Year 1				
Animals Including	Everyday Materials	Animals Including	Plants	
Humans - body		Humans – animal groups		
parts and the	Distinguish between an		Identify and name a variety	
senses	object and the material from	Identify and name a	of common wild and garden	
	which it is made.	variety of common	plants, including deciduous	
Identify, name,		animals including fish,	and evergreen trees.	
draw and label the	Identify and name a variety	amphibians, reptiles,		
basic parts of the	of everyday materials,	birds and mammals.	Identify and describe the	
human body and say	including wood, plastic, glass,		basic structure of a variety	
which is associated with each sense.	metal, water, and rock.	Identify and name a variety of common	of common flowering plants.	
	Describe the simple physical	animals that are	Identify and name the	
	properties of a variety of	carnivores, herbivores	roots, trunk, branches and	
	everyday materials.	and omnivores.	leaves of trees.	
	Compare and group together	Describe and compare		
	a variety of everyday	the structure of a		
	materials on the basis of	variety of common		
	their simple physical	animals (fish, amphibians,		
	properties.	reptiles, birds and		
		mammals		

## **Plants**

Many plants change in appearance over the year - losing leaves, buds developing into flowers, flowers developing into seeds or berries. Pupils should therefore visit the same plants throughout the year gathering additional clues for identification.

# Seasonal Change

Observe changes across the four seasons.

Observe and describe weather associated with the seasons and how day length varies.

Year 2	Llege of Eveny New Metarials	Plants	Living things in their believe
Animals including	Uses of Every Day Materials	Plants	Living things in their habitat
humans	Identify and compare the	Observe and describe how	(including microhabitats)
Notice that animals	suitability of a variety of	seeds and bulbs grow into	Explore and compare the
including humans,	· · · · · · · · · · · · · · · · · · ·	_	differences between things
•	everyday materials, including	mature plants.	_
have offspring which	wood, metal, plastic, glass,	Find out and describe how	that are living, dead and things that have never been alive.
grow into adults.	brick, rock, paper and		that have never been alive.
rind and and describe	cardboard for particular uses.	plants need water, light and	Tidoualifo allocation on the limits
Find out and describe	S. J. J. J. C. J. J.	suitable temperature to	Identify that most living
the basic needs of	Find out how the shapes of solid	grow and stay healthy.	things live in habitats to which
animals including	objects made from some		they are suited and describe
humans, for survival.	materials can be changed by		how different habitats provide
(Water, food, air.)	squashing, bending, twisting and		for the basic needs of
<b>.</b>	stretching.		different kinds of animals and
Describe the			plants, and how they depend on
importance for			each other.
humans of exercise,			
eating, the right			Identify and name a variety of
amounts of different			plants and animals in their
types of food, and			habitats including micro-
hygiene.			habitats.
Plants			Describe how animals obtain
Observe and describe			their food from other plants
how seeds and <b>bulbs</b>			and other animals, using the
grow into mature			idea of a simple food chain,
plants.			and identify and name
piantis.			different sources of food.
			different sources of food.

### **Plants**

Seeds and bulbs need to be planted at different times of the year (bulbs in Autumn and seeds, generally, in Spring). For these to reach full maturity, they need to complete their life cycle. This will be determined by the plant, not the time allocated to the topic. Once planted, the beds will need to be visited regularly to weed and make observations of growth.

While learning to name and identify plants, the pupils should be drawing on a range of different clues. Many plants change in appearance over the
year - losing leaves, buds developing into flowers, flowers developing into seeds or berries. At any particular time, only some of these parts will be
present. To ensure correct identification, all parts should be considered. Pupils should therefore visit the same plants throughout the year
gathering additional clues for identification.
Living things and their habitats
Animals visible in a habitat will change depending on the weather on the day and the season. In order to build up a full picture of the animals in a
habitat. The habitat should be visited at different times throughout the year.

Animals, including	Forces & Magnets	Plants	Light	Rocks & Soils
humans	, or one of magnete			
Identify that animals, including humans, need the right types of and amount if nutrition, and that they cannot make their own food: they get their nutrition from what they eat.  Identify that humans and some animals have skeletons and muscles for support, protection and movement.	Compare how things move on different surfaces Notice that some forces need contact between two objects, but magnetic forces can act at a distance Observe how magnets attract or repel each other and attract some materials and not others Compare and group a variety of everyday materials on the basis of whether they are attracted to a magnet, and identify some magnetic materials Predict whether two magnets will attract or repel each other, depending on which pole are facing	Identify and describe the functions of different parts of flowering plants: roots; stem/trunk; leaves; and 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	Recognise that we need light in order to see things Notice that light is reflected from surfaces Recognise that light from the sun is dangerous and that there are ways to protect their eyes Recognise that shadows are formed when the light from the light source is blocked by a solid object Find patterns in the way that the size of shadows change	Compare and group different types of rocks on the basis of their appearance and simple physical properties.  Describe in simple terms how fossils are formed when things that have lived are trapped within rock.  Recognise that soils are made from rocks and organic matter.

#### Plants

Many plants have an annual cycle - having buds, flowers, seeds/berries at certain times in the year. Pupils should therefore visit the same plants throughout the year gathering evidence linked to their life cycle e.g. collecting seeds and taking photographs or making observational drawings for buds, flowers etc. This evidence can then be reviewed at the end of the year to exemplify a range of plants' life cycles.

This topic is best taught in the summer term when there is sufficient light in the classroom to grow seedling and plants as part of enquiry work.

Links can be made between the Plants and Rocks topics. The ordering is not significant, but the links should be made explicit for the children by the teacher.

Year 4					
Animals including	Living Things and Their	States of Matter	Sound	Electricity	
Humans	Habitats				
		Compare and group	Know how sound is made	Identify common appliances that	
Describe the simple	Recognise that living things	materials together,	associating some of them	run on electricity.	
functions of the	can be grouped in a variety	according to whether	with vibrating.	·	
basic parts of the	of ways.	they are solids, liquids or	_	Construct a simple series electrical	
digestive system in	·	gases.	Know what happens to a	circuit, identifying and naming its	
humans.	Explore and use classification		sound as it travels from its	basic parts, including cells, wires,	
	keys to help group, identify	Observe that some	source to our ears.	bulbs, switches and buzzers.	
Identify the	and name a variety of living	materials change state			
different types of	things in their local and wider	when heated or cooled,	Know the correlation	Identify whether or not a lamp will	
teeth in humans	environment.	and measure and	between the volume of a	light in a simple series circuit,	
and their simple		research the	sound and the strength of	based on whether or not the lamp is	
functions.	Recognise that environments	temperature at which	the vibrations that	part of a complete loop with a	
	can change and that this can	this happens in degrees	produced it.	battery.	
Construct and	sometimes pose danger to	Celsius.	Know how sound travels		
interpret a variety	living things.		from a source to our ears.	Recognise that a switch opens and	
of food chains,		Identify the part played		closes the circuit and associate this	
identifying		by evaporation and	Know the correlation	with whether or not a lamp lights in	
producers,		condensation in the	between pitch and the	a simple series circuit.	
predators and prey		water cycle and	object producing a sound.		
		associate the rate of		Recognise some common conductors	
		evaporation with		and insulators, and associate metals	
		temperature.		with being good conductors.	
				Safety when using electricity.	

## Living things and their habitats

While learning to name and identify plants, the pupils should be drawing on a range of different clues. Many plants change in appearance over the year - losing leaves, buds developing into flowers, flowers developing into seeds or berries. At any particular time, only some of these parts will be present. To ensure correct identification, all parts should be considered. Pupils should therefore visit the same plants throughout the year gathering additional clues for identification. Animals visible in a habitat will change depending on the weather on the day and the season. In order to build up a full picture of the animals in a habitat, the habitat should be visited at different times throughout the year

# Living things and their habitats Pupil should be taught to construct and interpret a variety of food chains, identifying producers, predators and prey. This statement is within the Animals, including humans topic. In order to construct food chains based on their first-hand experience, this statement should be taught after they have visited a habitat to name and identify the plants and animals. Animals, including humans Pupil should be taught to construct and interpret a variety of food chains, identifying producers, predators and prey. In order to construct food chains based on their first-hand experience, this statement should be taught after they have visited a habitat to name and identify the plants and animals as part of the Living things and their habitats topic. Teaching pupils to identify producers, predators and prey represents an opportunity for pupils to apply their knowledge of the function of teeth. Consequently, it makes sense to teach the statement 'construct and interpret a variety of food chains, identifying producers, predators and prey after learning about teeth within the Animals, including humans topic.

Living Things and Their Habitats	Animals including Humans	Properties and changes of materials	Forces	Earth and Space
	Describe the changes as		Explain that unsupported	Describe the movement of the
Know the life cycle	humans develop to old age.	Identify the part played	objects fall towards the	Earth, and other planets, relative
of different living		by evaporation and	Earth because of the force	to the Sun in the solar system
things, e.g.	The content in this topic is small	condensation in the	of gravity acting between	,
Mammal, amphibian,	and therefore requires less time	water cycle and	the Earth and the falling	Describe the movement of the
insect bird.	to cover adequately than other topics.	associate the rate of evaporation with	object and the impact of gravity on our lives.	Moon relative to the Earth
Know the process		temperature.		Describe the Sun, Earth and Moon
of reproduction in		'	Identify the effects of air	as approximately spherical bodies
plants.		Know that some	resistance, water	, ,
•		materials will dissolve in	resistance and friction,	Describe the idea of the Earth's
Know the process		liquid to form a solution,	which act between moving	rotation to explain day and night
of reproduction in		and describe how to	surfaces.	and the apparent movement of the
animals.		recover a substance		sun across the sky.
		from a solution.	Recognise that some mechanisms, including	
		Use knowledge of solids,	levers, pulleys and gears,	
		liquids, and gases to	allow a smaller force to	
		decide how mixtures	have a greater effect.	
		might be separated,		
		including through		
		filtering, sieving and		
		evaporating.		

# Properties and changes of materials

There is a lot of content to cover in this topic and therefore more time should be allocated to allow for sufficient coverage. Schools may choose to separate the content into more than one topic e.g. properties of materials and changes of materials.

Year 6					
Living Things and	Animals including Humans	Evolution and	Light	Electricity	
their Habitats		Inheritance		·	
	Identify and name the main		Recognise that light	Associate the brightness of a lamp	
Classify living	parts of the human	Know about evolution and	appears to travel in straight	or the volume of a buzzer with the	
things into broad	circulatory system, and	can explain what it is.	lines.	number and voltage of cells used in	
groups according to	describe the functions of the			the circuit.	
observable	heart, blood vessels and	Know how fossils can be	Use the idea that light		
characteristics and	blood.	used to find out about	travels in straight lines to	Compare and give reasons for	
based on		the past.	explain that objects are	variations in how components	
similarities and	Recognise the impact of diet,		seen because they give out	function, including the brightness	
differences.	exercise, drugs and lifestyle	Recognise that living	or reflect light into the	of bulbs, the loudness of buzzers	
	on the way their bodies	things produce offspring	eye.	and the on/off position of switches.	
Give reasons for	function.	of the same kind, but			
classifying plants		normally offspring vary	Explain that we see things	Use recognised symbols when	
and animals based	Describe the ways in which	and are not identical to	because light travels from	representing a simple circuit in a	
on specific	nutrients and water are	their parents	light sources to our eyes or	diagram.	
characteristics.	transported within animals,		from light sources to		
	including humans.	Identify how animals and	objects and then to our		
		plants are adapted to	eyes.		
		suit their environment in			
		different ways and that	Use the idea that light		
		adaptation may lead to	travels in straight lines to		
		evolution- recognise that	explain why shadows have		
		living things have	the same shape as the		
		changed over time and	objects that cast them.		
		that fossils provide			
		information about living	Know how simple optical		
		things that inhabited the	instruments work, e.g.		
		Earth millions of years	periscope, telescope,		
		ago	binoculars, mirror,		
			magnifying glass etc.		