

What *Lucía Sapiens* learns in Charles Darwin's anniversary month



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**Lucía Sapiens finds out about
Darwin**



DARWIN'S CHILDHOOD AND LIFE AT SCHOOL

Monday, 2 February

Morning: History

Afternoon: Practical exercises in the School Botanical Garden and Art class

At nine o'clock sharp, Lucía Sapiens reached school, went into History class and sat down at her desk. Ms Douglas, the teacher, said good morning to everybody and without further ado, began to explain.

'During the month of February, we are going to spend our History lessons studying the life of Charles Darwin. Today, we're going to find out about his childhood and life at school.

'To start with, I will tell you that Darwin was born on 12 February, 1809, in the town of Shrewsbury, in the west of England, in a pretty house on the edge of the River Severn, surrounded by a big garden full of flowers, oak trees and conifers. A number of his family's houses stood on the estate.

'Known as "The Mount", even today you can feel Charles Darwin's presence here, and imagine him looking out of the windows or listening to the murmur of the leaves in his garden.

'Darwin was born after his sisters Marianne, Caroline, Susan and brother Erasmus. A year later, his sister Emily Catherine was born. His mother, Susannah Wedgwood, was the daughter of leading industrialist Josiah Wedgwood, while his father, Robert Waring Darwin, was a well-known and respected doctor and son of Erasmus Darwin, also a famous doctor and naturalist philosopher.

'On 15 November, nine months after his birth, Darwin was christened Charles Robert in the Anglican Church of St. Chad's.

'In his early years, he attended the Unitarian Church in town with his mother, which preached relatively progressive ideas.



▲ The Mount



▲ Garden at The Mount





▲ St. Chad's Church



▲ Shrewsbury Unitarian Church



▲ Charles Darwin, aged seven, with his sister Catherine (1816)

These, combined with the liberal and scientific ideas of his father and grandfathers, helped lay the foundation for Darwin's open-minded outlook from a young age.

'Darwin was just eight when his mother died'.

'Who looked after Darwin then?', Lucía Sapiens asked sadly.

'From that point on, his sister Caroline looked after him, helped by her father and all his loved ones', Ms Douglas answered. 'He was a very affectionate little boy and easy to bring up, although he was a bit mischievous and inclined to invent fantastic stories that drove everybody mad.'

'From his family, he learned to appreciate the observation of plants and animals, which, combined with his innate curiosity, meant that, by the age of nine, he was already enthusiastic about natural history and later wrote that he was captivated by nature. Also from an early age, he began taking walks alone in the countryside and collecting the rocks, shells, insects, plants and minerals he found'.

Lucía Sapiens could imagine Darwin enjoying the world around him, but she assumed he must also have had to go to school, so she asked,

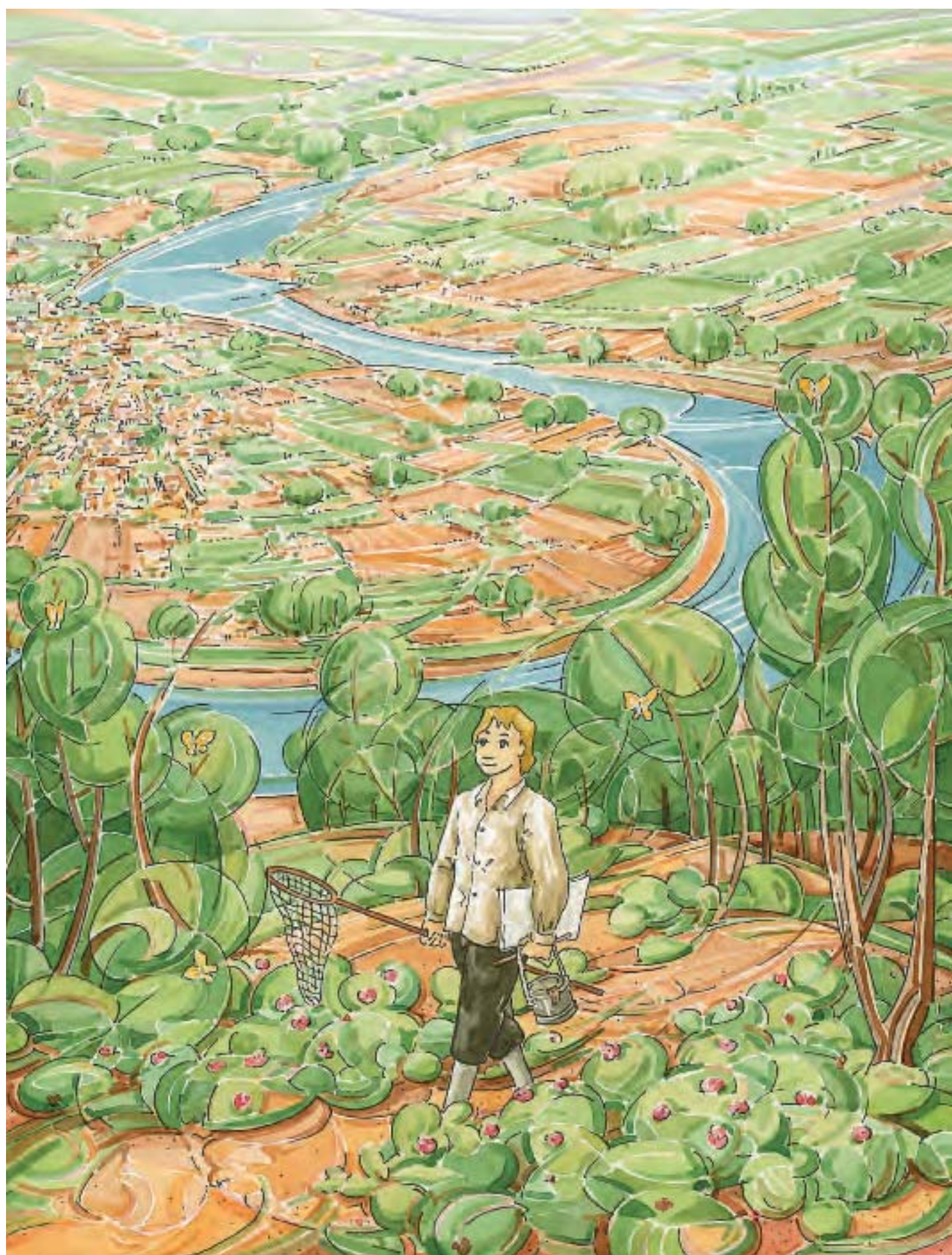
'How old was Darwin when he went to school?'

'Darwin started school when he was eight. The school was in the house of Reverend Case, the minister at the Unitarian Church which Darwin had attended on Sundays with his mother. A year later, his family sent him to Dr Butler's Shrewsbury School, where his elder brother, Erasmus was already a pupil.'

'Darwin was a boarder at the new school until he reached the age of 16. He didn't like living there, but as his house was barely more than a kilometre away, he often escaped one afternoon to see his family and then ran back again afterwards so that he would arrive before the gates shut.'

'He did not enjoy Dr Butler's classes, because, as he said later, all he learned was a little bit of ancient history and geography, and nothing at all of his true passion, the natural sciences. Dr Butler made his pupils study the Classics, learning 40 to 50 verses off by heart each day. They also had to go to chapel. Darwin considered this learning insufficient'.







▲ Shrewsbury School with statue of Darwin outside. Now the town's Public Library

'But did Darwin study what he was told to at school?', asked Lucía Sapiens.

'Oh yes, but he got very bored with it because, although he was interested in the Classics, he liked to be able to learn from things he could observe.

'Time passed and he did not get the grades his father had hoped, so he was taken out of school earlier than he should have been. That summer, Darwin spent time looking after poor people and had up to a dozen patients. He wrote very precise reports on their symptoms and personally prepared the medicines his father advised to make them better. After this gratifying experience, his father became hopeful that his son could become a doctor and he sent him, with his brother Erasmus, to Edinburgh University to study medicine.'

Ms Douglas finished talking at this point in the story and gave the students permission to leave the classroom. Lucía Sapiens and her classmates stayed in the schoolyard until it was time to go into the canteen for lunch.

In the afternoon, they had a practical lesson in the School Botanical Garden, led by Ms Sanders. Luckily, it was so warm and sunny that it was not like February at all, and being outside was not a problem.

Ms Sanders had designed the School Botanical Garden as a "living book", which combined the educational role of teaching botany with scientific experimentation. The aim was to consider



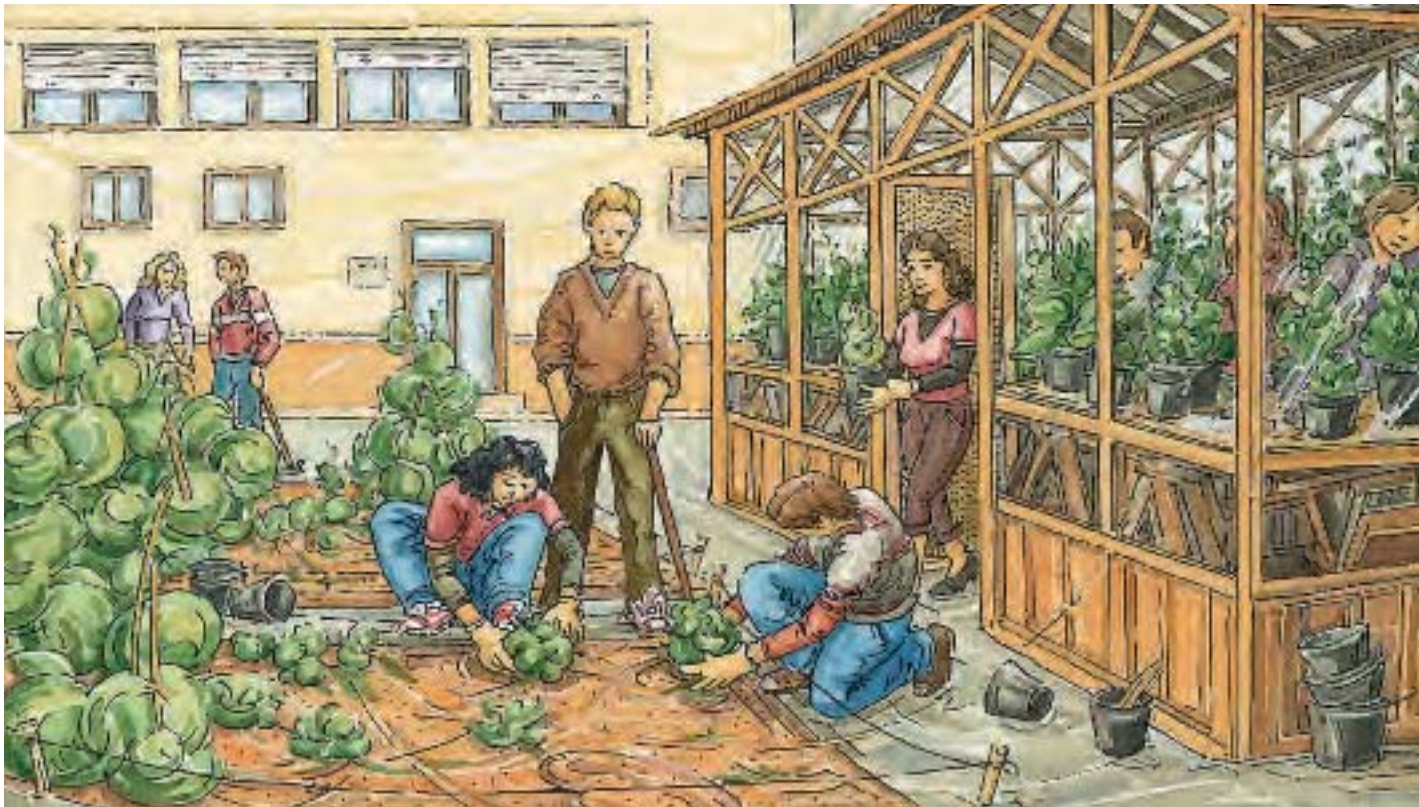
plants as living beings and for students to study their structure through experiments.

Every year, the pupils changed the garden and chose what they wanted to do. This year, they had added medicinal plants to the edible and decorative ones already growing there.

Each group had to classify one kind of plant and work on it. They also had to draw the result of their experiments and write up observations in their notebooks so they could show them in class and compare them with the conclusions of the other groups, to share their findings and decide on a common approach. This year, Lucía Sapiens's team had chosen to study the growth process of climbing plants and this was what their drawings reflected.

Using this method, they not only learned about botany in the open air, but also gained practice in handling plants and noting down and drawing their findings from their own observations, as well as learning from their classmates.

They finished the day in Art class with Mrs Moore.



DARWIN AT UNIVERSITY

Tuesday, 3 February

Morning: History

*Afternoon: Information & Communications Technology (ICT)
and English Language, Music*



▲ Edinburgh University

Ms Douglas began her class where she had left it the day before: ‘Darwin entered the Medicine Faculty at Edinburgh University; but unfortunately, he found the lessons there very boring and so he didn’t study as much as he ought to here either’.

‘So what happened next?’, asked Lucía Sapiens in a worried voice.

‘Well the same as at Shrewsbury School’, Ms Douglas replied. ‘He didn’t study very much. But when he was older, he regretted not having done so, because the animal dissection, drawing and maths they studied there would have been very useful to him in his later research’.

‘It’s odd that he didn’t like medicine when he had been so happy looking after people who were ill the summer before’, Lucía Sapiens sensibly pointed out.

‘The thing was that Darwin was still interested in natural sciences and the Geology and Zoology classes at university just didn’t satisfy him’, her teacher replied.

‘Darwin used his time studying and reading on his own and mixing with other people who were keen on the natural sciences and could provide him with the knowledge he was looking for. This led him to some important discoveries.

‘After he had spent two years at Edinburgh University, his father realised that Darwin was not going to get his degree in Med-



icine and made him return to Shrewsbury, where he was forced to take private lessons. Not long afterwards, he sent him to Cambridge University to train as a clergyman.

At Cambridge, Darwin made a lot of friends, including two university teachers who gave classes which students could attend on a voluntary basis. The first of these was Henslow, his Botany teacher, and the second Sedgwick, who taught Geology.

Darwin used to go on field trips with Henslow to observe rare species of plants and animals. They would go for long walks together, to the extent that Darwin was known to some as ‘the man who walks with Henslow’. Sedgwick also took Darwin with him on one of his trips to research ancient rocks in North Wales, where Darwin collected specimens and drew up a map of the area.

After three years, Darwin obtained his degree to become a clergyman with a good mark, but it was geology which still really interested him. He wanted to know the origin of the Earth and the nature of the materials of which it was composed, both inside and out. He was also passionate about zoology, which enabled him to select and classify the different animals he collected.

Each day, his passion for collecting grew. This is clear from the fact that, on one occasion, he saw two strange beetles and put one in each hand. But on seeing another beetle that he didn’t want to lose, he put the beetle he was holding in his right hand into his mouth, so he could pick up the third’.

‘Did he swallow it?’, asked Lucía Sapiens with a look of disgust on her face.

‘He didn’t swallow it, but the beetle ejected a fluid which burned his tongue and Darwin had to spit it out. Later, he acquired an extraordinary collection of these little creatures’.

Just at that moment, the bell rang, signalling the end of class and the group all trooped out into the schoolyard.



▲ Christ's College, University of Cambridge



DARWIN'S LIFE ON THE WEB

In the afternoon, Mr Heale, who taught ICT and Language, said they were going to look at Darwin's life on the Internet and that they would study the texts they found there.

'How do we do that?', asked Lucía Sapiens.

'Well, to begin with, open up your laptops and look for the following website:

http://en.wikipedia.org/wiki/Charles_Darwin

