

Science Focus:

Evolution and Inheritance

Year Group:

Autumn Term

6

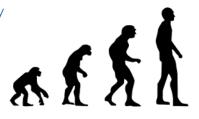
Key Knowledge:

How living things have changed over time.

- The types of animals that live on Earth have changed over time.
- These animals have adapted to suit life on Earth now.

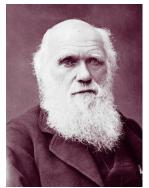


- Fossils are the remains of ancient animals and plants.
- Fossils give palaeontologists information about how plants and animals used to look.
- **Evolution** is the process by which different living thing have developed over time. An example of this is that Scientists believe humans have evolved from chimps.



Significant Person – Charles Darwin (Theory of Evolution)

- Charles Darwin is a famous Scientist.
- He worked with finches (birds) that lived on the Galapagos islands.
- Darwin found that some finches had developed/ **adapted** different beaks in order to eat different food.
- Darwin's theory is that all species can develop/ adapt to increase their ability to survive.



Family and their links.

- Animals and humans produce offspring (babies).
- Offspring are similar and often look like their parents because of inherited Traits.
- However not all adults and children will have the same coloured hair or eyes.

Animal and Plant adaptions.

Natural Selection

- The process where organisms **adapt** to suit their surroundings and to survive.
- They adapt to suit the environment in which they live (adaptive Traits).

Examples:

Polar Bear – Has white fur to camouflage against the snow. Cactus – It stores water in its stem to stay hydrated in the desert.

Key Vocabulary:

Offspring – The young animal or plant that is produced by the reproduction of that species.

Inheritance – This is when characteristics are passed on to offspring from their parents.

Variations – The differences between individuals within a species.

Characteristics – The distinguishing features or qualities that are specific to a species.

Adaptation – An adaption is a trait changing to increase the chances of surviving.

Habitat – A specific area or place in which animals and plants can live.

Environment – An environment contains many habitats and includes areas where there are both living and non-living things.

Evolution – Adaptation over a very long time.

Natural Selection – The process where organisms that are better adapted to their environment tend to survive and produce more offspring.

Fossil – The remains or imprint of a prehistoric plant or animal embedded in rock and preserved.

Adaptive Traits – Genetic features that help a living thing to survive.

Inherited Traits – These are traits you get from your parents. Within a family, you will often see similar traits. E.g. hair colour.

Diagrams and Symbols: Life Cycle of Humans — Feetus in the womb Baby / Infant the womb Baby / Infant the womb Baby / Infant the womb Childhood Adolescent / Teenager (3 - 5 years) Primary School (65 - 12 years) (65 - 55 years) (65 - years) (65 - years)

Possible Experiments:

An investigation into their family tree and the inherited traits transferred between generations.

Make their own fossils.

How fossils have changed over time.

https://www.stem.org.uk/resources/elibrary/resource/36611/fossils