



No Limits  
To Learning!

**Topic Title:** Sail Away (Evolution and Inheritance)

**Year Group:** 6

**Academic Year:** 2021/2022

**Science Intent:**

Using a range of evidence, research and observations, the children will draw conclusions and make links about how plants and animals have evolved over time.

<p><b>Prior Scientific Learning/Linked Topics:</b> Y3 <i>The children will build on their knowledge of fossils from Year 3 to find out more about how living things on earth have changed over time.</i></p>	<p><b>Literacy Links (including texts/media used):</b> <b>WRITING TO ENTERTAIN:</b> Beetle boy <b>WRITING TO INFORM:</b> Darwin letters (formal/informal) Darwin's notes <b>POETRY:</b> Moth</p>	<p><b>Maths Links:</b></p> <ul style="list-style-type: none"> <li>• Measurement: conversion</li> </ul>
<p><b>Scientific Knowledge</b></p>	<p><b>Working Scientifically</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> </ul>	<ul style="list-style-type: none"> <li>• planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary</li> <li>• taking measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate</li> <li>• recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs</li> <li>• using test results to make predictions to set up further comparative and fair tests</li> <li>• reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results, in oral and written forms such as displays and other presentations</li> <li>• identifying scientific evidence that has been used to support or refute ideas or arguments</li> </ul>	



**Content:**

**Lesson 1**

- The children will recognise the difference between inherited and environmental characteristics and identify the characteristics inherited from their parents. Using the Beckhams as an example.

**Lesson 2**

- To recognise the term species, the children will look at characteristics all dogs share and their differences. They will use tablets to research height, weight, life span, temperament.
- The children will understand the difference between 'selective breeding' and 'evolution' by exploring cross breeds of dogs and the reasons behind this.

**Lesson 3**

- Children explore a cactus and consider how it's adaptations enable it to survive in the desert.

**Lesson 4**

- Identify how animals and plants are adapted to suit their environment in different ways and that adaptation may lead to evolution. Provide children with animal in small groups to discuss. Consider the adaption that meant it was suited to its environment and consider the impact of not having these characteristics.

**Lesson 5**

- Provide children with an unusual environment e.g. volcano, desert, ice, a cave dwelling. Consider what adaptations an animal would need to survive – supporting their reasons why.

**Lesson 6**

- Use secondary sources to find out about how the population of peppered moths changed during the industrial revolution (Research)

**Lesson 7**

- Through the eyes of Charles Darwin, the children will visit the Galapagos islands and draw conclusions about how finches have evolved over time. The children will practically demonstrate how their beaks evolved using tweezers (Pattern Seeking)

**Lesson 8**

- The children will research the life of Mary Anning and how her research challenged the way scientists had thought the natural world had developed.

**Lesson 9**

- The children will explore fossils as evidence to draw conclusions about how these animals survived on Earth millions of years ago.



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**Key Vocabulary:** At the beginning of each topic, the children have the opportunity to explore, learn and understand the key vocabulary. survival, species, evolution, environment, characteristics, offspring, variation, reproduce, selection, adaptation, evidence, inheritance, suited, fossils

**Stunning Start/Marvellous Middle/Fabulous Finish:**

Real life guess who

**OAA/Trips/Visits/Visitors:**

Exotic animal visit  
Eton museum  
Natural History Museum