

Y3/4 – Assembly Plan 1

Who was Charles Darwin?

Background:

In 1831, a young naturalist called Charles Darwin boarded a ship called the HMS Beagle and set out on a fantastic five-year voyage around the world to study and collect animal, plant and rock samples.

Darwin was amazed at the variety of species he saw on his adventure. The Beagle visited the Galápagos Islands (a group of 19 islands and more than 100 islets and rocks in the Pacific Ocean, about 1,000km off the coast of Ecuador in South America) and while he was there Darwin collected specimens and made notes that would eventually change the way people thought about the world...

In 1858, Darwin revealed his 'theory of evolution by natural selection', to explain how animals adapted to their environment to survive. And the following year, he published *On The Origin Of Species* – a book that would change the world forever! Darwin explained how species can 'evolve' (change or develop) over time through a process called 'Natural Selection'. This shocked everyone because, until then, it was widely believed that all the animals on the planet had been made at the same time by one creator. Some people still believe that today. But Darwin scientifically proved all the species on Earth had evolved from earlier species – and that includes us!

Preparation:

- You will need a new £10 note featuring Charles Darwin (specimen pictures might be enlarged from the Bank of England website: www.bankofengland.co.uk).
- A globe, an observing glass, a fossil, and a pen and notebook, displayed on a table, will help to tell the story of Charles Darwin.
- Be prepared to explain some of the terms used in this assembly.

1	Introduce the theme of scientific observation by inviting the children to talk about creatures that they find especially fascinating. Reflect upon the purpose of some of the characteristics that are described: e.g., the colours of some animals provide camouflage, to help them remain hidden from sight. Some animals have tails adapted for climbing trees, claws which they use as weapons, or eyes providing powerful vision. Using examples given by the children, contrast different creatures. Refer to dinosaurs. Although they are extinct, we can learn about them from fossils. When reviewing the discussion, say that many creatures have only become familiar to us through television natural history programmes such as those of David Attenborough.
2	Display the £10 note and introduce the portrait of Charles Darwin. He lived from 1809 to 1882. Rather like David Attenborough, Charles Darwin was a naturalist. He accepted an invitation to go on a voyage around the southern hemisphere with other explorers on a ship called HMS Beagle. Their voyage was to last for five years and 40,000 miles! A ship similar to HMS Beagle is also featured on the £10 note.

3	Using the globe, indicate how the Beagle explored the southern hemisphere, visiting South America, South Africa and Australia and many remote islands, such as the Galapagos. On the voyage, Charles Darwin came across some amazing sights and animals and birds in different parts of the earth. Often, they made expeditions inland, for hundreds of miles. Refer to the observing glass, the fossil, and the notebook. Darwin saw wonderful plants and creatures that he carefully drew and wrote about in his notebooks. He collected thousands of specimens of insects, birds and plants. There were also fossils that helped him to learn about creatures living millions of years ago.
4	Pause to challenge the children's powers of observation. Can they identify the bird featured on the £10 note and spot the hidden fossils? (The bird is a green and red hummingbird, and the ammonite fossils are portrayed most clearly at the bottom of the security pattern to the left of the Queen's head.)
5	After his voyage, Charles Darwin spent many years thinking hard about everything he had seen. He wondered how so many species (kinds) of creatures and plants had come to exist. He eventually came to believe that life on earth had developed gradually in a process called 'evolution'. The many different plants and creatures which live on earth (not forgetting human beings!) have been formed through a struggle for survival that has lasted for hundreds of millions of years. Darwin wrote down his ideas about this in a book called The Origin of Species. It helped people to see themselves and the world in a new way.
6	Conclude by reflecting that scientists continue to explore the world in which we live. Today, we can learn about their exciting discoveries from television and the internet, as well as from books. The £10 note with a picture of Charles Darwin reminds us of the importance of science. There is no need for us to go on a long sea voyage! Wherever we are, there are things to discover if, like Darwin, we will observe carefully and think about what we see.

Reflection

Creator God,
Thank you for the excitement of exploration and discovery,
for new ideas and thoughts
and for science, which helps us to understand your world.
Amen.

Music

'Think of a world without any flowers' (Come and Praise, 17)
(The version in the book Hymns & Psalms includes the verse 'Think of a world without any science'.)