

# Knowledge Organiser Science Year 6

## Evolution and inheritance

### Characteristics are passed on

Living things produce offspring of the same kind. The offspring are not normally identical to their parents and vary from each other.



### Fossils

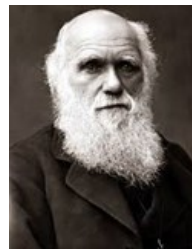


Fossils are the remains of living things which are found in sedimentary rocks. These rocks form in layers so animals and plants can get trapped between the layers. They provide information about living things that inhabited the Earth millions of years ago and can show the evolution of species over time.

### Key Vocabulary

<b>adaption</b>	Animals and plants are adapted to their environment. Their bodies are suited to the way they live.
<b>characteristics</b>	A distinguishing trait, feature or quality.
<b>environment</b>	The conditions in which a living thing exists.
<b>evolution</b>	The way in which plants and animals have changed over millions of years.
<b>fossil</b>	The naturally preserved remains or traces of animals or plants that lived long ago.
<b>inherited</b>	The way a trait or characteristic is passed to offspring from parents.
<b>mutation</b>	A mistake or a change in a living thing's DNA
<b>offspring</b>	A person's child/children or an animal's young.
<b>Palaeontologist</b>	Scientists that study the remains of plants or animals that lived millions of years ago.
<b>species</b>	A group of closely related organisms that are very similar to each other. We are the human species.
<b>variation</b>	A change or small difference.

### Evolutionary Pioneers



Charles Darwin  
(1809-1882)



Alfred Wallace  
(1823-1913)



Mary Anning  
(1799 - 1847)

### Evolution

Adaptation can lead to evolution if the environment changes. Animals and plants with variations that are best suited survive in greater numbers to reproduce and pass their characteristics on to their young. This is natural selection. Over time these inherited characteristics become more dominant within the population.

### The evolution of the giraffe through natural selection

