We are continuing with our Science work on **Inheritance** and **Evolution**.

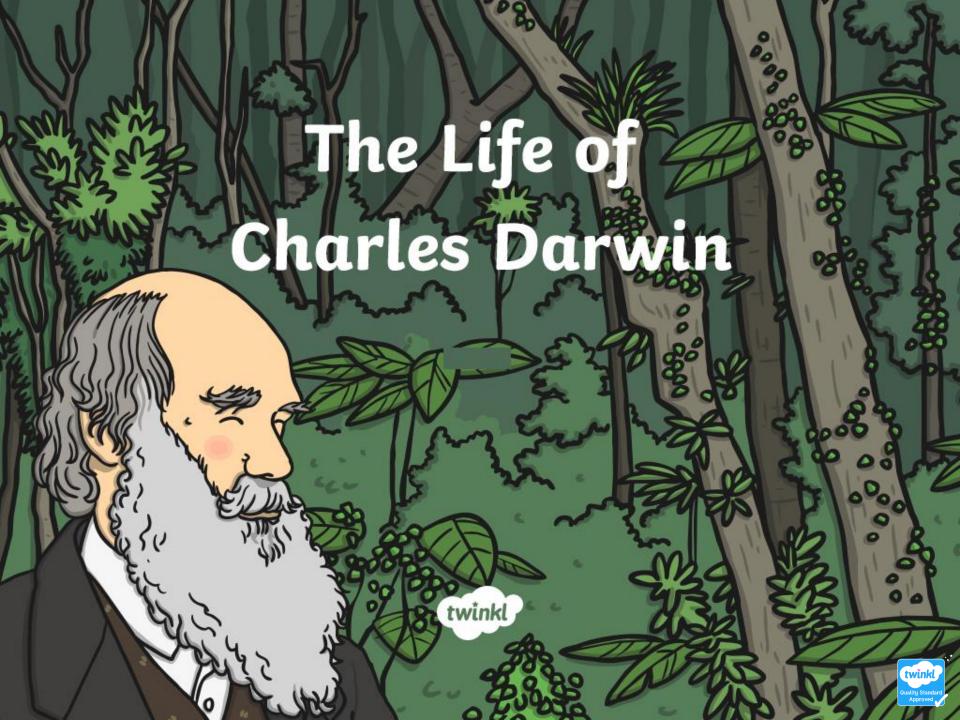
So far we have learned about:

- What Inheritance is
- Inherited characteristics
- Acquired characteristics
- Selective Breeding
- Fossils

Today we are learning about a man called **Charles Darwin**. He was a famous scientist who did lots of research into **Adaptation** and **Evolution**.

Read through the information below and follow the instructions in Purple.





Monday 1st February, 2021

LO: to understand the work done by **Charles Darwin** on **Adaptation** and **Evolution**

LO: to be able to produce a fact file about **Charles Darwin**

What is Adaptation?



What is Evolution?



Who Was Charles Darwin?

Charles Darwin was born on 12th February 1809 in Shrewsbury, England.



When he was nine years old, Charles Darwin went to Shrewsbury School for boys. Darwin did not particularly enjoy school and found some of the work, like Latin and Greek, hard. He did, however, love science and was always asking questions. When he was 13 years old, he set up a science lab in his garden shed.



When he was 16 years old, Darwin was sent to Edinburgh to train to become a doctor, like his father, grandfather and brother, who were also all doctors.



However, Darwin did not enjoy it and knew he did not want to become a doctor. He didn't like looking at blood. His father then sent him to Cambridge to become a vicar but he was more interested in learning about nature and animals. He had lots of friends and teachers at university who helped him to learn more about these things.

Darwin passed his exams to become a vicar but he did not want this to be his job. John Henslow, a teacher from Cambridge, sent him a letter saying that Robert FitzRoy, the captain of the ship HMS Beagle, was looking for someone to be the ship's naturalist. The person would have to explore, collect and record information about the rocks, plants and animals that they found on their trip. Darwin knew this was his dream job and so persuaded his father to let him go on the trip.



HMS Beagle 1831 The Beagle's voyage lasted for 5 years. They travelled to South America and reached the Galapagos islands. When he went ashore Darwin found plants and animals that nobody had ever seen before!

Animals Darwin discovered living in the Galapagos islands were finches and tortoises. He studied the finches to see how they were **adapted** to their environment.

Finches



Galapagos Tortoise



Evolution and Adaptation

Animals and plants **evolve** to make **adaptations** to not only survive but to survive better. Some of these changes are down to **habitats**.



Darwin studied different finches living in different parts of the Galapagos Islands and realised, even though they were different, they all had the same **ancestors**! Some had **evolved** to have larger beaks in certain areas, some with smaller beaks in other areas due to different food being available.

Small Changes Add up to Big Changes

Over time, the result of a few generations start to make noticeable differences.

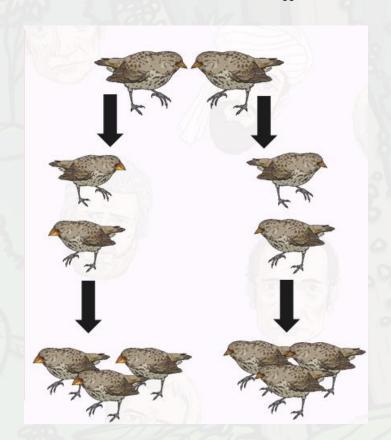
Looking at the Galapagos finches

The ones with large beaks reproduced and had **offspring**.

More of these **offspring inherited** large beaks and survived.

In other parts of the Galapagos, smaller beaks ensured better survival than larger ones.

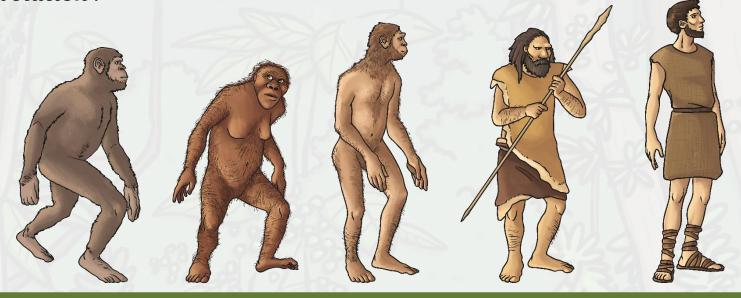
The **adaptations** meant that over a long period of time, the Galapagos finches **evolved adaptive traits** that caused differences between them.



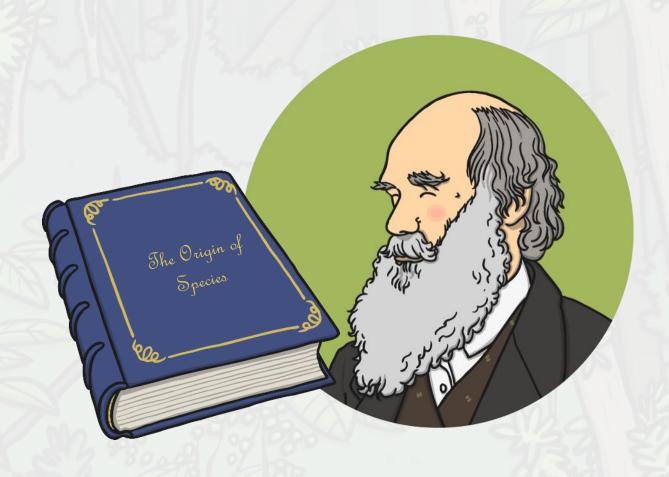


In 1859 Charles Darwin wrote a famous book, 'On the Origin of Species', all about the things he had found on his travels. After 20 years of studying, he had an idea that the plants and creatures he had collected hadn't always been the same as they were when we found them.

He thought that, millions of years ago, living things had all started off in the same way and had gradually, very, very slowly, changed. In this way lots of different animals and plants had developed. This idea is called 'evolution'.



Charles Darwin died on 19th April 1882 and even now, over 100 years later, people are still talking about his ideas and findings.



Watch these videos to find out more about Charles Darwin and his work:

https://youtu.be/BcpB 986wyk

https://www.bbc.co.uk/teach/class-clips-video/ks2-charles-darwin-victorian-science/zddbnrd

https://www.bbc.co.uk/teach/class-clipsvideo/science-ks2-the-work-of-charles-darwin-andalfred-wallace/zrbxgwx Use what you have learnt to write a Fact File about Charles Darwin.

You can use the template sheet 'Lesson 4 Charles-Darwin-Fact File',
OR
you can create your own.

