

ALDER COPPICE PRIMARY SCHOOL KNOWLEDGE ORGANISER

Subject: Science

Year: 6

Unit 5: Evolution and Inheritance

**Links to: Y6
Classification**

What I Should Already Know:

- That plants and animals are living things and be classified in different ways
- About different fossils and how they are formed.

Skills and Enquiry:

- Who was Charles Darwin and what did he do?
- What is evolution?
- What is inheritance?
- What is adaptation?
- How do humans change adaptation?

Unit Specific Vocabulary:

adaptation – the process by which an organism or species becomes better adapted to its environment

evolution - the process by which different kinds of living organisms are believed to have developed from earlier forms during the history of the earth

inherit - derive (a quality, characteristic, or predisposition) genetically from one's parents or ancestors

natural selection – the theory that living things that are better adapted to their environment tend to survive and bear offspring

naturalist – an expert in the study of natural history

selective breeding – a process used by humans to selectively develop the traits of living things

theory – a system of ideas intended to explain something.

What I should know by the end of this Unit:

- That living things have changed over time and that fossils provide information about living things that inhabited the Earth millions of years ago
- That inheritance means that offspring bear the traits of their parents or ancestors
- That animals and plants are adapted to suit their environment in different ways and that adaptation may lead to evolution
- That humans can affect adaptation by selectively breeding plants and animals

Key Facts:

What was Darwin's theory of evolution?

The theory of evolution by natural selection (first formulated in Darwin's book "On the Origin of Species" in 1859) is the process by which organisms change over time as a result of changes in inheritable physical or behavioural traits.

What is evolution?

Evolution is a process that has taken place over millions of years. It is linked to the process of natural selection.

What is inheritance?

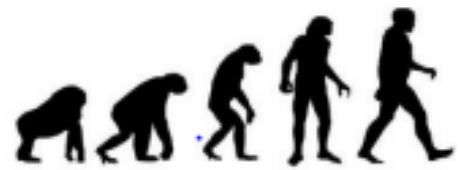
Inheritance refers to the characteristic traits that are genetically passed to offspring from their parents e.g. hair colour, eye colour, height etc. Darwin refers to this as natural selection when the strongest traits survive over generations.

What is adaptation?

the natural process by which an animal or plant becomes fitted to its surroundings, or environment.

Adaptation, evolution and human

intervention Consider: are all adaptations good? What is the impact of human intervention on evolution? What impact does this have on the wellbeing of the world and its inhabitants?



Important scientists

Charles Darwin

Charles Robert Darwin (12 February 1809 – 19 April 1882) was an English born evolutionary biologist, naturalist and geologist who was best known for his contributions to the science of evolution. He first formulated his theory in his book "On the Origin of Species" in 1859.

