

Science Overview Year 23/24

Class	Autumn 1 <i>Doctor/nurse visit</i>	Autumn 2	Spring 1 <i>Mobile Observatory in school?</i>	Spring 2 <i>Garden centre visit?</i>	Summer 1	Summer 2 <i>Possible whole school trip to Blue Planet</i>
Nursery	<p>All about Me (Humans)</p> <ul style="list-style-type: none"> ➤ Learn about the life cycles of humans ➤ Learn about how to take care of themselves ➤ Begin to make sense of their own life-story and family's history. ➤ • Understand the key features of the life cycle of a plant and an animal. <p><i>See overview of learning on separate plan</i></p>	<p>Humans Continued Senses Focus</p> <ul style="list-style-type: none"> ➤ Learn about their senses ➤ Describe what they see, hear and feel whilst outside. ➤ Use all their senses in hands-on exploration of natural materials 	<p>Space Seasonal Change</p> <ul style="list-style-type: none"> ➤ Explore the natural world around them. ➤ Understand the effect of changing seasons on the natural world around them. ➤ Explore natural materials, indoors and outside. <p><i>See overview of learning on separate plan</i></p>	<p>Plants</p> <ul style="list-style-type: none"> ➤ Plant seeds and care for growing plants. ➤ Understand the key features of the life cycle of a plant and an animal. ➤ • Begin to understand the need to respect and care for the natural environment and all living things. 	<p>Air, Land and Sea Living things in their Environment</p> <p>Reception</p> <ul style="list-style-type: none"> ➤ Draw information from a simple map. ➤ Explore the natural world around them. ➤ Describe what they see, hear and feel whilst outside. ➤ Recognise some environments that are different to the one in which they live. <p><i>See overview of learning on separate plan</i></p>	<p>Habitats Under the Sea Focus</p> <p>Recognise some environments that are different to the one in which they live.</p>
Class 1	<p>All About Me Animals Including Humans (YR)</p> <ul style="list-style-type: none"> ➤ Talk about members of their immediate family and community. ➤ Name and describe people who are familiar to them. 	<p>Humans Continued Senses Focus</p> <ul style="list-style-type: none"> ➤ 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>Space and Seasonal Change (Y1)</p> <p>Linked to main geography focus</p> <ul style="list-style-type: none"> ➤ Observe changes across the four seasons. 	<p>Plants (YR)</p> <ul style="list-style-type: none"> ➤ plant seeds and care for growing plants. ➤ Understand the key features of the life cycle of a plant <p>(Y1)</p>	<p>Air, Land and Sea Living things in their Environment</p> <p>Reception</p> <ul style="list-style-type: none"> ➤ Draw information from a simple map. ➤ Explore the natural world around them. 	<p>Habitats Under the Sea linked to living things in the Environment</p> <ul style="list-style-type: none"> ➤ Recognise some environments that are different to

	<p>(Y2)</p> <ul style="list-style-type: none"> ➤ 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. 		<ul style="list-style-type: none"> ➤ Observe and describe weather associated with the seasons and how day length varies. 	<ul style="list-style-type: none"> ➤ 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>(Y2)</p> <ul style="list-style-type: none"> ➤ 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. 	<ul style="list-style-type: none"> ➤ Describe what they see, hear and feel whilst outside. ➤ Recognise some environments that are different to the one in which they live. <p>(Y2)</p> <ul style="list-style-type: none"> ➤ Explore and compare the differences between things that are living, dead, and things that have never been alive. ➤ Identify and name a variety of plants and animals in their habitats, including microhabitats. 	<p>the one in which they live.</p> <p>(Y2)</p> <ul style="list-style-type: none"> ➤ 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. ➤ 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
Class 2	<p>Animals including humans: (Y3)</p> <ul style="list-style-type: none"> ➤ 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. ➤ identify that humans and some other animals 	<p>Rocks & soils (Y3)</p> <ul style="list-style-type: none"> ➤ compare and group together different kinds of rocks on the basis of their appearance and simple physical properties. (Y3 - Rocks) ➤ describe in simple terms how fossils are formed when things that have lived are trapped within rock. (Y3 - Rocks) 	<p>States of Matter (Y4)</p> <ul style="list-style-type: none"> ➤ 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, and measure or research the temperature at 	<p>Electricity (Y4)</p> <ul style="list-style-type: none"> ➤ Identify common appliances that run on electricity. ➤ construct a simple series electrical circuit, identifying and naming its basic parts, including cells, wires, bulbs, switches and buzzers. ➤ identify whether or not a lamp will light in a 	<p>Living things and their habitats (Y4)</p> <ul style="list-style-type: none"> ➤ Recognise that living things can be grouped in a variety of ways. ➤ Explore and use classification keys to help group, identify and name a variety of living things in their local and wider environment. 	<p>Sound (Y4)</p> <ul style="list-style-type: none"> ➤ Identify how sounds are made, associating some of them with something vibrating. ➤ recognise that vibrations from sounds travel through a medium to the ear. ➤ Find patterns between the pitch of a sound and features

	have skeletons and muscles for support, protection and movement.		<p>which this happens in degrees Celsius (°C).</p> <ul style="list-style-type: none"> ➤ Identify the part played by evaporation and condensation in the water cycle and associate the rate of evaporation with temperature. 	<p>simple series circuit, based on whether or not the lamp is part of a complete loop with a battery.</p> <ul style="list-style-type: none"> ➤ 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. 	<ul style="list-style-type: none"> ➤ Recognise that environments 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. (Y4 - Animals, including humans) 	<p>of the object that produced it.</p> <ul style="list-style-type: none"> ➤ 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.
Class 3	<p>The circulatory system (Year 6)</p> <ul style="list-style-type: none"> ➤ 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 lifestyle on the way their bodies function ➤ describe the ways in which nutrients and water are transported within animals, including humans 	<p>Electricity (Year 6)</p> <ul style="list-style-type: none"> ➤ associate the brightness of a lamp or the volume of a buzzer with the number and voltage of cells used in the circuit ➤ 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 	<p>Living things and their habitats (Year 5 & Year 6)</p> <ul style="list-style-type: none"> ➤ Year 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 ➤ Year 6 - 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 	<p>Animals including humans (Year 5)</p> <ul style="list-style-type: none"> ➤ describe the changes as humans develop to old age 		