

## Science Progression Document Class 1



### Part 1 : Knowledge and Understanding

Progression consideration: green, blue, purple

Knowledge and Understanding		Intended Year	Theme / challenge question	Dates covered Record when planned into yearly overview
To be taught about:	This might include:			
Plants Plants Plants	<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>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.</p> <p>Plants' place in the food chain, that they produce their own energy from sunlight (photosynthesis), and that they are 'producers'</p>	2019-20  2020-21	<p><b>What was it like when granny went shopping?</b> Identify parts of plants and life cycle. Structure of plants. How seeds change to a plant. From seed to plate. Harvest.</p> <p><b>What Create Fire and Light?</b> Identify some common trees found locally, and identify parts and structure of trees.</p> <p><b>Hot and Cold</b> Describe how plants need water, light and a suitable temperature to stay healthy.</p> <p><b>What is in an egg?</b></p>	Autumn 2019  Autumn 2020  Spring 2021  Summer 2021
Animals (including humans) Animals (including humans)	<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</p>	2019-20	<p><b>What was it like when granny went shopping?</b></p>	Autumn 19

<p>Animals (including humans)</p>	<p>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.</p> <p>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.</p> <p>Find out about and describe the basic needs of animals, including humans, for survival (water, food and air).</p> <p>Identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals.</p> <p>Identify and name a variety of common animals that are carnivores, herbivores and omnivores.</p> <p>Describe and compare the structure of a variety of common animals.</p> <p>Understanding food chains and that this comprises producers, consumers (herbivores/carnivores/omnivores) and decomposers.</p>	<p>2019-20</p> <p>2020-21</p> <p>2020-21</p> <p>2020-21</p>	<p>Animals which hibernate and migrate. Insects and amphibians.</p> <p>Basic need of animals for survival.</p> <p><b>Why are our seas so important?</b></p> <p>Structure of creatures under the sea and their needs to survive.</p> <p><b>What Creates Fire and Light?</b></p> <p>Identify nocturnal animals, and describe and compare their basic needs and behaviour.</p> <p>.</p> <p><b>Hot and Cold</b></p> <p>Identify creatures that live in areas of extreme temperatures, describe and compare their structures and adaptations for survival, and how they care for their offspring. How humans could survive in extreme temperatures, linked to food and water.</p> <p><b>What is in an egg?</b></p>	<p>Jan – March 2020</p> <p>Autumn 2020</p> <p>Spring 2021</p> <p>Summer 2021</p>
<p>Everyday Materials Use of 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</p>	<p>2019-20</p>	<p><b>Why are our seas so important?</b></p> <p>Floating and sinking. Suitable materials used to make boats and their properties.</p>	<p>Jan – March 2020</p>

	<p>; compare and group together a variety of everyday materials on the basis of their simple physical properties.</p> <p>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.</p>	2020-21	<p><b>What creates fire and light?</b> Identify and name everyday materials, describe their simple properties link to building materials, houses, and ease of burning. Investigate how materials change when heated and burn.</p>	Autumn 2020
		2020-21	<p><b>Hot and Cold</b> Investigate and group materials used to help us to keep warm, that insulate.</p>	Spring 2021
Seasonal changes	<p>observe changes across the four seasons ; observe and describe weather associated with the seasons and how day length varies.</p>	2020-21	<p><b>What creates fire and light?</b> Link the weather with the spread of fire. Link the seasons with the hours of sunlight</p> <p><b>Hot and Cold</b> Observe and describe the extremes of hot and cold weather and seasons</p>	Autumn 2020  Spring 2021
Living things and their habitats	<p>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</p>	2019-20	<p><b>Why are our seas so important?</b> Oceans and seas (habitat) Simple food chains</p>	Jan – March 2020
		2019-20	<p><b>Panda and bamboo week</b> Habitat of pandas, needs, comparison of giant and red pandas</p>	Sept 2019

	<p>of a simple food chain, and identify and name different sources of food.</p> <p>Understand that animals can be classified as herbivores, carnivores and omnivores</p>	<p>2020-21</p> <p>2020-21</p>	<p><b>What creates fire and light?</b> Simple food chains linked with nocturnal animals and their habitats.</p> <p><b>Hot and Cold</b> Describe and compare habitats in an extreme hot and cold area, describe the plants and animals found there, and a simple food chain</p> <p><b>What is in an egg?</b></p>	<p>Autumn 2020</p> <p>Spring 2021</p> <p>Summer 2021</p>
Light	<p>recognise that they need light in order to see things and that dark is the absence of light ; notice that light is 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>2020-21</p>	<p><b>What creates fire and light?</b> Recognise the need for light, and dark is the absence of light, consider light from the sun and how shadows are formed and change.</p>	<p>Autumn 2020</p>
Forces and magnets	<p>Exploration based : compare how things move on different surfaces ; 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 ;</p>	<p>2019-20</p>		
States of matter	<p>compare and group materials together, according to whether they are solids, liquids or gases ; observe that some materials change state when they are heated or cooled. Identify some basic properties of solids, liquids and gases. Know that air is made up of gases.</p>	<p>2020-21</p>	<p><b>What creates fire and light?</b> Observe that materials change state when heated. Know that air is made up of gases and</p>	<p>Autumn 2020</p>

			identify some basic properties of gases.	
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**Part 2 : working scientifically**

Ensure the following are built into the long and medium-term planning documents. Include these in the short / medium term objective grids (to go into books.) Audit at least once a term

	Audit point 1 Date : Jan 20	Audit point 2 Date: Dec 2020	Audit point 3 Date:	Audit point 4 Date:	Audit point 5 Date:	Audit point 6 Date:
Performing simple tests		X				
Identifying and classifying	X	X				
Ask simple questions	X	X				
Observing	X	X				
Use observations to suggest answers to questions	X	X				
Gathering and recording data		X				