

Historical Hero: Ada Lovelace

Ada Lovelace was born in 1815 in London, England to Anne Isabella Byron and famous Romantic poet Lord Byron. When Ada was a child, her mother encouraged her to study math. At the time, it was unusual for women to study math and science, even if they were wealthy.



Painting of Ada Lovelace

In 1833, she met mathematician Charles Babbage at a party. Charles, known as the father of the computer, made a machine that could calculate math problems. It was called the difference engine. Once Charles found out that Ada was interested in math, they became good friends. He showed Ada the difference machine and she was fascinated by it. Charles then took Ada under his wing and taught her about his research during the next several years.

About ten years later, Charles had an idea for a new mathematical machine. A fellow scientist had written an article about it, but it was in French. Charles asked Ada to translate the article for him. Not only did she translate the article, but she added her own notes and ideas. After she added her notes, the article became three times longer than the original! She used the initials A.A.L for Augusta Ada Lovelace to publish the English version of the article.

Ada died from uterine cancer in London on November 27, 1852. She was 36 years old. Many of Ada's ideas are still used in computers today. Her work went unnoticed until the 1950s. It was then that scientists realized how revolutionary her ideas were. In 1980, the United States Department of Defense named a new computer language "Ada" to recognize her past contributions. Now she is considered by many to be the world's first computer programmer.

Directions: Fill in the timeline with important events in Ada's life. *Student answers will vary, but may include:*

Ada's mother encouraged her to learn math and science even though that was unusual at the time.

Ada met Charles, who began to work with her and show her his inventions.

Ada translated an article to English that included her own ideas about Charles' new mathematical machine.

Ada's work was rediscovered in the 1950s, when scientists used it to create new computer programming languages.

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Directions: Complete the graphic organizer with information from the nonfiction text.

What is the topic of the text?

The topic of the text is Ada Lovelace's life and accomplishments.

What are some key details from the text?

1. She was born in 1815 in London, England.
2. Even though it was unusual for women to study math and science, her mother encouraged her studies.
3. Charles took Ada under his wing and taught her about his research during the next several years.
4. Ada translated an article from French to English about Charles' new mathematical machine.
5. Many of Ada's ideas are still used in computers today.

What is interesting to you about the text?

Student answers will vary.

What is the author's purpose for the text?

The author's purpose of the text is to inform readers about Ada's life accomplishments and her work in mathematics to help develop computer programming.

What is the main idea of the text?

Ada Lovelace was a programming pioneer who was not recognized for her contributions until after her death.