

Science Knowledge Organiser



Topic: Evolution and Inheritance

Year 6: Spring and Summer

Strand: Biology

What should I already know?

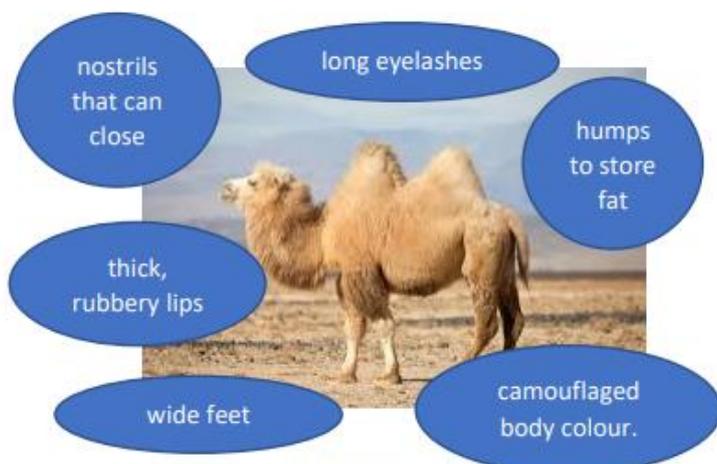
- There are different types of rocks
- Fossils can be found within rocks
- Parents reproduce to carry on the line of the species
- Some offspring look similar to their parents while others do not.

Key vocabulary

evolution	The way in which plants and animals have changed over millions of years.
offspring	A person's child/children or an animal's young.
inherited	The way a trait or characteristic is passed to offspring from parents.
characteristics	A distinguishing trait, feature or quality.
variation	A change or small difference.
adapted	Animals and plants are adapted to their environment. Their bodies are suited to the way they live.
environment	The conditions in which a living thing exists.
species	A group of closely related organisms that are very similar to each other. We are the human species.
fossil	The naturally preserved remains or traces of animals or plants that lived long ago.

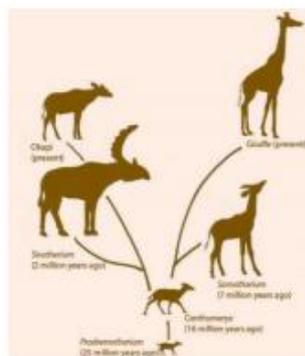
Adaptation

Plants and animals have characteristics that make them suited to their environment. E.g. camel:



Evolution

Adaptation can lead to evolution if the environment changes. Animals and plants with variations that are best suited survive in greater numbers to reproduce and pass their characteristics on to their young. This is natural selection. Over time these inherited characteristics become more dominant within the population.



Giraffes have evolved to have a longer neck through natural selection. This means they can reach food on the higher branches of trees.



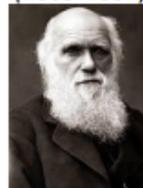
Fossils give us evidence of what lived on the Earth millions of years ago.

By studying fossils, scientists can put together how a plant or animal looked. They can identify what the animal ate, where it lived and how it died.



Living things produce offspring of the same kind. The offspring are not normally identical to their parents and vary from each other.

Charles Darwin
(1809-1882)



Charles Robert Darwin was born in Shrewsbury and was an English naturalist and biologist. His scientific theory of evolution by natural selection became the foundation of modern evolutionary studies.