



Endpoints for Science

Year 6 – Evolving Earth



During this project, we learn what fossils are, revisit how they form and explore how the fossil record helps us understand living things. We discuss evolution and the work of Charles Darwin and Alfred Russell Wallace, learning that life on Earth is related and has changed over time. We learn about inheritance, variation, adaptation, natural selection and survival of the fittest, before investigating plant and animal adaptations.

What I know and can explain

Fossils are the remains of once-living things that have been preserved as rock. They can also preserve traces of life such as footprints, tracks, dung or burrows.

The fossil record shows that the Earth's environment changed over time.

The theory of evolution was developed in the 19th century by the naturalists Charles Darwin

The theory states that: all life on Earth has evolved from simple life forms to more complex ones over time; all life on Earth has common ancestors and is therefore related, and; living things with characteristics most suited to their environment are more likely to survive and reproduce.

Inherited characteristics, such as eye colour, height, hair colour and type, nose shape and freckles, are features that offspring acquire from their parents' genes.

Offspring inherit one copy of each gene from the female parent and one from the male parent.

Variation is the natural differences in characteristics between individuals of the same species.

An adaptation means that they have special features that help them to survive

Natural selection is also known as 'survival of the fittest'

Useful Vocabulary

Adaptation - A physical or behavioural characteristic that allows a living thing to better survive in its habitat

Ancestor - A living thing from which others have evolved

Characteristic - A quality or physical feature of a living thing

Deoxyribonucleic acid (DNA) - The inherited material inside all cells that carries the instructions needed for that living thing to develop and survive

Evolution - The process by which complex living things developed from simple life forms during the history of Earth

Gene - A small section of DNA that acts as instructions for a specific inherited characteristic, such as eye colour

Inheritance - When living things pass on characteristics to their offspring following reproduction

Variation - The differences in characteristics between individuals of the same species