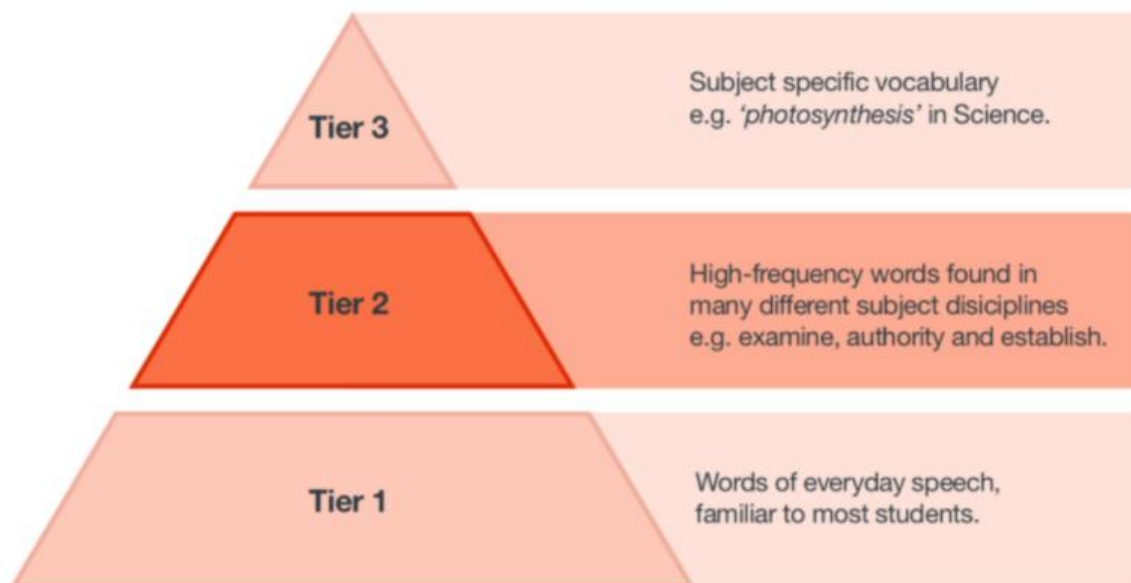


Progression of Vocabulary at Benjamin Adlard Primary School in Science

- At Benjamin Adlard Primary School we recognise that a large and rich vocabulary is the single most important determinant for academic achievement and success in life. Therefore we need to ensure that appropriate explicit and academic vocabulary is taught across the whole curriculum, and we must never assume that children know some of the vocabulary; ***children do not learn vocabulary automatically therefore explicit teaching of vocabulary is required.***



- **Relevant Tier 3 (subject specific) and Tier 2 (high frequency academic words) words have been specifically selected and are highlighted on all curriculum documents.**
- **Tier 3 words do not require pre-teaching, they are taught, consolidated and retrieved during applicable units of work.**
- **Tier 2 words must be explicitly taught, using the explain and consolidate strategy-**

Explain:

- Say the word carefully. (ask the children to repeat the word)
- Use dual coding – give a picture prompt or action to support understanding of word
- Give a student friendly definition, in the context of the applicable area of the curriculum.
- Give multiple meaningful examples, in the context of the subject been taught.
- If necessary, clarify any misconceptions.

Progression in Vocabulary at Benjamin Adlard Primary School

Working scientifically

	Tier Two (academic vocabulary)
EYFS	Look closely, Watch, Touch, Feel, Smell, Listen, Different, Same, Ask, Questions, Answer
Key Stage 1	Identity, Compare, Label, Investigate, Measure, Explore, Changes, Observe, Record, Predict, Present, Sort, Group, Pattern, Absorb, Recognise, Differences, Similarities, Classify, Growth
Lower Key Stage 2	Protect, Accurate, Conclude, Assemble, Protect, Circumference, Explain, Balanced, Research, Information, Findings, Properties, Remains, Discover, Information, Conditions, Environment, Process, Evidence, Data, Conclusion, Evaluation, Improve, Formed, Distance, Function, Diagram, Characteristics, Classification key, Collect, Increase, Decrease, Damage, Categories, Relationship, Accurate, Analyse, Cycle, Vibration, Volume, Independent variable, Dependent variable, Controlled variable, Justify, Construct
Upper Key Stage 2	Precision, Trend, Variables, Reliability, Anomalous result, Repeatability, Approximately, Surface, Appearance, Model, Representation, Argument, Rotation, Imaginary, Direction, Accuracy, Features, Milestones, Correlation, Dissolve, Solution, Filtering, Mixture, Reversible, Irreversible, Variations, Contract, Pathway, Dissection, Desirable, Inheritance, Adaptations, Evolution,

Animals including humans

	Tier 3 (Subject specific vocabulary)
Nursery	Head, shoulders, knees, toes, eyes, ears, mouth, nose cow, pig, dog, cat, rabbit, horse, duck, sheep, chicken, hen, plant-eater, animal-eater, grow, change, die
Reception	Senses, touch, smell, hear, taste, look, see, listen, feel hibernate, sleep, winter, bear, hedgehog, squirrel, turtle, baby animals, chick, calf, puppy, kitten, foal, duckling, piglet, cub, butterfly, bee, spider, ant, frog, lion, elephant. Zebra, cheetah, hippo, monkey, egg, caterpillar, cocoon, ant, spider, worm, beetle, snail,
Year 1	hair, face, mouth, neck, arm, elbow, hand, leg, foot, ankles, feet, wrists Sight, blind, hear, noisy, sweet, salty, sour, bitter, savoury, skin, smell, scent, sniff, stench animal, mammal, fur, wild mammal, pet, bird, wings, beak, feathers, webbed feet, flippers, tail, fins, scales, gills, amphibian, toad, newt, reptile, lizard, crocodile, turtle, carnivore, sharp teeth, herbivore, plants, vegetable, fruit, omnivore
Year 2	shelter, needs, survival, air, water, local area, body heat offspring, egg, parent, baby, child, teenager, life cycle, adolescent, frogspawn, tadpole, froglet, pupa, insect, adult, bird feed, Insectivore
Year 3	skeleton, bones, skull, ribcage, pelvis, femur, spine, antennae, exoskeleton, joint, hinge joint, balland-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, Marie Maynard Daly, high cholesterol, heart attack, clogged arteries
Year 4	Flat teeth, sharp teeth, chew, grind, incisors, canines, premolars, molars, enamel, root, decay, plaque, digestive system, mouth, oesophagus, stomach, small intestine, large intestine, rectum, saliva food chain, producer, consumer, prey, predator
Year 5	foetus, elderly adult, milestone, womb, period, reproduce, hormone, puberty, life expectancy, gestation period, gestation

Progression in Vocabulary at Benjamin Adlard Primary School

Year 6	<p>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, deoxygenated blood, chambers</p> <p>Covered in PSHE health and wellbeing unit:</p> <p>yoga, relaxation, stretches, immunisation, vaccine, disease, NHS, world health, organisation 7, habit, drugs, stimulant, nicotine, vape, addiction, heart rate, UV rays</p>
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Living things and their habitats

	Tier 3 (Subject specific vocabulary)
Nursery	Forest, desert, water, mountain, food, shelter, plant, animal
Reception	Safari, savannah, grassland, garden, rocks, logs, soils, lead pile, pond
Year 2	Arctic plants, hibernate, habitat, cactus, desert, rainfall, ocean, seagrass, woodland, fern, moss, microhabitat, spider, snail, diet, food chain, living, never alive
Year 4	vertebrate, invertebrate, soft-bodied invertebrate, flowering plant, non-flowering plant, fern, moss, urban, rural, natural resources, deforestation, rewinding, nature reserve
Year 5	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
Year 6	organism, excretion, reproduction, mollusc, arachnid, classification, coniferous tree, microorganism, bacteria, virus, fungi, characteristics, Carl Linnaeus

Plants

	Tier 3 (Subject specific vocabulary)
Nursery	Plant, sunflower, soil, grow, roots, leaves, seed, bulb, changing, flower, sunlight, branch, bulb, hole, dig, grow, shoot, soil
Reception	tree, bush, herb, weed, grass, garden, bark
Year 1	Petal, stem, branch, trunk, wildflower, daisy, garden plant, nettle, buttercup, dandelion, deciduous tree, horse chestnut, oak, sycamore, evergreen tree, pine, holly, needles, growth, Bethan Stagg, biodiversity
Year 2	sunlight, compost, herb, blossom, living thing, conditions, weak, compost, temperature, nettle, wildflowers, daisy, bluebell, dandelion, ivy, bracken
Year 3	water transportation, tubes, seedling, seed coating, germination, stamen, pistil, pollen, reproductive organs, pollination, pollinators, wind dispersal, animal dispersal, water dispersal, explosion dispersal, seed dispersal

Materials

	Tier 3 (Subject specific vocabulary)
Nursery	Soft, hard, smooth, rough, cold, warm, bumpy, wood, plastic, sand, mud, clay, grass, dry, wet, water, glass, see-through, float, sink, bendy, stiff, wobbly

Progression in Vocabulary at Benjamin Adlard Primary School

Reception	Ice, freezing, frozen, melt, warm, icicles, soggy, change back, apply heat
Year 1	material, shiny, dull, rock, heavy, light, object, wool, solid, liquid, absorb, waterproof, block
Year 2	Flexible, rigid, properties, rock, stones, brick, brittle, flexible, transparent, translucent, opaque, flexible, natural, man-made, twister, squashed, stretched, Charles Macintosh, chemicals, naphtha, liquid
Year 5	electrical conductor, electrical insulator, thermal insulator, lifespan, dissolve, soluble, insoluble, solution, mixture, reversible changes, reverse, chemical reaction, irreversible change, burning, heating, vinegar, bicarbonate of soda

Rocks

	Tier 3 (Subject specific vocabulary)
Reception	Natural, shells, pebbles, stones
Year 3	granite, pumice, sandstone, chalk, marble, gneiss, crystals, grains, layers, texture, hardness, reaction, weathering, shell, fossilisation, sediment, sandy soil, clay soil, peat soil, chalky soil, organic matter, nutrients, deforestation, habitat loss

States of matter

	Tier 3 (Subject specific vocabulary)
Reception	Ice, freezing, frozen, melt, melting, warm, icicles, soggy, change back, apply heat
Year 4	solid, liquid, gas, volume, states of matter, pouring solid, ooblek, flow, boiling, condensation, evaporation, melting point, water cycle, precipitation, atmosphere, water vapour

Electricity

	Tier 3 (Subject specific vocabulary)
Nursery	Covered in computing Device, App, Care, Phone, TV, Computer, Internet, Photograph, Video, Camera, Interactive Whiteboard
Reception	Covered in computing Laptop, Mouse, USB stick, System, Fan, Hard Drive, Monitor, Computer tower, Speakers, Walkie-talkies, Tablet/iPad, Digital camera, Digital clock, Remote control, Electric toothbrush, electricity
Year 4	Appliances, plug, socket, cell, electrocuted, circuit, switch, battery, buzzer, conductor, insulator, Joseph Swan, Thomas Edison, lightbulb, long-lasting, reliable, filament
Year 6	Stephen Gray, Static, William Gilbert, Alessandro Volta, Michael Faraday, Electric motor, Power Station, John Logie Bair, series circuit, voltage, current, complete circuit, incomplete circuit, rechargeable batteries

Earth and space

	Tier 3 (Subject specific vocabulary)
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Progression in Vocabulary at Benjamin Adlard Primary School

Nursery	sun, sky, day, bright, shine, warm, dark, night, moon, stars, sleep, quiet, light
Reception	Space, atmosphere, air
Year 5	The solar system, planets, spherical, orbit, planets, gravitational pull, orbit, heliocentric, geocentric, axis, satellite

Seasonal change

	Tier 3 (Subject specific vocabulary)
Nursery	sun, sky, day, bright, shine, warm, dark, night, moon, stars, sleep, quiet, light
Reception	Rainy, sunny, cloudy, snowy, icy, season, spring, summer, autumn, winter, weather, windy, puddles, shower, rainbow
Year 1	Blooming, fresh, warm, green, bright, warn, cooler, daylight, cloudy, frosty, stormy, foggy, rainfall, rain gauge

Sound

	Tier 3 (Subject specific vocabulary)
Nursery	bang, tinkle, clap, tap, buzz, ring, whistle, loud, quiet, sound, soft, noisy, silent, fast, slow, high, low, music
Reception	Voices, traffic, sirens, volume, crackle, hum, buzz, roar
Year 4	vibration, pitch, outer ear, ear bones, cochlea, ear drum, ear canal, decibel, insulate, high-pitched, low-pitched, background noise, medium, decile metre

Light

	Tier 3 (Subject specific vocabulary)
Nursery	sun, bright, brighter, brightest, shine, shiny, light, see-through, glow
Reception	Sunny, shadow, shady, cloud, touch, light source
Year 3	natural light sources, artificial light sources, sunglasses, protect, reflection, transparent, translucent, opaque
Year 6	retina, iris, pupil, lens, ray diagram, periscope, solar eclipse, refraction, medium, rainbow, prism, coloured filter, spectrum of light

Forces

	Tier 3 (Subject specific vocabulary)
Nursery	Float, sink, under, above, light, heavy, up, down, slowly, quickly
Reception	Magnet, out, pull, magnetic, stick, roll, drop, turn, spin, slow, fast, faster, further, furthest, bounce, push, pull
Year 3	force, contact force, friction, poles, magnetic force, non-metal, iron, aluminium, steel attract, repel
Year 5	frictional force, motion, air resistance, parachute, surface area, water resistance, streamlined, non-contact force, gravity, weight, lever, gear, pulley, machine

Progression in Vocabulary at Benjamin Adlard Primary School

Evolution and inheritance

	Tier 3 (Subject specific vocabulary)
Nursery	Living, extinct, long ago, bones, fossils
Reception	Safari, savannah, grassland, garden, rocks, logs, soils, lead pile, pond
Year 2	Arctic plants, hibernate, habitat, cactus, desert, rainfall, ocean, seagrass, woodland, fern, moss, microhabitat, spider, snail, diet, food chain, living, never alive
Year 4	vertebrate, invertebrate, softbodied invertebrate, flowering plant, non-flowering plant, seasonal changes, natural resources, rewilding, nature reserve
Year 5	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
Year 6	Variation, organism, species, inheritance, desirable characteristics, polar habitat, desert habitat, adaptations, evolution, common ancestor, natural selection, finch, Galapagos Islands, decompose, Charles Darwin, palaeontologist, Mary Anning