

## National Curriculum Links – Science

The following composition has been created using the statutory requirements set out in the ‘The National Curriculum in England: key stages 1 and 2 framework document’ (2013). This document encompasses the statutory requirements for ‘Science’ for years 1 to 6. The chosen statutory requirements may be wholly or partially observed whilst with Stoke Bruerne Boat Company limited. You may have the opportunity to observe examples of the following statutory requirements to aid and encourage students learning, during your visit and/or post-visit with Stoke Bruerne Boat Company Limited.

Science						
Key Stage 1						
School Year	Plants	Animals, Including Humans	Everyday Materials	Seasonal Changes	Living Things and Their Habitats	Uses of Everyday Materials
Year 1	<ul style="list-style-type: none"> <li>• identify and name a variety of common wild and garden plants, including deciduous and evergreen trees.</li> <li>• identify and describe the basic structure of a variety of common flowering plants, including trees.</li> </ul>	<ul style="list-style-type: none"> <li>• identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals.</li> <li>• identify and name a variety of common animals that are carnivores, herbivores and omnivores.</li> <li>• describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals, including pets).</li> </ul>	<ul style="list-style-type: none"> <li>• distinguish between an object and the material from which it is made.</li> <li>• identify and name a variety of everyday materials, including wood, plastic, glass, metal, water, and rock.</li> <li>• describe the simple physical properties of a variety of everyday materials.</li> </ul>	<ul style="list-style-type: none"> <li>• observe changes across the four seasons.</li> <li>• observe and describe weather associated with the seasons and how day length varies.</li> </ul>		
Year 2	<ul style="list-style-type: none"> <li>• observe and describe how seeds and bulbs grow into mature plants.</li> </ul>	<ul style="list-style-type: none"> <li>• notice that animals, including humans, have offspring which grow into adults.</li> </ul>			<ul style="list-style-type: none"> <li>• explore and compare the differences between things that are living, dead, and things that have never been alive.</li> <li>• identify that most living things live in habitats to which they are suited and describe</li> </ul>	<ul style="list-style-type: none"> <li>• identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses.</li> </ul>

						<p>how different habitats provide for the basic needs of different kinds of animals and plants, and how they depend on each other.</p> <ul style="list-style-type: none"> <li>• identify and name a variety of plants and animals in their habitats, including microhabitats.</li> <li>• 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.</li> </ul>	
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Lower Key Stage 2

School Year	Plants	Animals, Including Humans	Rocks	Light	Forces and Magnets	Living Things and their Habitats	States of Matter	Sound	Electricity
Year 3	<ul style="list-style-type: none"> <li>• identify and describe the functions of different parts of flowering plants: roots, stem/trunk, leaves and flowers.</li> <li>• explore the requirements of plants for life and growth (air,</li> </ul>		<ul style="list-style-type: none"> <li>• compare and group together different kinds of rocks on the basis of their appearance and simple physical properties.</li> </ul>	<ul style="list-style-type: none"> <li>• recognise that they need light in order to see things and that dark is the absence of light.</li> <li>• notice that light is reflected from surfaces.</li> </ul>	<ul style="list-style-type: none"> <li>• compare how things move on different surfaces.</li> </ul>				

	light, water, nutrients from soil, and room to grow) and how they vary from plant to plant.			<ul style="list-style-type: none"> <li>• recognise that shadows are formed when the light from a light source is blocked by an opaque object.</li> </ul>					
Year 4						<ul style="list-style-type: none"> <li>• explore and use classification keys to help group, identify and name a variety of living things in their local and wider environment.</li> <li>• recognise that environments can change and that this can sometimes pose dangers to living things.</li> </ul>	<ul style="list-style-type: none"> <li>• identify the part played by evaporation and condensation in the water cycle and associate the rate of evaporation with temperature.</li> </ul>	<ul style="list-style-type: none"> <li>• recognise that sounds get fainter as the distance from the sound source increases.</li> </ul>	<ul style="list-style-type: none"> <li>• identify common appliances that run on electricity.</li> </ul>
Upper Key Stage 2									
School Year	Living Things and their Habitats	Animals, Including Humans	Properties and Changes of Materials	Earth and Space	Forces	Evolution and Inheritance	Light	Electricity	

Year 5	<ul style="list-style-type: none"> <li>• describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird.</li> <li>• describe the life process of reproduction in some plants and animals.</li> </ul>		<ul style="list-style-type: none"> <li>• 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.</li> </ul>		<ul style="list-style-type: none"> <li>• identify the effects of air resistance, water resistance and friction, that act between moving surfaces.</li> <li>• recognise that some mechanisms, including levers, pulleys and gears, allow a smaller force to have a greater effect.</li> </ul>			
Year 6	<ul style="list-style-type: none"> <li>• describe how living things are classified into broad groups according to common observable characteristics and based on similarities and differences, including microorganisms, plants and animals.</li> <li>• give reasons for classifying plants and animals based</li> </ul>					<ul style="list-style-type: none"> <li>• recognise that living things produce offspring of the same kind, but normally offspring vary and are not identical to their parents.</li> <li>• identify how animals and plants are adapted to suit their environment in different ways and that adaptation may</li> </ul>	<ul style="list-style-type: none"> <li>• recognise that light appears to travel in straight lines.</li> <li>• use the idea that light travels in straight lines to explain that objects are seen because they give out or reflect light into the eye.</li> <li>• explain that we see things because light travels from light sources to our eyes or</li> </ul>	<ul style="list-style-type: none"> <li>• associate the brightness of a lamp or the volume of a buzzer with the number and voltage of cells used in the circuit.</li> <li>• compare and give reasons for variations in how components function, including the brightness of bulbs, the loudness of buzzers and the</li> </ul>

	on specific characteristics.					lead to evolution.	from light sources to objects and then to our eyes. <ul style="list-style-type: none"><li>• use the idea that light travels in straight lines to explain why shadows have the same shape as the objects that cast them.</li></ul>	on/off position of switches.
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