



Year 1 – 3 Science Long Term Plan

Autumn	Spring	Summer
<p>Seasonal Changes will be taught across the year: observe changes across the four seasons observe and describe weather associated with the seasons and how day length varies</p>		
<p>Materials</p>	<p>Animals including Humans</p>	<p>Plants and Living things</p>
<p>Year 1 – Pupils should be taught to:</p> <ol style="list-style-type: none"> 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. Compare and groups together a variety of everyday materials on the basis of the simple physical properties. <p>Year 2 – Pupils should be taught to:</p> <ol style="list-style-type: none"> Identify and compare the uses 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>Year 1 – Pupils should be taught to:</p> <ol style="list-style-type: none"> 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 common animals (fish, amphibians, reptiles, birds, mammals including pets) Identify, name, draw and label the basic parts of the human boy and say which part of the body is associated with each sense <p>Year 2 – Pupils should be taught to:</p> <ol 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 foOr survival (water, food, air) 	<p>Across Key Stage 1 – Pupils should be taught to:</p> <ol style="list-style-type: none"> Identifying 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>Year 2 – Pupils should be taught to:</p> <ol style="list-style-type: none"> 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 one another. Identify and name a variety of plants and animals in their habitats, including micro-habitats.



	<p>Year 3 – Pupils should be taught to:</p> <ol style="list-style-type: none"> 1. 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. 2. Identify that humans and some animals have skeletons and muscles for support, protection and movement. 	<ol style="list-style-type: none"> 4. 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. 5. Observe and describe how seeds and bulbs grow into mature plants. 6. Find out and describe how plants need water, light and a suitable temperature to grow and stay healthy. <p>Year 3 – Pupils should be taught:</p> <ol style="list-style-type: none"> 1. Identify and describe the functions of different parts of flowering plants: roots, stem/trunk, leaves and flowers 2. 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. 3. Investigate the way in which water is transported within plants 4. Explore the part that flowers play in the life cycle of flowering plants, including pollination, seed formation and seed dispersal.
<p>Science <i>whole school</i> Focus days – 1 per term</p>		
<p>Year 1/2 focus: Outdoor learning – working Scientifically – Plants Pupils should: Use the local environment to explore and answer questions about plants growing in</p>	<p>Year 1/2 focus: working scientifically – Materials Pupils should:</p>	<p>Year 1/2 Focus: Outdoor learning - working scientifically – Animals, including humans Pupils should: Use the local environment to explore and answer questions about animals in their</p>



<p>their habitat. They should become familiar with common names of flowers, examples of deciduous and evergreen trees, and plant structures (flowers, petals, fruit, roots, bulb seed, trunk, branches, stem)</p>	<p>Perform a simple test to explore a question: What is the best material for... an umbrella, curtains, bookshelf, gymnast leotard..?</p>	<p>habitat. Use their observations to compare and contrast animals describing how they identify and group them: what they eat, use of senses to compare textures, sounds & smells.</p>
<p>Year 3 focus: Rocks Pupils will be taught to:</p> <ol style="list-style-type: none"> 1. Compare and group together different kinds of rocks on the basis of their appearance and simple physical properties. 2. Describe in simple terms how fossils are formed when things that have lived are trapped within rock. 3. Recognise that soils are made from rock and organic matter. 	<p>Year 3 focus: Light Pupils will be taught:</p> <ol style="list-style-type: none"> 1. Recognise that they need light in order to see things and that dark is the absence of light 2. Notice that light is reflected from surfaces. 3. Recognise that light from the sun can be dangerous and that there are ways to protect their eyes. 4. Recognise that shadows are formed when the light for a light source is blocked by a solid object. 5. Find patterns in the way that the size of shadows change. 	<p>Year 3 focus: Forces and Magnets Pupils will be taught:</p> <ol style="list-style-type: none"> 1. Compare how things move on different surfaces. 2. Notice that some forces need contact between two objects, but magnetic forces can act at a distance. 3. Observe how magnets attract or repel each other and attract some materials and not others. 4. 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. 5. Describe magnets as having two poles 6. Predict whether two magnets will attract or repel each other, depending on which poles are facing.