

Evolution and Inheritance: Theory of Evolution

<p>Aim: Identifying scientific evidence that has been used to support or refute ideas or arguments</p> <p>and</p> <p>Identify how adaptation may lead to evolution by examining the theories of evolution constructed by Darwin and Wallace.</p> <p>I can identify the key ideas of the theory of evolution.</p>	<p>Success Criteria: I can demonstrate understanding of how ideas about evolution developed over time.</p> <p>I can explain the terms adaptation, evolution and natural selection.</p>	<p>Resources: Lesson Pack</p> <p>Lolly sticks or alternatives to attach Theory of Evolution Scientist Masks to</p>
	<p>Key/New Words: Adaptation, environment, habitat, DNA, genes, adaptive traits, mutation, replication, accidental.</p>	<p>Preparation: Theory of Evolution Scientist Masks - as required Theory of Evolution Teacher Sheet - as required Theory of Evolution Pupil Sheet pre-cut into sections - as required Laminated differentiated Evolutionary Ideas Cards - as required</p>

Prior Learning: Children will have learnt about adaptation and adaptive traits in Lesson 2.

Learning Sequence

	<p>Key Vocabulary: Children reread their definitions for adaptation and evolution from the Evolution and Inheritance Key Vocabulary Activity Sheet completed in lesson 1. <i>Have your ideas changed? If so, how? What is adaptation? What is evolution? Who are the key scientists who came up with the idea of evolutionary change?</i></p>	
	<p><i>(Depending on the children's existing understanding, it may be advisable to shorten some of the following sections or discuss any misconceptions or errors in others.)</i></p> <p>Theory of Evolution: If possible have whole class on chairs in a circle. Read the Theory of Evolution Teacher Sheet while children enact and read out the ideas of different theorists and scientists using the Theory of Evolution Pupil Sheet and Theory of Evolution Scientist Masks (These can either be given to the children in advance or when that person is being referred to). Go through the Lesson Presentation slides as prompted on the Theory of Evolution Teacher Sheet.</p> <p><i>Check understanding of theories and ideas. How does this fit in with the ideas about inherited and adaptive traits? How is x's idea different to y's? Also address any misconceptions – for example children may not know what an academic 'paper' is.</i></p>	
	<p>Evolution: Children sort the differentiated Evolutionary Ideas Cards into categories and then independently write a brief paragraph summarising how the ideas changed over time for each of the categories. <i>(Conduct a mini-plenary, reading out good examples of summaries that emphasise the similarities and differences between ideas by paraphrasing key points and ideas.)</i></p> <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;">  <p>Children to sort cards into two categories: Natural Selection Adaptation and Evolution</p> </div> <div style="text-align: center;">  <p>Children to sort cards into the following categories: Natural Selection Adaptation and Evolution Inherited Traits Adaptive Traits</p> </div> <div style="text-align: center;">  <p>Children to sort cards into the following categories: Natural Selection Adaptation and Evolution Human Evolution Single Origin of Life Inherited Traits Adaptive Traits</p> </div> </div>	

Taskit

- Diaryit:** Children write a diary entry from the point of view of either Darwin or Wallace, reflecting on their investigations that led them to the idea of evolution.
- Questionit:** Children sit in ability groups. Each to be given a copy of the differentiated [Evolutionary Ideas Fact Sheets](#). Children select 4 or 5 of the differentiated Evolutionary Ideas Question Cards placed in the middle of the table.
- Answerit:** Children read statements on the differentiated [Evolutionary Ideas True or False Activity Sheets](#) and then check if they are true or false using the differentiated Evolutionary Ideas Fact Sheets. Children record answers on the activity sheet.
- Singit:** Horrible Histories, Series 4, Episode 2 - song called 'Charles Darwin: Natural Selection'. Children learn the lyrics and sing along, reinforcing their understanding of the key concepts in this lesson.
- Researchit:** Children to research one of the scientists and find out more about them. Children complete a [Great Scientists Mini-Biography Activity Sheet](#).