

# Science Knowledge Organiser—Year 5/6 Cycle B

## Evolution and Inheritance



**inherit**—when features are passed on from parents to offspring



**adaptation** - changes or special features of a living thing to help it live in a habitat



**evolved** —how living things gradually change over time



**natural selection** — survival and reproduction of the fittest



**ancestor** — a person or living thing an organism is descended from



**fossil** —the remains or impression of a prehistoric animal or plant embedded in rock

### Characteristics and Variation

A characteristic describes how something looks or how it behaves. **Characteristics** can be passed on from parents to their offspring, meaning that they can be **inherited**. They can include hair colour, eye colour and height. However, **environmental** factors are important too.



### Adaptations

Plants and animals have numerous **adaptations** which help them to survive in their **habitats**.

- Camels have humps to store food, two rows of eyelashes and small slits for nostrils
- Epiphytes are plants which can grow on the surface of another plant
- Some plants contain toxic minerals to protect themselves from predators
- Other plants can store water, trap insects and smother other plants



### Charles Darwin, the Galapagos Islands and Human Evolution

Charles Darwin was a famous naturalist who studied finches and tortoises on the Galapagos Islands. He suggested that some species may share a common ancestor and evolve to suit their habitats. He called this process natural selection.

**Australopithecus**  
**Homo habilis**  
**Homo erectus**  
**Homo heidelbergensis/ neanderthalensis**  
**Homo sapiens**

3.6 million years ago  
↓  
Human Evolution  
↓  
Today

### Fossils

Mary Anning was a palaeontologist who found and collected many fossils along the Jurassic Coast in Dorset. She was the first person to uncover a full ichthyosaurus skeleton.

