





Charles Darwin is famous for his <u>theory</u> of <u>evolution</u> by natural selection – a theory that helps us explain life on Earth.

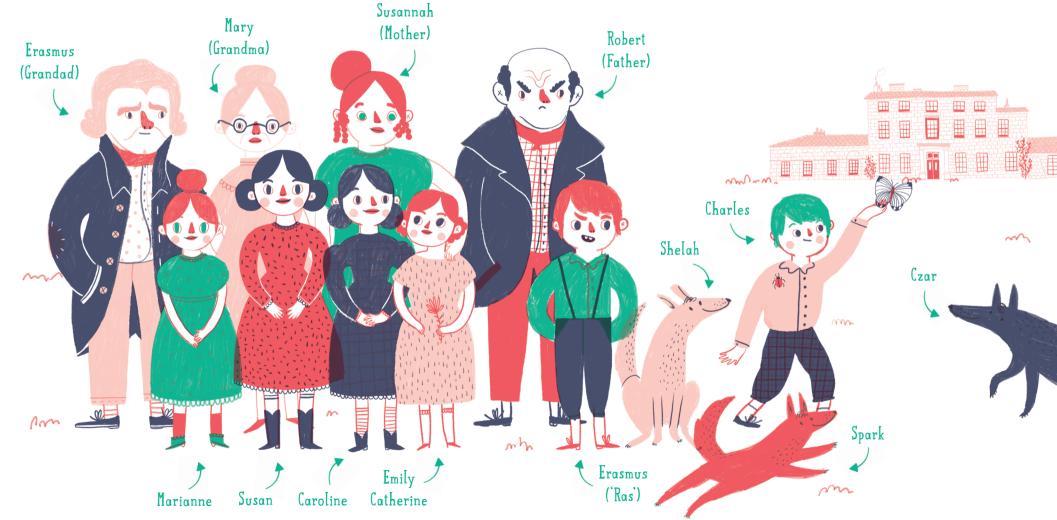
Charles' idea that living things change over time and <u>adapt</u> to the place where they live is one of the most important discoveries in science. In the 1800s and 1900s, it changed the way people thought about the world.

The theory of evolution by natural selection did not come to Charles in one 'lightbulb moment'. It was the result of many decades of patient work, building on the ideas of scientists who had gone before him.





As he was growing up, no one would have guessed that young Charles was going to change the world. He was born in 1809 into a large and wealthy family. The Darwins lived in Shrewsbury, England, in a big house called the Mount. Charles grew up with four sisters and a brother. Like every other rich boy in nineteenth-century England, he enjoyed tearing about the countryside, riding, hunting, birdwatching and fishing.



The following year, Charles was sent to a boarding school. It was rules, rules, rules. He hated all the lessons he had to learn, and continued to get up to mischief instead. Charles was happiest when he was alone outdoors.

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The headmaster got cross with Charles for wasting his time outside when he should have been learning Latin and Greek. But Charles was developing a passion for collecting and an eye for detail that would one day help him to understand nature in a brand new way.

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I loved to go exploring and collecting in the countryside.

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Charles clearly wasn't going to cut it as a doctor, so his dad let him leave Edinburgh. It was time for Plan B – studying at the University of Cambridge to become a <u>clergyman</u>.

Charles had a great time. Once again, he found a group of friends who were interested in the natural world. He spent more time studying plants than religion, and got a reputation as one of the best beetle-collectors in Cambridge.

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One day while out 'beetling', Charles spotted a beauty hiding under some bark. But he already had a rare beetle in each hand, so he popped one of them into his mouth so he could pick up the third.

To my unspeakable disgust and pain, the little inconsiderate beast squirted acid down my throat!

NhA

Charles spat out the beetle and watched in dismay as the third beetle got away too!

The voyage would be the biggest event of Charles' life, but first he had to meet Captain Fitzroy. The meeting seemed to go well. It was only later that Charles found out he almost lost the job because of the shape of his nose!



When everything was agreed, Charles rushed around buying equipment for the two-year voyage:



Little did Charles know, it would actually be five years before he returned to England.

On 27 December 1831, HMS *Beagle* finally set sail. Even though Charles was often sea-sick, he enjoyed living on the ship. He kept a diary for the entire voyage, as well as writing hundreds of pages of notes and letters.

Mid-Atlantic

Galápagos

Islands

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Plymouth

Rio de

Janeiro

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Bay of Biscay

Cape Verde

<u>Plymouth, Dec 1831</u> These two months in Plymouth were the most miserable which I ever spent.

<u>Bay of Biscay, Dec 1831</u> I found the only thing my stomach would bear was biscuit & raisins.

1831–1835, England to

1835–1836, Galápagos Islands back to England

Equator

Australia

Galápagos Islands

(via Australia)

<u>Cape Verde, Jan 1832</u> Collecting loads of amazing octopuses. Why would God put so much beauty out here, where there is no one to see it?

<u>Mid-Atlantic, Feb 1832</u> I find a ship a very comfortable house... if it was not for sea-sickness the whole world would be sailors.

<u>Equator, Feb 1832</u> Those that have never crossed the <u>Equator</u> are dunked, shaved and treated roughly. Great fun.

When Charles saw HMS Beagle for the first time, he was amazed at how small the ship was. Sixty-five crew members and nine passengers would soon be crammed onboard. Charles' hammock hung above a table, less than a metre from Skylights for the the cabin ceiling cabins below 0111111111 Newly built cabins for the crew Mess tables Capt. FitzRoy's (where the sailors ate) m cabin m nn Water tanks m . 28 metres long

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Sick bay

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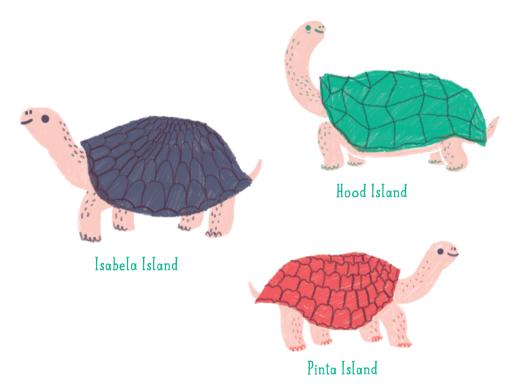
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Charles noticed that the plants and animals looked a bit like those he had seen on the mainland, but with some important differences. Even between the individual islands, Charles could spot differences.

Some of the oddest inhabitants were the enormous tortoises. These lumbering giants were large enough to ride and they hissed when anyone got too close to them!



The governor of the Galápagos Islands told Charles that he could tell which island a tortoise came from just by looking at the shape of its shell.



This got Charles thinking, and for the last two years of his voyage he wondered about the <u>origins</u> of these various species. But it wouldn't be until he got home that he would realise just how important these differences were. Charles was becoming famous for all the fantastic fossils and specimens he'd collected on the *Beagle* voyage. There were 1,529 bottled species and 3,907 labelled specimens, so it took Charles and his friends years to sort and catalogue them all! In 1845, he collected his tales of adventure into a book, which was a big hit. But Charles wasn't satisfied with writing about his adventures. His mind was still buzzing with unanswered questions about the things he had seen on his long voyage. How did all those different species of plants and animals come to be on the planet? This is what Charles would later call the 'mystery of mysteries'.

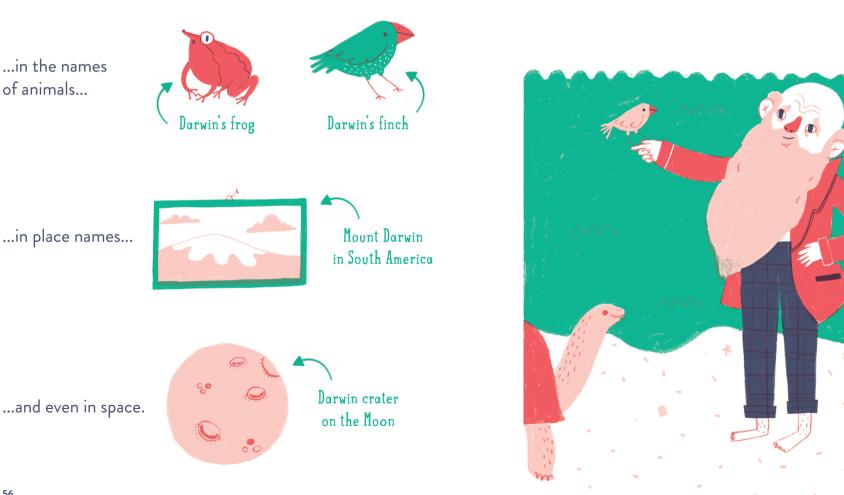




Charles Darwin died in 1882, aged 73. He was honoured with a burial in London's Westminster Abbey, close to Isaac Newton (another super-famous scientist).

Since his death, Charles has become even more famous and his name is remembered around the world...

Charles is a towering figure in the history of science. His power was learning to look at things closely, and his natural curiosity about the world kept him asking questions. Most importantly, he wasn't afraid to be honest about what he saw, even if it led him to radical conclusions.



There is grandeur in this view of life...from so simple a beginning, endless forms most beautiful and most wonderful have been. and are being, evolved.

TIMELINE

