

# Y6 - Epic Evolution

## What is the theory of evolution?

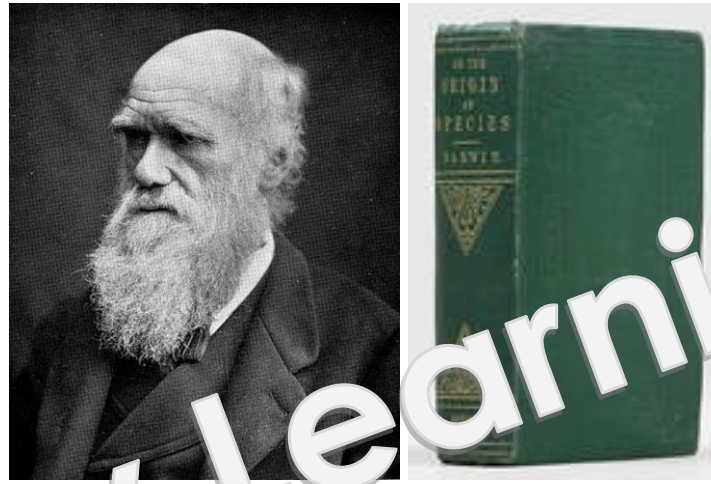
**Evolution** is a process of change that takes place over many generations, during which species of animals or plants slowly change some of their physical characteristics. This is because living things produce offspring of the same kind, but normally offspring vary and are not identical to their parents.

It occurs when there is competition to survive. The process by which species of animals and plants that are best adapted to their environment survive and reproduce, while those that are less well adapted die out is called **natural selection**.

**Difference** within a species (for example between parents and offspring) can be caused by **inheritance** and **mutations**.

**Inheritance** is when characteristics are passed on from one generation to the next.

**Mutations** in characteristics are not inherited from the parents and appear as new characteristics.



### Charles Darwin Timeline

1809	Charles Darwin was born in Shrewsbury, England.
1825	He was sent to the University of Edinburgh to become a doctor like his grandfather, father and brother. However, he did not enjoy it and failed to become a doctor.
1828	Charles attended the University of Cambridge to become a vicar - another respected profession - but he was more interested in learning about nature and animals.
1831-1836	He set sail on the HMS Beagle (captained by Robert FitzRoy) for a round the world voyage. Darwin was the ship's naturalist who explored, collected and recorded information about the rocks, plants and animals found on the trip.
1859	Darwin published his theory of evolution. His book was called 'On the Origin of Species'.
1882	Charles Darwin died and was buried in Westminster Abbey.

### Key vocabulary:

**Adaptation:** The process of change so that an organism or species can become better suited to their environment.

**Characteristic:** A feature, trait or quality (for example: size, shape, colour) of a plant or animal.

**Classify:** To put things into groups.

**Environment:** The surroundings or conditions in which an animal or plant lives.

**Extinct:** An animal or plant species that has died out and is no longer present in the world population, such as dinosaurs.

**Fossil:** The hard remains or impression of a prehistoric plant or animal embedded in rock and preserved.

**Gene:** Part of a cell that controls characteristics of plants and animals.

**Naturalist:** A person who studies the natural world.

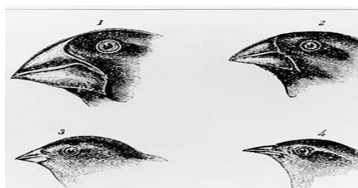
**Offspring:** A person's child or an animal's young.

**Palaeontology:** The study of fossils as a guide to the history of life on Earth.

**Species:** A group of related organisms that have common characteristics and can



**Evolution**



**Adaptation**



**Darwin's journey on the HMS Beagle**