



Science - Long Term Plan

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Year 1	<p>Everyday Materials</p> <p>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 and group together a variety of everyday materials on the basis of their simple physical properties.</p>	<p>Seasons - Winter</p> <p>observe changes across the four seasons observe and describe weather associated with the seasons and how day length varies.</p>	<p>Animals including humans</p> <p>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</p>	<p>Seasons - Spring</p> <p>observe changes across the four seasons observe and describe weather associated with the seasons and how day length varies.</p>	<p>Plants</p> <p>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.</p>	<p>Seasons - Summer</p> <p>observe changes across the four seasons observe and describe weather associated with the seasons and how day length varies.</p>

			part of the body is associated with each sense.			
Year 2	Materials: identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses.	Materials cont'd Investigate how shapes of solid objects can be changed. Consider reversible and irreversible changes eg melting, mixing, baking.	Living things What are they? Compare living, dead and inanimate things. Focus on habitats and how living things depend on their habitat to provide their basic needs. Identify a variety of plants and animals in their habitats Investigate simple food chains	Animals including humans Pupils should be taught to: 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 for humans of exercise, eating the right amounts of different types of food, and hygiene.	Plants Pupils should be taught to: 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. (bean experiments)	Impact humans have on their environment David Attenborough Marine environment Sea pollution Food chains
Year 3	Living Things and their Habitats (taken from Y4) recognise that living things can be grouped in a variety of ways explore and use	Rocks & Fossils compare and group together different kinds of rocks on the basis of their appearance and simple physical properties describe	Light, Shadow & Reflections recognise that they need light in order to see things and that dark is the absence of light notice that light is	Plants identify and describe the functions of different parts of flowering plants: roots, stem/trunk, leaves and flowers	Forces, magnets, springs compare how things move on different surfaces notice that some forces need contact between two	

	<p>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.</p>	<p>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.</p>	<p>reflected from surfaces recognise that light from the sun can be dangerous and that there are ways to protect their eyes recognise that shadows are formed when the light from a light source is blocked by an opaque object find patterns in the way that the size of shadows change.</p>	<p>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.</p>	<p>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 together a variety of everyday materials on the basis of whether they are attracted to a magnet, and 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.</p>	
Year 4	<p>Animals, Including Humans (Y3 switch)</p> <p>identify that animals, including humans, need the right types and amount of nutrition,</p>	<p>States of Matter; solid/liquid/gas & changes of state caused by temperature. Identify the part played by evaporation and condensation in the</p>	<p>Animals including Humans describe the simple functions of the basic parts of the digestive system in humans. construct and interpret a variety of food</p>	<p>The digestive system in humans</p> <p>Human teeth and their different functions.</p>	<p>Electricity</p> <p>identify common appliances that run on electricity construct a simple series electrical circuit, identifying and naming its</p>	<p>Sound</p> <p>identify how sounds are made, associating some of them with something vibrating recognise that vibrations from</p>

	<p>and that 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.</p>	<p>water cycle. Demonstrate that the rate of evaporation is dependant on temperature</p>	<p>chains, identifying producers, predators and prey.</p>		<p>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.</p>	<p>sounds travel through a medium to the ear find patterns between the pitch of a sound and features of the object that produced it find patterns between the volume of a sound and the strength of the vibrations that produced it recognise that sounds get fainter as the distance from the sound source increases.</p>
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