



Science vocabulary progression

Area of science	Years 1 + 2	Years 3 + 4	Years 5 + 6
<p>Animals including humans</p>	<p>Names of animal groups - fish, amphibians, reptiles, birds, mammals.</p> <p>Animal diets: carnivore, herbivore, omnivore.</p> <p>Human and animal body parts: e.g. body, head, neck, arms, elbows, legs, knees, face, ears, eyes, nose, hair, mouth, teeth, hands, feet, tail, wings, feathers, fur, beak, fins, gills.</p> <p>Human senses: sight, hearing, touch, smell, taste. Exploring senses: loud, quiet, soft, rough. Other: human, animal, pet.</p> <p>Being born and growing: Young, offspring, live young, grow, develop, change, hatch, lay, fly, crawl, talk. Young and adult names: e.g. lamb and sheep</p> <p>Life cycle stages: e.g. baby, toddler, child, teenager, adult; frogspawn, tadpole, froglet, frog.</p> <p>Survival and staying healthy: basic needs, survive, food, air, exercise, diet, nutrition, healthy, balanced diet, hygiene, germs.</p> <p>Food groups: fruit and vegetables, proteins, dairy and alternatives, carbohydrates, oil and spreads, fat, salt, sugar.</p>	<p>Food groups and nutrients: fibre, fats (saturated and unsaturated), vitamins, minerals.</p> <p>Skeletons and muscles: skeleton, muscles, tendons, joints, protection, support, organs, voluntary muscles, involuntary muscles, biceps, triceps, contract, relax, bone, cartilage, shell, vertebrate, invertebrate, endoskeleton, exoskeleton, hydrostatic skeleton.</p> <p>Names of human bones: e.g. skull, spine, backbone, vertebral column, ribcage, pelvis, clavicle, scapula, humerus, ulna, pelvis, radius, femur, tibia, fibula.</p> <p>Other: energy.</p> <p>Digestive system: digest, digestion, tongue, teeth, saliva, salivary glands, oesophagus, stomach, liver, pancreas, gall bladder, small intestine, duodenum, large intestine, rectum, anus, faeces, organ.</p> <p>Types of teeth and dental care: molar, premolar, incisor, canine, wisdom teeth, tooth decay, plaque, enamel, baby (milk) teeth.</p> <p>Food chains and animal diets: decomposer, food web.</p> <p>Previously introduced vocabulary: producer, consumer, prey, predator, excretion, habitat.</p>	<p>Process of reproduction: gestation, asexual reproduction, sexual reproduction, sperm, egg, cells, clone.</p> <p>Changes and life cycle: embryo, foetus, uterus, prenatal, adolescence, puberty, menstruation, adulthood, menopause, life expectancy, old age, hormones, sweat.</p> <p>Changing body parts: e.g. breasts, penis, larynx, ovaries, genitalia, pubic hair.</p> <p>Previously introduced vocabulary: reproduction, reproduce, types of animals and animal groups, fertilisation.</p> <p>Circulatory system: circulation, heart, pulse, heartbeat, heart rate, lungs, breathing, blood vessels, blood, pump, transported, oxygenated blood, deoxygenated blood, oxygen, arteries, veins, capillaries, chambers, plasma, platelets, white blood cells, red blood cells carbon dioxide</p> <p>Lifestyle: drug, alcohol, smoking, disease, calorie, energy input, energy output.</p> <p>Other: water transportation, nutrient transportation, waste products.</p>
<p>Plants</p>	<p>Names of common plants: wild plant, garden plant, evergreen tree, deciduous tree, common flowering plant, weed, grass.</p> <p>Name some features of plants: e.g. flower, vegetable, fruit, berry, leaf/leaves, blossom, petal, stem, trunk, branch, root, seed, bulb, soil.</p>	<p>Water transportation: transport, evaporation, evaporate, nutrients, absorb, anchor.</p> <p>Life cycle of flowering plants: pollination (insect/wind), pollen, nectar, pollinator, seed formation, seed dispersal (animal/wind/water), reproduce, fertilisation, fertilise, stamen, anther, filament, carpel (pistil), stigma, style, ovary, ovule, sepal, carbon dioxide.</p>	

	<p>Name some common types of plant e.g. sunflower, daffodil.</p> <p>Growth of plants: germination, shoot, seed dispersal, grow, food store, life cycle, die, wilt, seedling, sapling. Needs of plants: sunlight, nutrition, light, healthy, space, air.</p> <p>Name different types of plant: e.g. bean plant, cactus.</p> <p>Names of different habitats: e.g. rainforest, desert.</p> <p>Previously introduced vocabulary: water, temperature, warm, hot, cold, habitat.</p>		
Living things and their habitats	<p>Living or dead: living, dead, never living, not living, alive, never been alive, healthy.</p> <p>Habitats including microhabitats: depend, shelter, safety, survive, suited, space, minibeast, air.</p> <p>Life processes: movement, sensitivity, growth, reproduction, nutrition, excretion, respiration.</p> <p>Food chains: food sources, food, producer, consumer, predator, prey.</p> <p>Names of habitats and microhabitats: e.g. under leaves, woodland, rainforest, sea shore, ocean, urban, local habitat.</p> <p>Previously introduced vocabulary: senses, carnivore, herbivore, omnivore, seed, water, names of materials.</p>	<p>Living things: organisms, specimen, species.</p> <p>Grouping living things: classification, classification keys, classify, characteristics.</p> <p>Names of invertebrate animals: snails and slugs, worms, spiders, insects.</p> <p>Invertebrate body parts: e.g. wing case, abdomen, thorax, antenna, segments, mandible, proboscis, prolegs.</p> <p>Environmental changes: environment, environmental dangers, adapt, natural changes, climate change, deforestation, pollution, urbanisation, invasive species, endangered species, extinct.</p> <p>Previously introduced vocabulary: carbon dioxide, fish, bird, mammal, amphibian, reptile, skeleton, bone, vertebrate, invertebrate, backbone, names for animal body parts, names of common plants, photosynthesis.</p>	<p>Reproduction: asexual reproduction, sexual reproduction, gestation, metamorphosis, gametes, tuber, runners/side branches, plantlet, cuttings, embryo, adolescent, penis, vagina, egg, pregnancy, gestation.</p> <p>Classifying: Carl Linnaeus, Linnaean system, flowering and non-flowering plants, variation. Microorganisms: bacteria, single-celled, microbes, microscopic, virus, fungi, fungus, mould, antibiotic, yeast, ferment, microscope, decompose.</p> <p>Previously introduced vocabulary: life cycle, pollination, offspring, fertilise, fertilisation, sepal, filament, anther, stamen, pollen, petal, stigma, style, ovary, carpel, ovule, stem, bulb, roots, mammal, adult, baby, sperm, cells, live young.</p>
Evolution and inheritance			<p>Evolution and inheritance: evolve, adaptation, inherit, natural selection, adaptive traits, inherited traits, mutations, theory of evolution, ancestors, biological parent, chromosomes, genes, Charles Darwin.</p> <p>Other: selective breeding, artificial selection, breed, cross breeding, genetically modified food, cloning, DNA.</p> <p>Previously introduced vocabulary: classification, offspring, characteristics, habitat, environment, adapt, variations, human, fossil, suited, cells, names of different habitats, names of animals and their body parts, species, sedimentary rock, lava, igneous rock, metamorphic rock, magma, heat, fossilisation.</p>

Seasonal changes	<p>Seasons: spring, summer, autumn, winter, seasonal change.</p> <p>Weather: e.g. sun, rain, snow, sleet, frost, ice, fog, cloud, hot/warm, cold, storm, wind, thunder, weather forecast. Measuring weather: temperature, rainfall, wind direction, thermometer, rain gauge.</p> <p>Day length: night, day, daylight.</p>		
Forces		<p>How things move: move, movement, surface, distance, strength.</p> <p>Types of forces: push, pull, contact force, non-contact force, friction.</p> <p>Magnets: magnetic, magnetic field, magnetic force, bar magnet, horseshoe magnet, ring magnet, magnetic poles (north pole, south pole), attract, repel, compass.</p> <p>Magnetic and non-magnetic materials: e.g. iron, nickel, cobalt.</p> <p>Previously introduced vocabulary: metal, names of materials.</p>	<p>Types of forces: air resistance, water resistance, buoyancy, upthrust, Earth's gravitational pull, gravity, opposing forces, driving force.</p> <p>Mechanisms: levers, pulleys, gears/cogs.</p> <p>Measurements: weight, mass, kilograms (kg), Newtons (N), scales, speed, fast, slow.</p> <p>Other: streamlined, Earth.</p> <p>Previously introduced vocabulary: air, heat, moon.</p>
Light		<p>Light and seeing: dark, absence of light, light source, illuminate, visible, shadow, translucent, energy, block.</p> <p>Light sources: e.g. candle, torch, fire, lantern, lightning.</p> <p>Reflective light: reflect, reflection, surface, ray, scatter, reverse, beam, angle, mirror, moon.</p> <p>Sun safety: dangerous, glare, damage, UV light, UV rating, sunglasses, direct.</p> <p>Previously introduced vocabulary: opaque, transparent, sunlight, sun.</p>	<p>Reflection: periscope.</p> <p>Seeing light: visible spectrum, prism.</p> <p>How light travels: light waves, wavelength, straight line, refraction.</p> <p>Previously introduced vocabulary: names and properties of materials, absorb.</p>
Sound		<p>Parts of the ear: eardrum.</p> <p>Making sound: vibration, vocal cords, particles.</p> <p>Measuring sound: pitch, volume, amplitude, sound wave, quiet, loud, high, low, travel, distance.</p> <p>Other: soundproof, absorb sound.</p>	
Earth and space		<p>.</p>	<p>Solar system: star, planet.</p> <p>Names of planets: Mercury, Venus, Earth, Mars, Jupiter, Saturn, Neptune, Uranus.</p>

			<p>Shape: spherical bodies, sphere.</p> <p>Movement: rotate, axis, orbit, satellite.</p> <p>Theories: geocentric model, heliocentric model, astronomer.</p> <p>Day length: sunrise, sunset, midday, time zone.</p> <p>Previously introduced vocabulary: Sun, moon, shadow, day, night, heat, light, reflect.</p>
Electricity		<p>Electricity: mains-powered, battery-powered, mains electricity, plug, appliances, devices.</p> <p>Circuits: circuit, simple series circuit, complete circuit, incomplete circuit.</p> <p>Circuit parts: bulb, cell, wire, buzzer, switch, motor, battery.</p> <p>Materials: electrical conductor, electrical insulator.</p> <p>Other: safety.</p> <p>Previously introduced vocabulary: names of materials.</p>	<p>Flow and measure of electricity: voltage, amps, resistance, electrons, volts (V), current.</p> <p>Circuits: symbol, circuit diagram, component, function, filament.</p> <p>Variations: dimmer, brighter, louder, quieter.</p> <p>Types of electricity: natural electricity, human-made electricity, solar panels, power station.</p> <p>Other: positive, negative</p>
Materials	<p>Names of materials: wood, plastic, glass, metal, water, rock, paper, cardboard, rubber, fabric.</p> <p>Properties of materials: hard, soft, shiny, dull, stretchy, rough, smooth, bendy, not bendy, transparent, opaque, waterproof, not waterproof, absorbent, not absorbent, sharp, stiff.</p> <p>Changing shape: squash, bend, twist, stretch.</p> <p>Properties of materials: e.g. strong, flexible, light, hard-wearing, elastic.</p> <p>Other: suitability, recycle, pollution.</p>	<p>Types of rock: sedimentary rock, igneous rock, metamorphic rock.</p> <p>Properties of rocks: permeable, semi-permeable, impermeable, durable.</p> <p>Names of rocks: e.g. marble, chalk, granite, sandstone, slate.</p> <p>Formation of rocks and fossils: natural, human-made, magma, lava, molten rock, sediment, erosion, fossilisation, layers, bone, fossil.</p> <p>Soil: sandy, chalky, clay, peaty, loamy, topsoil, subsoil, bedrock, mineral, organic matter, compost.</p> <p>Other: palaeontology, atmosphere.</p> <p>States of matter: solids, liquids, gases, particles.</p> <p>State change: evaporate, condense, melt, freeze, heat, cool, melting point, freezing point, boiling point, water vapour.</p> <p>Water cycle: precipitation, evaporation, condensation, ground run-off, collection, underground water, bodies of water (sea, river, stream), water droplets, hail.</p> <p>Previously introduced vocabulary: soil, water, air, temperature, rain, cloud, snow, wind, sun, hot, cold, absorb, carbon dioxide.</p>	<p>Properties of materials: thermal conductor/insulator, magnetism, electrical resistance, transparency.</p> <p>Mixtures and solutions: dissolving, substance, soluble, insoluble.</p> <p>Changes of materials: reversible change, physical change, irreversible change, chemical change, burning, new material, product.</p> <p>Separating: sieving, filtering, magnetic attraction.</p> <p>Previously introduced vocabulary: electrical conductor/insulator, bulb, translucent.</p>

