






<p><b>Programme of Study Statements</b></p> <ul style="list-style-type: none"> <li>Recognise that living things have changed over time and that fossils provide information about living things that inhabited the Earth millions of years ago.</li> <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 lead to evolution.</li> <li></li> </ul>					<p><b>Key Vocabulary</b></p> <p>Offspring, sexual reproduction, vary, characteristics, suited, adapted, environment, inherited, species, fossils</p>
<p><b>Investigations and Skills for thinking like a Scientist</b></p> <div style="display: flex; justify-content: space-around; align-items: center;">      </div>					<p><b>Sticky Knowledge:</b></p> <p>Life cycles have evolved to help organisms survive to adulthood.</p> <ul style="list-style-type: none"> <li>Over time the characteristics that are most suited to the environment become increasingly common.</li> </ul>
<p><b><u>Comparative Tests</u></b></p> <p>What is the most common eye colour in our class?</p>	<p><b><u>Identify &amp; Classify</u></b></p> <p>Compare the skeletons of apes, humans, and Neanderthals – how are they similar, and how are they different?</p> <p>Can you classify these observations into evidence for the idea of evolution, and evidence against?</p>	<p><b><u>Observation over time</u></b></p> <p>How has the skeleton of the horse changed over time?</p>	<p><b><u>Pattern seeking</u></b></p> <p>Is there a pattern between the size and shape of a bird's beak and the food it will eat?</p>	<p><b><u>Research</u></b></p> <p>What happened when Charles Darwin visited the Galapagos islands?</p> <p>What ideas did American geneticist Barbara McClintock have about genes that won her a Nobel Prize?</p>	<p><b><u>Prior Knowledge:</u></b></p> <ul style="list-style-type: none"> <li>Describe in simple terms how fossils are formed when things that have lived are trapped within rock. (Y3 - Rocks)</li> <li>Recognise that environments can change and that this can sometimes pose dangers to living things. (Y4 - Living things and their habitats)</li> <li>Describe the life process of reproduction in some plants and animals. (Living things and their habitats - Y5)</li> <li></li> </ul>
<ul style="list-style-type: none"> <li><b>Potential Evidence to support our Scientists (I can..):</b></li> <li>Can identify characteristics that will make a plant or animal suited or not suited to a particular habitat</li> <li>Can link the patterns seen in the model to real examples</li> <li>Can explain why the dominant colour of the peppered moth changed over a very short period of time</li> </ul> <p><b>Big Question:</b> What is evolution, how does it happen and how do scientists know?</p>					<p><b><u>Future Knowledge:</u></b></p> <ul style="list-style-type: none"> <li>Heredity as the process by which genetic information is transmitted from one generation to the next. (KS3)</li> <li>A simple model of chromosomes, genes and DNA in heredity, including the part played by Watson, Crick, Wilkins and Franklin in the development of the DNA model. (KS3)</li> <li>The variation between species and between individuals of the same species means some organisms compete more successfully, which can drive natural</li> </ul>

	<p>selection. (KS3)</p> <ul style="list-style-type: none"> <li>• Changes in the environment may leave individuals within a species, and some entire species, less well adapted to compete successfully and reproduce, which in turn may lead to extinction. (KS3)</li> <li>•</li> </ul>	
<p><b>Cultural Capital</b></p>		
<p><b>Visits and visitors</b> Wild Place Project</p>	<p><b>Experiences and events</b> Handling real fossils</p>	<p><b>Key texts</b></p> <p><i>One Smart Fish</i> (Christopher Wormell) <i>The Molliebird</i> (Jules Pottle) <i>Our Family Tree</i> (Lisa Westberg Peters)</p>
<p><b>Community events and links</b></p>	<p><b>Global issues</b> Endangered species Impact of Global warming on species in the future</p>	<p><b>Famous people/ Key Scientists</b></p> <p><b>Charles Darwin and Alfred Russel Wallace</b> (Theory of Evolution by Natural Selection) <b>Jane Goodall</b> (Chimpanzees)</p>
<p><b>Life Skills</b> Curiosity Resilience Making Links</p>	<p><b>Key places</b></p>	