

Rattlesden C of E Primary Academy Shine Together 'I can do all things through Christ who strengthens me.' Philippians 4:13

### **Vocabulary Progression - Science**

EYFS	Year 1	Year 2			
	Working Scientifically (KS1)				
Science, experiment, find out, explain, reason, why, change, observe.	question, answer, observe observing, equipment, identify, classify, sort, group, record – diagram, chart, map data, compare, contrast, describe. prediction, table				
Animals (EYFS)	Animals including humans (KS1)				

<ul> <li>Model and encourage children to use vocabulary such as: (Non Humans)</li> <li><u>ALL:</u> live, on land, in water, jungle, desert, North Pole, South Pole, sea, hot, cold, wet, dry, snow, ice.</li> <li>Also, exposure to the names of various animals.</li> <li><u>SOME:</u> environment, polar regions, ocean, camouflage.</li> <li>For Humans:Model and encourage children to use vocabulary such as: <u>ALL:</u> hair (black, brown, dark, light, blonde, ginger, grey, white, long, short, straight, curly), eyes (blue, brown, green, grey), skin (black, brown, white), big/tall, small/short, bigger/smaller, baby, toddler, child, adult, old person, old, young, brother, sister, mother, father, aunt, uncle, grandmother, grandfather, cousin, friend, family, boy, girl, man, woman</li> <li><u>SOME:</u> Expose to vocabulary such as:</li> </ul>	<u>ALL:</u> Head, body, eyes, ears, mouth, teeth, leg, tail, wing, claw, fin, scales, feathers, fur, beak, paws, hooves. Senses: touch, sight, smell, taste, hearing. Fingers, skin, eyes, nose, ear and tongue. Birds, fish, mammals <u>SOME:</u> amphibians, reptiles, carnivore, herbivore, omnivore.	As previous years plus: <u>ALL:</u> Offspring, reproduction, growth, child, adult, young. young/old stages (examples - chick/hen, baby/child/adult, caterpillar/butterfly), Diet, exercise, heartbeat, breathing, hygiene, germs, disease, food types (examples – meat, fish, vegetables, bread, rice, pasta) <u>SOME:</u> Develop, live young, de-hydrate, energy, nutrition, pulse,
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bald, elderly, wrinkles, male, female,		
freckles.		
	Materials	
Model and encourage children to use vocabulary such as: <u>ALL:</u> ice, water, frozen, icicle, snow, melt, wet, cold, slippery, smooth, big, bigger, biggest, smaller, smaller, smallest, hard, soft, bendy, rigid, wood, plastic, paper, card, metal, strong, weak, hot, apply heat, waterproof, soggy, not waterproof, best, change, change back <u>SOME:</u> expose to supplementary vocabulary such as: solid, liquid, gas, most suited	<u>ALL:</u> Object, material, wood, plastic, glass, metal, water, rock, brick, paper, fabric, elastic, foil, card/cardboard, rubber, wool, clay, hard, soft, stretchy, stiff, bendy, floppy, waterproof, absorbent, breaks/tears, rough, smooth, shiny, dull, see-through, not see-through <u>SOME:</u> Transparent, opaque.	As previous years plus: <u>ALL:</u> properties, opaque, transparent, translucent, reflective, nonreflective, rigid. shape, push/pushing, pull/pulling, twist/twisting, squash/squashing, bend/bending, stretch/stretching <u>SOME:</u> Suitability, flexible
	Seasonal changes	
Model and encourage children to use vocabulary such as: <u>ALL:</u> spring, summer, autumn, winter, seasons, sunny, cloudy, hot, warm, cold, shower, raining, storm, thunder, lightning, hail, sleet, snow, icy, frost, puddles, windy, rainbow, animals, young, plants, flowers	ALL: Weather, sunny, rainy, windy, snowy, foggy (etc.) Seasons, winter, summer, spring, autumn. Sun, sunrise, sunset, day length SOME:	As previous year: <u>ALL:</u> daylight, January, February, March, April, May, June, July, August, September, October, November, December.

SOME: expose to supplementary vocabulary such as: hibernate, migrate, snowflake	daylight, January, February, March, April, May, June, July, August, September, October, November, December.	
	Living things and their habitats	
		ALL: living, dead, never been alive, suited, suitable, basic needs, food, food chain, shelter, move, feed Names of local habitats e.g. pond, woodland etc. Names of micro-habitats e.g. under logs, in bushes etc. <u>SOME:</u> food sources, life processes, survive.
	Plants	
Model and encourage children to use vocabulary such as: <u>ALL</u> : plant, tree, bush, flower, vegetable, herb, weed, animal, names of plants and animals they see, name of a contrasting environment e.g. beach, forest.	<u>ALL:</u> leaf, flower, blossom, petal, fruit, berry, root, seed, trunk, branch, stem, bark, stalk, bud, weed, bulb, bean.	As previous year plus <u>ALL:</u> sunlight, shade, sun, warm, cool, water, grow, healthy, shoot, temperature
<u>SOME</u> : Expose to supplementary vocabulary such as:	Names of trees in the local area.	SOME: germination, nutrients,

Names of garden and wild flowering plants in the local	Dormant, sprout,
area. <u>SOME:</u> evergreen, deciduous	

### Light (EYFS)

# Model and encourage children to use vocabulary such as:

<u>ALL:</u> Sun, sunny, light, shadow, shady, clouds, torch, see-through, non-see through, source, light source

<u>SOME:</u>Expose children to supplementary vocabulary such as: casting a shadow, pale, dark, transparent, opaque

#### Sound (EYFS)

## Model and encourage children to use vocabulary such as:

<u>ALL:</u> sound, noise, listen, hear, music, voices, bird song, traffic, sirens, thunder, high, low, loud, quiet, soft, volume, crackle, thunder, hum, buzz, roar <u>SOME:</u>Expose to supplementary vocabulary such as:

source, crescendo, vibration, pitch

#### Forces (EYFS)

# Model and encourage children to use vocabulary such as:

<u>ALL:</u> float, sink, up, down, top, bottom, surface, move, roll, drop, fly, turn, spin, fall, fast, slow, faster, slower, fastest, slowest, further, furthest, wind, air, water, blow <u>SOME:</u> Expose to supplementary vocabulary such as: force, rotate, solid, liquid, gravity.

### Earth and Space (EYFS)

Model and encourage children to use vocabulary such as:

<u>ALL:</u> Sun, Moon, Earth, star, planet, sky, day, night, space, round, light, heavy, fall, bounce, float, rise, fall, air

<u>SOME:</u> Expose to supplementary vocabulary such as: sunrise, sunset, astronaut, astronomer, constellation, orbit, nocturnal, slow-motion, magnify

Year 3	Year 4	Year 5	Year 6
	Working Scientifico	ally (LKS2 & UKS2)	
As previous year plus: research – relevant questions, scientific enquiry, comparative and fair test, systematic, careful observation, accurate measurements equipment – thermometer, data logger data – gather, record, classify, present record – drawings, labelled diagrams, keys, bar charts, tables.		As previous years plus: Plan, variables, measurements, accuracy, precision, repeat readings Record data – scientific diagrams, labels, classification keys, tables, scatter graphs, bar graph and line graphs.	
Oral and written explanations, conclusion Predications, further comparative and fair tests		arative and fair tests.	

predictions.differences, similarities, changes, evidence, improve, secondary sources, guides, keys, construct and interpret.		Report and present – correlationships, explanations written display and present <b>Evidence</b> – support, refute Identify, classify and descr	s, degree of trust, oral and tation.
	Plai	nts	
As previous year plus: <u>ALL</u> Photosynthesis, pollen, insect/wind pollination, seed formation, seed dispersal (wind dispersal, animal dispersal, water dispersal), pollinator, pollination <u>SOME</u> Fertilisation, stamen, filament, anther, carpel, stigma, style, sepal, ovary, ovule.			No coverage in year 6
	Animals inclue	ding humans	
As previous year plus: Nutrition, nutrients, healthy, carbohydrates, sugars, protein, vitamins, minerals, fibre, fat, water, skeleton, bones, muscles, joints,	As previous years plus: Digestive system, digestion, mouth, teeth, saliva, esophagus, stomach, small intestine, nutrients, large	As previous years plus: <u>ALL</u> : fertilisation, reproduce, sexual reproduction, life cycle, adolescence, puberty, adulthood, life expectancy.	As previous years plus: <u>ALL:</u> Heart, pulse, rate, pumps, blood, blood vessels, transported, lungs, oxygen, carbon dioxide, nutrients, water, muscles, cycle,

support, protect, move, skull, ribs, spine. <u>SOME:</u> Saturated fats, unsaturated fats, minerals, vertebrate, invertebrate, endoskeleton, exoskeleton.	intestine, rectum, anus, teeth, incisor, canine, molar, premolars, herbivore, carnivore, omnivore, producer, predator, prey, food chain.	<u>SOME:</u> gestation, asexual reproduction, menstruation, prenatal.	circulatory system, diet, exercise, drugs, lifestyle. <u>SOME:</u> oxygenated blood, deoxygenated blood, plasma, platelets.	
	Roc	ks		
ALL: Rock, stone, pebble, boulde absorb water, soil, fossil, mar sandy/chalk/clay soil. <u>SOME:</u> igneous rock, sedimentary ro permeable, impermeable, p erodes.	No coverage in year 6			
Light				
<u>ALL</u> Light, light source, dark, absence of light, transparent, translucent, opaque, shiny, matt, surface, shadow, reflect, mirror, sunlight, dangerous, ray, pupil, retina.		As previous years plus: <u>ALL:</u> straight lines, light rays, reflection, refraction, prism		

<u>SOME:</u>	<u>SOME:</u> incident ray. reflected ray, the law of reflection, visible spectrum.		
Forces includ	ing magnets		
<u>ALL:</u> Force, push, pull, twist, contact force, non-contact force, magnetic force, magnet, strength, bar magnet, ring magnet, button magnet, horseshoe magnet, attract, repel, magnetic material, metal, iron, steel, poles, north pole, south pole. <u>SOME:</u> Magnetic field, friction	As previous years plus: <u>ALL:</u> gravity, Earth, air resistance, water resistance, friction, mechanisms, simple machines, levers, pulleys, gears, magnetic field. <u>SOME:</u> weight, mass, streamlined, buoyancy, upthrust.	No coverage in year 6	
Living things and habitats			
Classification, classification keys, environment, habitat, human impact, positive, negative, migrate, hibernate.	As previous years plus: <u>ALL:</u> Life cycle, reproduce, sexual, sperm, fertilises, egg, live young, metamorphosis,	As previous years plus: <u>ALL:</u> gestation. vertebrates, fish, amphibians, reptiles, birds, mammals, invertebrates, insects,	

		pollination, asexual, plantlets, runners, bulbs, cuttings. <u>SOME:</u> gestation	spiders, snails, worms, flowering, non-flowering, microscope, species <u>SOME:</u> Characteristics, taxonomy, bacteria,
	<b></b>		microorganism.,
	States of	matter	
<u>ALL:</u> Solid, liquid, gas, state change evaporation, temperature, v <u>SOME:</u> Water vapour, condense, pr	vater cycle.		No coverage in year 6
	Sou		
<u>ALL:</u> Sound, source, vibrate, vibration, travel, pitch (high, low), volume, faint, loud, insulation, eardrum, sound proof, distance <u>SOME:</u> Amplitude, vacuum, particles			No coverage in year 6
Electricity			
<u>ALL:</u> Electricity, electrical appliance/device, mains, plug, electrical circuit, complete circuit, component, cell, battery, positive, negative,		As previous years plus: <u>All:</u> Amps, voltage, electrons, resistance. <u>SOME (from KS3):</u>	

connect/connections, loose connection, short circuit, crocodile clip, bul			
switch, buzzer, motor, conductor, insulator, metal, non-metal, symbol, cu	rrent circuit, parallel circuit		
SOME			
Amps, voltage, electrons, resistance.			
Properties and changes in materials			
ALL: (See states of matter above too)			
Thermal/electrical insulator/conductor, change of state, mixture, dissolve	e, No coverage in year 6		
solution, soluble, insoluble, filter, sieve, reversible/ non-reversible change,			
burning, rusting, new material.			
<u>SOME:</u> transparency, conductivity.			
Earth and Space			
ALL:	No coverage in year 6		
Earth, Sun, Moon, (Mercury, Jupiter, Saturn, Venus, Mars, Uranus, Neptune	e),		
spherical, solar system, rotates, star, orbit, planets, axis, rotate, astronome	er.		
SOME: spherical body, celestial body, satellite, geocentric model,			
heliocentric model,			
Evolution and inheritance (Year 6 Only)			
	All: Offspring, sexual		
	reproduction, vary,		
	characteristics, suited,		
	adapted, environment,		

	inherited, species, fossils, evolution.
	<u>SOME:</u> variations, habitat, adaptation, natural selections, adaptive traits, inherited traits.