

Science Vocabulary Progression

Note: The vocabulary is specific to year groups but is taught in units of work in mixed year groups at Chadsmead.

Biology: Animals Including Humans

EYFS	KS1		LKS2		UKS2	
	<u>Year 1</u>	<u>Year 2</u>	<u>Year 3</u>	<u>Year 4</u>	<u>Year 5</u>	<u>Year 6</u>
<p><u>Names of body parts:</u> Head, ear, eye, mouth, nose, face, hair, leg, knee, arm, elbow, back, toes, hands, fingers</p> <p><u>Animal diets:</u> carnivore, herbivore, omnivore</p> <p><u>Names of animal groups:</u> fish, amphibians, reptiles, birds, mammals.</p>	<p><u>Human and animal body parts:</u> 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><u>Human senses:</u> sight, hearing, touch, smell, taste.</p> <p><u>Exploring senses:</u> loud, quiet, soft, rough.</p> <p><u>Other:</u> human, animal, pet.</p> <p><u>Previously introduced vocabulary:</u> carnivore, herbivore, omnivore, fish, amphibians, reptiles, birds, mammals.</p>	<p><u>Being born and growing:</u> Young, offspring, live young, grow, develop, change, hatch, lay, fly, crawl, talk.</p> <p><u>Young and adult names:</u> e.g. lamb and sheep, kitten and cat, duckling and duck.</p> <p><u>Life cycle stages:</u> e.g. baby, toddler, child, teenager, adult; frogspawn, tadpole, froglet, frog.</p> <p><u>Survival and staying healthy:</u> basic needs, survive, food, air, exercise, diet, nutrition, healthy, balanced diet, hygiene, germs.</p> <p><u>Food groups:</u> fruit and vegetables, proteins, dairy and alternatives, carbohydrates, oil and spreads, fat, salt, sugar.</p> <p><u>Previously introduced vocabulary:</u> water.</p>	<p><u>Food groups and nutrients:</u> fibre, fats (saturated and unsaturated), vitamins, minerals.</p> <p><u>Skeletons and muscles:</u> skeleton, muscles, tendons, joints, protection, support, organs, muscles, biceps, triceps, contract, relax, bone, cartilage, shell, vertebrate, invertebrate, endoskeleton, exoskeleton, hydrostatic skeleton.</p> <p><u>Names of human bones:</u> e.g. skull, spine, backbone, vertebral column, ribcage, pelvis, clavicle, scapula, humerus, ulna, pelvis, radius, femur, tibia, fibula.</p> <p><u>Other:</u> energy.</p> <p><u>Previously introduced vocabulary:</u> movement.</p>	<p><u>Digestive system:</u> digest, digestion, tongue, teeth, saliva, salivary glands, oesophagus, stomach, liver, pancreas, gall bladder, small intestine, duodenum, large intestine, rectum, anus, faeces, organ.</p> <p><u>Types of teeth and dental care:</u> molar, premolar, incisor, canine, wisdom teeth, tooth decay, plaque, enamel, baby (milk) teeth.</p> <p><u>Food chains and animal diets:</u> decomposer, food web.</p> <p><u>Previously introduced vocabulary:</u> producer, consumer, prey, predator, excretion, habitat.</p>	<p><u>Process of reproduction:</u> gestation, asexual reproduction, sexual reproduction, sperm, egg, cells, clone.</p> <p><u>Changes and life cycle:</u> embryo, foetus, uterus, prenatal, adolescence, puberty, menstruation, adulthood, menopause, life expectancy, old age, hormones, sweat.</p> <p><u>Changing body parts:</u> e.g. breasts, penis, larynx, ovaries, genitalia, pubic hair.</p> <p><u>Previously introduced vocabulary:</u> reproduction, reproduce, types of animals and animal groups, fertilisation.</p>	<p><u>Circulatory system:</u> 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.</p> <p><u>Lifestyle:</u> drug, alcohol, smoking, disease, calorie, energy input, energy output.</p> <p><u>Other:</u> water transportation, nutrient transportation, waste products.</p> <p><u>Previously introduced vocabulary:</u> carbon dioxide.</p>

Biology: Plants

EYFS	KS1		LKS2		UKS2	
	<u>Year 1</u>	<u>Year 2</u>	<u>Year 3</u>	<u>Year 4</u>	<u>Year 5</u>	<u>Year 6</u>
<p><u>Name some features of plants:</u> e.g. flower, vegetable, fruit, berry, leaf/leaves, blossom, petal, stem, trunk, branch, root, seed, bulb, soil.</p>	<p><u>Names of common plants:</u> wild plant, garden plant, evergreen tree, deciduous tree, common flowering plant, weed, grass.</p> <p><u>Name some common types of plant</u> e.g. sunflower, daffodil.</p> <p><u>Previously introduced vocabulary:</u> flower, vegetable, fruit, berry, leaf/leaves, blossom, petal, stem, trunk, branch, root, seed, bulb, soil.</p>	<p><u>Growth of plants:</u> germination, shoot, seed dispersal, grow, food store, life cycle, die, wilt, seedling, sapling.</p> <p><u>Needs of plants:</u> sunlight, nutrition, light, healthy, space, air.</p> <p><u>Name different types of plant:</u> e.g. bean plant, cactus.</p> <p><u>Names of different habitats:</u> e.g. rainforest, desert.</p> <p><u>Previously introduced vocabulary:</u> water, temperature, warm, hot, cold, habitat.</p>	<p><u>Water transportation:</u> transport, evaporation, evaporate, nutrients, absorb, anchor.</p> <p><u>Life cycle of flowering plants:</u> 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><u>Previously introduced vocabulary:</u> life cycle.</p>	<p><u>Previous vocabulary is revisited during discrete units of work</u></p>	<p><u>Previous vocabulary is revisited during discrete units of work</u></p>	<p><u>Previous vocabulary is revisited during discrete units of work</u></p>

Biology: Living Things and Their Habitats

EYFS	KS1		LKS2		UKS2	
	<u>Year 1</u>	<u>Year 2</u>	<u>Year 3</u>	<u>Year 4</u>	<u>Year 5</u>	<u>Year 6</u>
	<p><u>Previous vocabulary is revisited during discrete units of work</u></p>	<p><u>Living or dead:</u> living, dead, never living, not living, alive, never been alive, healthy.</p> <p><u>Habitats including microhabitats:</u> depend, shelter, safety, survive, suited, space, minibeast, air.</p> <p><u>Life processes:</u> movement, sensitivity, growth, reproduction, nutrition, excretion, respiration.</p> <p><u>Food chains:</u> food sources, food, producer, consumer, predator, prey. Names of habitats and microhabitats: e.g. under leaves, woodland, rainforest, sea shore, ocean, urban, local habitat.</p> <p><u>Previously introduced vocabulary:</u> senses, carnivore, herbivore, omnivore, seed, water, names of materials.</p>	<p><u>Previous vocabulary is revisited during discrete units of work</u></p>	<p><u>Living things:</u> organisms, specimen, species.</p> <p><u>Grouping living things:</u> classification, classification keys, classify, characteristics.</p> <p><u>Names of invertebrate animals:</u> snails and slugs, worms, spiders, insects.</p> <p><u>Invertebrate body parts:</u> e.g. wing case, abdomen, thorax, antenna, segments, mandible, proboscis, prolegs.</p> <p><u>Environmental changes:</u> environment, environmental dangers, adapt, natural changes, climate change, deforestation, pollution, urbanisation, invasive species, endangered species, extinct.</p> <p><u>Previously introduced vocabulary:</u> carbon dioxide, fish, bird, mammal, amphibian, reptile, skeleton, bone, vertebrate, invertebrate, backbone, names for animal body parts, names of common plants, photosynthesis.</p>	<p><u>Reproduction:</u> asexual reproduction, sexual reproduction, gestation, metamorphosis, gametes, tuber, runners/side branches, plantlet, cuttings, embryo, adolescent, penis, vagina, egg, pregnancy, gestation.</p> <p><u>Previously introduced vocabulary:</u> 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>	<p><u>Classifying:</u> Carl Linnaeus, Linnaean system, flowering and non-flowering plants, variation.</p> <p><u>Microorganisms:</u> bacteria, single-celled, microbes, microscopic, virus, fungi, fungus, mould, antibiotic, yeast, ferment, microscope, decompose.</p>

Biology: Evolution and Inheritance

EYFS	KS1		LKS2		UKS2	
	<u>Year 1</u>	<u>Year 2</u>	<u>Year 3</u>	<u>Year 4</u>	<u>Year 5</u>	<u>Year 6</u>
Other: Fossil, Carnivore, omnivore, herbivore, features of dinosaurs.						<u>Evolution and inheritance:</u> evolve, adaptation, inherit, natural selection, adaptive traits, inherited traits, mutations, theory of evolution, ancestors, biological parent, chromosomes, genes, Charles Darwin. <u>Other:</u> selective breeding, artificial selection, breed, cross breeding, genetically modified food, cloning, DNA. <u>Previously introduced vocabulary:</u> 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.

Physics: Seasonal Changes

EYFS	KS1		LKS2		UKS2	
	<u>Year 1</u>	<u>Year 2</u>	<u>Year 3</u>	<u>Year 4</u>	<u>Year 5</u>	<u>Year 6</u>
<p><u>Seasons:</u> spring, summer, autumn, winter,</p> <p><u>Day length:</u> night, day, daylight.</p>	<p><u>Seasons:</u> seasonal change.</p> <p><u>Weather:</u> e.g. sun, rain, snow, sleet, frost, ice, fog, cloud, hot/warm, cold, storm, wind, thunder, weather forecast.</p> <p><u>Measuring weather:</u> temperature, rainfall, wind direction, thermometer, rain gauge.</p> <p><u>Previously introduced vocabulary:</u> spring, summer, autumn, winter, night, day, daylight</p>	<p><u>Previous vocabulary is revisited during discrete units of work</u></p>				

Physics: Forces and Magnets

EYFS	KS1		LKS2		UKS2	
	<u>Year 1</u>	<u>Year 2</u>	<u>Year 3</u>	<u>Year 4</u>	<u>Year 5</u>	<u>Year 6</u>
	<p><u>Previous vocabulary is revisited during discrete units of work</u></p>	<p><u>Previous vocabulary is revisited during discrete units of work</u></p>	<p><u>How things move:</u> move, movement, surface, distance, strength.</p> <p><u>Types of forces:</u> push, pull, contact force, non-contact force, friction.</p> <p><u>Magnets:</u> magnetic, magnetic field, magnetic force, bar magnet, horseshoe magnet, ring magnet, magnetic poles (north pole, south pole), attract, repel, compass.</p> <p><u>Magnetic and non-magnetic materials:</u> e.g. iron, nickel, cobalt.</p> <p><u>Previously introduced vocabulary:</u> metal, names of materials.</p>		<p><u>Types of forces:</u> air resistance, water resistance, buoyancy, upthrust, Earth's gravitational pull, gravity, opposing forces, driving force.</p> <p><u>Mechanisms:</u> levers, pulleys, gears/cogs.</p> <p><u>Measurements:</u> weight, mass, kilograms (kg), Newtons (N), scales, speed, fast, slow.</p> <p><u>Other:</u> streamlined, Earth.</p> <p><u>Previously introduced vocabulary:</u> air, heat, moon.</p>	

Physics: Light

EYFS	KS1		LKS2		UKS2	
	<u>Year 1</u>	<u>Year 2</u>	<u>Year 3</u>	<u>Year 4</u>	<u>Year 5</u>	<u>Year 6</u>
			<p><u>Light and seeing:</u> dark, absence of light, light source, illuminate, visible, shadow, translucent, energy, block.</p> <p><u>Light sources:</u> e.g. candle, torch, fire, lantern, lightning. Reflective light: reflect, reflection, surface, ray, scatter, reverse, beam, angle, mirror, moon.</p> <p><u>Sun safety:</u> dangerous, glare, damage, UV light, UV rating, sunglasses, direct.</p> <p><u>Previously introduced vocabulary:</u> opaque, transparent, sunlight, sun.</p>			<p><u>Reflection:</u> periscope.</p> <p><u>Seeing light:</u> visible spectrum, prism.</p> <p><u>How light travels:</u> light waves, wavelength, straight line, refraction.</p> <p><u>Previously introduced vocabulary:</u> names and properties of materials, absorb.</p>

Physics: Sound

EYFS	KS1		LKS2		UKS2	
Measuring sound: loud, quiet, volume, sound	<u>Year 1</u>	<u>Year 2</u>	<u>Year 3</u>	<u>Year 4</u> Parts of the ear: eardrum. Making sound: vibration, vocal cords, particles. Measuring sound: pitch, volume, amplitude, sound wave, quiet, loud, high, low, travel, distance Other: soundproof, absorb sound.	<u>Year 5</u>	<u>Year 6</u>

Physics: Earth and Space

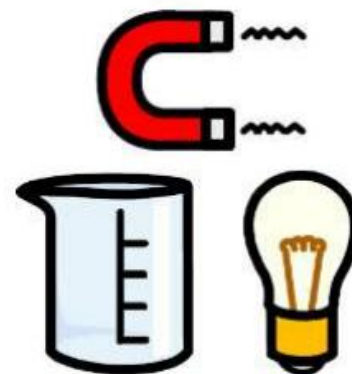
EYFS	KS1		LKS2		UKS2	
Solar System: Planet, star, Earth, Moon, space, Sun	<u>Year 1</u>	<u>Year 2</u>	<u>Year 3</u>	<u>Year 4</u>	<u>Year 5</u> Solar system: star, planet. Names of planets: Mercury, Venus, Earth, Mars, Jupiter, Saturn, Neptune, Uranus. Shape: spherical bodies, sphere, oblate spheroid Movement: rotate, axis, orbit, satellite. Theories: geocentric model, heliocentric model, astronomer. Day length: sunrise, sunset, midday, time zone. Previously introduced vocabulary: Sun, moon, shadow, day, night, heat, light, reflect.	<u>Year 6</u>

Physics: Electricity

EYFS	KS1		LKS2		UKS2	
	<u>Year 1</u>	<u>Year 2</u>	<u>Year 3</u>	<u>Year 4</u>	<u>Year 5</u>	<u>Year 6</u>
				<p><u>Electricity:</u> mains-powered, battery-powered, mains electricity, plug, appliances, devices.</p> <p><u>Circuits:</u> circuit, simple series circuit, complete circuit, incomplete circuit.</p> <p><u>Circuit parts:</u> bulb, cell, wire, buzzer, switch, motor, battery.</p> <p><u>Materials:</u> electrical conductor, electrical insulator.</p> <p><u>Other:</u> safety.</p> <p><u>Previously introduced vocabulary:</u> names of materials.</p>		<p><u>Flow and measure of electricity:</u> voltage, amps, resistance, electrons, volts (V), current.</p> <p><u>Circuits:</u> symbol, circuit diagram, component, function, filament.</p> <p><u>Variations:</u> dimmer, brighter, louder, quieter.</p> <p><u>Types of electricity:</u> natural electricity, human-made electricity, solar panels, power station.</p> <p><u>Other:</u> positive, negative.</p>

Chemistry: Materials (including Rocks)

EYFS	KS1		LKS2		UKS2	
	<u>Year 1</u>	<u>Year 2</u>	<u>Year 3</u>	<u>Year 4</u>	<u>Year 5</u>	<u>Year 6</u>
<p><u>Names of materials:</u> wood, plastic, glass, metal, water, rock, paper, cardboard, rubber, fabric.</p> <p><u>Properties of materials:</u> Hard, soft, rough, smooth</p>	<p><u>Properties of materials:</u> shiny, dull, stretchy, rough, smooth, bendy, not bendy, transparent, opaque, waterproof, not waterproof, absorbent, not absorbent, sharp, stiff.</p> <p><u>Other:</u> object.</p> <p><u>Previously introduced vocabulary:</u> wood, plastic, glass, metal, water, rock, paper, cardboard, rubber, fabric, smooth, rough, soft, hard</p>	<p><u>Changing shape:</u> squash, bend, twist, stretch.</p> <p><u>Properties of materials:</u> e.g. strong, flexible, light, hard-wearing, elastic.</p> <p><u>Other:</u> suitability, recycle, pollution.</p>	<p><u>Types of rock:</u> sedimentary rock, igneous rock, metamorphic rock.</p> <p><u>Properties of rocks:</u> permeable, semi-permeable, impermeable, durable.</p> <p><u>Names of rocks:</u> e.g. marble, chalk, granite, sandstone, slate.</p> <p><u>Formation of rocks and fossils:</u> natural, human-made, magma, lava, molten rock, sediment, erosion, fossilisation, layers, bone, fossil.</p> <p><u>Soil:</u> sandy, chalky, clay, peaty, loamy, topsoil, subsoil, bedrock, mineral, organic matter, compost.</p> <p><u>Other:</u> palaeontology.</p> <p><u>Previously introduced vocabulary:</u> soil, water, air.</p>	<p><u>States of matter:</u> solids, liquids, gases, particles.</p> <p><u>State change:</u> evaporate, condense, melt, freeze, heat, cool, melting point, freezing point, boiling point, water vapour.</p> <p><u>Water cycle:</u> precipitation, evaporation, condensation, ground run-off, collection, underground water, bodies of water (sea, river, stream), water droplets, hail.</p> <p><u>Other:</u> atmosphere.</p> <p><u>Previously introduced vocabulary:</u> temperature, rain, cloud, snow, wind, sun, hot, cold, absorb, carbon dioxide.</p>	<p><u>Properties of materials:</u> thermal conductor/insulator, magnetism, electrical resistance, transparency.</p> <p><u>Mixtures and solutions:</u> dissolving, substance, soluble, insoluble.</p> <p><u>Changes of materials:</u> reversible change, physical change, irreversible change, chemical change, burning, new material, product.</p> <p><u>Separating:</u> sieving, filtering, magnetic attraction.</p> <p><u>Previously introduced vocabulary:</u> electrical conductor/insulator, bulb, translucent.</p>	



Progression of Vocabulary:

Working Scientifically

EYFS	KS1	LKS2	UKS2
Experiment Fair Find out Explain	aim answers block diagrams changes	accurate bar chart chart classify	accuracy and precision bar graphs causal relationship degree of trust

Reason Why? Change	compare describe difference different enquiry equipment experience explore findings gather group identify (name) investigate measure notice observe patterns pictograms questions record same similarity simple tables sort sorting diagrams tally charts test What will we do? (plan) What do you think will happen? (prediction) What happened? (results) What have we found out? (conclusion)	comparative test conclusion (What have we found out?) criteria data develop diagram evaluate evidence explanation key making a test fair method observations plan (What will we do?) practical enquiry prediction (What do you think will happen?) primary sources questioning reasoning relationships results (What happened?) secondary sources standard units table What do we change, what do we keep the same, what are we measuring?	dependent variable independent variable justify line graphs refute repeat results scatter graphs support variables (what do we change, what do we keep the same, how and what are we measuring?)
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