials, properties, flexible, transparent, opaque, physical

Tier 1 = words children should already know · Tier 2 = high-frequency academic words · Tier 3 = subject-specific vocabulary

Science Vocabulary Progression Map

Year 2

A progression map of science vocabulary across topics

Topic	Words children should already know	Tier 2 Vocabulary	Tier 3 Vocabulary
Living Things and Their Habitats	habitat, animal, plant, living	thrive, depend, producer, consume, prey, predator	oxygen, nutrition, respiration, sensitivity, reproduction, excretion
Animals, Including Humans	mammal, amphibian, reptile, carnivore, herbivore, omnivore	healthy, survive, exercise, heart, lungs, muscles	hygiene, larva, pupa, vertebrates, invertebrates, metamorphosis
Use of Everyday Materials	materials, physical, properties, flexible, transparent, waterproof, opaque, absorb	artificial, brittle, extracted, fabric, manufactured, natural	ceramic, durable, inflexible, reflective, rigid, translucent
Plants	bud, trunk, stem, branch, bark, seed, nutrients, respiration, reproduction, excretion, deciduous	wither, dormant, mature, bulb, anchor, sustain	germination, perennial, carbon dioxide, glucose, clone

Tier 1 = words children should already know · Tier 2 = high-frequency academic words · Tier 3 = subject-specific vocabulary

Science Vocabulary Progression Map

Year 3

A progression map of science vocabulary across topics

Topic	Words children should already know	Tier 2 Vocabulary	Tier 3 Vocabulary
Rocks	materials, properties, physical	cemented, compacted, decay, prehistoric, soil, transform	fossil, igneous, magma, metamorphic, minerals, sedimentary
Animals, Including Humans	vertebrates, invertebrates, flexible, muscles, heart, absorb	minerals, skeleton, skull, voluntary, involuntary, nerves	biceps, triceps, vertebrae, vitamins, proteins, carbohydrates
Revisit Rocks	N/A	N/A	N/A
Forces and Magnets	materials, properties, physical, metal	consequence, contact, force, attract, north, south	magnet, resistance, friction, repel, pole, magnetic, field
Plants	thrive, absorb, stem, nutrients, perennial, germination	adapt, essential, glucose, transport, variety, vital	transpiration, stoma, pollination, stamen, pistil, photosynthesis
Light	light, materials, opaque, shiny	absence, cast (shadow), impenetrable, reflect, shadow, source (light)	constant, dependent, independent, illuminate, translucent, variable

Tier 1 = words children should already know · Tier 2 = high-frequency academic words · Tier 3 = subject-specific vocabulary

Science Vocabulary Progression Map

Year 4

A progression map of science vocabulary across topics

Topic	Words children should already know	Tier 2 Vocabulary	Tier 3 Vocabulary
Living Things and Their Habitats	habitat, micro-habitat, depend,	classification, environment,	vertebrate, invertebrate,
States of Matter	heat, cool, temperature,	permanent, particle, solid,	evaporate, condense, melt,
Animals, Including Humans	skull, skeleton, carbohydrates,	expel, compact, digestion, acid,	incisor, canine, molar, enzyme,
Electricity	perimeter, complete,	associate, identify, portable,	component, electrical,
Sound	particle, matter, solid, liquid, gas,	produce, property, source,	vibrate, pitch, volume, medium,

Tier 1 = words children should already know · Tier 2 = high-frequency academic words · Tier 3 = subject-specific vocabulary

Science Vocabulary Progression Map

Year 5

A progression map of science vocabulary across topics

Topic	Words children should already know	Tier 2 Vocabulary	Tier 3 Vocabulary
Properties and Changes of Materials	transparent, transparency,	property, particle, separate,	atom, molecule, chemical
Animals, Including Humans	chronology, chronological,	development, diverse, unique,	adolescence, puberty,
Forces	force, magnetism, attract, repel,	opposite, reaction,	pulley, gear, pivot, fulcrum, lever,
Earth and Space	anticlockwise, hemisphere,	luminous, phenomenon,	orbit, axis, crescent
Living Things and Their Habitats	pupa, larva, reproduction,	deduce, process, re-form,	embryo, sexual, metamorphosis,

Tier 1 = words children should already know · Tier 2 = high-frequency academic words · Tier 3 = subject-specific vocabulary

Science Vocabulary Progression Map

Year 6

A progression map of science vocabulary across topics

Topic	Words children should already know	Tier 2 Vocabulary	Tier 3 Vocabulary
Electricity	circuit/circuitous, current, conductor/conductor, insulate/insulator, insulation	component, consequence, systematic, represent, source, generate	proton, neutron, electron, terminal, series, voltage
Animals, Including Humans (Circulatory System)	skeleton, muscles, digestion, nutrition, oxygen	cell, chamber, system, circulation, vessel, clot, filter, expel, substance, function, regulate, transform	plasma, platelet, artery, capillary, vein, ventricle, kidney, bladder, urine, excretion, toxin, nutrient
Animals, Including Humans (Water Transportation)	system, digestion, circulation, muscle	filter, expel, substance, function, regulate, transform	kidney, bladder, urine, excretion, toxin, nutrient
Light	reflect, absence, presence, transparent, translucent, opaque, visible	impurity, emit, absorb, constituent, filter, artificial	refraction, incidence, spectrum, prism, lux, pigment
Living Things and Their Habitats	environment, vertebrate, invertebrate, interdependence, ecosystem	characteristic, interdependence, specific, categorise, primitive, hierarchy	fungus, arthropod, taxonomy, kingdom, phylum, genus
Evolution and Inheritance	vary, variation, reproduce, reproduction, descend, descendant, diverse, diversity, diversify	characteristic, adaptation, acquire, theory, modify, generation	evolve, survival, species, clone, inherit, fossil

Tier 1 = words children should already know · Tier 2 = high-frequency academic words · Tier 3 = subject-specific vocabulary