Little People, BIG DREAMS®

Mary Anning

Name: Mary Anning

Dates: 1799 - 1847

Place of Birth: Lyme Regis, Dorset

Famous For: Being a palaeontologist and fossil collector

Illustrated by: Popy Matigot

Early Life:

Mary was born in the seaside town of Lyme Regis into a poor family of religious dissenters - Protestants who had separated from the Church of England. Although her parents had 10 children, only Mary and her brother, Joseph, survived and grew into adults. Mary herself almost didn't make it. When she was a baby, she was being carried by a neighbour when she was struck by lightning. The woman holding her was killed but miraculously Mary was unharmed.

As a child, Mary had little formal education and mainly taught herself how to read, write and draw. Mary's father, Richard, was a cabinet maker and didn't earn much money. He boosted his income by scouring nearby beaches for 'curiosities' - fossils that he could sell to tourists. By the time she was five or six, Mary went out with her father looking for items to sell too. Richard taught her how to clean the fossils and the pair often took their findings home where they put them on display in her father's cabinet maker's shop.

Sadly, Mary's father died suddenly in 1810 of tuberculosis. Encouraged by her mother, Molly, Mary continued to find and sell her fossils to help pay off the family's debts.

Important Discoveries:

Mary was 12 when she made her first major discovery. She and her brother, Joseph, were out fossil hunting when Joseph found a strange-looking fossilised skull. Carefully, Mary dug round close to the skull and revealed a 5.2 metre-long skeleton attached to it.

At first, the fossil was thought to have been a crocodile, although scientists continued to debate Mary and Joseph's discovery for years, eventually naming it Ichthyosaurus or 'fish lizard'. We now know that it was an ancient marine reptile that lived between 201 and 194 million years ago.

Mary continued to scour the beaches and cliffs of Lyme Regis looking for fossils. The limestone cliffs were a particularly good place to look as they dated back to the early Jurassic period around 200 million years ago when the whole of Lyme Regis was submerged under water. It was here, in 1823, that Mary made another important discovery - the complete skeleton of a Plesiosaurus.

The discovery caused such a sensation that the remains were brought to the Geological Society in London where French scientist, Georges Cuvier, inspected them. Mary herself was not invited and at first Cuvier, known as the 'Father of Palaeontology', declared that they were fake before eventually admitting to his mistake after lengthy debate.

Mary's discoveries did not stop there. In 1828, she discovered a pile of bones belonging to an animal with a long tail and wings. This flying reptile was later named a Pterodactyl and was the first of its kind to have been discovered outside of Germany. Mary also took the lead when it came to pioneering the study of coprolites - fossilised poo - which helped scientists work out what these ancient creatures ate.

Despite the fact that the scientific community was hesitant to recognise her work, Mary still continued to look for fossils, often taking well-known scientists with her so that she could discuss her theories with them. She still sold many of her finds in order to earn an income. Often, male scientists who bought the fossils Mary identified did not credit her in their work. The Geological Society refused to admit her because of her gender and because she came from a poor, working-class background.

Legacy:

Mary died of breast cancer in 1847 at the age of 47. Despite her extraordinary discoveries, she still faced financial difficulties at the time of her death, yet her tremendous legacy lives on today. Mary's discoveries inspired artworks and books as well as providing the fossil evidence for scientist Charles Darwin's Theory of Evolution.

You can still see some of Mary's amazing finds on display in museums such as the Natural History Museum in London. The Jurassic Coast, where Mary lived and worked, is now a UNESCO World Heritage site and continues to inspire amateur palaeontologists and visitors today. In 2010, she was recognised by the Royal Society as being among the top ten influential women in British science history.

Did you know?

Mary often went fossil hunting after a storm because the rain and wind sometimes made parts of the cliff face crumble. This caused rocks to fall and crack open allowing her to hunt for fossils more easily.

Did you know?

The tongue-twister 'she sells sea shells on the sea shore' is believed to have been inspired by Mary Anning.

Did you know?

Women were not allowed to join the Geological Society until 1904. After Mary's death, the Society paid to have a stained-glass window installed in her local church in Lyme Regis in her memory.