

## Evolution, Inheritance and Classification

*In this unit children will learn about the theory of evolution developed by Charles Darwin. They will also learn how animals and plants are classified, based on the Linnaean classification system. They will undertake research into different plants and animals and devise their own keys to sort and classify species.*

### Background information

- *The theory of evolution by natural selection was developed by an English scientist, Charles Darwin, in the 19<sup>th</sup> century. He published his book "On the Origin of Species" in 1859.*
- *In 1835 Darwin visited the Galapagos Islands. By observing the finches on the islands, he started to develop his theory. He used fossil records to ascertain that humans had evolved from other animals.*
- *Carl Linnaeus, a Swedish scientist, developed a system of classifying animals and plants that is still used today.*

### Knowledge and Understanding

In this unit pupils will learn:

- How life on Earth has evolved over time by the processes of natural selection and adaptation.
- That humans evolved from other great apes.
- How scientists have used fossil records and DNA to evidence the theory of evolution.
- How scientists organise and classify all living things into different Kingdoms and Species.

### Enquiry skills and Key concepts

- Research information about the life and work of two key scientists – Charles Darwin and Carl Linnaeus.
- Classify animals and plants using scientific keys.
- Make detailed observations, record and make drawings of the characteristics of plants and animals.
- Identify plants and animals based on their characteristics.

### Key Vocabulary:

**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.

**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.

**Characteristics:** the distinguishing features or qualities that are specific to a species.

**Variations:** The differences between individuals within a species.

**Adaptation:** An adaptation is a trait (characteristic) changing to increase a living thing's chances of surviving and reproducing.

**Habitat:** Refers to a specific area or place in which particular animals and plants can live.

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