# MARIE CURIE

Want to Be a Scientist Like

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In 1898, the streets of Paris were humming with talk about a newly discovered kind of energy. "It's like light," people were saying, "except it can pass through materials that usually block light!"



Marie Curie heard people talking about ideas for how to use radiation. It was already used to make X-ray pictures of people's bones. Many people hoped radiation would be able to cure diseases.



Marie and her husband, Pierre, were scientists at a French university when they first heard about the new energy. Marie was excited to explore the energy and learn all about it. Marie discussed the energy with other scientists. The energy was a kind of radiation that came from rocks in the earth. Marie and Pierre became friends with Henri Becquerel (on-REE beck-uh-REEL), the man who discovered radiation coming from a metal called uranium.





Marie learned that this kind of radiation could be found in rock called pitchblende ore. This ore was leftover mining material that wasn't used for anything.



Marie gathered as much pitchblende ore as she could and started to study it. Uranium had already been removed from the ore. She believed an additional source of radiation was coming from a new material.

Marie worked with the ore day and night. She broke it into tiny pieces, heated it in a giant pot, and separated the parts that had radiation from the parts that didn't. The ore was heavy and the work made Marie very tired, but she kept working and studying. Pierre taught at the university during the day and came to the lab to work with Marie in the evenings.



Marie and Pierre worked with the ore for three years. Finally, Marie found the source of radiation in the ore. Marie had been right—it was a metal that no one had discovered. Marie named it radium. It took almost a ton of ore to make a tiny speck of radium.





Marie taught other people how to separate radium from ore, hoping they would discover new ways to use radiation. Her research led to the discovery that radium could be used to treat cancer.



In 1903, Marie, Pierre, and Henri Becquerel shared a Nobel Prize for their work with radiation. This was a great honor. Then, in 1911, Marie won a second Nobel Prize for discovering radium and another metal called polonium. The discovery of radium and Marie's Nobel Prizes sent another buzz through the streets of Paris. Marie Curie became the most famous woman scientist in the world. But Marie didn't care about fame. She just wanted to find more ways for her research to improve the world.



## For Teachers and Parents

#### Marie Curie 1867–1934

Marie Curie said, "You cannot hope to build a better world without improving the individuals."

#### Scholar

Marie Curie was raised in Poland, but Warsaw University did not admit women at the time, so she moved to France to attend the University of Paris at the Sorbonne. There she received degrees in physics and mathematics. Fourteen years later, she became the Sorbonne's first female professor.

#### Scientist

Marie Curie is credited with the discovery of both radium and polonium. She shared the 1903 Nobel Prize for physics with her husband Pierre, and French physicist Henri Becquerel. In 1911, Marie won the Nobel Prize for chemistry.



### Philanthropist

Marie Curie did not patent her process for isolating radium because she feared it would limit the benefits of radium. During World War I, Marie equipped automobiles with X-ray machines to help with the war effort. The machines helped doctors see soldiers' broken bones. The doctors could then help the soldiers. Later, Marie raised money for research scholarships.

## Math & Science

Scientist

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