

Key Vocabulary

<b>Evolution</b>	<b>Adaptation</b> over a long period of time
<b>Natural selection</b>	The process where organisms that are better adapted to their environment tend to survive and produce more offspring
<b>fossil</b>	The remains or imprint of a pre-historic animal or plant embed-
<b>Adaptive traits</b>	Genetic features that help living things to survive
<b>Inherited traits</b>	These are traits you get from your parents. Within a family, you will often see similar traits e.g. curly hair
<b>Inheritance</b>	This is when <b>characteristics</b> are passed on to offspring from their parents
<b>variation</b>	The differences between individuals within a species
<b>characteristics</b>	The distinguishing features or qualities that are specific to a species
<b>adaptation</b>	An <b>adaptation</b> is a trait (or <b>characteristic</b> ) changing to increase a living thing's chances of surviving and reproducing

Key knowledge



**Offspring**  
Animals and plants produce **offspring** that are similar but not identical to them. **Offspring** often look like their parents because features are passed on.

**Variation**  
In the same way that there is **variation** between parents and their **offspring**, you can see **variation** within any species, even plants.

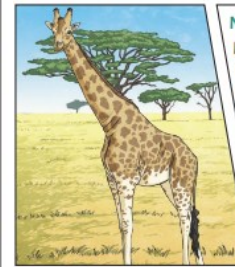
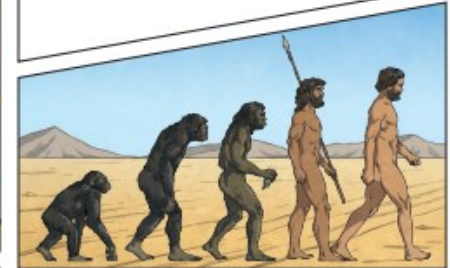


**Adaptive Traits**  
**Characteristics** that are influenced by the **environment** the living things live in. These **adaptations** can develop as a result of many things, such as food and climate.











**Inherited Traits**  
Eye colour is an example of an **inherited trait**, but so are things like hair colour, the shape of your earlobes and whether or not you can smell certain flowers.

**Evolution** is the gradual process by which different kinds of living organism have developed from earlier forms over millions of years. Scientists have proof that living things are continuously **evolving** - even today!



**Natural Selection**  
Fossils of giraffes from millions of years ago show that they used to have shorter necks. They have gradually **evolved** through **natural selection** to have longer necks so that they can reach the top leaves on taller trees.

Living Things	Habitat	Adaptive Traits
polar bear 	arctic 	Its white fur enables it to camouflage in the snow.
camel 	desert 	It has wide feet to make it easier to walk in the sand.
cactus 	desert 	It stores water in its stem.
toucan 	rainforest 	Its narrow tongue allows it to eat small fruit and insects.

What we will learn

- 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
- To recognise that living things produce offspring of the same kind, but normally offspring vary and are not identical to their parents
- To identify how animals and plants are adapted to suit their environment in different ways and that adaptation may lead to evolution

Investigation

To identify evidence from fossil research to support ideas about the animal and compare to modern animals



Other Famous Scientists

Professor Nazneen Rahman



Alfred Russel Wallace and Charles Darwin