Marie Curie was the first woman to win a Nobel Prize, and one of the few scientists ever to win that award twice. In collaboration with her physicist husband, Pierre Curie, she developed and introduced the concept of radioactivity to the world. Working in primitive laboratory conditions, Curie investigated the nature of high-energy rays spontaneously produced by certain elements, and isolated two new radioactive elements, polonium and radium. Her scientific efforts also included the application of X-rays and radioactivity to medical treatments.

Christened Maria Sklodowska, Curie was born on November 7, 1867, in Warsaw, Poland. She was the fourth daughter and fifth child of schoolteachers whose ancestors had been wealthy landowners. Curie’s parents considered learning to be important, so they encouraged their children’s curiosity and creativity in a loving environment. The family’s happiness was dimmed, however, when Curie was only five years old. Her mother, Bronisława, contracted tuberculosis (a communi-

“All my mind was centered on my studies. All that I saw and learned that was new delighted me. It was like a new world opened to me, the world of science, which I was at last permitted to know in liberty.”

Marie Curie
Words to know

compound: a combination of elements
disintegration: a change in atomic composition because of radioactivity
element: a basic substance that consists of atoms of only one kind
radioactivity: the ability of an element to release energy particles or energy rays
transmutation: a change in form as the result of radioactivity
X-ray: an electromagnetic radiation that is like visible radiation, except that it has a short wavelength produced by bombarding a target with fast electrons in a vacuum.

cable disease primarily affecting the lungs) and had to avoid kissing or even touching her children. By the time Curie was 11, both her mother and her eldest sister, Zosia, had died. When she completed her elementary schooling, she entered Warsaw's "Floating University," an underground, revolutionary school that prepared young Polish students to become teachers.

Helps with sister's education

Curie left Warsaw at the age of 17, not for her own sake but for that of her older sister Bronya. Because Polish law prohibited higher education for women, both sisters wanted to go to school abroad. The family could not afford to send either of them, so Marie took a job as a governess to fund her sister's medical education in Paris. At first she accepted a post near her home in Warsaw, then she went to work for the Zorawski family, a family who lived some distance from Warsaw. Curie supplemented her formal teaching duties there by organizing a free school for the local peasant children. Casimir Zorawski, the family's eldest son, eventually fell in love with Curie and she agreed to marry him, but his parents objected vehemently. Marie was a fine governess, they argued, but Casimir should marry a much richer woman. Stunned by her employers' rejection, Curie finished her term with the Zorawski family and sought another position. She had spent a year in a third governess job before her sister Bronya finished medical school and summoned her to Paris.

Enrolls at the Sorbonne

In 1891, at the age of 24, Curie enrolled at the Sorbonne, becoming one of the few women in attendance at the Parisian