Science Long Term Plan 2019-2020

	Term 1	Term 2	Term 3	Term 4	Term 5	Term 6		
EYFS	Me and my world	Festivals/Cooking	Pets	Planting	People and	Environments		
	Then and Now			Growing	communities	Mini beasts		
	Comments and asks questions about aspects of their familiar world such as the place where they live or the natural world. Can talk about some of the things they have observed such as plants, animals, natural and found objects. Talks about why things happen and how things work. Developing an understanding of growth, decay and changes over time. Shows care and concern for living things and the environment. Looks closely at similarities, differences, patterns and change. <u>Early Learning Goal</u> Children know about similarities and differences in relation to places, objects, materials and living things. They talk about the features of their own immediate environment and how environments might vary from one another. They make observations of animals and plants and explain why some things occur, and talk about changes.							
Key Stage 1	Animals including	Seasonal Changes	Everyday	Plants	Animals including	Living things and		
	humans		materials		humans	their habitats		
	Amazing Me!	Wild Weather To observe changes	Brilliant Builders	<i>Growing Things</i> To observe and	Wild and wonderful creatures	Food Chains. To explore and compare		
	To notice that animals, including humans, have offspring which grow into adults. To find out about and describe the	across the 4 seasons. To observe and describe weather associated with the seasons and how day length varies.	To distinguish between an object and the material from which it is made To identify and name a variety of	describe how seeds and bulbs grow into mature plants To find out and describe how plants need water, light and a suitable	To identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals To identify and name a variety of common animals that are	the differences between things that are living, dead, and things that have never been alive To 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		

	(water, food and air). To describe the importance for humans of exercise, eating the right amounts of different types of food, and hygiene. (Year 2 topic)		plastic, glass, metal, water, and rock To describe the simple physical properties of a variety of everyday materials To compare and group together a variety of everyday materials on the basis of their simple physical properties (Year 1 topic)	healthy. (Year 2 topic)	To describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals including pets) To identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense. (Year 1 topic).	of animals and plants, and how they depend on each other. To identify and name a variety of plants and animals in their habitats, including microhabitats To 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. (Year 2 topic)
Key Stage 2 Year 3 and 4	Forces and magnets	Animals including humans	Plants A feast of flowers,	Living things and habitats	States of matter What's the matter?	Sound Sounds spectacular
	Magnetic fun and	Fit for success –	fruits and seeds (A world of living		Sounds spectacular
	games	(food nutrition and skeleton)	life cycles)	things.	To compare and group materials	To identify how sounds are made,
	To compare how things move on different surfaces To notice that some forces need contact between 2 objects, but magnetic forces can act at a distance. To observe how magnets attract or repel each other and attract some materials and not others. To compare and group together a variety of	To identify that animals, including humans, need the right types and amount of nutrition, and that they cannot make their own food; they get nutrition from what they eat To identify that humans and some	To identify and describe the functions of different parts of flowering plants: roots, stem/trunk, leaves and flowers. To explore the requirements of plants for life and growth (air, light, water, nutrients from soil, and room to grow) and how they	To recognise that living things can be grouped in a variety of ways. To explore and use classification keys to help group, identify and name a variety of living things in their local and wider environment.	together, according to whether they are solids, liquids or gases. To observe that some materials change state when they are heated or cooled, and measure or research the temperature at which this happens	associating some of them with something vibrating. To recognise that vibrations from sounds travel through a medium to the ear. To find patterns between the pitch of a sound and features of the object that produced it. To find patterns between the volume

	everyday materials on the basis of whether they are attracted to a magnet, and identify some magnetic materials. To describe magnets as having 2 poles To predict whether 2 magnets will attract or repel each other, depending on which poles are facing. (Year 3 topic)	other animals have skeletons and muscles for support, protection and movement.(Year 3 topic)	vary from plant to plant. To investigate the way in which water is transported within plants. To explore the part that flowers play in the life cycle of flowering plants, including pollination, seed formation and seed dispersal. (Year 3 topic)	To recognise that environments can change and that this can sometimes pose dangers to living things. (Year 4 topic)	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. (Year 4 topic)	of a sound and the strength of the vibrations that produced it. To recognise that sounds get fainter as the distance from the sound source increases. (Year 4 topic)
Key Stage 2 Year 5 and 6	Living things and habitats. Life Cycles To describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird To describe the life process of reproduction in some plants and animals. (Year 5 topic).	Properties and changes of materials Materials Consultants To 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. To know that some materials will dissolve in liquid to form a solution, and describe how to recover a substance from a solution. To use knowledge of solids, liquids and gases to decide how mixtures	Light Theatre Lighting Technicians. To recognise that they need light in order to see things and that dark is the absence of light. To notice that light is reflected from surfaces. To recognise that light from the sun can be dangerous and that there are ways to protect their eyes To recognise that shadows are formed when the light from a light source is blocked by an opaque object	Animals including humans The Human Species. To describe the changes as humans develop to old age. (Year 5 topic)	Electricity Electric Art To associate the brightness of a lamp or the volume of a buzzer with the number and voltage of cells used in the circuit 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.	Medical Manoeuvres – integrated revision. – Animals including humans.

	might be separated, including through filtering, sieving and evaporating. To give reasons, based on evidence from comparative and fair tests, for the particular uses of everyday materials, including metals, wood and plastic. To demonstrate that dissolving, mixing and changes of state are reversible changes. To 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. (Year 6 topic)	find patterns in the way that the size of shadows change. (Year 6 topic)		To use recognised symbols when representing a simple circuit in a diagram. (Year 6 topic)	
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