

Charles Darwin

1

There can be no doubt that the English naturalist Charles Darwin (1809-82) is among the greatest scientists of all time. He was the person who discovered that all living things on Earth share the same ancestry, and that the different species have evolved extremely slowly over many millions of years. This was a shocking idea for most people in the nineteenth century, but it now forms the basis of modern biology.

At the heart of the idea was the proposition that mutations take place in every species, giving them new characteristics. Through a process that Darwin called ‘natural selection’, mutations that give living things a better chance of survival are passed on from generation to generation.

Darwin was interested in plants and animals from an early age, and at university in Cambridge he had a rather unusual hobby: collecting beetles. Shortly after the end of his studies, aged twenty-two, he received an invitation to join a scientific expedition along the coast of South America on a ship named the *HMS Beagle*. He saw the voyage as a great opportunity to develop a career as a naturalist: little did he know that it would also change the way people thought about the natural world.

During the five-year journey on the *Beagle*, Darwin’s most important studies of plants and animals took place in the Galapagos Islands. He was puzzled by the fact that islands close to each other in the Galapagos group were home to different species of bird and tortoise, and that each of these species was perfectly adapted to its local environment.

2

When the *Beagle* returned to England in 1836, these observations began to lead Darwin towards his revolutionary theories. Although they were quite well developed by the end of the 1830s, Darwin waited almost twenty years before publishing them because he knew they would be controversial.

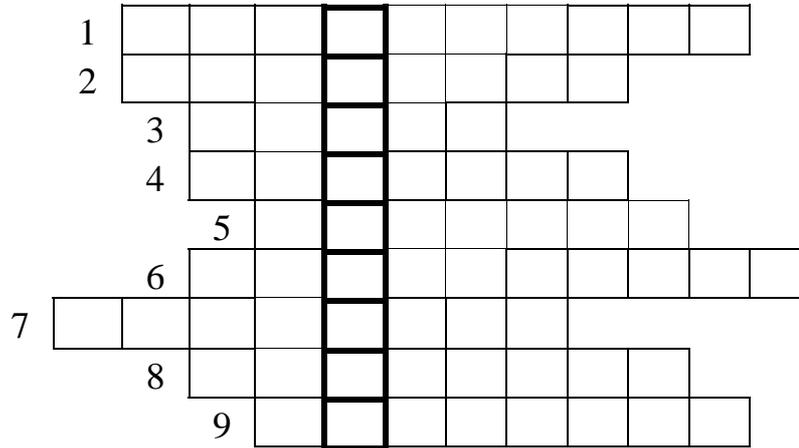
Scientific ideas at the time were closely linked to religious ideas. It was widely believed that different species of animal were not related to each other, and had remained unchanged since their creation by God only a few thousand years previously – but Darwin’s idea was that all living things shared the same ancestry, and had all gone through changes over many millions of years. The part of his theory that caused greatest anger among religious people was the proposition that human beings, rather than having been placed by God in a superior position above and outside the natural world, were in fact descended from monkeys.

Although a great scientist, Darwin was not a great romantic. In the 1830s, before he married Emma Wedgwood, he drew up a list of the pros and cons of having a wife. The disadvantages he wrote down included ‘less money for books’ and ‘terrible loss of time’, while the advantages included ‘constant companion and a friend in old age ... better than a dog’. Ms Wedgwood’s thoughts on the matter are not known, but we do know that the couple had ten children, born between 1839 and 1856.

Charles Darwin

A

Fill the gaps below to complete the name of Darwin's most important idea ('the theory of _____').



1. After university, Darwin joined a five-year scientific _____ to South America on the HMS *Beagle*.
2. Part of what Darwin called 'natural selection' is the idea that certain mutations give living things a better chance of _____.
3. For Darwin, one of the disadvantages of marriage was having less money for _____.
4. Before Darwin, scientists mostly believed that different species of animals were not _____ to each other.
5. He showed that human beings were not above and _____ the natural world.
6. He was a great _____.
7. He believed that animals and plants had been on Earth for _____ of years, not just a few thousand.
8. His ideas were very _____ for most people in the nineteenth century.
9. Darwin discovered that all living things share the same _____.

Charles Darwin

WORKSHEET C

B

Below is a short text written by a young British schoolgirl after a trip to see a museum exhibition on the subject of Charles Darwin. The text contains fifteen mistakes. Can you find and correct them?

TRIP TO THE NATURAL HISTORY MUSEUM

Last Friday we've all been to the Natural History Museum at London to see an exhibition of Charles Darwin and theory of evolution.

Darwin was a famous naturist who said that human beings were related by monkeys, which was shock for many people in nineteenth century, but now almost everyone accept the idea.

The exhibition contained some dead birds who Darwin collected in the Galapagos Islands in 1830s - these birds are preserved for about 170 years!

The ship Darwin travelled in to south America called the *Beagle*. As well as the Galapagos Islands he visited Argentina and Chile, where he has also studied a lot of animals and plants.

Charles Darwin

WORKSHEET D

TRIP TO THE NATURAL HISTORY MUSEUM

Last Friday **we all went** to the Natural History Museum **in** London to see an exhibition **about/on** Charles Darwin and **the** theory of evolution.

Darwin was a famous **naturalist** who said that human beings were related **to** monkeys, which was **shocking** for many people in **the** nineteenth century, but now almost everyone **accepts** the idea.

The exhibition contained some dead birds **that** Darwin collected in the Galapagos Islands in **the** 1830s - these birds **have been** preserved for about 170 years!

The ship Darwin travelled in to **South** America **was** called the *Beagle*. As well as the Galapagos Islands he visited Argentina and Chile, where he **also studied** a lot of animals and plants.