

Marie Curie



Born: 7th November 1867 in Poland

Died: 4th July 1934

Marie Curie was a Polish-born physicist and chemist and one of the most famous scientists of her time. Together with her husband Pierre, she was awarded the Nobel Prize in 1903, and she went on to win another in 1911. She is known for discovering radium and polonium.

EARLY LIFE

Marie Sklodowska was born in Warsaw, Poland, on 7 November 1867, the daughter of a teacher. In 1891, she went to Paris to study physics and mathematics at the Sorbonne University where she met Pierre Curie, professor at the School of Physics. They were married in 1895.

ADULT LIFE



The Curies worked together investigating radioactivity building on the work of the German physicist Roentgen and the French physicist Becquerel. In July 1898, the Curies announced the discovery of a new chemical element, polonium. At the end of the year, they announced the discovery of another, radium. The Curies, along with Becquerel, were awarded the Nobel Prize for Physics in 1903.

Pierre was tragically killed in 1906 when he was knocked down by a carriage. Marie took on his teaching post and became the first woman to teach at the Sorbonne. She devoted her life to continuing the work they had begun together. In 1911, she received a second Nobel prize for her work in Chemistry, in recognition for her work in radioactivity.

MAIN ACHIEVEMENT

The Curie's research was crucial in the development of x-rays in surgery. During World War One, Curie helped to equip ambulances with x-ray equipment (nicknamed 'Petites Curies'), which she herself drove to the front lines. The International Red Cross made her head of its radiological service and she held training courses for medical orderlies and doctors in the new techniques.

They also discovered the radioactive elements could be used to destroy tissue and this led to a way of treating cancer. Radiation treatment is now one of the main treatments for cancer.

LIFE STRUGGLES

Despite her success, Marie continued to face great opposition from male scientists in France, and she never received significant financial benefits from her work. By the late 1920s, her health was beginning to deteriorate. She died on 4th July 1934 from leukaemia, which was caused by exposure to high-energy radiation from her research.



DID YOU KNOW?

- Marie's daughter, Irene, also became a famous scientist and was awarded the Nobel prize for Chemistry.
- The clothes Marie wore in her laboratory were the ones she wore when she married Pierre.
- Her notebooks are still too dangerous to touch. You need to wear special clothes to read them because of radioactivity.

FIND OUT MORE ...

https://www.bbc.co.uk/programmes/b01s954d/clips

https://www.youtube.com/watch?v=jbS2mD2Erek

https://www.youtube.com/watch?v=vNeMO1tqYQo

EXAMPLE QUESTIONS

- 1. Where was Marie born?
- 2. In what year did the Curies discover Polonium and Radium?
- 3. Why are Marie's notebooks too dangerous to touch?
- 4. What were the X-ray machines nicknamed?
- 5. In what year did Marie win her second Nobel prize?