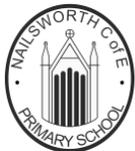


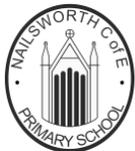
Science: Evolution & Inheritance (Biology)

Areas of study	EYFS	Y3	Y4	Y6
<b>Core substantive knowledge</b>	<p>Animals including Humans</p> <ul style="list-style-type: none"> <li>Understand the life cycle of a human</li> <li>Begin to group animals</li> </ul>	<p>Rocks</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>Living things and their habitats</p> <ul style="list-style-type: none"> <li>recognise that living things can be grouped in a variety of ways.</li> <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>	<p>Evolution and inheritance</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> </ul>
<b>Cross-curricular links</b>	<p>English - verbal discussions            Texts – <i>'The Snail And The Whale'</i>  <i>'The Bad-tempered Ladybird'</i></p>	<p>Geography - location of rocks</p>		<p>English Text  <i>Carl Linnaeus: Genius Of Classification</i>             Biography writing - Carl Linnaeus</p>



Science: Evolution & Inheritance (Biology)

Areas of study	EYFS	Y3	Y4	Y6
<p><b>Range and depth of scientific knowledge-substantive knowledge</b></p>	<p>Understand that there are a variety of types of animals. They inhabit different environments. Animals change as they grow.</p> <p>Recognition that humans have common body parts and these can be named.</p>	<p>Understand that some rocks contain fossils. Which were formed millions of years ago.</p> <p>Become familiar with the process by which fossils are formed</p>	<p>Living things can be grouped (classified) in different ways according to their features.</p> <p>Classification keys can be used to identify and name living things.</p> <p>Environments may change naturally e.g. through flooding, fire, earthquakes etc. Humans also cause the environment to change both positive and negative</p> <p>These environments also change with the seasons</p>	<p>All living things have offspring of the same kind, as features in the offspring are inherited from the parents. Due to sexual reproduction, the offspring are not identical to their parents and vary from each other.</p> <p>Plants and animals have characteristics that make them suited (adapted) to their environment. If the environment changes rapidly some variations of a species may not suit the new environment and will die. If the environment changes slowly, animals and plants with variations that are best suited survive in greater numbers to reproduce and pass their characteristics on to their young. Over time these inherited characteristics become more dominant within the population. Over a very long period of time these characteristics may be so different to how they were originally that a new species is created. This is evolution.</p> <p>Fossils give us evidence of what lived on the Earth millions of year ago and provide evidence to support the theory of evolution. More recently scientists such as Darwin and Wallace observed how living things adapt to different environments to become distinct varieties with their own characteristics.</p>



Areas of study	EYFS	Y3	Y4	Y6
<b>Range and depth of disciplinary knowledge</b>	<p>Observation of a range of creatures, first hand. Discussion about their similarities and differences.</p> <p>Demonstration of curiosity about objects, events and people. Exploration using senses</p>	<p>Research and discuss the different kinds of living things whose fossils are found in sedimentary</p>	<p>Raising and answering questions based on observations of animals and research</p>	<p>Observation of local animals and recognition of how they are adapted to their environment</p> <p>Identification of how some living things are adapted to survive in extreme conditions E.G. cactuses, polar bears and camels.</p> <p>Analysis of the advantages and disadvantages of specific adaptations (e.g. such as being on two feet rather than four, having a long or a short beak, having gills or lungs, tendrils on climbing plants, brightly coloured and scented flowers)</p> <p>Identification of patterns between the size and shape of a bird's beak and the food it will eat?</p>
<b>Scientific enquiry-disciplinary knowledge</b>	<p>Observation Compare/contrast</p>	<p>Research</p>	<p>Research Asking/answering questions</p>	<p>Observation Compare/contrast, classification, pattern-seeking</p> <p>Research and record</p>
<b>Organisation and communication</b>	<p>Verbal communication</p>	<p>Verbal communication</p>	<p>Verbal communication</p>	<p>Verbal communication</p> <p>Classification charts</p> <p>Biography Writing</p> <p>Diagrams</p>