

Marie Curie

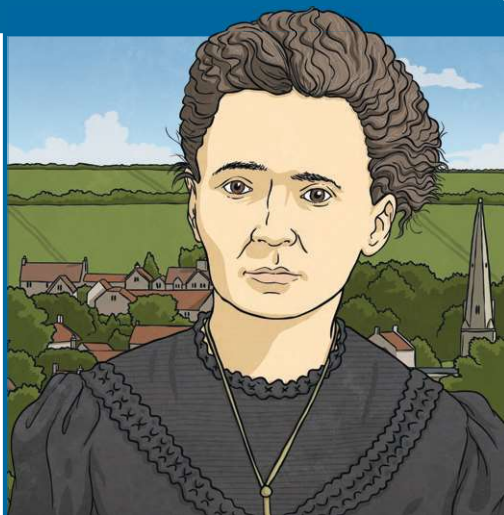
Marie Curie is commonly noted as being one of the most influential scientists of all time. One of only two people to have won the prestigious Nobel Prize twice in their lifetime, her work on radiation is renowned worldwide and is still being used today.



Early Life

Born Maria Salomea Sklodowska in Poland on the 7th November 1867, Marie Curie was the fifth and youngest child of Bronislawa and Wladyslaw Sklodowska, who were both teachers.

At the time of her birth, Marie's father was a teacher of maths and physics. However, due to the changing law and political unrest at the time, it was declared that laboratory work would no longer be taught at school. Upon this news, Marie's father took the lab equipment from his place of work and began using it to teach his own children instead. It is widely believed that this is where Marie Curie first developed her fascination with the sciences.

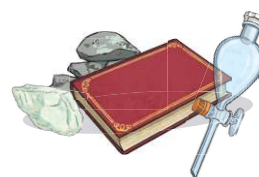


Moving to Paris

Marie's greatest dream was to go to university. Unfortunately, at the time, it was unheard of for women to be in the field of academia so she was unable to study in her homeland of Poland. 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 in an effort to stay warm against the harsh Parisian winters.

An avid reader and with a real thirst for knowledge, it is said that Marie Curie often forgot to eat and drink as a result of being so involved in her studies!



It was here, in Paris, that the young Maria Sklodowska met Pierre Curie – a fellow scientist. In 1895, they married; Maria took on his surname and adopted the French translation of her first name – Marie. Opting against a traditional wedding, Marie chose to wear a dark blue outfit in lieu of a wedding dress; the same outfit she would end up wearing while working in the laboratory for many years to come!



Discovering New Elements



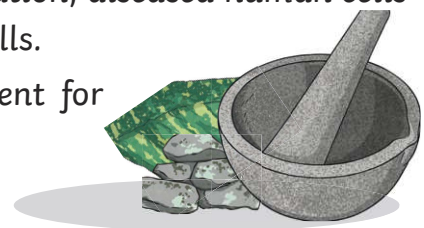
Inspired by the work of Henri Becquerel, who had discovered radiation – tiny, high-energy waves that are small enough to penetrate the human body – Marie was convinced that there were highly radioactive elements that had not yet been discovered. Many people believed that she was wrong but this didn't dissuade her.



By now, her work had piqued the interest of Pierre, who subsequently chose to abandon his work on crystals to help Marie. Together, in an old shed attached to the university, they ground, burnt, melted, filtered and examined various materials; these materials were so radioactive that Marie would often spend the night watching them emit a slight glow.

It was this work that led them to the discovery of two new elements: polonium (named after Marie's beloved homeland) and radium. During one of her experiments, Marie noted 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.

In 1903, Marie Curie was awarded a joint Nobel Prize in Physics for her work on radioactive elements alongside Pierre Curie and Henri Becquerel. Initially, due to the fact that she was a woman, the prize was only intended for the two male scientists.

Upon hearing this fact, Pierre complained to the committee who overturned the decision; Marie became the first woman in history to win the coveted Nobel Prize.



In 1911, she won a second Nobel Prize for Chemistry, becoming the first person ever to receive two awards.



While we know today that handling radioactive materials is dangerous and requires suitable protection, little was known of their dangers at the time. 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 of incredible significance today and, in 2009, the New Scientist Magazine named her 'The Most Influential Woman in Science.'