



**Year 6 Skills and Knowledge Organiser.  
Evolution and Inheritance.**

Key Knowledge and Skills	Working scientifically	Key Vocabulary	Key Questions
<p>To recognise variation in different species ( dogs, horses)</p> <p>To recognise that offspring have some of the features of their parents</p> <p>To recognise that living things produce offspring of the same kind, but normally offspring vary and are not identical to their parents</p> <p>To recognise that animals have to compete for food</p> <p>To describe how animals avoid predators ( speed, camouflage)</p> <p>To describe how animals and plants are adapted to their environments</p> <p>To identify how animals and plants are adapted to suit their environment in different ways and that adaptation may lead to evolution</p> <p>To explain how being well adapted to an environment means an organism is more likely to survive Micro-organism, microbe, fungus, bacteria, virus, classified, classification key, yeast, characteristic, microscope,</p> <p>To explain that animals which are better adapted to an environment are more likely to survive, reproduce and pass on characteristics to their offspring meaning the animal species will gradually change and evolve (giraffe with the tallest neck could reach more leaves to feed on)</p> <p>To 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>	<p>pupils should be taught to use the following practical scientific methods, processes and skills through the teaching of the programme of study content:</p> <p>planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary</p> <p>taking measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate</p> <p>recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs</p> <p>using test results to make predictions to set up further comparative and fair tests</p>	<p>Evolution – the way in which plants and animals have changed over millions of years.</p> <p>Inherited- the way a trait or characteristics is passed to offspring from parents.</p> <p>Variation – a change or small difference.</p> <p>Offspring – a person’s child/children or an animals young.</p> <p>Species- a group of closely related organisms that are very similar to each other.</p> <p>Adaptation- plants and animals have characteristics that make them suited to their environment.</p> <p>Fossil- the naturally preserved remains or traces of animals</p>	<p>What does evolution mean and why do animals evolve?</p> <p>How is an animal’s offspring similar to its parent?</p> <p>In what ways do animals and plants adapt to their environment?</p> <p>How does adaptation lead to evolution?</p> <p>How does adaptation increase an animal’s chance of survival?</p> <p>How have living things changed over time?</p> <p>What can happen to a native species when a new species is introduced to an environment?</p>



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<p>To explain why we do not have a complete fossil record</p> <p>To describe the story of the peppered moth and how this provides evidence for natural selection</p> <p>To explain how antibiotic resistant bacteria provide evidence for natural selection</p> <p>To explain why we can see evidence for natural selection in fast reproducing organisms like bacteria (e.g. antibiotic resistant bacteria and pesticide resistant insects)</p> <p>To explain how the introduction of a new species to an isolated environment can effect native species ( Dodo, Kakapo or Stephen's island wren)</p> <p>To compare the ideas of Darwin and Lamarck on evolution and inheritance.</p>	<p>reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of and a degree of trust in results, in oral and written forms such as displays and other presentations</p> <p>identifying scientific evidence that has been used to support or refute ideas or arguments</p>	<p>or plants that lived long ago.</p>	
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**Outcome.**

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