

**Marlborough Primary Academy School**  
**SCIENCE Key Vocabulary**

It is crucial that children have explicit and robust instruction in vocabulary, **to support their verbal and written communication**. At Marlborough Primary Academy, we know that a good understanding of a wide range of vocabulary supports success across the whole curriculum. Therefore, children are regularly taught new vocabulary in all areas of the curriculum.

We know that vocabulary is developed in two ways:

- 1) Through indirect instruction; using rich reading experiences to grow vocabulary 'naturally'. Paying attention to context to work out meaning and using background knowledge.
- 2) Through direct 'robust' instruction. Good vocabulary instruction involves...
  - a. Decisions about which words to teach
  - b. Decisions about how to teach these words

Vocabulary learning at Marlborough is taught in a fun and active way across the curriculum. Each unit of learning within each subject has key vocabulary identified and taught.

Having key subject specific vocabulary gives our children cultural capital to be able to engage with the wider world as they move through life.

	Willows Class			Maple Class			Sycamore Class			Beech Class		
	Term 1	Term 2	Term 3	Term 1	Term 2	Term 3	Term 1	Term 2	Term 3	Term 1	Term 2	Term 3
2023-2024	herbivore, face, carnivore, hair, omnivore, leg, human, knee, animal, arm, fish, elbow, birds, back, head, toes, ear, hands, eye, fingers, mouth, nose, tree, petals, trunk, fruit, branch, roots, leaves, bulb, flowers, seed, stem, material, metal, wood, rock, plastic, hard, glass, soft, paper, fabric, material, smooth, shiny, rough, Summer, day, Spring, dark, Autumn, light, Winter, night, Season, Moon, Sun, Earth, Moon, Planet, space, Sun, star, loud, quiet, volume, sound,	animals, babies, young, adults, species, extinct, survive, eggs, live young, mammals, pregnant, older, teenager, toddler, food, vitamins, minerals, carnivores, herbivores, omnivores, water, air, oxygen, breathe,	discover, scientist, gravity, pulling it, working scientifically, rainbows, prism, experiment, colours, lens, white light, telescope, space, observatory, wind vane, anemometer, questions, observations, acoustics, control, predict, fungus, germs, disease, spread, sterile, circuit, wire,	material, different, types, wood, plastic, metal, glass, stone, fabric, properties, absorbent, bad idea, bendy, compare, dry, dull, fabric, good idea, group, hard, investigate, material, metal, not absorbent, not waterproof, opaque, paper, rock, rough, shiny, smooth, soft,	acid, adult teeth, canines, carnivore, crown, damage, decay, dentine, digestive system, enamel, gall bladder, herbivore, incisors, intestine, liver, milk teeth, molars, oesophagus, omnivore, pancreas, plaque, premolars, pulp, rectum, root, stomach, sugar, teeth, tooth, wisdom	absorption, anthropic, bone fossil, building, burns, carve, crystals, decay, decompose, dissolve, durable, earth, erosion, extinct, fossil, fossilisation, friction, grains, igneous, impermeable, metamorphic, minerals, mold fossil, molten, natural, organism, origin, palaeontologist, paleontology, permeable, polished, porous, properties,	, alloy, Antarctica, Arctic, attract, bar magnet, button magnet, compass, cylindrical magnet, direction, distance, Earth, field, force, friction, fridge, gravity, horseshoe magnet, investigate, iron, like, magnet, magnetic, magnetised, man-made,	battery, branches, bulb, buzzer, complete circuit, component, conductor, electric current, electric shock, electrical current, electricity, electrons, generator, high voltage, insulator, motor, parallel circuit, power, proton, series circuit, simple circuit, switch, symbol, voltage, voltmeter, volts, adapt, adaptation, artificial selection, cell, characteristics,	accomplishments, altricial, amphibian, anther, arthropod, asexual, bird, budding, bulbs, carpel, class, discoveries, echinoderm, embryo, exoskeleton, fetus (foetus), filament, fish, gestation, grafting, internal organs, invertebrate, life cycle, mammal, molluscs, naturalist, offspring, ovary, plant, precocial, propagating,	absorbed, angle, angle of incidence, angle of reflection, angle of refraction, bend, cornea, ecosystems, electromagnetic, radiation, glare, illusion, incident ray, iris, lens, light pollution, light trespass, light waves, opaque, optic nerve, perpendicular joint, prism, pupil, reflected, reflected ray, refraction, retina, rods and cones, shadow,		

			<p>bulb, alive, energy, move, grow, respond, respire, reproduce, waste, die, sunlight, food, living, non-living, habitat, woodland, pond, ocean, mountain, seaside, coast, rainforest, desert, artic, micro-habitats, invertebrates, mini-beasts, decomposers, insects, arachnids, food chains, herbivores, carnivores, omnivores,</p>	<p>sort, stiff, stretchy, transparent, umbrella Venn diagram, water, water object, waterproof, wet anchor, baby plant (embryo), bean seed, bulb, conditions, dispersal, dissect, dormant, expedition, germinate, germination, grow, growth, instructions, leaves, life cycle, packet, prediction, reproduction, root, roots, seed, seed coat, seed leaves, seedling, shoot, sprout, stem, sunflower, survive, variables</p>		<p>remains, resin fossil, rock segments, rocks, sculpture, sediment, sedimentary, soil, submerge, tourists, trac, fossil, uses Celsius, change of state, condensation, condenses, convert, cycle, degree Celsius, evaporation, freeze, gas, liquid, material, melting, pace, precipitation, rate, solid, states of matter, temperature, viscosity, water vapour</p>	<p>material, movement, natural, non-magnetic , north, object, opposite, pointer, pole, pull, push, real-life, record, repel, ring magnet, shape, south, speed, start , steel, stop, strength, surfaces, travel, absorb, amplitude, anvil, auditory nerve, closer, cochlea, decreasing, distance, ear canal, ear drum, energy, fainter, faster, flautist, flute, force, frequency, further, gas, guitar, guitarist, hammer, high, increasing, larger, length, liquid, loud, low, musical instruments, particles, pinna, pitch, protect, quiet, slower, smaller, solid, sound, source, speed, stirrup,</p>	<p>chromosome, climate change, DNA, dominant, dominant and recessive, environment, evolution, extinct, extinction, fossil, gene, hereditary , ichthyosaur, inheritance, invasive species, living things, natural selection, palaeontologist , plesiosaur , predator, recessive, reproduce, species, survive, survival of the fittest , threat, trait/characteristic, traits, variation</p>	<p>reproduction, reptile, runners, sexual, significant, species, sponges, spores, stamen, stigma, style, tubers, vertebrate, viviparous, worm, zoologist (names of planets), asteroid belt, atmosphere, axis, climate conditions, crater, predator, daylight, daylight hours, daytime, earth, equator, flat earth , full moon, galaxy, gas planets, geocentric, gibbous, heliocentric, inner planets, lunar eclipse , lunar month, milky way, moon, mythology, new moon, night-time, northern hemisphere, orbit, outer planets, phases of the moon, planets, prime meridian, rocky planets, rotate, solar system, southern hemisphere , spherical body, spherical earth, star, sun, theory, tilt, time zone, universe, volcano, waning, waxing</p>	<p>shielding, skylight, the visible spectrum, translucent, transmitted, wave frequency, wavelength, white light</p>
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	<b>Willows Class</b>			<b>Maple Class</b>			<b>Sycamore Class</b>			<b>Beech Class</b>		
	<b>Term 1</b>	<b>Term 2</b>	<b>Term 3</b>	<b>Term 1</b>	<b>Term 2</b>	<b>Term 3</b>	<b>Term 1</b>	<b>Term 2</b>	<b>Term 3</b>	<b>Term 1</b>	<b>Term 2</b>	<b>Term 3</b>
2023-2024	herbivore, face, carnivore, hair, omnivore, leg, human, knee, animal, arm, fish, elbow, birds, back, head, toes, ear, hands, eye, fingers, mouth, nose, tree, petals, trunk, fruit, branch, roots, leaves, bulb, flowers, seed, stem, material, metal, wood, rock, plastic, hard, glass, soft, paper, fabric, material, smooth, shiny, rough, Summer, day, Spring, dark, Autumn, light, Winter, night, Season, Moon, Sun, Earth, Moon, Planet, space, Sun, star, loud, quiet, volume, sound,	head, neck, leg, arm, elbow, finger, mouth, ears, toes, feet, hands, stomach, wrist, eyes, ears, nose, senses, taste, sound, touch, sight, smell, feel, tongue	absorbent, bend, biodegradable, bulletproof, crops, discover, fabric, flexible, glass, invention, inventor, Kevlar, litter, materials, metal, objects, opaque, packaging, paper, plastic, pledge, pollution, properties, recycle, rigid, rock, rubber, scientist, shape, silicon chip, single-use, squash, stretch, suitability, suitable, symbols, transparent, twist, unsuitable, water, waterproof, wood, air, bark, blossom, brambles, bulbs, buttercup, clothing,	active, adapt, animals, autumn, colder, daylight, fall, forecasts, fruit, fungi, hibernate, leaves, longer, migration, month, nuts, season, shorter, sleet, snow, spring, summer, temperature, warmer, weather, winter, year, amphibian, animals, backbone, beak, birds, carnivore, characteristics, claws, cold blooded, describe, diet, differences, ears, exercise, eyes, feathers, fins, fish, freshwater, gills, hearing, herbivore, lungs, mammal, medicine, mouth, nose, omnivore, pet,	(common bone names), (scientific bone names), balanced, ball and socket joint, bone, carbohydrates, cardiac, carnivore, cartilage, diet, endoskeleton, exoskeleton, fibre, food chain, herbivore, hinge joint, human, invertebrate, involuntary, ligament, minerals, movement, muscle, nutrition, omnivore, organs, photosynthesis, pivot joint, protection, proteins, skeletal muscle, skeleton, smooth muscle, support, tendon, vertebrate,	amphibian, annelid, arachnid, bird, botany, carnivore, characteristics, class, classification, key, conifers, consumer, crustacean, deforestation, depend, echinoderm, ecosystem, environment, ferns, fish, flowering, food chain, food web, grasses, habitat, herbivore, identify, impact, insects, invertebrate, local, mammal, microhabitat, mollusc, mosses, natural/human, nature reserve, negative, non-flowering, omnivore, organism, pollution, positive, positive/negative, predator, prey, producer, protect,	angle, brighter, closer, concave mirror, convex mirror, direct line of sight, faint, famous, formed, inventor, lightbulb, man-made, mirrors, opaque, periscope, phonograph, plane mirror, reflection, shadow, source of light, sundial, translucent, transparent appliance, battery, battery powered, break, brighter, buzzer, circuit, complete, component, conductor, conducts, dimmer, electrical, electricity, energy,	acid, alkali, attract, base, chemical reaction, classify, combustion, compass, concentrated, condensation, conductivity, conductor, corrosion, create, diluted, dissolve, electrical, evaporation, filtrate, filtration, freeze, hardness, improve, indicator, insoluble, insulator, iron, irreversible, magnetic field, magnetism, man-made, material, materials science, melt, metal, mixture, molecules, natural, neutralisation, particles, property, repel, resistance, reversible, saturated, semiconductor, separation, soluble, solute, solution, solvent, steel, synthetic,	accomplishments, altricial, amphibian, anther, arthropod, asexual, bird, budding, bulbs, carpel, class, cnidarians, discoveries, echinoderm, embryo, exoskeleton, fetus (foetus), filament, fish, gestation, grafting, internal organs, invertebrate, life cycle, mammal, molluscs, naturalist, offspring, ovary, ovoviviparous, ovule, parent plant, precocial, propagating, reproduction, reptile, runners, sexual, significant, species, sponges, spores, stamen, stigma, style, Tanzania, tubers, vertebrate, viviparous, worm, zoologist, zygote algae, angiosperms, bacteria,	addiction, amino acids, analgesics, arteries, artery, atrium, biconcave, blood vessel, capillaries, carbohydrates, cardiovascular system, circulatory system, cytoplasm, deoxygenated blood, depressant, diastole, diffusion, drug, fatty acids, glucose, haemoglobin, hallucinogens, immunity, lactate, lactic acid, lungs, membrane, minerals, nutrient, oxygenated blood, plasma, platelets, protein, pulmonary circuit, red blood cell, resting heart rate, stimulant, systemic system, systole,		

			<p>clover, cotton, daisy , dandelion, deciduous, evergreen, farmer, fern, flower, food, fruit, garden plant, grass, grow, honeysuckle, hydrangea, insects, ivy , lavender, leaves, living thing, magnolia tree, marigold, medicine, moss, nettle, petals, plant, pod, poppies, primula, raw, roots ,rose, seeds, shrub, soil, stem, sunflower, sweet pea, thistle, tree, trunk, weed, wild plant</p>	<p>reproduce, reptile, saltwater, scales, shelter, sight, similarities, skeleton, skin, skull, smell, taste, touch, vertebrate, warm blooded, wild animal, wings</p>	<p>vitamins, voluntary</p>	<p>protozoa, reptile, species, urbanisation, vertebrate, zoology, absorb, adapt, anchor, anther, bean, carpel, distributed, environment, fertilisation, fertilizer, flowering, food, germination, life cycle, light, nutrients, ovary, photosynthesis, pollination, roots, seed dispersal, seed formation, sepal, stamen, stem, support, survival, water, transportation</p>	<p>incomplete, insulates, insulator, light, light bulb, mains powered, material, motor, pass through, power, power source, switch, wire</p>	<p>thermal, transparency, air resistance, anti-clockwise, balanced, buoyancy, clockwise, contact force, density, direction, drag, effort, force, friction, fulcrum, gear, gradient, gravitational force, gravity, heat, kilograms/grams, lever, load, machine, magnetism, mass, matter, newton meter, newtons, non-contact force, pull, pulley, push, pushing force, streamlined, surface, surface area, unbalanced, upthrust, vacuum, water resistance, weight</p>	<p>biodiversity, botany, bryophytes, characteristics, class, classification, conservation, dichotomous key, evolution, exoskeleton, extinction family, family, fungi, genus, gymnosperms, habitat, hierarchy, invertebrate, microorganism, non-vascular plants, order, phylum, Plantae Kingdom, protozoa, species, taxonomist, taxonomy, The Linnaean System, vascular plants, vertebrate, viruses</p>	<p>target heartrate, vein, ventricle, vitamins, white blood cell</p>
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