

Introduction

This unit builds on the children's learning from the Year 3 Rocks unit as well as the Animals including Humans and Living Things and their Habitats units. As such, it is important that children have the appropriate understanding of fossils, habitats and human development in order to grasp the concepts and ideas presented to them in these lessons. Children will learn about variation and adaptation. They will be able to explore how both Charles Darwin and Alfred Wallace separately developed their theories of evolution. They will examine the scientific evidence from plants and animals that has been gathered to support the theory of evolution.



Home Learning

Living Fossils: Children sort living things according to whether or not they are a living fossil.

Missing Transitional Forms: Children draw what they think the transitional form between living things would have looked like.



Wider Learning

[This website](#) contains multiple video links that will further embed the key concepts in this unit.

[The Natural History Museum](#) has the largest collection of fossils in the UK and houses the Darwin Centre.

[Visit Down House](#) where Charles Darwin lived and wrote *On the Origin of the Species*. His notebooks from his time on the HMS Beagle can be explored as well as the gardens he used as his 'outdoor laboratory'.

Assessment Statements

By the end of this unit...

...all children should be able to:

- Identify inherited traits and adaptive traits.
- Understand that adaptations are random mutations.
- Examine fossil evidence supporting the idea of evolution.
- Identify the difference between selective and cross-breeding.

...most children will be able to:

- Develop an understanding of the development of evolutionary ideas and theories over time.
- Explain how human evolution has occurred and compare modern humans with those of the same genus and family.
- Understand that adaptation and evolution is not a uniform process for all living things.
- Give examples of selective and cross-breeding.

...some children will be able to:

- Explain the terms adaptation, evolution and natural selection and use these in context.
- Describe how living things evolve via the process of natural selection.
- Explain in simple terms what genes and DNA are.
- Investigate the ethical issues of human intervention in the process of evolution by natural selection.

Lesson Breakdown

Resources

1. Inheritance

Recognise that living things produce offspring of the same kind, but normally offspring vary and are not identical to their parents in the context of inheritance.

- I can explain the scientific concept of inheritance.



2. Adaptation

Identify how animals and plants are adapted to suit their environment in different ways in the context of environmental variation.

- I can demonstrate understanding of the scientific meaning of adaptation.

- Glue sticks
- Scissors



3. Theory of Evolution

Identifying scientific evidence that has been used to support or refute ideas or arguments; Identify how adaptation may lead to evolution by examining the theories of evolution constructed by Darwin and Wallace.

- I can identify the key ideas of the theory of evolution.

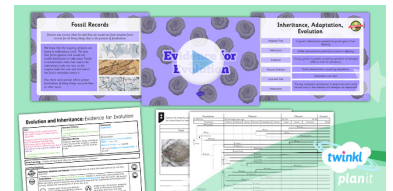
- Lolly sticks or alternatives to attach **Theory of Evolution Scientist Masks** to



4. Evidence for Evolution

Identifying scientific evidence that has been used to support or refute ideas or arguments; Recognise that living things have changed over time and that fossils provide information about living things that inhabited the Earth millions of years ago in the context of the evolution of plants and animals.

- I can identify evidence for evolution from fossil records.



5. Evidence for Evolution: Humans

Identifying scientific evidence that has been used to support or refute ideas or arguments; Recognise that living things have changed over time and that fossils provide information about living things that inhabited the Earth millions of years ago in the context of the evolution of human beings.

- I can understand how human beings have evolved.



6. Adaptation, Evolution and Human Intervention

Identify how adaptation may lead to evolution by examining the advantages and disadvantages of specific adaptations and the role of human intervention in the process of evolution.

- I can explain how adaptations can result in both advantages and disadvantages.
- I can explain how human intervention affects evolution.

- Glue sticks
- Scissors

