



Plants	Animals Inc	cluding Humans	Seasonal Changes	Uses of Everyday Materials	Working Scientifically
common wild plants garden plants tree deciduous evergreen trunk branches leaf root plant leaf bud flowers blossom petals root stem fruit vegetables bulb seed	common animals fish amphibians reptiles birds mammals pets carnivores meat cat dog lion tiger fox shark killer whale eagle hawk snake herbivores plants	hamster guinea pig tortoise omnivores meat and plants badger human bear chickens hear neck arms elbows legs knees face ears eyes hair mouth teeth	season spring summer autumn winter weather hot/warm cool/cold sun/sunny cloud/cloudy wind/windy rain/rainy snow/snowing hail/hailing sleet frost fog/mist ice/icy rainbow thunder lightning	material wood plastic glass metal water rock properties hard soft stretch stiff shiny dull rough smooth bendy waterproof absorbent brick paper	question answer observe observing equipment identify classify sort group record diagram chart map data compare contrast describe biology chemistry physics





Plants	Animals Including Humans	Living Things and Their Habitats	Use of Everyday Materials	Working Scientifically
water ight suitable temperature grow nealthy germination reproduction	offspring grow adults nutrition reproduce survival water food air exercise hygiene egg-chick-chicken egg-caterpillar-pupa- butterfly spawn-tadpole-frog lamb-sheep baby-toddler-child- teenager-adult	living dead never alive habitats micro-habitats food food chain sun-grass-cow-human alive healthy logs leaf litter stony path under bushes shelter seashore woodland ocean rainforest conditions hot/ warm/ cold	wood metal plastic glass brick rock paper cardboard squashing bending twisting stretching metal – coins, cans, cars, table, legs wood – matches, floors, telegraph poles spoons – plastic, wood, metal John Dunlop- rubber Charles Macintosh- waterproof fabric	question answer observe observing equipment identify classify sort group record diagram chart map data compare contrast describe biology chemistry physics





Plants	Animals Including Humans	Light	Rocks	Forces and Magnets	Working Scientifically
structure – flowering plants, roots, stem/ trunk, leaves, flowers function – nutrition, support, reproduction, makes own food requirements for life and growth – air, light, water, nutrients from the soil, room to grow, fertiliser life cycle - flowers pollination, seed dispersal	nutrition vitamins minerals fat protein carbohydrates fibre water skeletons – support, protection skulls – brain ribs – heart, lungs joint muscles- movement, pull, contract relax diet	light see dark reflect reflective surface natural star Sun Moon artificial torch candle lamp translucent transparent	rock stone pebble boulder soil fossil grains crystals hard/soft texture absorb water marble chalk granite sandstone slate sandy soil clay soil chalky soil peat	force push pull open surface magnet magnetic attract repel magnetic poles north south metal iron steel	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 oral and written explanations conclusion predictions differences, similarities, change evidence





secondary s guides, keys construct interpret	gu				





Electricity	Animals Including Humans	Sound	Living Things and Their Environment	States of Matter	Working Scientifically
appliances electricity electrical circuit cell wire bulb buzzer danger electrical safety sign insulators wood rubber plastic glass conductors metal water	human digestive system mouth tongue-mixes, moistens, saliva teeth: incisors- cutting, slicing canines- ripping, tearing molars-chewing, grinding oesophagus transports stomach acid enzymes small intestine	sound sound source noise vibrate travel solid liquid gas pitch tune high low volume loud quiet fainter muffle	environment flowering non-flowering plants animals vertebrate danger invertebrates- snails, slugs, worms, spiders, insects vertebrates- fish, amphibians, reptiles, birds, mammals plants – flowering plants, non- flowering plants population development	solid liquid gas air oxygen powder grain/ granular crystals ice/ water/ steam water vapour heated/ heating cooled/ cooling temperature degrees Celsius melt freeze solidify melting point	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
switch open closed components plug motor mains	large intestine carnivore herbivore omnivore brush floss food chain Sun	insulation instrument percussion strings brass woodwind tuned instrument	litter deforestation	molten boil	oral and written explanations conclusion predictions differences, similarities, change evidence improve





producers prey predators	secondary sources guides, keys construct interpret





Earth and Space	Forces	Materials	Living Things and Their Habitats	States of Matter	Working Scientifically
Earth planets Sun solar system Moon celestial body sphere/ spherical rotate/ rotation spin night and day Mercury Venus Mars Jupiter Saturn Uranus Neptune Pluto 'dwarf' planet orbit revolve geocentric model heliocentric model shadow clocks	fall gravity force air resistance water resistance friction moving surfaces mechanisms levers pulleys gears magnetic force magnet attract	properties hardness solubility transparency conductive response to magnets dissolve liquid solution solute separate separating solids, liquids, gases filtering sieving evaporating reversible changes mixing evaporation filtering sieving melting irreversible conductivity	life process of reproduction-plants animals vegetable garden flower border reproduction plants- sexual, asexual animals- sexual life cycles- mammal, amphibian, insect, bird lifecycles around the world-rainforest, oceans, desert prehistoric similarities differences germination pollination stamen stigma	solid liquid gas air oxygen powder grain/ granular crystals ice/ water/ steam water vapour heated/ heating cooled/ cooling temperature degrees Celsius melt freeze solidify melting point molten boil	plan variables measurements accuracy precision repeat repeats record data scientific diagrams labels classification keys tables scatter graphs bar graph line graph predictions further comparative and fair tests report and present conclusions casual relationships explanations degree of trust oral and written display





	opaque translucent rusting residue condensing	support refute ideas arguments identify, classify and describe patterns systematic quantitative measurements
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Animals Including Humans	Evolution and inheritance	Living Things and Their Habitats	Electricity	Light	Working Scientifically
circulatory system heart blood blood vessels pumps oxygen carbon dioxide lungs nutrients water diet exercise drugs lifestyle	evolution suited/ suitable adapted/ adaptation offspring characteristics vary/ variation inherit/ inheritance fossils	organism micro-organism fungus mushrooms classification keys environment fish amphibians reptiles birds mammals vertebrates invertebrates	appliances electrical circuit complete circuit circuit diagram circuit symbol components cell battery positive/ negative terminal connection loose connection short circuit wire crocodile clip bulb brightness switch buzzer volume motor conductor insulator voltage current resistance	light travels straight reflect reflection light source object shadows mirrors periscope rainbow filters	plan variables measurements accuracy precision repeat repeats record data scientific diagrams labels classification keys tables scatter graphs bar graph line graph predictions further comparative and fair tests report and present conclusions casual relationships explanations degree of trust oral and written display presentation evidence





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