



SACRED HEART CATHOLIC PRIMARY SCHOOL & NURSERY

Science Vocabulary Progression Map

Progression Aims

This document shows the progression of required vocabulary that the children should understand throughout each topic as a prerequisite for further learning. Vocabulary is not exclusive to each year group, however there a specific focus on the language in the topics covered in that science unit. We value a vocabulary rich curriculum and we provide opportunities for the pupils to verbalise their knowledge using subject specific vocabulary to demonstrate their understanding.

Science	Nursery	Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Working Scientifically	What...? Look closely Watch Touch Smell Listen Sort	How? Observe Feel Same Different Compare ask questions record group resources	Why ...? Similar different best and worst change plan look biggest and smallest compare sort and group	change slowly quickly describe name identify label record measure bigger and smaller pattern notice cycle predict	gradually identify observe recognise investigate record units table fair evidence research length observations prediction	similarities differences research and source scientists discovery process cycle measurements conclude evaluate rank plan vary keep the same/constant bar graph table tally	classify interpret pattern relationship prediction analyse interpret conclude evaluate rank variable constants control repeat key relationship line graph	hypothesis variable constants evaluate plan conclude interpret classify categorise database enquiry control repeat support refute degree of trust scatter graph
Biology - Plants	plant leaf branch flower	bulb weed shoot root	deciduous evergreen tree trunk	light suitable temperature grow	air nutrients soil reproduction			



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	petal seed berry fruit vegetable water grow	stem bark soil	branches, oak holly willow birch chestnut conker daisy buttercup rose daffodil	healthy germinate decompose	transportation dispersal pollination flower			
Biology – Animals including Humans	head eyes nose mouth ears hands fingers feet toes arm leg animal	herbivore face carnivore hair omnivore leg human knee animal arm fish elbow birds back head toes ear hands eye fingers mouth nose	fish reptiles mammals birds, amphibians herbivore omnivore carnivore leg arm elbow head ear nose back wings beak sight, hearing, touch, smell, taste.	Survival Water Air Food Adult Baby Toddler Teenager Offspring Kitten Calf Puppy Exercise Hygiene Young, offspring live young grow develop change hatch lay	Movement Muscles Bones Skull Nutrition Skeletons skeleton, muscles, tendons, joints, protection, support, organs, voluntary muscles, involuntary muscles, biceps, triceps contract relax bone cartilage	Mouth Tongue Teeth Oesophagus Stomach Small Intestine Large Intestine Herbivore Carnivore Canine Incisor Molar digestion, molar, premolar, incisor, canine, wisdom teeth, tooth decay, plaque, enamel	Foetus Embryo Womb Gestation Baby Elderly Growth Development Puberty	Circulatory Heart Blood Vessels Veins Arteries Oxygenated Deoxygenated Valve Exercise Respiration Pulse Capillaries Platelets Blood cells Drugs Alcohol Disease Nutrient transportation



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				fly crawl talk. basic needs survive food air exercise diet nutrition healthy balanced diet hygiene germs proteins dairy and alternatives carbohydrates oil and spreads fat salt sugar	shell vertebrate invertebrate			
Biology – Living Things and their Habitats	frogspawn tadpole butterfly frog spider ladybird etc home lives lifecycle grow change	habitats, lifecycles food nests dens hole Hot Cold Arctic Desert Sea Ocean Jungle		Living Dead Habitat Energy Food chain Predator Prey Woodland Pond Desert		Vertebrates Fish Amphibians Reptiles Birds Mammals Invertebrates Snails Slugs Worms Spiders Insects Environment	Mammal Reproduction Insect Amphibian Bird Offspring Classification Vertebrates Invertebrates Microorganisms Amphibians Reptiles	Linnaean system flowering and non-flowering plants variation bacteria single-celled microbes microscopic virus fungi fungus



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		Wood Forest Scales feathers				Habitats classification keys classify characteristics environment environmental dangers adapt natural changes climate change deforestation pollution urbanisation invasive species endangered species extinct	Mammals Insects	mould antibiotic yeast ferment microscope decompose
Biology – Evolution and Inheritance								Fossils Adaptation Evolution Characteristics Reproduction Genetics evolve adaptation inherit natural selection adaptive traits inherited traits



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								mutations theory of evolution ancestors biological parent chromosomes genes Charles Darwin
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Chemistry - Materials	material wood glass paper hard soft	Metal rock plastic fabric smooth shiny rough	Everyday Materials Wood Plastic Glass Paper Water Metal Rock Hard Soft Bendy Rough Smooth	Materials Hard Soft Stretchy Stiff Shiny Dull Rough Smooth Bendy Waterproof Absorbent Opaque Transparent Brick Paper Fabrics Squashing		States of Matter Solid Liquid Gas Evaporation Condensation Particles Temperature Freezing Heating Precipitation	Properties, including changes of, materials Hardness Solubility Transparent Opaque Translucent Magnetic Filter Evaporation Dissolving Mixing Thermal conductor thermal insulator	



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				Bending Twisting Stretching Elastic Foil			electrical conductor electrical insulator	
Chemistry- Rocks	Natural Shells Pebbles Stones				Fossils Soils Sandstone Granite Marble Pumice Crystals sedimentary metamorphic igneous absorbent/porous durable permeable impermeable			

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Physics- Seasonal Change	Summer Spring dark Autumn light Winter night Season		Year Months days Hot Warm Mild Cold					



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	Moon Sun		Sunny Cloudy Rain Sleet Snow Hail thunder lightning rainbow wet damp dry windy breezy gust temperature degrees Celsius thermometer weather vane anemometer					
Physics - Light	Shine Light Dark Bright Dim shadow				light source dark absence of light surface shadow reflect mirror Sun Sunlight dangerous opaque transparent			<ul style="list-style-type: none"> • Reflection: periscope. • Seeing light: visible spectrum, prism. • How light travels: light waves, wavelength, straight line, refraction.



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					translucent reflective non-reflective			straight lines, light rays refraction optic nerve
Physics - Forces					movement surface distance strength push pull contact force non-contact force friction magnet magnetic field magnetic force bar magnet horseshoe magnet ring magnet magnetic poles (north pole, south pole) attract repel compass		air resistance water resistance buoyancy up thrust Earth's gravitational pull Gravity opposing forces driving force levers pulleys gears/cogs weight mass kilograms (kg) Newtons (N) scales speed fast slow	
Physics - Sound	loud quiet volume sound	Bang Explosion Tune Soft				Eardrum Vibration vocal cords particles		



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						pitch volume amplitude sound wave quiet loud high low travel distance soundproof absorb sound		
Physics - Electricity						mains-powered battery- powered mains electricity plug appliances devices circuit simple series circuit complete circuit incomplete circuit bulb cell wire buzzer switch motor		Voltage Amps resistance electrons volts (V) current symbol circuit diagram component function filament dimmer brighter louder quieter natural electricity human-made electricity solar panels power station



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						battery electrical conductor electrical insulator safety		positive negative
Physics – Earth and Space							<ul style="list-style-type: none">• Solar system: star, planet.• Names of planets: Mercury, Venus, Earth, Mars, Jupiter, Saturn, Neptune, Uranus.• Shape: spherical bodies, sphere.• Movement: rotate, axis, orbit, satellite.• Theories: geocentric model, heliocentric model, astronomer.• Day length: sunrise, sunset,	



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							midday, time zone.	
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