
EVOLUTION IN A DAY

Guide to delivery of the day



A guide to delivery of the day:

To make the most of 'Evolution in a day' with your class, it is suggested that you begin with '**The Nature of Natural Selection**' activity first. This introduces students to the concept of evolution, using an interactive approach to aid learning. From then, the order of activities is up to you: choose from '**In the Land of Giants: The Galapagos Giant Tortoise**' and '**Amazing Adaptations: The Marine Iguana**'. Both offer an in-depth study into the adaptations of these iconic Galapagos species.

A lesson plan and complete set of resources are provided for each activity, all of which can be found in the 'Teacher Zone' (all of our teaching resources can be accessed for free after you create a log in) <http://www.discoveringgalapagos.org.uk/dg-teacher-zone/?tz=7-11#54727>

To further enhance learning, the '**Guide to Enrichment Activities**' offers a wealth of activities you can share with your class, as well as suggestions for reading and activities before the day, should you have extra time!

The table below gives a prescriptive outline of the day's activities as well as in-depth curriculum links.

Activity title	National Curriculum links	Outline of activity
<p>Starter activity:</p> <p>The Nature of Natural Selection</p> <p>Darwin's question – Why are their beaks shaped like this?</p>	<p>Science</p> <p><u>Lower KS2 Working scientifically</u></p> <ul style="list-style-type: none"> - asking relevant questions and using different types of scientific enquiries to answer them - reporting on findings from enquiries, including oral explanations <p><u>Upper KS2 Working scientifically</u></p> <ul style="list-style-type: none"> - identifying scientific evidence that has been used to support or refute ideas or arguments <p><u>Year 6 Evolution and Inheritance</u></p> <ul style="list-style-type: none"> - recognise that living things have changed over time - recognise that living things produce offspring of the same kind, but normally offspring vary and are not identical to their parents □ - identify how animals and plants are adapted to suit their environment in different ways and hat adaptation may lead to evolution <ul style="list-style-type: none"> - find out about how Charles Darwin and Alfred Wallace developed their ideas on evolution - compare how some living things are adapted to survive in extreme conditions 	<p>The concept of Natural Selection through evolution will be investigated in this activity. Children will be introduced to the phenomenon by focusing on how animals use camouflage as an effective method of species survival. They will be asked to consider characteristics and adaptations of species that aid survival. Discuss how Darwin came to realise that from one species of finch that colonised Galapagos, 13 different species were to evolve, depending on which island and habitat they live in. To facilitate understanding, children play a game - showing the effectiveness of camouflage in species of finch from one of their natural predators: the Galapagos hawk.</p> <p>They will go on to investigate the beaks of different birds and explain how they are adapted depending on their diet, and answer Darwin's question – Why is their beak shaped like that?</p> <p>Children will have the opportunity to write their own 'Why?' questions related to natural selection at the end, and to answer others' questions.</p>

<p>Then complete activities in preferred order:</p> <p>1. In the Land of Giants – The Galapagos Giant Tortoise</p> <p>Darwin’s question – Why do the tortoises look different?</p>	<p>Science</p> <p><u>Lower KS2 Working scientifically</u></p> <ul style="list-style-type: none"> - asking relevant questions and using different types of scientific enquiries to answer them - reporting on findings from enquiries, including oral explanations <p><u>Upper KS2 Working scientifically</u></p> <ul style="list-style-type: none"> - identifying scientific evidence that has been used to support or refute ideas or arguments <p><u>Year 4 Living things and their habitats</u></p> <p>Recognise that environments can change and that this can sometimes pose dangers to living things</p> <p><u>Year 6 Evolution and Inheritance</u></p> <ul style="list-style-type: none"> - recognise that living things have changed over time - recognise that living things produce offspring of the same kind, but normally offspring vary and are not identical to their parents - identify how animals and plants are adapted to suit their environment in different ways and that adaptation may lead to evolution <ul style="list-style-type: none"> - compare how some living things are adapted to survive in extreme conditions 	<p>This activity explores one of the Galapagos giants – the Galapagos giant tortoise. Endemic to these Islands, these huge reptiles have survived persecution by pirates and explorers to become one of the most recognised species of Galapagos. Children will have the opportunity to investigate how these giants have evolved to become separate species within the archipelago and how some people know merely from looking at one, which island it inhabits. They will model their own tortoise carapaces and decide which island habitat it best suits and why.</p> <p>This activity uses footage from the Discovering Galapagos website to aid children’s understanding.</p>
<p>2. Amazing Adaptations – The Marine Iguana</p> <p>Darwin’s question – How is the iguana able to feed in the sea?</p>	<p><u>Lower KS2 Working scientifically</u></p> <ul style="list-style-type: none"> - asking relevant questions and using different types of scientific enquiries to answer them - reporting on findings from enquiries, including oral explanations <p><u>Upper KS2 Working scientifically</u></p> <ul style="list-style-type: none"> - identifying scientific evidence that has been used to support or refute ideas or arguments <p><u>Year 4 Living things and their habitats</u></p> <p>Recognise that environments can change and that this can sometimes pose dangers to living things</p>	<p>This activity offers insight into one of the strangest, most iconic of animals in the Galapagos – the marine iguana. Children will explore how they evolved from their land ancestors into the marine reptiles we see today, and will be encouraged to develop their reasoning as to why this happened.</p> <p>Using photos taken of the iguanas with key questions about their adaptations, they will develop their own ideas and theories about their physical features, investigating how they are adapted to survive in the harsh environment of Galapagos.</p>

	<p><u>Year 6 Evolution and Inheritance</u></p> <ul style="list-style-type: none">- recognise that living things have changed over time- recognise that living things produce offspring of the same kind, but normally offspring vary and are not identical to their parents- identify how animals and plants are adapted to suit their environment in different ways and that adaptation may lead to evolution - compare how some living things are adapted to survive in extreme conditions	<p>If time allows, children will have the opportunity to design and make their own iguana 'raft' – resembling the rafts used by iguanas to travel across the ocean in order to colonise the islands.</p> <p>This activity uses footage from the Discovering Galapagos website to aid children's understanding.</p>
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