

Below outlines the learning focus for each term

Term	Learning Focus		Conceptual Development
	Knowledge	Skills	
Autumn 1	<p>Animals, including humans To describe the simple functions of the basic parts of the digestive system in humans</p> <p>To identify the different types of teeth in humans and their simple functions</p> <p>To construct and interpret a variety of food chains, identifying producers, predators and prey</p> <p>To be introduced to the main body parts associated with the digestive system, for example, mouth, tongue, teeth, oesophagus, stomach and small and large intestine</p>	<p>To explore questions that help them to understand their special functions.</p> <p>To compare the teeth of carnivores and herbivores</p> <p>Finding out what damages teeth and how to look after them.</p> <p>Draw and discuss their ideas about the digestive system and compare them with models or images.</p>	<p>Build upon: 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 – Year 3</p> <p>Prepare for: <i>To identify and name the main parts of the human circulatory system.</i> <i>To describe the functions of the heart, blood vessels and blood - Year 6</i></p>
Autumn 2	<p>States of matter To compare and group materials together, according to whether they are solids, liquids or gases</p> <p>Observe that some materials change state when they are heated or cooled, and measure or research the temperature at which this happens in degrees Celsius (°C)</p> <p>Identify the part played by evaporation and condensation in the water cycle and associate the rate of evaporation with temperature.</p> <p>Explore a variety of everyday materials and develop simple descriptions of the states of matter (solids hold their shape; liquids form a pool not a pile; gases escape from an unsealed container).</p> <p>Observe water as a solid, a liquid and a gas and should note the changes to water when it is heated or cooled. <i>Note: Teachers should avoid using materials where heating is associated with chemical change, for example, through baking or burning.</i></p>	<p>Grouping and classifying a variety of different materials</p> <p>Exploring the effect of temperature on substances such as chocolate, butter, cream (for example, to make food such as chocolate crispy cakes and ice-cream for a party).</p> <p>Research the temperature at which materials change state, for example, when iron melts or when oxygen condenses into a liquid.</p> <p>Observe and record evaporation over a period of time, for example, a puddle in the playground or washing on a line</p> <p>Investigate the effect of temperature on washing drying or snowmen melting.</p>	<p>Build upon: Describe the simple physical properties of a variety of everyday materials.</p> <p>Compare and group together a variety of everyday materials on the basis of their simple physical properties - Year 2</p> <p>Prepare for: <i>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</i></p> <p><i>To use knowledge of solids, liquids and gases to decide how mixtures might be separated, including through filtering, sieving and evaporating</i></p> <p><i>To recognise that melting and dissolving are different processes.</i></p> <p><i>To demonstrate that dissolving, mixing and changes of state are reversible changes</i></p>

			<p>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.</p> <p>To explore changes that are difficult to reverse, for example, burning, rusting and other reactions, for example, vinegar with bicarbonate of soda – Year 5</p>
Spring	<p>Sound To identify how sounds are made, associating some of them with something vibrating</p> <p>To recognise that vibrations from sounds travel through a medium to the ear</p> <p>To find patterns between -the pitch of a sound and features of the object that produced it - the volume of a sound and the strength of the vibrations that produced it</p> <p>To recognise that sounds get fainter as the distance from the sound source increases.</p> <p>To find out how the pitch and volume of sounds can be changed in a variety of ways.</p>	<p>To find patterns in the sounds that are made by different objects. E.g using saucepan lids of different sizes or elastic bands of different thicknesses.</p> <p>To investigate which provides the best insulation against sound. E.g make earmuffs from a variety of different materials</p> <p>To make and play their own instruments by using what they have found out about pitch and volume.</p>	<p>Prepare for: <i>Pupils should be taught about:</i> - frequencies of sound waves, frequency is measured in hertz (Hz); -echoes, reflection and absorption of sound -Understand that sound needs a medium to travel -sound produced by vibrations of objects, in loud speakers, detected by their effects on microphone diaphragm and the ear drum -auditory range of humans and animals- KS3</p>
Summer 1	<p>Living things and their habitats To recognise that living things can be grouped in a variety of ways</p> <p>To use classification keys to help group, identify and name a variety of living things in their local and wider environment</p> <p>To begin to put vertebrate animals into groups such as fish, amphibians, reptiles, birds, and mammals; and invertebrates into snails and slugs, worms, spiders, and insects. <i>Note: Plants can be grouped into categories such as flowering plants (including grasses) and non-flowering plants, such as ferns and mosses.</i></p>	<p>Use and make simple guides or keys to explore and identify local plants and animals</p> <p>Raising and answering questions based on their observations of animals and what they have found out about other animals that they have researched.</p> <p>To explore possible ways of grouping a wide selection of living things that include animals and flowering plants and non-flowering plants.</p>	<p>Build upon: 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.</p> <p>Identify and name a variety of plants and animals in their habitats, including micro-habitats.</p> <p>Explore and compare the differences between things that are living, dead and things that have never been alive- Year 2</p> <p>Prepare for : <i>To describe how living things are classified into broad groups</i></p>

	<p>To recognise that environments and habitats can change and that this can sometimes pose dangers to living things.</p> <p>To explore examples of human impact (both positive and negative) on environments, for example, the positive effects of nature reserves, ecologically planned parks, or garden ponds, and the negative effects of population and development, litter or deforestation</p>		<p><i>according to common observable characteristics and based on similarities and differences, including micro-organisms, plants and animals</i></p> <p><i>To give reasons for classifying plants and animals based on specific characteristics.</i></p> <p><i>To know that broad groupings, such as micro-organisms, plants and animals can be subdivided.</i></p> <p><i>To find out about significance of the work of scientists such as Carl Linnaeus, a pioneer of classification Year 6</i></p>
<p>Summer 2</p>	<p>Electricity Identify common appliances that run on electricity</p> <p>Construct a simple series electrical circuit, identifying and naming its basic parts, including cells, wires, bulbs, switches and buzzers</p> <p>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</p> <p>Recognise that a switch opens and closes a circuit and associate this with whether or not a lamp lights in a simple series circuit</p> <p>Recognise some common conductors and insulators, and associate metals with being good conductors.</p> <p>Construct simple series circuits, trying different components, for example, bulbs, buzzers and motors, and including switches, and use their circuits to create simple devices.</p> <p>Pupils should draw the circuit as a pictorial representation <i>Note: Pupils might use the terms current and voltage, but these should not be introduced or defined formally at this stage. Pupils should be taught about precautions for working safely with electricity.</i></p>	<p>To observe patterns, for example, that bulbs get brighter if more cells are added, that metals tend to be conductors of electricity</p> <p>Understand that some materials can and some cannot be used to connect across a gap in a circuit.</p>	<p>Prepare for: <i>To associate the brightness of a lamp or the volume of a buzzer with the number and voltage of cells used in the circuit.</i></p> <p><i>To use recognised symbols when representing a simple circuit in a diagram.</i></p> <p><i>To construct simple series circuits, to help them to answer questions about what happens when they try different components, for example, switches, bulbs, buzzers and motors.</i></p> <p><i>To learn how to represent a simple circuit in a diagram using recognised symbols.</i></p> <p>Year 6</p>