



Science Knowledge Organiser

Evolution and Inheritance

This is biology. Biology is the study of living things.

Key Vocabulary

- offspring
- inheritance
- variation
- habitat
- fossils
- adaptations
- evolution

Prior Knowledge

I know that most living things live in habitats to which they are suited. I can describe how different habitats provide for the basic needs of animals and plants and how they depend on each other.

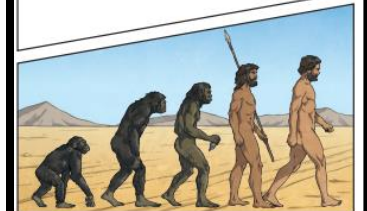
- I can describe how fossils are formed when things that have lived are trapped within rocks.
- I know that environments can change and that this can sometimes pose dangers to living things.

Key Knowledge

Fossils are the preserved remains, or partial remains, of ancient animals and plants. Fossils let scientists know how plants and animals used to look millions of years ago. This is proof that living things have **evolved** over time.



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!



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

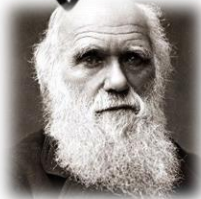
Characteristics that are influenced by the **environment** the living things live in. These **adaptations** can develop as a result of many things, such as food and climate.



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.

Scientists



Charles Darwin



Mary Anning



Telma G. Laurentino



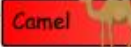
Alfred Wallace



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.

Adapted to Warm Environments



Fennec Fox



Kangaroo



Penguin



Seal



Polar Bear



Adapted to Cold Environments