### Ada Lovelace Fact File

**10 December 1815 – 27th November 1852**

Ada Lovelace was a mathematician who is thought to have written the world’s first computer program 100 years before the first computer was made! She also correctly predicted the future possibilities of computers including for creating music and graphics.

When you consider that Ada lived in a time when girls were not generally educated her achievements are even more incredible.

Ada was born in England to Lord and Lady Byron. Her father was a poet and her mother a mathematician. Ada was brought up by her mother who encouraged her to study maths and science. Ada demonstrated a natural aptitude for the subjects.

Ada married William King in 1835 and became the Countess of Lovelace three years later when William was made an Earl.

Ada met a young mathematician and engineer named Charles Babbage when she was 17. Ada was fascinated by Babbage’s ideas, especially his plans for a machine to handle complex calculations named the analytical engine. Babbage was so impressed by Ada he asked her to translate an article about the analytical engine written by an Italian engineer.

Ada translated the article and also added pages of her own notes. Ada’s work was published in 1843. The analytical engine was nothing like the computers of today. It was a large clunky machine programmed using punched cards!

Unfortunately the analytical engine was never finished and Ada’s notes were forgotten about until they were found and republished in 1953.

Ada very sadly died from cancer in 1852, aged just 36. She left behind an impressive legacy. Ada Lovelace Day is held on the second Tuesday of October each year and is an international celebration of the achievements of women in STEM.

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**Activity**

You don't need a computer to learn the basics of coding.

Work on logical thinking skills by designing codes and asking a friend to break them.

Start with something very simple, such as replacing each letter of the alphabet with a number. Other ideas to try are designing a symbol for each letter or moving each letter a set number of spaces forward or backwards. For example A could become C and B become D.