

# Marie Curie

Marie Curie is often described as one of the most influential scientists of all time. One of only two people to have won the sought-after Nobel Prize twice, her work on radiation is known around the world and is still being used today.



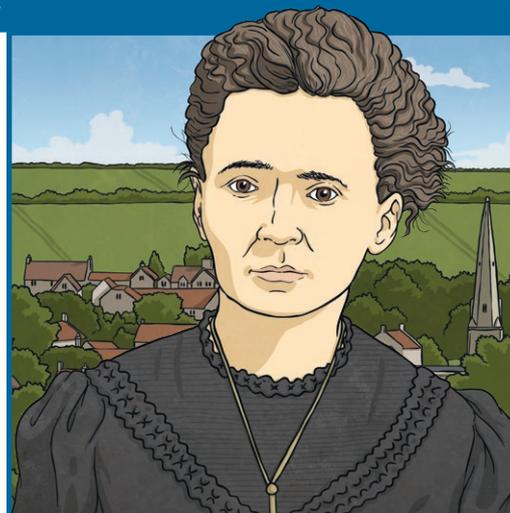
## Early Life

Marie Curie was born in Poland on the 7<sup>th</sup> November 1867.

The youngest of five children, she was born Maria Salomea Skłodowska.

At the time of her birth, Marie's father was a teacher of maths and physics. However, at that time, many laws were changing and it was decided that laboratory work would no longer be taught at school.

When he heard this news, Marie's father took the lab equipment from his place of work and began using it to teach Marie and her siblings instead. It is widely believed that this is where Marie Curie first developed her fascination with the sciences.



## Moving to Paris

Marie's greatest dream was to go to university. Unfortunately, at the time, it was unheard of for women to continue studying after they had left school. Therefore, Marie made the difficult decision to leave her beloved Poland and head for France, where the Sorbonne University in Paris was accepting women.

While studying for a degree in Physics, Marie had little money and often wore every item of clothing she owned during the cold winters in an attempt to keep warm. Marie loved learning new things and it is said that she often forgot to eat and drink as a result of being so involved in her studies!



While in Paris, the young Maria Sklodowska met Pierre Curie, a fellow scientist. In 1895, they married and Maria Sklodowska became Marie Curie: Marie being the French translation of her original first name. Not being interested in a traditional wedding, Marie chose to wear a dark blue outfit instead of a white wedding dress. In fact, this was the same outfit she would end up wearing while working in the laboratory for many years to come!



### Discovering New Elements

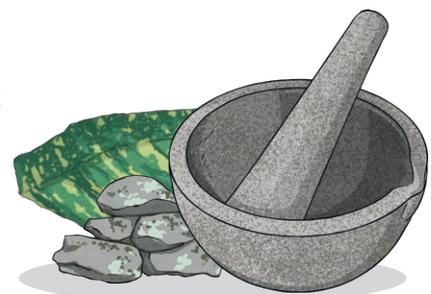


Marie Curie was inspired by the recent work of Henri Becquerel, who had discovered tiny, high-energy waves that were small enough to enter the human body. These waves were called 'radiation' and Marie believed that there were other radioactive elements that had not yet been discovered.

By now, her husband (who had been previously running tests on crystals) was so interested in her work that he abandoned his own altogether to work with Marie. Together, in an old shed attached to the university, they ground, burnt, melted and examined various materials.

These materials were so radioactive that Marie used to enjoy sitting and watching them glow in the dark. It was this work that led them to the discovery of two new elements: polonium (named after Marie's favourite place – Poland) and radium.

During one of her experiments, Marie noticed that, when exposed to radiation, diseased human cells were destroyed a lot quicker than healthy human cells. This led to the discovery of radiation as a treatment for cancer; a treatment still being used today.



# - NOBEL PRIZES -

1903

**In 1903, Marie Curie was awarded a joint Nobel Prize in Physics for her scientific discoveries alongside Pierre Curie and Henri Becquerel.**

To begin with, it was decided that only the two male scientists would receive the award as women were not allowed to. When Pierre heard this, he complained to the committee, who overturned the decision. This made Marie Curie the first woman in history to win the coveted Nobel Prize.

In 1911, she won a second Nobel Prize in Chemistry: making her the first person ever to receive two Nobel Prizes.



Although we now know that handling radioactive materials is dangerous and requires protection, Marie Curie knew little of the dangers. Having spent her life carrying around these materials in her pockets, at the age of 66, Marie fell fatally ill as a result of radiation poisoning.

Marie Curie's work is still incredibly important today and, in 2009, the New Scientist Magazine named her 'The Most Influential Woman in Science.'

