

CURRICULUM OVERVIEW FOR KS2 SCIENCE

	Reception/Year 1	Year 1/2	Year 3/4	Year 4/5	Year 5/6
Autumn Term			<p><b>Forces &amp; magnets</b></p> <ul style="list-style-type: none"> <li>• compare how things move on different surfaces</li> <li>• notice that some forces need contact between two objects, but magnetic forces can act at a distance</li> <li>• observe how magnets attract or repel each other and attract some materials and not others</li> <li>• 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</li> <li>• describe magnets as having two poles</li> <li>• predict whether two magnets will attract or repel each other, depending on which poles are facing.</li> </ul> <p><b>Animals (incl humans)</b></p> <ul style="list-style-type: none"> <li>• 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</li> <li>• identify that humans and some other animals have skeletons and muscles for support, protection and movement.</li> </ul>	<p><b>Y4 children as for Y3/4</b> <b>Y5 children as for Y5/6</b></p>	<p><b>Forces</b></p> <ul style="list-style-type: none"> <li>• explain that unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling object</li> <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> <p><b>Animals</b></p> <p>describe the changes as humans develop to old age. Identify and describe different organs in human body</p>
Spring Term			<p><b>Rocks</b></p> <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> <li>• describe in simple terms how fossils are formed when things that have lived are trapped within rock</li> <li>• recognise that soils are made from rocks and organic matter.</li> </ul>	<p><b>Y4 children as for Y3/4</b> <b>Y5 children as for Y5/6</b></p>	<p><b>Evolution &amp; Inheritance</b></p> <p>recognise that living things have changed over time and that fossils provide information about living things that inhabited the Earth millions of years ago</p> <ul style="list-style-type: none"> <li>• recognise that living things produce offspring of the same kind, but normally offspring vary and are not</li> </ul>

			<b>Light</b> <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> <li>• recognise that light from the sun can be dangerous and that there are ways to protect their eyes</li> <li>• recognise that shadows are formed when the light from a light source is blocked by a solid object</li> <li>• find patterns in the way that the size of shadows change.</li> </ul>		<p>identical to their parents</p> <ul style="list-style-type: none"> <li>• identify how animals and plants are adapted to suit their environment in different ways and that adaptation may lead to evolution.</li> </ul> <p>Pupils might find out about the work of palaeontologists such as Mary Anning and about how Charles Darwin and Alfred Wallace developed their ideas on evolution.</p> <p><b>Light</b></p> <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 from light sources to objects and then to our eyes</li> <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>
Summer Term			<b>Plants</b> <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, light, water, nutrients from soil, and room to grow) and how they vary from plant to plant</li> <li>• investigate the way in which water is transported within plants</li> <li>• explore the part that flowers play in the life cycle of flowering plants, including pollination, seed formation and seed dispersal</li> </ul>	Y4 children as for Y3/4 Y5 children as for Y5/6	<p><b>Living Things</b></p> <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> <p>Pupils could find out about the work of naturalists and animal behaviourists, for example, David Attenborough and Jane Goodall</p>