

Little Girls,  
**BIG** Dreams



**THINK**  
DIGITAL ACADEMY



# Ada Lovelace



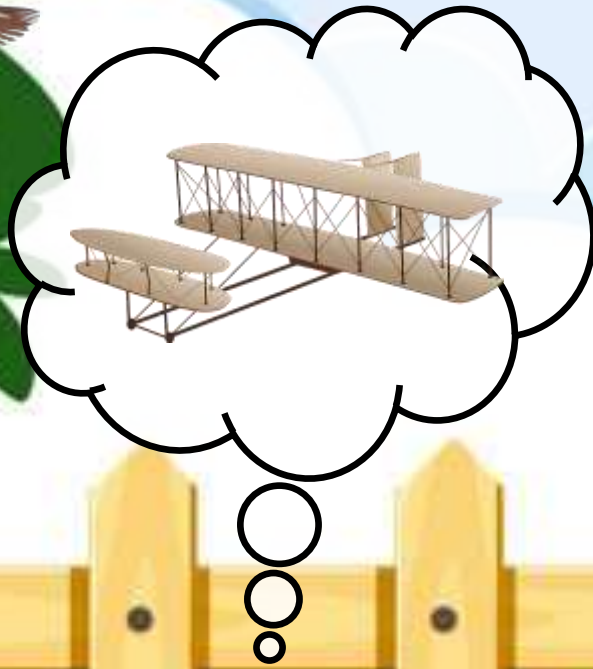
Ada Lovelace was born in England to a mother who loved maths and a father who loved poetry.



Ada's father left England when she was very little and never returned. Her mother went away a lot, too. So young Ada spent a lot of time at her grandparents' house. A cat called Mrs Puff kept her company.



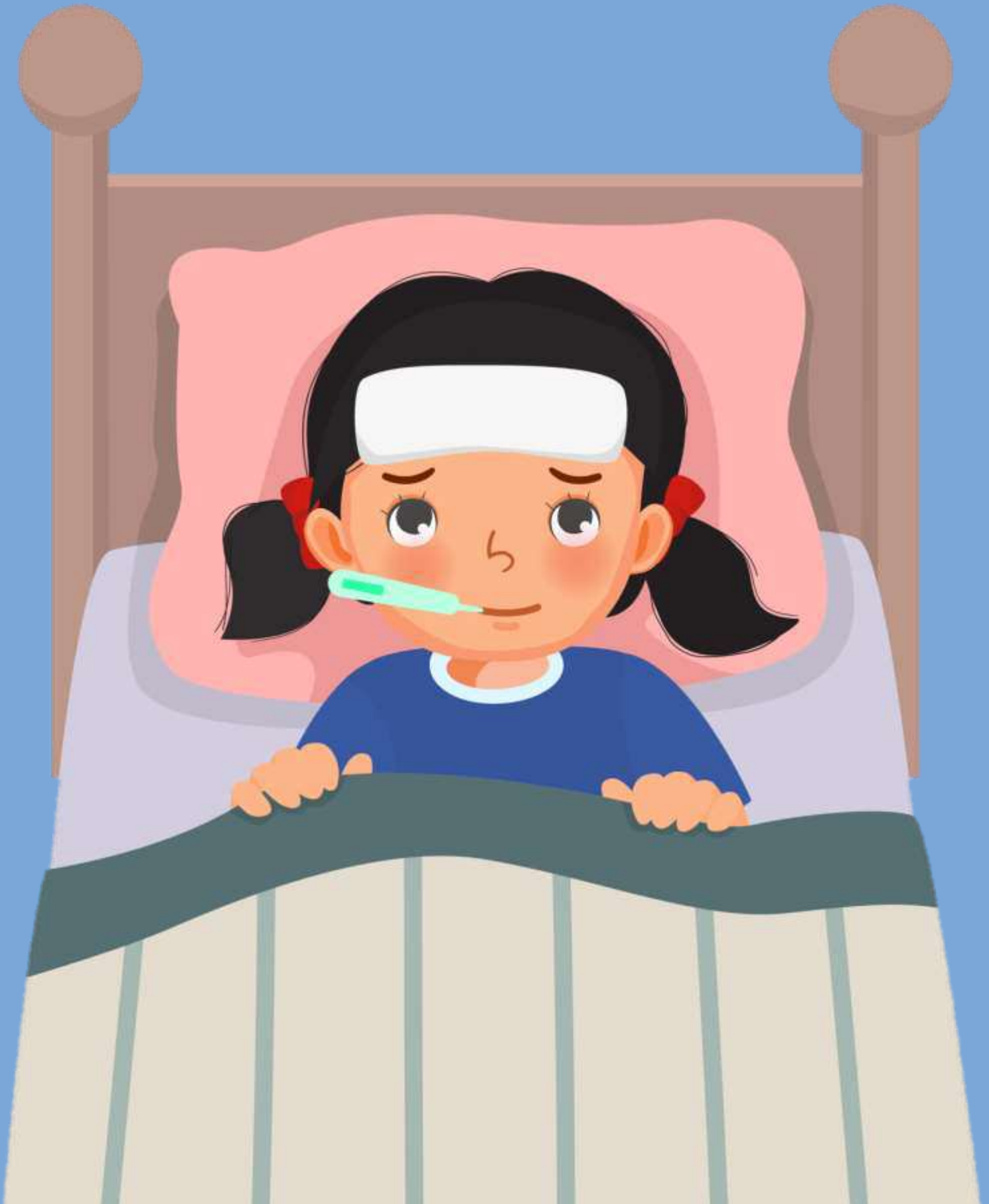
Left alone, Ada's imagination took flight. She started to dream of machines with wings that could move in any direction.



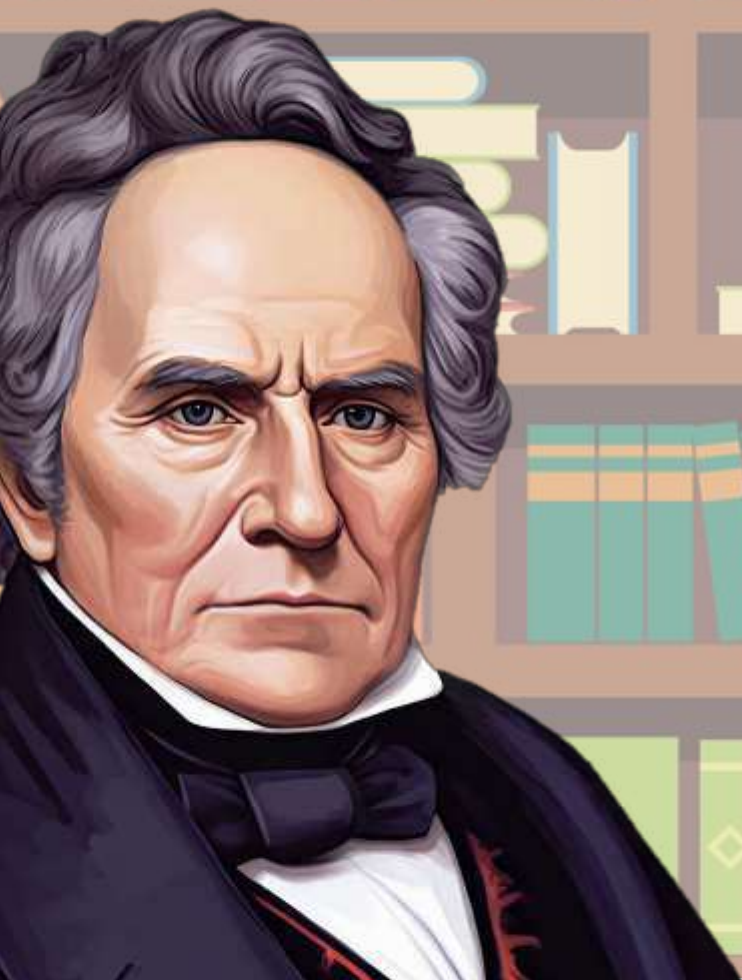
When Ada's mother came to visit, she didn't like her imaginary inventions. She wanted her to concentrate on maths and logic – and nothing else! Luckily, Ada liked numbers and was very good at solving mathematical problems.



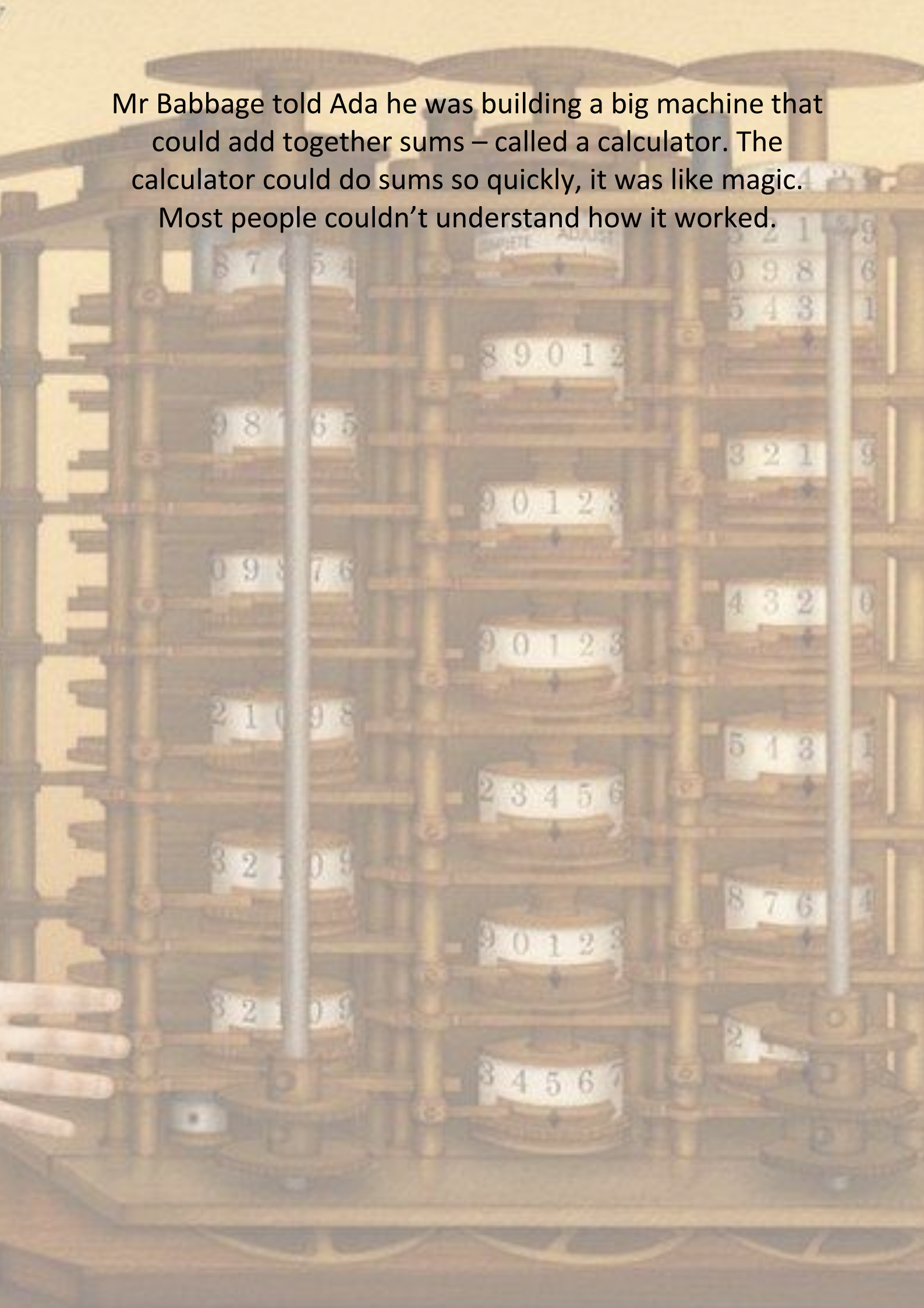
When she was 14, Ada became sick. She had to spend a lot of time resting in bed, but she kept studying, inventing and dreaming.



After three long years, Ada got better. She went to London and was introduced to a famous mathematician called Charles Babbage.



Mr Babbage told Ada he was building a big machine that could add together sums – called a calculator. The calculator could do sums so quickly, it was like magic. Most people couldn't understand how it worked.

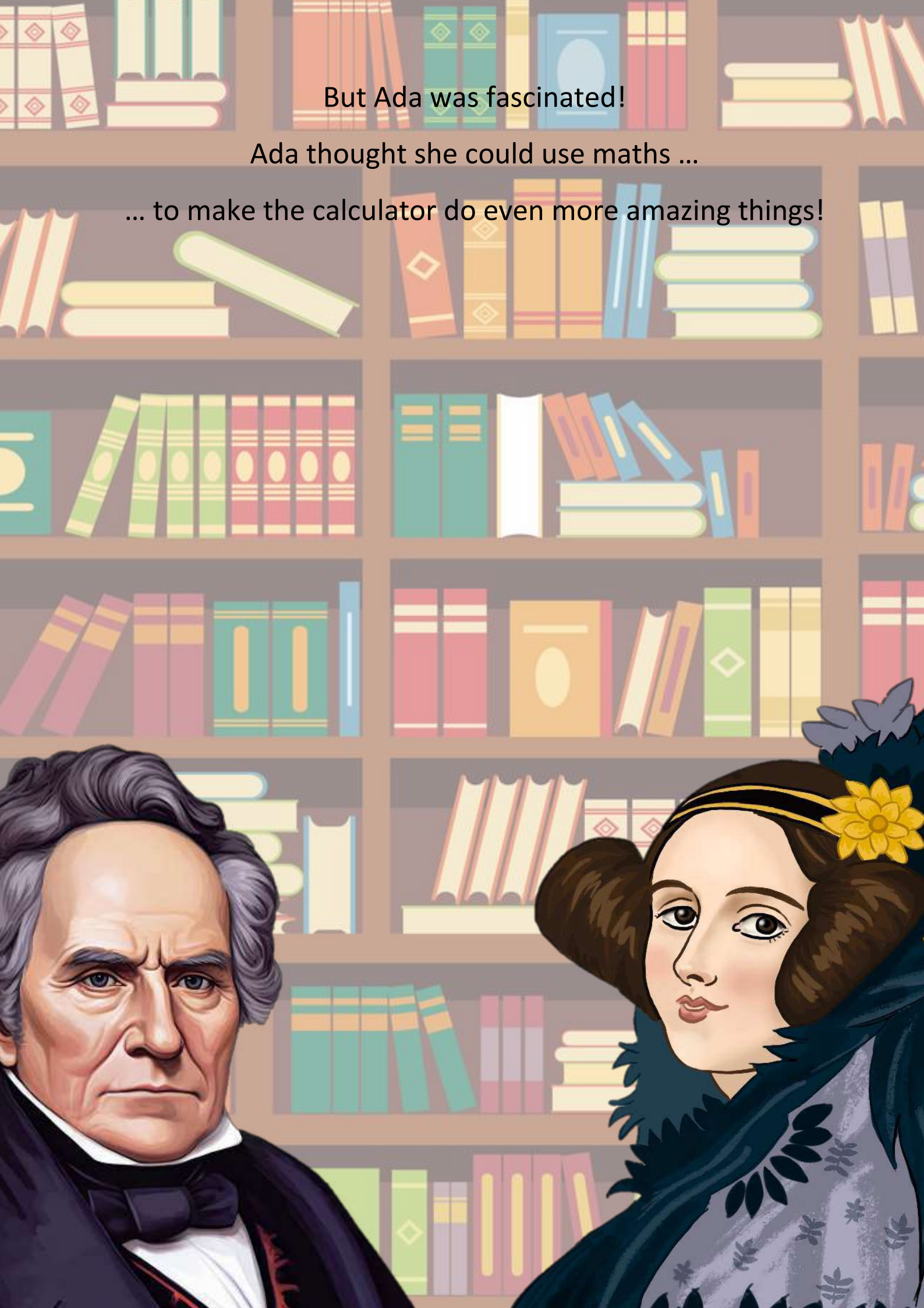




But Ada was fascinated!

Ada thought she could use maths ...

... to make the calculator do even more amazing things!



She wrote a code made up of numbers, that would tell the calculator what to do.



Ada didn't know it, but she had just invented the language that computers use today. Little Ada, who loved both numbers and poetry, had become the world's first computer programmer.



She showed that when you use science and imagination,  
your dreams can take flight.



Born 1815

Died 1852



Augusta Ada Byron was born in London in 1815. Her mother, Lady Byron, was a talented mathematician who loved logic. Her father, Lord Byron, was a famous poet who left his family when Ada was only five weeks old. Young Ada and her mother moved to her grandparents' house in the country.



Her mother was often away, so she was looked after by her grandmother or governess. Lady Byron was worried Ada would inherit her father's 'mad' love of poetry, so she encouraged her to learn mathematics. This was unusual for a young girl at that time, and especially unusual because Ada was from a noble family.



Aged 12, Ada started to dream of flying machines. She studied the way birds flew and wrote down her thoughts in a book called 'Flyology'.

But when she was 14, Ada became sick with measles and had to spend a long time resting in bed.





She recovered by age 17 and went to London. There, she was introduced to Charles Babbage – a famous mathematician and inventor. He was building a large calculator called a Difference Engine. Ada was fascinated and asked Babbage to show her how the machine worked.



Ada and Babbage became friends and worked on plans for a new machine. In 1840, Ada wrote a new code that could tell the machine what to do. She believed anything could be turned into numbers and programmed into a machine.



With this idea, Ada had become the world's first computer programmer. Her work led to the invention of the very first computer, over 100 years later.





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