

Marie Curie

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Marie Curie was born on November 7, 1867 in Warsaw, Poland. Her father, a school teacher, noticed how bright Marie was and spent all of his free time educating her. By age four, Marie was already a proficient reader and had taken a liking to science. In fact, she loved learning so much that she graduated high school with top honors at age 15.



Both her and her sister Broyna dreamt of attending Warsaw University for college.



*Warsaw University Gates

Unfortunately, women were not allowed to attend the university. The girls **schemed** until they developed a plan to get both of them higher education.



*Sorbonne University Campus

Bronya would attend Sorbonne University in Paris, while Marie worked as a **governess** to pay Broyna's way. Once Broyna had graduated and gotten a steady job, she would pay Marie's tuition.

Thus, Marie was hired as a governess for the Zorawski family. Though she was not attending school, Marie kept up with her studies by reading mathematics and **physics** texts. When she was not working or studying, she taught **illiterate** children how to read and write.



When Broyna graduated, Marie joined her in Paris and attended Sorbonne University. In her first year, she faced **opposition** because she was a woman who was studying science, which was not common during her time. Additionally, she was Polish and during this time Polish people were facing **adversity**. To prove that her heritage and gender didn't make her less than her peers, she studied extremely hard, devoting all her time to the task. Her hard work paid off because she graduated first in her class in science, beating all of her male classmates.



After graduation, Marie found a job studying the magnetic properties of different types of steel. It was at this job that she met Pierre Curie, who would later become her husband. Pierre



introduced Marie to Henri Becquerel, who was studying **uranium**.

Today uranium is the 92nd element on the Periodic Table. Marie began studying

uranium, as well. It was during this time that Marie discovered radioactivity, which is a term that she came up with.

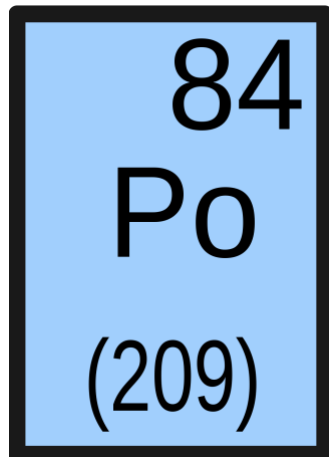
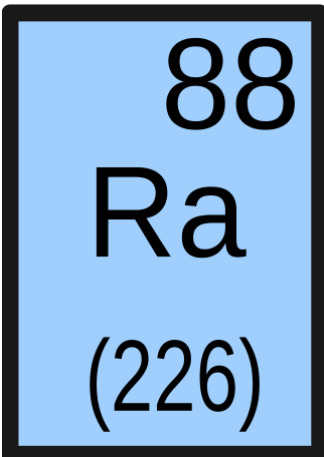


Her breakthrough came while working with pitchblende. Pitchblende is a brown and



black mineral that contains large amounts of uranium. While working with the pitchblende, she and Pierre discovered a new

radioactive element. Marie decided to name the new element **polonium** after Poland, her home country. Shortly after discovering polonium, Marie's research led her to find yet another element. This new element she called **radium**.



The discovery of polonium and radium were very important to the scientific community. However, since Marie was a woman in a time when women were not credited for their achievements in the sciences, only Pierre was praised for the discovery. The scientific community chose to reward him with a **Nobel Prize** in physics for his work on radioactivity. He refused the reward, angered by the lack of recognition for Marie. The scientific community gave into his wishes and she was also given a Nobel Prize for physics.



While working together, Marie and Pierre fell in love. Pierre wanted to marry Marie, but Marie needed a lot of convincing. She wanted to return to Poland with her father. After some time, Marie agreed to marry Pierre. They honeymooned on bikes for a few months before returning to their work. They loved each other very much and were devoted to each other.



The Curies had two daughters, Irene and Eve. Marie was more interested in her studies than in her children. They were raised by Pierre's father and received little attention from their parents. There were spaces of up to a year where they wouldn't get to see their parents.



The girls resented their mother for her lack of involvement. It wasn't until Irene worked with Marie that she forgave her and it was not until Marie's death that Eve forgave her.

The exposure to the radium was taking a toll on Pierre and Marie's health. Pierre was quoted saying, "We can no longer dream of the great work days of times gone by. I can only keep up by avoiding all physical fatigue, and my wife is in the same condition." While coming home from the doctor, Pierre walked out into traffic and was hit by a horse drawn carriage. The carriage wheel crushed his skull, killing him. Marie was devastated.



After Pierre's death, Marie was presented with another Nobel Prize. This time the award was for her discovery of polonium and radium. The award was presented for her achievements towards the subject of **chemistry**.



*Her second Nobel Prize was awarded in 1911.

When World War I hit, Marie was determined to do her part in helping. She saw how many soldiers were dying that could be saved if x-rays were more accessible. So she invented mobile x-rays, or Petite Curies, to save the lives on the French soldiers. She taught herself to drive and enlisted her daughter Irene to help with the work. They treated over a million soldiers.



*Marie Curie driving one of her Petite Curies during WWI.

After the war, Marie continued to work on her studies. She worked until she became too sick to continue. Marie passed away on July 4th, 1934. She was 67 years old. Her official cause of death is cancer due to excessive exposure of radiation.



Glossary

Scheme: To make plans

Physics: A branch of science that studies matter and energy

Illiterate: Not being able to read or write

Governess: Someone whose job is to teach children in the children's own home

Opposition: Showing disapproval to a situation

Adversity: A difficult situation

Uranium: The 92nd element on the periodic table, it is a radioactive metal

Radioactive: When something is sending out radiation

Radium: The 88th element on the periodic table; it is another radioactive metal.

Polonium: The 84th element on the Periodic Table; It is a radioactive metal.

Nobel Prize: An annual award that is given for work in the sciences, literature, and peace

Chemistry: A branch of science that explores what makes up matter and what happens within the matter

Works Referenced

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Common Core State Standards

CCSS.ELA-LITERACY.RI.5.10

By the end of the year, read and comprehend informational texts, including history/social studies, science, and technical texts, at the high end of the grades 4-5 text complexity band independently and proficiently.

CCSS.ELA-LITERACY.RF.5.4.A

Read grade-level text with purpose and understanding.

CCSS.ELA-LITERACY.RI.5.2

Determine two or more main ideas of a text and explain how they are supported by key details; summarize the text.

CCSS.ELA-LITERACY.RI.5.3

Explain the relationships or interactions between two or more individuals, events, ideas, or concepts in a historical, scientific, or technical text based on specific information in the text.

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