

The Nar Valley Federation of Church Academies: Science Vocabulary Progression



Years R and 1: Cycle A / B

Seasonal Changes 1	Animals, including Humans 1	Everyday Materials 1	Plants 1	Working Scientifically	
autumn changes cloud cold / colder/ coldest day length deciduous hail hibernate ice overcast rain seasons snow spring summer sun sunny temperature warm / warmer / warmest weather wind winter	arm ears elbow eyes face fingers foot hair hand head hearing human body knee leg mouth neck nose sense shoulder sight smell sound taste teeth texture thumb toes touch	amphibians animals birds carnivores fish insect habitat herbivores mammals omnivores pets reptiles	absorbent bendy classify dull glass group hard material metal object opaque plastic properties rock rough shiny smooth soft stiff stretchy transparent water waterproof wood	blossom branch bud bulb coniferous deciduous evergreen flower flowering fruit garden local leaves living thing petals roots seed stem trunk vegetables wild	answer change chart classify compare data describe diagram different equipment features findings group identify measurement observe / observing pattern question relationship record scientific language same sort test thermometer

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Years 2 and 3: Cycle A

Light 3	Uses of Everyday Materials 2	Living Things & their Habitats 2	Animals, including Humans 2	Animals, including Humans 3	Working Scientifically
absence of light beam blocked danger dark distance glare light light source mirror opaque patterns protect ray reflect shadows sun surfaces translucent transparency / transparent	bending brick cardboard changed flexible glass materials metal paper plastic properties purpose rock shapes squashing stretching suitability suitable test twisting unsuitable uses wood	alive animals basic needs characteristics coast conditions dead depend on desert environment food food chain freshwater grassland habitat healthy living meadow micro-habitat mountain ocean plants polar provide rainforest seashore shelter sources suited woodland	adult air animals baby basic needs child eggs exercise food growth humans hygiene medicine nutrition offspring reproduction shelter survival teenager toddler water	amount animals balanced diet body parts bones calcium carbohydrates contract diet eat endoskeleton exoskeleton fats fibre food food groups functions healthy humans invertebrates joints meals minerals movement muscles nutrition protect / protection protein relax skeleton support types vertebrates vitamins	answer* accuracy / accurate bar charts classify* compare* conclusion data* diagram* describe equipment* evidence explanation enquiry fair test features* findings group* identify* improvement investigate / investigation key labelled diagrams measurement* observe / observations* pattern* prediction question* record* relationship* results similarities & differences sort* table test* thermometer *By the end of Year 2

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Years 2 and 3: Cycle B

Rocks 3	Living Things & their Habitats 2	Forces and Magnets 3	Plants 2 and 3	Working Scientifically
appearance buildings crystals formed fossils grains gravestones igneous rock organic matter physical properties purpose rocks sedimentary rock soils trapped volcano	alive animals basic needs characteristics coast conditions dead depend on desert environment food food chain freshwater grassland habitat healthy living meadow micro-habitat mountain ocean plants polar provide rainforest seashore shelter sources suited woodland	attract / attraction compass contact distance forces magnetic materials move north pole objects poles properties pull push repel / repulsion south pole strength surface uses	air anchor bulbs carbon dioxide environment fertiliser flowering plants germination grow / growth healthy leaves life cycle light mature plants nutrients / nutrition pollination reproduction roots seedlings seed dispersal seed formation soil stem store of food support survival temperature transport transpiration water	answer* accuracy / accurate bar charts classify* compare* conclusion data* describe diagram* equipment* evidence explanation enquiry fair test features* findings group* identify* improvement investigate / investigation key labelled diagrams measurement* observe / observations* pattern* prediction question* record* relationship* results similarities & differences sort* table test* thermometer *By the end of Year 2

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Years 4, 5 and 6: Cycle A

States of Matter 4	Sound 4	Properties of Materials 5	Earth and Space 5	Working Scientifically
boiling change state condensation condense cooled degrees Celsius escape evaporation everyday materials freeze / freezing gases heated liquids melt / melting pool precipitation shape solids states steam substance temperature transpiration volume water cycle water vapour	distance ear fainter features high instruments insulation loud low pitch quiet sound sound source strength travel vibrate / vibrations volume waves	absorbency acid burning chemical changes chemists dissolve electrical conductivity evaporation everyday materials filter / filtering formation gas hardness irreversible changes liquid magnetism melt mixture new materials physical changes plastic properties reactions reversible changes rusting separate sieve solid soluble materials solute solution substance solvent thermal conductivity transparency	axis celestial body day Earth geocentric heliocentric Jupiter Mars Mercury Moon movement Neptune night orbit phases planets rotate / rotation satellite Saturn solar system sphere / spherical star Sun sundial tilted Uranus Venus	accuracy argument bar graph causal relationship classification key comparison comparative test conclusion data degree of trust equipment evidence experiment explanation enquiry fair test investigate / investigation labels line graph measurement mean average observations observe pattern precision prediction repeated readings refute scatter graphs scientific diagrams secondary source support systematic table variable

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Years 4, 5 and 6: Cycle B

Living Things & their Habitats 4	Light 6	Living Things & their Habitats 6	Evolution and Inheritance 6	Animals, including Humans 6	Working Scientifically
amphibians birds Carroll diagram change characteristics classification classified danger deciduous deforestation development differences environment evergreen fish flowering groups habitat human impact insects key living things mammals non-flowering organisms reptiles similarities species subdivided variation Venn diagram	beam cast cornea emitted eye glare iris lens light light source opaque optical periscope prism pupil rainbows ray retina reflect reflection shadows spectrum straight lines Sun translucent transparent travel visible	annelids arachnids arthropods bacteria class conifer crustacean family fern fungus fungi genus homo sapiens invertebrates key kingdom moss microbes micro-organisms molluscs observable characteristics order organisms phylum / phyla species subdivided taxonomy variation vertebrates virus	adapted adaptation breed changed characteristics competitions DNA environment evolution fossils fossil record genes identical inheritance inherited mutation natural selection offspring parents produce reproduction suit survive survival of the fittest variation vary	aorta artery atrium blood blood vessels capillary carbon dioxide cells chambers circulatory system deoxygenated digestive system function heart internal organs lifestyle lungs muscular system nutrients oxygen oxygenated pulmonary vein / artery pulse red blood cells respiration skeletal system substances trachea transported valve vein vena cava ventricle waste products white blood cells	accuracy argument bar graph causal relationship classification key comparison comparative test conclusion degree of trust equipment evidence experiment explanation enquiry fair test investigate / investigation labels line graph measurement mean average observations observe pattern precision prediction repeated readings refute scatter graphs scientific diagrams secondary source support systematic table variable

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Years 4, 5 and 6: Cycle C

Animals, including Humans 4	Forces 5	Living Things and their Habitats 5	Animals, including Humans 5	Electricity 4 and 6	Working Scientifically
canines carnivore consumers damages digestive system energy food chain functions herbivore humans incisors large intestine molars mouth nutrients oesophagus predators premolars prey producers rectum saliva salivary glands small intestine stomach teeth tongue	air resistance attracts / attraction balanced buoyancy Earth fall faster force friction gears gravity gravitational pull greater levers mass machines mechanism movement Newtons object opposing parachute particles pulleys slow down smaller stop surface unbalanced upthrust water resistance weight	amphibians animals anther asexual birds carpel changes cuttings differences dispersal fertilisation filament flowering plants gestation habitats insects life cycle life process mammals ovary parent plant petals plants pollination reproduce / reproduction root seed sepals sexual similarities stamen stem stigma style	adolescent adult / adulthood animals appearance baby changes develop embryo foetus gestation growth hormones humans oestrogen old age periods puberty teenager testosterone timeline toddler visible changes	appliances battery brighter brightness bulb buzzer cell components conductor device electricity insulator lamp metals motor parts series circuit straight lines switch symbols variations voltage volume wire	accuracy argument bar graph causal relationship classification key comparison comparative test conclusion degree of trust equipment evidence experiment explanation enquiry fair test investigate / investigation labels line graph measurement mean average observations observe pattern precision prediction repeated readings refute scatter graphs scientific diagrams secondary source support systematic table variable