

# Year 6: Evolution and inheritance

## KEY VOCABULARY

### Fossils :

Fossils provide information about living things that inhabited the Earth millions of years ago.

## How do fossils provide evidence for Evolution?

- \* Fossils provide physical records of organisms that are not alive today.
- \* These are very helpful for scientists to study body structures of ancient organisms and relate them to modern species.
- \* Fossils also are evidence of the rate of evolutionary change.
- \* Fossils in intermediate stages between species and their ancestors give clear evidence of evolution.



Fossils of feathered dinosaurs found in China reveal some evolutionary stages between dinosaurs and birds.

### Adaptation:

Identify how animals and plants are adapted to suit their environment in different ways and that adaptation may lead to evolution.



### Variation :

Recognise that living things produce offspring of the same kind, but normally offspring vary and are not identical to their parents

Different offsprings, from the same parents.



### Charles Darwin :



The first person who explained how evolution happens was Charles Darwin with his scientific theory of natural selection. He published his scientific theory of natural selection in a book called 'On the Origin of Species' in 1859. Darwin's theory explained how every living thing is connected in a family tree that stretches back billions of years to the beginning of life on Earth.



**Adaptation**—How living things are specialised to suit their environment.



**Evolution**—The process by which living things can gradually change over time.



**Fossil**—the remains of ancient life that have been preserved by natural processes.



**Inheritance**—The process of passing on features from parents to offspring.



**Natural Selection**— a process by which a species changes over time in response to changes in the environment, or competition between organisms, in order for the species to survive.



**Offspring**— the young born of living organisms.



**Species**—A group of living things with very similar characteristics that are capable of producing fertile offspring.



**Variation**—The differences between living things in a species