5 Remarkable Things You Didn't Know About Marie Curie

The Nobel Prize-winning scientist paved the path for other female scientists to follow. Here are some interesting facts about Marie Curie.



Marie Curie (1867-1934) was often the only woman in a room full of male scientists. But that didn't stop her from being the first female to win a Nobel Prize, and the first and only to win the award in two separate fields.

The Polish-born French physicist gained recognition for her research on radioactivity, but she racked up accomplishments throughout her life. Marie was a child product who exhibited extraordinary skills as young as age four. Born to two teachers who had instilled the value of education, 4-year-old Marie taught herself to read both French and Russian. Equally as impressive was Marie's memory, which allowed her to recall vivid events from her toddler years.

In 1891, her French came in handy as the young scientist headed for Paris to further her education at Sorbonne University, where she studied chemistry, maths and physics. There she discovered two radioactive elements: radium and polonium. Soon after, she met her husband and science partner, Pierre Curie. They shared a love for science and research, which led to their ground-breaking discovery of radioactivity — the spontaneous emission of energetic particles or waves via unstable atomic nuclei. The term radioactivity was coined by Marie herself and garnered the world's attention.

For their groundbreaking work, the pair received the Nobel Prize in physics in 1903. Even

though Marie became the first woman to receive a Nobel Prize, she didn't stop there. In 1911, she became the sole recipient of the Nobel Prize for chemistry for her work on pure radium. Today, Marie Curie's discoveries on the properties of radioactive elements have paved the way for diagnosis and radiation therapy in medicine.

What Are Some Interesting Facts About Marie Curie?

Here are five **fun facts** about Marie Curie, a radiant woman who paved the way for <u>women in science</u>:

1. She Didn't Have a Fancy Lab

When you think of a Nobel Prize-winning physicist, you can only imagine how legitimate their workspace must be. Marie Curie may have broken barriers in science, but her lab was far from glamorous. When Marie and her husband sought to conduct a series of experiments that would prove the existence of the elements radium and polonium, they needed plenty of space — a traditional laboratory just didn't make the cut. Turns out Team Curie opted to work out of an old shed for much of their Nobel prize-winning research.

2. She Was a World War I Hero

Curie helped save thousands of soldiers by developing mobile radiology units that were delivered to the front lines for army doctors to use. The portable technology allowed them to X-ray the wounded soldiers and helped guide their surgeries. Over a million soldiers benefited from the "Petites Curies," Marie's invention that came with a generator, a hospital bed, an X-ray and the ability to save a life.

3. Nobel Prizes Run in the Family

Winning Nobel Prizes was a family affair: The Curie family had a total of <u>five total Nobel Prizes</u>. Marie held the most, with two to her name, while her husband, Pierre, held one. In 1935, daughter Irène Joliot-Curie followed in her parents' footsteps and received a Nobel alongside her husband, Frederic Joliot, for their discovery of new radioactive isotopes. Following the family tradition, the youngest Curie married a Nobel Peace Prize winner, Henry Richardson Labouisse, who received the award as the head of UNICEF in 1965.

4. Albert Einstein Was a Huge Marie Curie Fan

Who would think that Albert Einstein be part of the fun facts about Marie Curie? In 1906, Pierre was killed in a tragic road accident. As a grieving widow, Marie faced the brutal sexism that accompanied her fame as a solo female scientist. It was then that Einstein decided to send a glowing letter to Marie in hopes of uplifting her. The note not only described how Einstein was inspired by her drive and intellect, but also that she had his full support. Here's what the father of modern physics had to say about this remarkable woman: "Marie Curie is, of all celebrated beings, the only one whom fame has not corrupted."

5. A Science Love Story

Nothing says true love like a shared passion for science. Marie and Pierre Curie were introduced by Marie's colleague shortly after she graduated from Sorbonne University. The dynamic duo soon became partners in both life and research. In fact, it was Pierre who insisted his wife be equally recognized when awarded the Nobel Prize for their scientific discoveries. Though Marie was often undermined as a woman in a male-dominated field, Pierre backed her every step of the way.

Tasks

I. Answer the following questions:

- 1. Who was Marie Curie, and what were her accomplishments in the field of science?
- 2. What did Marie Curie discover during her studies at Sorbonne University, and how did she meet her husband Pierre Curie?
- 3. What is radioactivity, and who coined the term?
- 4. How many Nobel Prizes did Marie Curie receive, and for what fields?
- 5. What impact have Marie Curie's discoveries had on medicine today?
- 6. What challenges did Marie Curie face as a woman in science, and how did she overcome them?
- 7. Why did Marie Curie choose to work out of an old shed instead of a traditional laboratory for much of her research?
- 8. How did Marie Curie contribute to World War I efforts, and what invention did she create to help save soldiers' lives?
- 9. What is Albert Einstein's connection to Marie Curie, and what did he think of her work?
- 10. How did Marie and Pierre Curie's shared passion for science influence their personal and professional relationship?

II. Match these words to their definitions.

Vocabulary chunks Definitions

- 1. a Nnobel prize-winning physicist ${\it q}$ a. To attract or gather interest, admiration, or support from others.
- 2. to rack up accomplishments b. The central part of an atom that contains protons and neutrons.
- 3. radioactive isotopes c. To meet the required standard or criteria for something.
- 4. atomic nuclei **b**d. The knowledge of the French language proved to be useful or advantageous.
- 5. to garner attention c. To have a trait or characteristic that is common among members of a family.
- 6. ground-breaking discovery of radioactivity f. Scientific investigation that has earned its author(s) the prestigious Nobel Prize.
- 7. to follow in parents' footsteps (g. To carry out tests or trials in order to obtain data or prove a hypothesis.
- 8. portable technology h. The release or discharge of tiny particles or energy waves from a source.
- 9. French came in handy i. Variants of chemical elements that emit radiation due to unstable atomic nuclei.

- 10. to run in the family **e** j. Electronic dev
- 11. to gain recognition for research C
- 12. emission of particles or waves
- 13. Nobel prize-winning research
- 14. to make the cut
- 15. Who would think that ... 🗶
- 16. to conduct experiments
- a child prodigy

- j. Electronic devices or equipment that can be easily carried around.
- k. Expressing surprise or disbelief at something unexpected or unlikely.
- 1. To achieve numerous successes or achievements.
- m. A young person who possesses exceptional talent or ability in a particular field.
- n. To pursue a career or path similar to that of one's parents.
- o. An important and innovative finding about the phenomenon of radioactivity.
- p. To receive acknowledgement or credit for one's scientific investigations.
- q. A scientist who has been awarded the Nobel Prize for their contributions to physics.

III. Spot the target lexical chunks in these sentences and make your own sentences with them.

- 1. She hopes to gain recognition for her research on renewable energy.
- 2. In the past year, he has been able to rack up many accomplishments in his new job.
- 3. Mozart was a child prodigy who started composing music at the age of 5.
- 4. When she visited France, her knowledge of the language came in handy.
- 5. Marie Curie made a ground-breaking discovery of radioactivity and its benefits for science and medicine.
- 6. The emission of particles from the sun can affect the Earth's atmosphere.
- 7. Atomic nuclei are the central core of atoms that contain protons and neutrons.
- 8. His new book garnered attention from critics and readers alike.
- 9. Albert Einstein was a Nobel Prize-winning physicist known for his theory of relativity.
- 10. Scientists need to conduct experiments in order to test their theories and hypotheses.
- 11. Only the best candidates will make the cut to be accepted into the prestigious university.
- 12. Her Nobel prize-winning research focused on finding new treatments for cancer.
- 13. Advances in portable technology have made it easier for people to work remotely from anywhere.
- 14. Musical talent seems to run in the family, as both her parents are accomplished musicians too.
- 15. After studying medicine for several years, she decided to follow in her parents' footsteps and become a doctor.

- 16. Radioactive isotopes can be used in medical imaging to detect diseases and injuries in the body.
- 17. Who would think that a small act of kindness could change someone's life forever?

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