Welcome to Spotlight. I’m Katy Blake. And I’m Luke Haley. Spotlight uses a special English method of broadcasting. It is easier for people to understand, no matter where in the world they live. Do you know the name Marie Curie? Marie Curie was a scientist in the early 20th century. At that time, very few women were scientists. Marie had to work hard to prove her skills. But her scientific discoveries lead to many of the important technologies of our time. Today’s Spotlight is on Marie Curie’s life and work. When she was a young girl, Marie dreamed of going to university. But this did not seem possible. She was born in the late 19th century. Her family lived in Poland. During that time, Russia ruled Poland. And Marie’s parents wanted Poland to be its own country. They demonstrated against Russian rule. But Marie’s parents were teachers. The Russian government managed their schools. Her parents were forced to leave their teaching jobs. So the whole family had to work hard to survive. Then, when Marie was just 11 years old, her mother died. Marie did continue her education. But the best schools in her country would not teach her, because she was a woman. This may not seem like a successful beginning for Marie. But Marie would not give up. She went to Paris, and found a school that would teach her. She went without food to study. But it was all worth it. Even as a student, she made many discoveries that made her famous. In1896 Henri Becquerel was studying the element uranium. He discovered something very special about it. It gave off energy. Becquerel did not know much about radiation. He thought that it would move through solid objects, like an X-ray. But the energy from uranium was different. It was a weaker energy. And it did not do anything interesting, at first. Many scientists did not explore Becquerel’s discovery. Marie Curie was different than these other scientists. She was very interested in uranium. She was a student at the University of Paris. She was working to become an expert in chemistry and physics. Becquerel’s work was a good subject to study. No one knew much about it, so Marie could experiment. Around this time, Marie met another scientist. His name was Pierre Curie. They fell in love, and married in 1895. Neither was very wealthy. Pierre taught at the university. And Marie spent all of her time studying. They wanted a laboratory to experiment in together. Instead they experimented in a small shed, used for storing tools. They did not have enough money for a real laboratory. Marie spent a long time on her research. She studied the radiation coming from uranium. She also discovered other elements that were radioactive. She named them polonium and radium. She named Polonium after the place she was born; Poland. These elements had a stronger energy than uranium. She also found that radiation could shrink tumors from cancer. Soon, Marie’s husband Pierre recognized the importance of her work. He had never studied radioactive elements. But soon, Pierre started helping Marie. He stopped his own experiments. And the two worked on the same project. Together they even invented the word “radioactivity.” Soon, other scientists noticed what Pierre and Marie were doing. The Curies even received the Nobel Prize for their work in 1903. The Nobel Prize recognizes the world’s best scientists and writers. It gives them money to continue their work. However, Marie almost did not win her first Nobel Prize. Again, it was because she was a woman. Most scientists and engineers at that time were men. Many people thought that women did not have the skill to be scientists. The Nobel committee planned to recognize Henri Becquerel and Pierre Curie alone, without Marie. But they did not do all of the work with radiation! Pierre knew that if he deserved the award, Marie did too. She started their experiments. She discovered polonium and radium. He told everyone he knew about her work. And together they fought to put her name on the award too. It was one of the greatest events of her life. After winning the Nobel Prize, life was easier for Marie and Pierre. Pierre got a better job at Paris University. And Marie finally became a professor too. They were famous around the world. But their happiness did not last. Pierre died very suddenly, three years later. His death hurt Marie for years after. She wrote in her Autobiographical Notes, “Pained by his death, I did not feel I had a future. But I could not forget what my husband used to say. That, even without him, I should continue my work.” Working without Pierre was difficult for Marie. But it was a way to remember her husband. She took his position at the University of Paris. She was the first female professor in its history. And she continued experimenting with radiation. However, she continued to have problems, as a woman scientist. There were many people who believed that Marie Curie did not deserve her Nobel Prize. They said that Marie was her husband’s assistant. As if to prove them wrong, she invented a way to measure radiation levels. And she applied her work with radiation to medicine. There was hope it could cure cancer. In 1911, she won the Nobel Prize again. This time, no one could say she did not deserve it. Tragically, Marie Curie also died because of her work with radiation. Today, we know that polonium and radium are very dangerous. Radiation can help cure cancer, but it is also a kind of poison. Marie did not know this. At that time, no one did. So she did not protect herself. In 1934 she went into the hospital. There, they found that she had a bone disease caused by radiation. She died soon after, at the age of 66. Marie Curie lived, and died, for science. Today, we can see the effects of her work everywhere. Her discoveries led to the first nuclear power. She was one of the first people to use X-rays for medical purposes. And it is because of her work that we have better ways to treat cancer. She even started several schools for people to study radiation. Marie Curie was important for another reason too. She showed that women are equal to men in learning, education and scientific discovery. And her example has inspired the next generation of women scientists to achieve great results too. The writer of this program was Dan Christmann. The producer was Michio Ozaki. The voices you heard were from the United States and the United Kingdom. All quotes were adapted for this program and voiced by Spotlight. You can listen to this program again, and read it, on the internet at www.radioenglish.net. This program is called, “Marie Curie.” We hope you can join us again for the next Spotlight program. Goodbye.