

Veritas



Identifying and	• I ask questions about how and why things ore similar or	• I talk about what criteria I will	• I recognise when
Classifying	different	use to sort and classify things	identifying and classifying will
	<ul> <li>I decide what to observe to identify or sort things</li> </ul>	I decide what equipment to use	be helpful to answer my
	•I make comparisons between simple features of objects,	to identify and classify things	questions
	materials or living things	<ul> <li>I talk about things that can be</li> </ul>	I decide what equipment,
	•I record my observations in words or pictures or simple tables	grouped and decide when	tests and secondary sources
	<ul> <li>I sort objects by observable and behavioural features</li> </ul>	questions can be answered by	of information to use to
	<ul> <li>I record my sorting in sorting circles or tables</li> </ul>	sorting and classifying	identify and classify things
	<ul> <li>I identify similarities and differences and talk about them</li> </ul>	<ul> <li>I carry out simple tests to sort</li> </ul>	•I use a series of tests to sort
	begin to use simple scientific language to talk about how	and classify according to	and classify materials
	things are similar or different	properties or behaviour	<ul> <li>I use secondary sources to</li> </ul>
	<ul> <li>I to use my records to help sort or identify other things</li> </ul>	<ul> <li>I use Carroll diagrams, Venn</li> </ul>	identify and classify things
		diagrams and more complex	<ul> <li>I make my own keys and</li> </ul>
		tables to sort things	branching databases with
		<ul> <li>I use simple keys and</li> </ul>	four or more items
		branching databases to identify	• I use more than one piece
		things	of scientific evidence to
		<ul> <li>I make simple branching</li> </ul>	identify and classify things
		databases (keys) for things that	<ul> <li>I draw valid conclusions</li> </ul>
		hove clear differences	when sorting and classifying
		<ul> <li>I draw simple conclusions</li> </ul>	• I recognise the significance
		about the things have sorted and	of sorting and classifying
		classified	<ul> <li>I talk about and explain</li> </ul>
		<ul> <li>I talk about the similarities and</li> </ul>	what I have done using
		differences I identified using	scientific knowledge
		some scientific language	• I evaluate how well my keys
		•I suggest improvements to the	worked
		way I sort and identify things	
Pattern Seeking	•I ask questions about why and how things are linked •	I talk about where patterns	• I recognise when variables
	With help, I decide what patterns to observe and measure and	might be found and decide when	cannot be controlled and



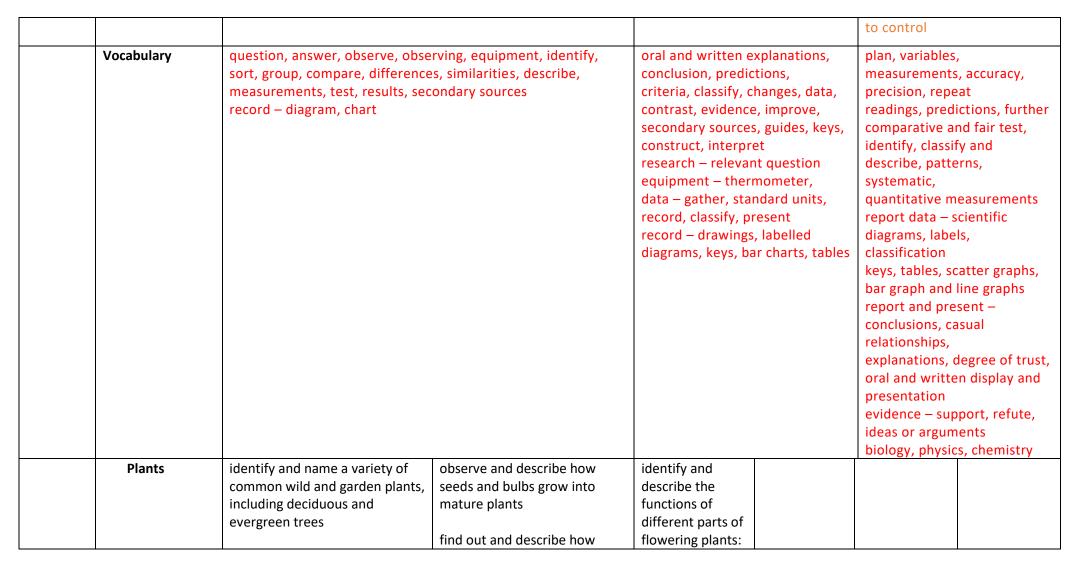
suggest how to do it	questions can be investigated by	when pattern seeking will
<ul> <li>I use non-standard units and simple equipment to record</li> </ul>	pattern seeking •I decide on	help to answer my question
events that might be related.	which sets of data to collect,	<ul> <li>I decide how detailed my</li> </ul>
<ul> <li>I record in words or pictures, or in simple prepared formats</li> </ul>	what observations to make and	data needs to be, and which
such as tables, tally chars and maps	what equipment to use	equipment to use, to make
<ul> <li>I identify simple patterns and talk about them</li> </ul>	<ul> <li>I use a range of equipment to</li> </ul>	my measurements as
<ul> <li>I make links between two sets of observations</li> </ul>	collect data using standard	accurate as possible
<ul> <li>I begin to use scientific language to talk about patterns</li> </ul>	measures	• I use equipment accurately
<ul> <li>I talk about whether the pattern was what I expected</li> </ul>	• I make records using tables,	to collect observations
	bar charts simple scatter graphs	• I record data appropriately
	• I begin to use and interpret	and accurately I present data
	data collected through	in scatter graphs and
	dataloggers	frequency charts
	<ul> <li>I draw conclusions about</li> </ul>	• I recognise patterns in
	simple patterns between two	results
	sets of data	• I recognise the effect of
	<ul> <li>I talk about patterns using</li> </ul>	sample size on reliability
	some scientific language	<ul> <li>I draw valid conclusions</li> </ul>
	• I suggest improvements to the	from data about patterns and
	way I looked for patterns	recognise their limitations
		• I recognise the significance
		of relationships between sets
		of data • I talk about and
		explain cause and effect
		patterns using scientific
		knowledge and
		understanding
		• I evaluate how well looked
		for patterns



Research	• I ask questions about how things are and the way they work	•I talk about how things are and	• I recognise when research
Research	•With help, I make suggestions about how to find things out	the way they work and decide	using secondary sources will
	• I use simple books and electronic media to find things out	when questions can be answered	help to answer my questions
	• I ask questions to find out what people do and how things	by research using secondary	• I decide which sources of
	work	• I use information sources to	information might answer my
	<ul> <li>I record in words and pictures what found out</li> </ul>	find the information I need	questions
	•I begin to use scientific language to talk about what I found	•I use someone else's data	• I use relevant information
	out	• I record what I found out in my	and data from a range of
	• I talk about whether the information source was useful	own words I present information	secondary sources
	•I give an opinion about some things I found out	in different ways	• I recognise how data has
		• I draw conclusions from what I	been obtained
		found out from different sources	I start to notice when
		•I talk about what the	information and data is
		information and data means	biased or based on opinions
		using some scientific language •	rather than facts
		I suggest ways to improve how	• I present my findings in
		find out and use information	suitable formats
			<ul> <li>I draw valid conclusions</li> </ul>
			from my research
			• I talk about and explain my
			research using scientific
			knowledge and
			understanding
			<ul> <li>I evaluate how well my</li> </ul>
			research has answered my
			questions
			<ul> <li>I recognise that some</li> </ul>
			scientific questions may not
			have been answered
			definitively



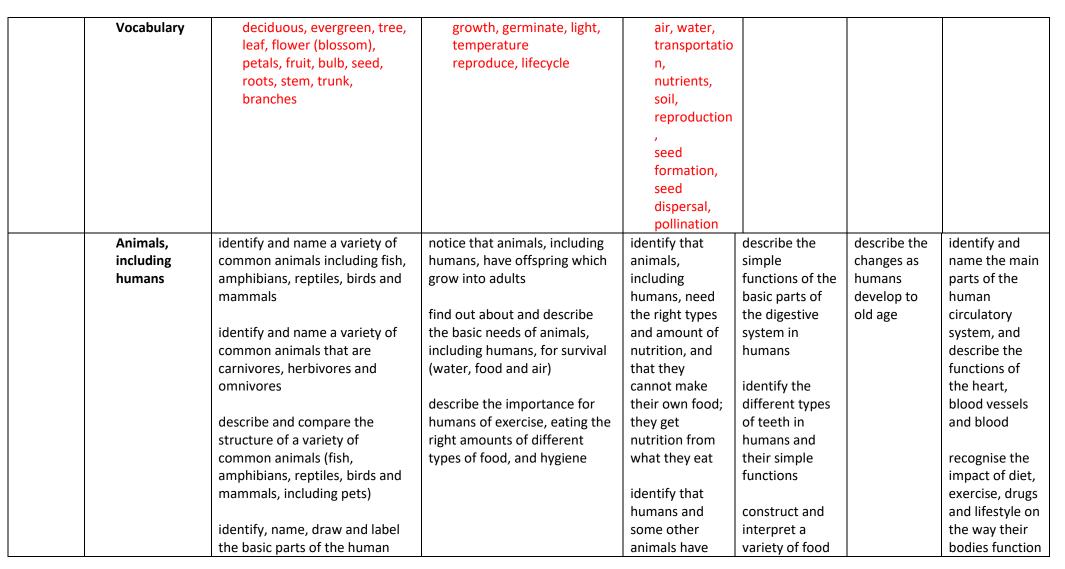
Fair Testing	• I ask questions about why and how	• I talk about links between	• I recognise when variables
Tan Testing	With help, I notice links between cause and effect	cause and effect and (with help)	need to be controlled and
	• With help, I identify simple variables to change and measure	pose a fair test question	when a fair test is the best
	<ul> <li>I plan simple comparative tests</li> </ul>	<ul> <li>I help to plan a fair test</li> </ul>	way to answer my question
	• I use non-standard units and simple equipment to record	I decide what data to collect	•I plan a fair test, selecting
	data	• I decide what equipment to	the most suitable variables to
	• I record in words or pictures, or in simple prepared formats	use and how to make	measure, change and keep
	such as tables and tally charts	observations	the same
	• I interpret and talk about my data	• I use a range of equipment to	• I decide what equipment to
	• I begin to use simple scientific language to identify and	collect data using standard	use to make my
	describe simple causal relationships	measures	measurements as accurate as
	<ul> <li>With help, I can say if my test was fair</li> </ul>	<ul> <li>I make records using tables</li> </ul>	possible
	<ul> <li>I say if the relationship was what I expected</li> </ul>	and bar charts	• I use equipment accurately
		<ul> <li>I begin to use and interpret</li> </ul>	to collect observations
		data collected through	• I record data appropriately
		dataloggers	and accurately I present data
		• I draw simple conclusions from	in line graphs
		my fair tests	<ul> <li>I identify causal</li> </ul>
		• I talk about and explain, simple	relationships
		causal relationships using some	• I draw valid conclusions
		scientific language • I suggest	based on the data
		ways that I can improve my fair	•I recognise the significance
		tests	of the results of fair tests
			• I talk about and explain
			causal relationships using
			scientific knowledge and
			understanding
			• I evaluate the effectiveness
			of my fair testing, recognising
			variables that were difficult





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	identify and describe the basic	plants need water, light and a	roots,	
	structure of a variety of	suitable temperature to grow	stem/trunk,	
	common flowering plants,	and stay healthy	leaves and	
	including trees		flowers	
			explore the	
			requirements of	
			plants for life and	
			growth (air, light,	
			water, nutrients	
			from soil, and	
			room to grow)	
			and how they	
			vary from plant	
			to plant	
			investigate the	
			way in which	
			water is	
			transported	
			within plants	
			explore the part	
			that flowers play	
			in the life cycle of	
			flowering plants,	
			including	
			pollination, seed	
			formation and	
			seed dispersal	









	body and say which part of the body is associated with each sense		skeletons and muscles for support, protection and movement	chains, identifying producers, predators and prey		describe the ways in which nutrients and water are transported within animals, including humans
Vocabulary	amphibians, fish, reptiles, mammals, birds (+ 1 example of each) herbivore, omnivore, carnivore head, nose, ear, neck, shoulder, arm, elbow, wrist, hand, back, chest, hip, leg, knee, ankle, foot wing, beak, tail, fin sight, smell, touch, taste, hearing	survival, water, air, food reproduce, adult, baby, offspring, kitten, calf, puppy food chain, prey, predator, camouflage, protection exercise, hygiene, balanced die	skeleton, skull, bones, muscles, movement, support, protection,	nutrition mouth, tongue, teeth, oseophagus, stomach, small intestine, large intestine, nutrients, absorb, canine, incisor, molar producer, consumer, apex predator	womb, foetus, embryo, gestation, baby, toddler, teenager, elderly growth, development, puberty	Animals including humans function, circulatory system, heart, valve, blood vessel, vein, artery transport, oxygenated, deoxygenated lifestyle, drug
Living things and their habitats		explore and compare the difference between things that are living, dead, and things that have never been alive identify that most living things live in habitats to which they are suited and describe how different		describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird describe the life process of	describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird describe the	describe how living things are classified into broad groups according to common observable characteristics



	I			
habitats provide the basic		eproduction in	life process of	and based on
needs of different kinds of		ome plants	reproduction	similarities
animals and plants, and	aı	nd animals	in some plants	and
how they depend on each			and animals	differences,
other				including
identify and name a variety				micro-
of plants and animals in				organisms,
their habitats, including				plants and
micro-habitats				animals
describe how animals				give reasons
obtain their food from				for classifying
plants and other animals,				plants and
using the idea of a simple				animals based
food chain, and identify				on specific
and name different				characteristics
sources of food				
recognise that living things				
can be grouped in a variety				
of ways				
explore and use				
classification keys to help				
group, identify and name a				
variety of living things in their local and wider				
environment				
recognise that				
environments can change				
and that this can				
sometimes pose dangers				

	to living things				
Vocabulary	living, dead, habitat, microhabitat, woodland, meadow, hedgerow, pond		vertebrates, invertebrates (+ 1 example of each) environment, habitat, classification key	life process, reproduction, offspring,	characteristic, classification, organism, micro- organism
Light		recognise that they need light in order to see things and that the dark is the absence of light notice that light is reflected from surfaces recognise that light from the sun can be dangerous and that there are ways to protect their eyes			recognise that light appears to travel in straight lines use the idea that light travels in straight lines to explain that objects are seen because they give out or reflect light into the eye explain that we see things because light



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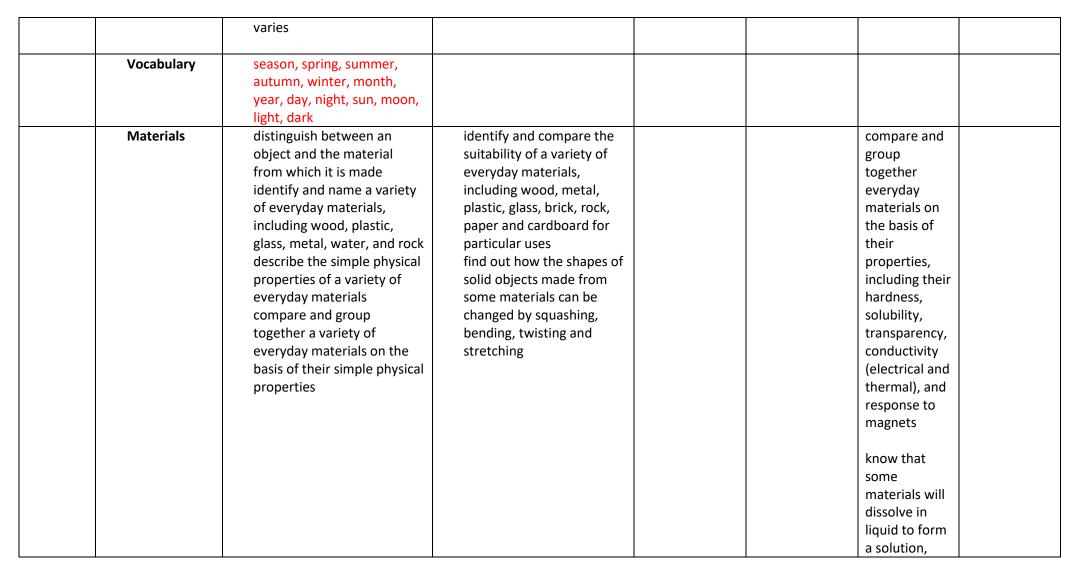
	recognise that shadows are formed when the light from a light source is blocked by a solid object find patterns in the way that the size of shadows changes	travels from light sources to our eyes or from light sources to objects and then to our eyes use the idea that light travels in straight lines to explain why shadows have the same shape as the objects that cast
		the objects that cast them
Vocabulary	Image: constraint of the second state of the secon	refraction, reflection, spectrum, rainbow

Forces and	find out how the shapes of	compare how	explain that
magnets	solid objects made from	things move on	unsupported
	some materials can be	different	objects fall
	changed by squashing,	surfaces	towards the
	bending, twisting and		Earth because
	stretching (Year 2	notice that	of the force of
	materials unit)	some forces	gravity acting
		need contact	between the
		between two	Earth and the
		objects, but	falling object
		magnetic forces	
		can act at a	identify the
		distance	effects of air
			resistance,
		observe how	water
		magnets attract	resistance and
		or repel each	friction, that
		other and	act between
		attract some	moving
		materials and	surfaces
		not others	
			recognise that
		compare and	some
		group together	mechanisms,
		a variety of	including
		everyday	levers, pulleys
		materials on	and gears,
		the basis on	allow a
		whether they	smaller force
		are attracted to	to have a



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		a magnet, identify some magnetic materials describe magnets as having two poles predict whether two magnets will attract or repel each other, depending on which poles are facing	greater effect
Vocabulary		force, contact, surface, magnetic, attract, repel, poles	air resistance, water resistance, friction, gravity lever, gear, pulley, Newtons
Seasonal change	observe changes across the four seasons observe and describe weather associated with the seasons and how day length		





and describe how to recover a substance from a solution use knowledge of knowledge of
recover a substance from a solution use knowledge of
substance from a solution use knowledge of
from a solution use knowledge of
solution use knowledge of
use knowledge of
knowledge of
knowledge of
solids, liquids
and gases to
decide how
mixtures
might be
separated,
including
through
filtering,
sieving and
evaporating
give reasons,
based on
evidence from
comparative
and fair tests,
for the
particular
uses of
everyday

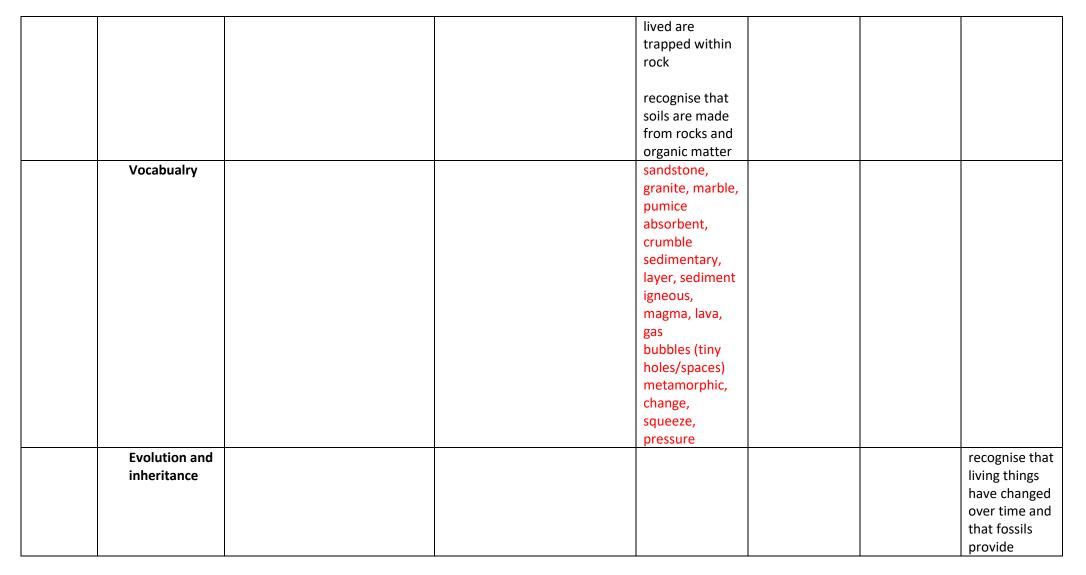


		materials,
		including
		metals, wood
		and plastic
		demonstrate
		that
		dissolving,
		mixing and
		changes of
		state are
		reversible
		changes
		explain that
		some changes
		result in the
		formation of
		new
		materials, and
		that this kind
		of change is
		not usually
		reversible,
		including
		changes
		associated
		with burning
		and the action
		of acid on
		bicarbonate



				of soda
Vocabulary	wood, plastic, glass, paper, metal, rock, hard, soft, rough, smooth, shiny, dull, bendy, stiff	brick, fabric, elastic, foil property, solid, waterproof, absorbent, opaque, transparent, squash, bend, flexible, twist, stretch push, pull, roll, slide, bounce		hardness, transparency, conductivity (electrical, thermal) solubility, solution dissolve, filter, evaporate, sieve, reversible, irreversible
Rocks			compare and group together different kinds of rocks on the basis of their appearance and simple physical properties describe in simple terms how fossils are formed when things that have	

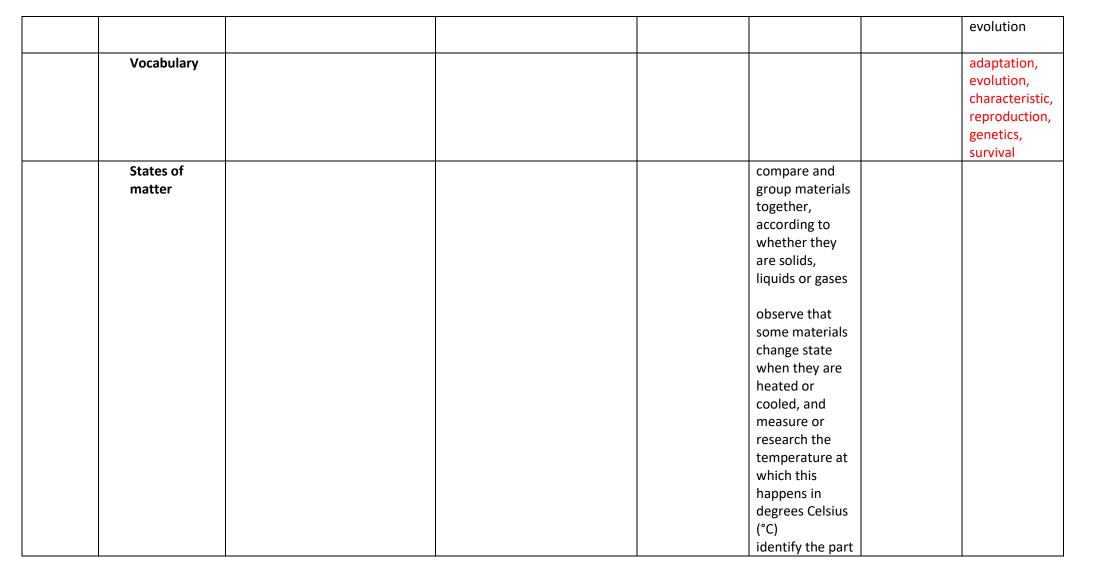




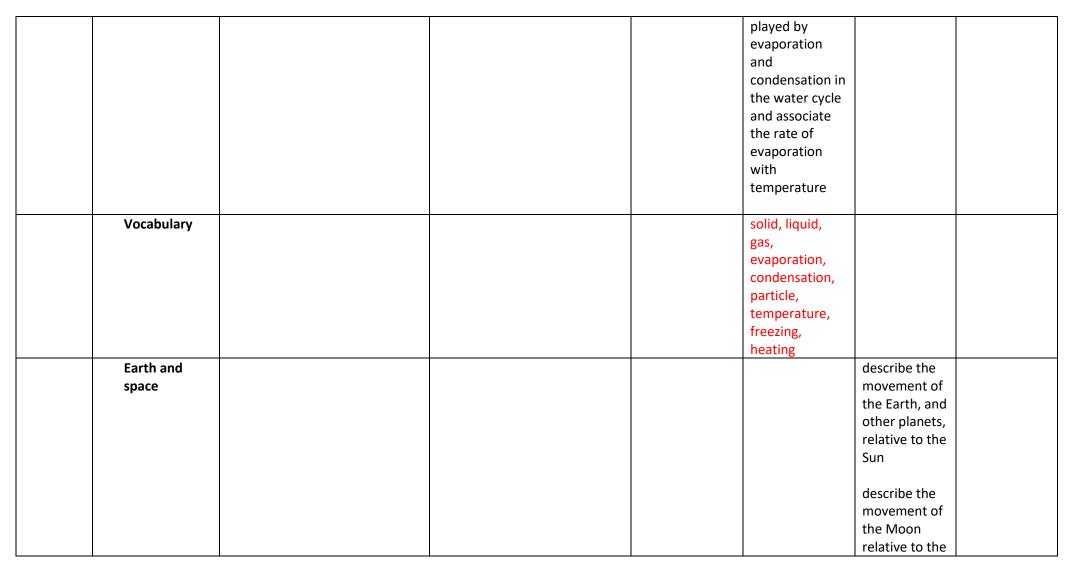


			information about living things that inhabited the Earth millions of years ago
			recognise that living things produce offspring of the same kind, but normally
			offspring vary and are not identical to their parents
			identify how animals and plants are adapted to suit their environment
			in different ways and that adaptation may lead to





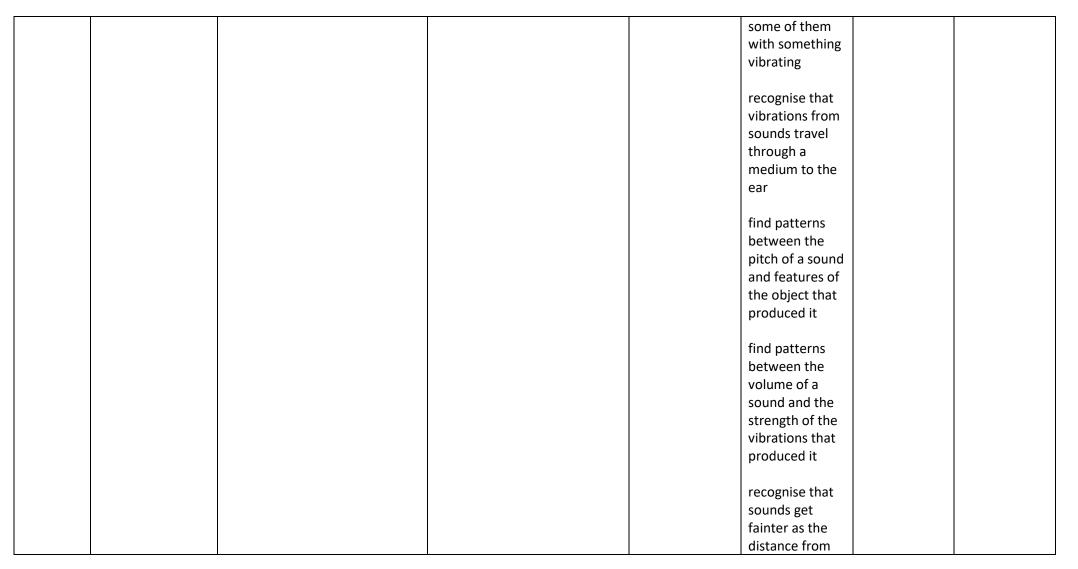






			Earth	
			describe the	
			Sun, Earth	
			and Moon as	
			approximately	
			spherical	
			bodies	
			use the idea	
			of the Earth's	
			rotation to	
			explain day	
			and night and	
			the apparent	
			movement of	
			the sun across	
			the sky	
			Earth, sun,	
			moon, solar	
			system, axis	
			of rotation,	
			day, night,	
			phases of the	
			moon, star,	
 			constellation	
Sound		identify how		
		sounds are		
		made,		
		associating		

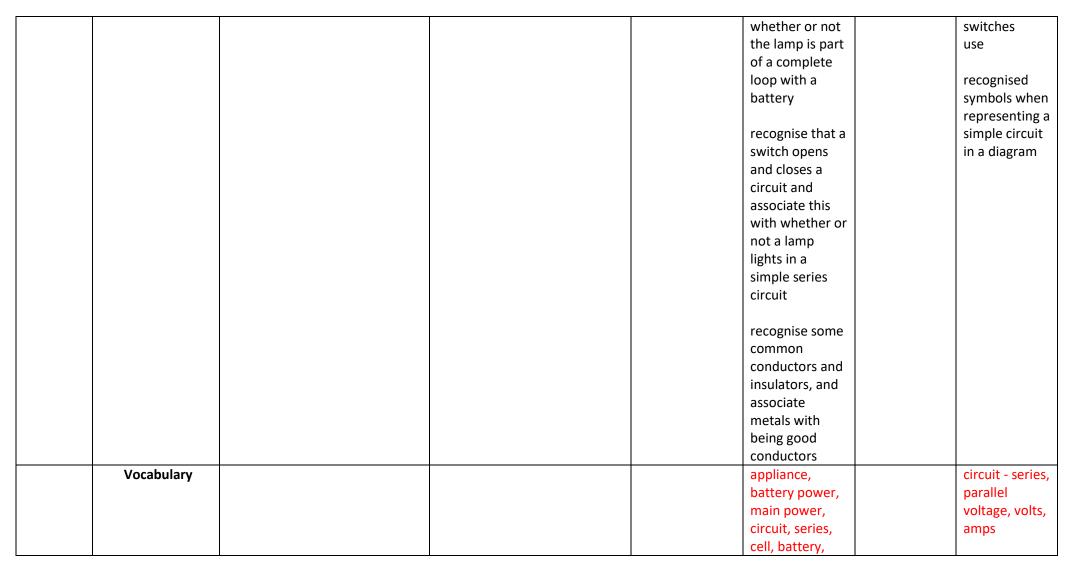






		the sound	
		source	
		increases	
Vocabulary		vibration, wave,	
		volume,	
		pitch, tone,	
		insulation	
Electricity		identify	associate the
		common	brightness of
		appliances that	a lamp or the
		run on	volume of a
		electricity	buzzer with
			the number
		construct a	and voltage of
		simple series	cells used in
		electrical	the circuit
		circuit,	
		identifying and	compare and
		naming its basic	give reasons
		parts, including	for variations
		cells, wires,	in how
		bulbs, switches	components
		and buzzers	function,
			including the
		identify	brightness of
		whether or not	bulbs, the
		a lamp will light	loudness of
		in a simple	buzzers and
		series circuit,	the on/off
		based on	position of









		wire, bulb,	
		switch, break in	
		circuit	
		conductor,	
		insulator	