	EYFS	Class 1	Class 2	Class 3	Class 4	Class 5	Class 6
Animals including humans	- Explore using senses in practical activities outdoors - Name external parts of the body Classify animals into simple groups using own ideas, i.e., can a fly live in water - Make observations and drawings of animals as they explore Health - Understand the need for a variety of foods - Show understanding of good practise with exercise, sleeping, eating and hygiene contribute to good health - Understand the need for oral hygiene, water/brushing teeth	-Identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals - Identify and name a variety of common animals that are carnivores, herbivores and omnivores - Describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals, including pets) - Identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense.	- Notice that animals, including humans, have offspring which grow into adults Find out about and describe the basic needs of animals, including humans, for survival (water, food and air). - Describe the importance of human's exercise, eating the right amounts of different types of food, and hygiene.	-Knows that animals, including humans, need the right types and amount of nutritionUnderstands they cannot make their own food; they get nutrition from what they eat Identify that humans and some other animals have skeletons and muscles for support, protection and movement	-Can describe the simple functions of the basic parts of the digestive system in humansIs able to identify the different types of teeth in humans and their simple functionsCan construct and interpret a variety of food chains, identifying producers, predators and prey.	−Can describe the changes as humans develop to old age.	→Can identify and name the main parts of the human circulatory system. -Can describe the functions of the heart, blood vessels and blood. -Is able to recognise the impact of diet, exercise, drugs and lifestyle on the way their bodies function. -Describes the main ways in which nutrients and water are transported with animals, including humans.
Plants	- Make observations and drawings of plants they explore - Talk about plants that are found and changes over time - Develop understanding of growth/decay over time - Show care for the environment ie trampling, watering, growing	- Identify and name a variety of common wild and garden plants, including deciduous and evergreen trees. - Identify and describe the basic structure of a variety of common flowering plants, including trees. - Observe the growth of flowers and vegetables that they have planted	-Observe and describe how seeds and bulbs grow into mature plants. - Find out and describe how plants need water, light and a suitable temperature to grow and stay healthy	-Can identify and describe the functions of different parts of flowering plants: roots, stem/trunk, leaves and flowersIs able to 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			
Living things and their habitats			- Explore and compare the differences 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 habitats provide for the basic needs of different kinds of animals and plants, and how they depend on each other Identify and name a variety of plants and animals in their habitats, including microhabitats Describe how animals obtain their food from plants and other animals, using the idea of a simple food chain, and identify and name different sources of food.		-Recognises that living things can be grouped in a variety of waysTo explore and use classification keys to help group, identify and name a variety of living things in their local and wider environmentTo recognise that environments can change and that this can sometimes pose dangers to living things.	-Can describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird -Can describe the life process of reproduction in some plants and animals.	- describe how living things are classified into broad groups according to common observable characteristics and based on similarities and differences, including micro-organisms, plants and animals - give reasons for classifying plants and animals based on specific characteristics

Rocks				-Is able to compare and group together different kinds of rocks on the basis of their appearance and simple physical properties. - Describes, in simple terms, how fossils are formed when things that have lived are trapped within rockRecognises that soils are made from rocks and organic matter.		
Evolution and inheritance						-Recognises that living things have changed over time and that fossils provide information about living things that inhabited earth millions of years agoUnderstands that living things produce offspring of the same kind, but normally offspring vary and are not identical to their parents. -Can identify how animals and plants are adapted to suit their environment in different ways and that adaptation may lead to evolution.
Use of everyday materials	- Recognise differences between materials, i.e. texture, soft, hard, rough, smooth	-Distinguish between an object and the material from which it is made Identify and name a variety of everyday materials, including wood, plastic, glass, metal, water, and rock Describe the simple physical properties of a variety of everyday materials Compare and group together a variety of everyday materials on the basis of their simple physical properties.	Identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses. Find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching.			
Seasonal	- Observe natural changes - Observe four seasons and talk about them - Observe changing weather and states of matter	Observe changes across the four seasons. Observe and describe weather associated with the seasons and how day length varies.				

			- Recognises that some forces need		-Explains that unsupported objects fall	
			contact between two objects, but		towards the Earth because of the force of	
			magnetic forces can act at a distance.		gravity acting between the Earth and the	
S			- Is able to compare how things move		falling object.	
magnets			on different surfaces.		- Identify the effects of air resistance,	
_ <u>~</u>			- Observes how magnets attract or		water resistance, and friction, that act	
₩			repel each other and attract some		between moving surfaces	
Ø						
			materials and not others.		- Recognise that some mechanisms	
			- Describes magnets as having two		including levers, pulleys and gears allow a	
2			poles.		smaller force to have a greater effect	
and			- Is able to predict whether two			
100			magnets will attract or repel each			
Forces			other, depending on which poles are			
Ŭ			facing.			
			 Compares and groups together a 			
l Σ			variety of everyday materials on the			
_			basis of whether they are attracted to			
			a magnet, and identify some			
			magnetic materials.			
			- Recognises that they need light in			- Recognise that light appears to travel in
			order to see things and that dark is			straight lines
			the absence of light.			- use the idea that light travels in straight
			- Notice that light is reflected from			lines to explain that objects are seen
			surfaces.			because they give out or reflect light into
			- Is able to find patterns in the way			the eye
<u> </u>			that the size of shadows change.			 explain that we see things because light
Light			- Recognises that shadows are			travels from light sources to our eyes or
□			formed when the light from a light			from light sources to objects and then to
			source is blocked by a solid object.			our eyes
			- Find patterns in the way that the			- use the idea that light travels in straight
			size of shadows change			lines to explain why shadows have the
			- Recognise that light from the sun			same shape as the objects that cast them
			can be dangerous and that there are			same shape as the objects that east them
			ways to protect their eyes			
			ways to protect their eyes	-To identify how sounds are made,		
				associating some of them with		
				something vibrating.		
				-To recognise that vibrations from		
				sounds, travel through a medium		
_				to the ear.		
) 2				-Is able to find patterns between		
 				the pitch of a sound and features		
٦ ٢				of the object that produced it.		
Sound				-Recognises that sounds get fainter		
1				as the distance from the sound		
				source increases.		
				-Is able to find patterns between		
				the volume of a sound and the		
				strength of the vibrations that		
				produced it.		
-	+			produced it.	Is able to describe the maximum out of the	
a)					-Is able to describe the movement of the	
<u>"</u>					Earth, and other planets, relative to the	
space					Sun in the solar system.	
<u>a</u>					-Is able to describe the movement of the	
S					Moon relative to the Earth.	
∞					-Is able to describe the Sun, Earth, Moon	
					as approximately spherical bodies.	
					-Can use the idea of the Earth's rotation	
⊑					to explain day and night and the	
Earth					apparent movement of the sun a across	
1					the sky.	

Electricity			-Is able to identify common appliances that run on electricity - Is able to construct a simple series electrical circuit, identifying and naming its basic parts, including cells, wires, bulbs, switches and buzzers Is able to identify whether or not a lamp will light in a simple series circuit, based on whether or not the lamp is part of a complete loop	-Associate the brightness of a lamp or the volume of a buzzer with the number and voltage of cells used in the circuit - Is able to compare and give reasons for variations in how components function, including the brightness of bulbs, the loudness of buzzers and the on/off position of switches - use recognised symbols when representing a circuit in a diagram
Ele			with a battery. -Recognises that a switch opens and closes a circuit and associate this with whether or not a lamp lights in a simple seriescircuit. -Is able to recognise some common conductors and insulators, and associate metals with being good conductors. -Is able to compare and group materials together, according to whether they are solids, liquids or	
ıtter			gases. -Observes that some materials change state when they are heated or cooled, and measure or research the temperature at which this happens in degrees Celsius (°C). -To identify the part played by evaporation and condensation in the water cycle and associate the rate of evaporation with temperature.	
States of matter				

		•			
				-Is able to compare and group together	
<u>S</u>				every day materials on the basis of their	
ס				properties, including their hardness,	
. <u>⊏</u>				solubility, transparency, conductivity	
1 B				(electrical and thermal), and response to	
σi				magnets.	
materials				-Knows that some materials will dissolve	
				in liquid to form a solution, and describe	
of				how to recover a substance from a	
S				solution.	
g				-Uses knowledge of solids, liquids and	
ا ش				gases to decide how mixtures might be	
chan				separated, including through filtering,	
2				sieving and evaporating.	
S				-Gives reasons, based on evidence from	
pu				comparative and fair tests, for the	
				particular uses of every day materials,	
О				including metals, wood and plastic.	
es				-Demonstrates that dissolving, mixing and	
ti				changes of state are reversible changes.	
<u> </u>				-Explains that some changes result in the	
ledo				formation of new materials, and that this	
1 7				kind of change is not usually reversible,	
				including changes associated with	
Ъ				burning and the action of acid on	
				bicarbonate of soda.	

- Ask questions and take part in

Suggest conclusions to simple

discussions

experiments

- Make observations

- Ask simple questions and recognise that they can be answered in different ways.
- Make close observations, using simple equipment.
- Perform simple tests.
- Perform fair tests.
- Identify and classify.
- Using their observations and ideas to suggest answers to questions.
- Gather and record data to help answer questions.
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 Gather and record data to help answer questions.
- Is able to ask relevant questions.
- Use different types of scientific enquiries to answer them.
- Gather, recording, classifying and presenting data in a variety of ways to help in answering questions.
- To recognise when and how secondary sources might help them to answer questions that cannot be answered through practical investigations.
- To set up simple practical enquiries, comparative and fair tests.
- Investigate by making systematic and careful observations and, where appropriate, take accurate measurements using standard units, using a range of equipment, including themometers and data loggers.

 Record findings using simple scientific
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 To use results to draw simple
- conclusions, make predictions for new values, suggest improvements and raise further questions.
 Is able to report on findings from
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- -Use their science experiences to explore ideas and raise different kinds of questions.
- -Talk about how scientific ideas have developed over time
- -Select and plan the most appropriate type of scientific enquiry to use to answer scientific questions.
- -Recognise when and how to set up comparative and fair tests and explain which variables need to be controlled and why.
- -Choose the most appropriate equipment to make measurements with increasing precision and explain how to use it accurately.
- -Take repeat measurements where appropriate.
- -Make decisions about what observations to make, what measurements to use and how long to make them for. Use and develop keys and other
- information records to identify, classify and describe living things and materials, and identify patterns that might be found in the natural environment.

 -Decide how to record data and results of
- increasing complexity from a choice of familiar approaches: scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs.

 -Use oral and written forms such as displays and other presentations to report conclusions, causal relationships and explanations of degree of trust in results.
- -Use simple models to describe scientific ideas
- -Use relevant scientific language and illustrations to discuss, communicate and justify their scientific ideas -Identify scientific evidence that has been used to support or refute ideas or arguments.
- -Look for different causal relationships in data and identify evidence that refutes or supports ideas.
- -To recognise which secondary sources will be most useful to research their ideas and begin to separate opinion from fact.
 -Use results to make predictions and identify when further observations, comparative and fair tests might be needed.

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