

	Biology				Chen	nistry	Physics					
Subject Area	Living things and their habitats	Animals including humans	Evolution and Inheritance	Seasonal changes	Plants	Materials (including rocks)	States of Matter	Forces (including magnets)	Sound	Light	Electricity	Earth and Space
Year Group												
EYFS	• Know some similarities and differences between the natural world around them and contrasting environments, drawing on their experiences and what has been read in class; understand some important processes and changes in the natural world around them, including the seasons and changing states of matter. This includes exploring and comparing the differences between life cycles: Butterflies. Frogs.			Understand some important processes and changes in the natural world around them, including the seasons and changing states of matter. Physically exploring the changing seasons, with regards to temperature, plants, insects and animals.	Explore the natural world around them, making observations and drawing pictures of animals and plants.	Exploring the similarities and differences between materials: Texture and touch. Floating/sinking. Magnetic/nonmagnetic. Waterproof/not waterproof	Understand some important processes and changes in the natural world around them, including the seasons and changing states of matter. Observe and discuss the changes in water when melting and freezing. Observe and make comments about changes when baking.		• Exploration of how sound is made. This is done by using body percussion, listening to environmental sounds, instrumental sounds and speech sounds.			Exploration of the concept of earth and space through stories and books.
1		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.		observe changes across the four seasons observe and describe weather associated with the seasons and how day length varies.	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.	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.						
2	 explore and compare differences between things that are living, 	• notice that animals, including • humans, have offspring which			observe and describe how seeds and bulbs	• identify and compare the suitability of a variety of everyday						

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	dead, and things that	• grow into adults	grow into mature	materials, including						
	have never been alive	find out about and	plants	wood, metal,						
		describe the	find out and	plastic, glass, brick,						
		basic needs of		rock, paper and						
	 identify that most 		describe how	cardboard for						
	living things live in	animals, including	plants need							
	habitats to which	humans, for survival	water, light and	particular uses						
		(water, food and air)	a suitable	 find out how the 						
	they are suited and	• describe the	temperature to	shapes of solid						
	describe how	importance for	grow and stay	•						
	different habitats		healthy.	objects made from						
	provide for the basic	humans of exercise,	nearthy.	some materials can						
		eating the right		be changed by						
	needs of different	amounts of different		squashing,						
	kinds of animals and	types of food, and								
	plants, and how they			bending, twisting						
	depend on each other	hygiene.		and stretching.						
	depend on each other									
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	 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.									
3		 identify that 	 identify and 	 compare and 		 compare how 		 recognise that 		
		animals, including	describe the	group together		things move on		they need light in		
						_				
		humans, need the	functions of	different kinds of		different surfaces		order to see things		
		right types and	different parts of	rocks on the basis		 notice that some 		and that dark is the		
		amount of nutrition,	flowering plants:	of their appearance		forces need contact		absence of light		
		and that they cannot	roots, stem/trunk,	and simple physical		between two		 notice that light 		
		make their own food;	leaves and flowers	properties		objects, but		is reflected from		
		they get nutrition	 explore the 	describe in		magnetic forces can		surfaces		
		from what they eat	requirements of	simple terms how		act at a distance		 recognise that 		
		identify that humans		fossils are formed		observe how				
		*	plants for life and					light from the sun		
		and some other	growth (air, light,	when things that		magnets attract or		can be dangerous		
		animals have	water, nutrients	have lived are		repel each other		and that there are		
		skeletons and	from soil, and room	trapped within rock		and attract some		ways to protect		
		 muscles for 	to grow) and how	 recognise that 		materials and not		their eyes		
		support, protection	they vary from	soils are made from		others		 recognise that 		
		and movement.	plant to plant	rocks and organic		 compare and 		shadows are		
			investigate the	matter.		group together a		formed when the		
				matter:						
			way in which water			variety of everyday		light from a light		
			is transported			materials on the		source is blocked by		
			within plants			basis of whether		an opaque object		
			explore the			they are attracted		 find patterns in 		
			part that flowers			to a magnet, and		the way that the		
			play in the life cycle			identify some		size of shadows		
			of flowering plants,			magnetic materials		change.		
			including			describe magnets				
			pollination, seed			as having two poles				
			formation and seed			predict whether				
			dispersal.			two magnets will				
						attract or repel				
						each other,				
						depending on				
						which poles are				
						facing.				
4	• recognise	describe the simple			compare and		identify how		identify	
*										
	that living	functions of the basic			group materials		sounds are made,		common appliances	
	things can be	parts of the digestive			together, according		associating some of		that run on	
	grouped in a	system in humans			to whether they are		them with		electricity	
	variety of	identify the different			solids, liquids or		something vibrating		construct a	
	ways				gases					
		types of teeth in			_		 recognise that 		simple series	
	explore and	humans and their			 observe that 		vibrations from		electrical circuit,	
	use	simple functions			some materials		sounds travel		identifying and	
	classification	cimple functions			change state when		Sourias travel		.acitarying and	

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	keys to help group, identify and name a variety of living things in their local and wider environment recognise that environment s can change and that this can sometimes pose dangers to living things.	construct and interpret a variety of food chains, identifying producers, predators and prey.				they are heated or cooled, and measure or research the temperature at which this happens in degrees Celsius (°C) identify the part played by evaporation and condensation in the water cycle and associate the rate of evaporation with temperature.		through a medium to the ear		naming its basic parts, including cells, wires, bulbs, switches and buzzers 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 with a battery recognise that a switch opens and closes a circuit and associate this with whether or not a lamp lights in a simple series circuit recognise some common conductors and insulators, and associate metals with being good conductors.	
5	describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird describe the life process of reproduction in some plants and animals.	describe the changes as humans develop to old age.			compare and group together everyday materials on the basis of their properties, including their hardness, solubility, transparency, conductivity (electrical and thermal), and response to magnets know that some materials will dissolve in liquid to form a solution, and describe how to recover a substance from a solution use 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.	explain that unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling object identify the effects of air resistance, water resistance and friction, that act between moving surfaces recognise that some mechanisms, including levers, pulleys and gears, allow a smaller force to have a greater effect				describe the movement of the Earth, and other planets, relative to the Sun in the solar system describe the movement of the Moon relative to the 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.
6	describe how living things are classified into broad groups according to common observable characteristics and based on similarities and differences, including microorganisms, plants and animals	identify and name the main parts of the human circulatory system, and describe the functions of the heart, blood vessels and blood recognise the impact of diet, exercise, drugs and	• recognise that living things have changed over time and that fossils provide information about living things that inhabited the Earth millions of years ago						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	associate the brightness of a lamp or the volume of a buzzer with the number and voltage of cells used in the circuit	

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give reasons for classifying plants and animals based on specific characteristics.	describe the ways in which nutrients and water are transported within animals, including humans. offspring of kind, but no offspring value are not ide their paren identify hanimals and are adapte their environme different w	ings produce g of the same t normally g vary and dentical to rents fy how and plants orted to suit ment in t ways and ptation may						out or reflect light into the eye • explain that we see things because light 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 them.	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 simple circuit in a diagram.	
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