

Unit	YEAR 1 & YEAR 2	YEAR 3 & YEAR 4	YEAR 5 & YEAR 6
<b>Working Scientifically</b>	question answer observe observing equipment identify classify sort diagram chart map data compare contrast describe biology chemistry physics group record	experiment fair test variables prediction observation thermometer temperature microscope accuracy results diagram conclusion enquiry solar renewable energy scientific investigation prediction plausible record data table graph acid alkali PH method practical evidence explanation compare baking measurements fair test control experiment variable conclusive scientific knowledge equipment collated	fair test dependent variable independent variable control variables prediction observation accurate average reliable trend pattern causal relationship rogue conclusion comparative test improvement precision
<b>Animals, including humans</b>	head body skeleton limb joint brain eyelash eye sight pupil sound ear sign language vibration deafness tongue mouth taste flavour sweet touch fingertips skin organ brain smell odour nose nostril nose hair fish amphibian reptile mammal bird feather warm-blooded characteristic backbone hatchling gills scale cold-blooded herbivore carnivore omnivore predator canines pet wild shelter veterinary natural similarities differences compare unsuitable climate survival shelter nutrition oxygen essential vital non-essential survive grow healthy protein carbohydrate dairy vitamins calcium fat balanced diet nutrients fresh food pre-cooked processed food exercise strength flexibility balance coordination hygiene prevent germs bacteria virus life cycle grow survive independent adult foetus womb helpless toddler develop offspring inherit gene resemble differences reproduction hatchling chick bar chart predict caterpillar transformation larva chrysalis metamorphosis frog frogspawn tadpole froglet	nutrition carbohydrate protein vitamin mineral nutrition label portion energy balanced diet vertebrate invertebrate endoskeleton exoskeleton hydrostatic skeleton humerus ulna radius tibia fibular endoskeleton vertebrate skull rib cage spine muscle contract hamstrings biceps diaphragm digestive system oesophagus stomach small intestine large intestine saliva peristalsis absorb liver gall bladder incisors canines molars jaw gum enamel plaque tooth decay cavity fluoride ecosystem producer consumer prey predator food web tundra hide interdependence threatened	foetus dependent adolescent puberty reproduce gestation pregnant duration extreme breeding womb umbilical chord embryo trimester midwife growth spurt childhood motor skills milk teeth constant adolescence puberty hormones mood swing develop lifestyle keratine elasticity cataracts neurodegenerative circulatory system atrium ventricle vessel valves artery vein capillary microscope blood plasma platelet white blood cell red blood cell absorb diffusion osmosis concentration nutrients diet exercise heart rate BPM pulse drug painkiller stimulant depressant hallucinogens

<p><b>Living things and their habitats</b></p>	<p>senses nutrition reproduce excrete respire habitat microhabitat fungi survive shelter antennae suitable condition colony insect producer consumer herbivore carnivore omnivore food chain life cycle nutrients rot caterpillar automated frozen food forklift truck refrigerated lorry canned habitat microhabitat organism environment mate rainforest moisture extinct climate endangered biodiversity deforestation poaching pollution rainforest plankton ocean ecosystem coral reef trench Antarctic Arctic caribou narwhal tundra earthworm desert lizard cactus pond</p>	<p>habitat microhabitat conditions adapted camouflage coastal grassland environment climate exposure classify characteristics vertebrate invertebrate species sub-groups identify criteria classification keys organism adapted region features colouring blubber ecosystem oxygenised flowering plant non-flowering plant pond dipping ecosystem Northern Hemisphere Southern Hemisphere migrate monsoon rainforest deforestation drought biodiversity recycling fossil fuels pollution greenhouse gases emissions climate change chemicals sewage contaminate pesticides water treatment plant conserve drought freshwater pure water butt endangered marine sanctuaries protect conservation areas recycling</p>	<p>reproduction asexual fertilisation tuber genes pouch mammary glands placental mammal monotreme mammal marsupial metamorphosis caterpillar amphibian larva pupa egg fledgling egg tooth hatch embryo documentary naturalist primatologist endangered natural sciences living organism reproduction life cycle vertebrate warm-blooded classify microorganism fern living organism kingdom MRSGREEN cell multicellular unicellular conifer Carl Linnaeus classification Latin species domain microorganism bacteria fungi virus protozoa plant microscopic fungi mycelium ecosystem classify microorganism living organism habitat reproduction weather climate prevent global warming climate change recycle landfill rubbish biodegrade council net zero renewable non-renewable greenhouse gases emissions industrial revolution fossil fuel coal combustion fuel COP sustainability conference pledge subsidy species sensitive natural disaster habitat vulnerable</p>
<p><b>Plants</b></p>	<p>seed plant tree soil predict stem petal leaf root flower environment weed daisy dandelion flower deciduous evergreen seasons branch bush growth seedling young plant adult plant observe bulbs growth plant compare predict investigate control experiment method photosynthesis carbon dioxide oxygen glucose energy pollination life cycle germination reproduction seedling manure crop insulate thrive healthy forest desert adapt condition survive</p>	<p>nutrients fertiliser nursery potassium stunted chlorophyll stomata xylem photosynthesis UV light phloem absorb transpiration anther stigma style filament reproduction pollination pollen nectar seed dispersal pollinator germination vulnerable anchor sapling formation</p>	<p></p>

<p><b>Evolution and Inheritance</b></p>			<p>offspring characteristic inherit variation environmental adaptation habitat climate nutrition feature nutrients epiphytes toxic predators pollinate fossil Mary Anning Palaeontologist ichthyosaurus Jurassic coast Charles Darwin evolved extinct natural selection theory ancestor tools primate Homo sapien Neanderthal</p>
<p><b>Materials</b></p>	<p>material fabric wood plastic metal object glass property brick elastic property opaque transparent dull stiff natural man-made factory rubber polyester predict float sink submerge buoyant absorbent sponge waterproof umbrella soak solid strong brick clay wind waterproof absorbent non-absorbent roof slate transparent opaque suitable window pane window frame furniture cotton mattress soft wool weather jumper suitable waterproof evaluate material properties tile garden material property suitable object brick bridge triangle obstacle structure construction stretchy elastic floppy hinder limit bend twist squash stretch force mackintosh protective fluorescent safety waterproof John McAdam merchant bound highway road</p>		<p>conductive magnetic durable transparent versatile thermal conduction molecules degrees Celsius (°C) insulator hardness force iron steel stone dissolve solute insoluble soluble solvent solution substance saturation pure mixture filtering sieving evaporation solute evaporate reversible mixture physical change melting evaporate irreversible chemical change compare effervescence product fair test variable control variable corrosion rusting combustion fuel oxygen extinguish smother reaction predict acid bicarbonate of soda carbon dioxide</p>

<p><b>Seasonal changes</b></p>	<p>season spring summer autumn winter autumn hibernate weather protect harvest frost sleet temperature compare changes grow chick warm sun protection temperature heatwave rainfall measuring record results graph</p>		
<p><b>States of Matter</b></p>		<p>matter solid liquid gas volume particle bond arranged cooled heated melting melting point temperature thermometer freezing reverse boiling sublimation deposition evaporation condensation absorb water vapour process water cycle precipitation surface runoff transpiration groundwater</p>	
<p><b>Rocks</b></p>		<p>igneous rocks intrusive igneous rock extrusive igneous rock crystals magma sedimentary rock metamorphic rock limestone marble sandstone weathering chemical weathering physical weathering biological weathering acid rain appearance texture submerged erosion receding fossil extinct sediment embedded amber decompose fragments clay soil chalky soil sandy soil</p>	
<p><b>Earth and space</b></p>			<p>terrestrial planet gas giant planets Solar System spherical orbit astronomy heliocentric geocentric dwarf planet orbit axis poles season hemisphere orbit sundial time zone gnomon dial shadow moon phase waxing waning eclipse rocky planet gas planet</p>
<p><b>Light</b></p>		<p>light source natural artificial reflect vitamin D ultraviolet rays sunburn exposure protection fluorescent high visibility reflective surface materials shadow opaque sundial rays blocks position cast opposite direction length size shape closer further puppet</p>	<p>Light eye light source symbol scientific diagram reflected prediction fair test variable table periscope angle mirror line of sight utilise shadow block opaque transparent translucent plan sun shade real life problem rotate direction optical phenomena disperse spectrum refraction</p>

<p><b>Forces</b></p>		<p>force contact force non-contact forces air resistance friction motion surface resistance texture tilt magnet attract repel bar magnet horseshoe magnet magnetism magnetic magnetic field iron steel non-contact forces magnetism attract non-magnetic materials recycle compass magnetic needle magnetic north direction orienteering</p>	<p>Sir Isaac Newton gravity astronomy weight mass Galileo Galilei air resistance opposing streamlined parachute water resistance streamlined upthrust buoyant sink friction resistance lubricant Newton meter Newton lever load pivot fulcrum pulley mechanism gear mesh rack and pinion bevel gear</p>
<p><b>Electricity</b></p>		<p>electricity batteries mains electricity appliance socket circuit series circuit component cell voltage current power battery wire bulb conductor insulator metal copper rubber switch current control complete circuit incomplete circuit non-renewable energy renewable energy wind turbines solar panels hydropower</p>	<p>symbol circuit diagram battery wires electricity current voltage voltmeter brightness blown resistor variable resistor LED dimmer switch output variable fair test control test systematically synchronised traffic light signal sensor timer-based closed electric circuit indicating conductor insulator resistor</p>
<p><b>Sound</b></p>		<p>vibration medium waves eardrum signals source energy particles echo vacuum materials reflect absorb insulate defenders volume decibels decibel metre amplitude power pitch high pitch low pitch instruments orchestra energy particles travel sound source fade</p>	