

RADIOACTIVITY

FROM
1891

Marie Curie discovered radioactive elements and their qualities. In 1903, she became the first woman to receive the most important award in the world of scientific research: the Nobel Prize. Then, it was in physics—and in 1911, she won it again in chemistry.

At the age of four, Marie could already read and solve math problems. When she grew up, she moved from her native Warsaw to Paris. In those days, women were not allowed to study in Poland, but she was not going to let that stop her. In 1891, she began to study physics at the famous university of Sorbonne in Paris. Apart from her, there were just 20 women enrolled at the university,

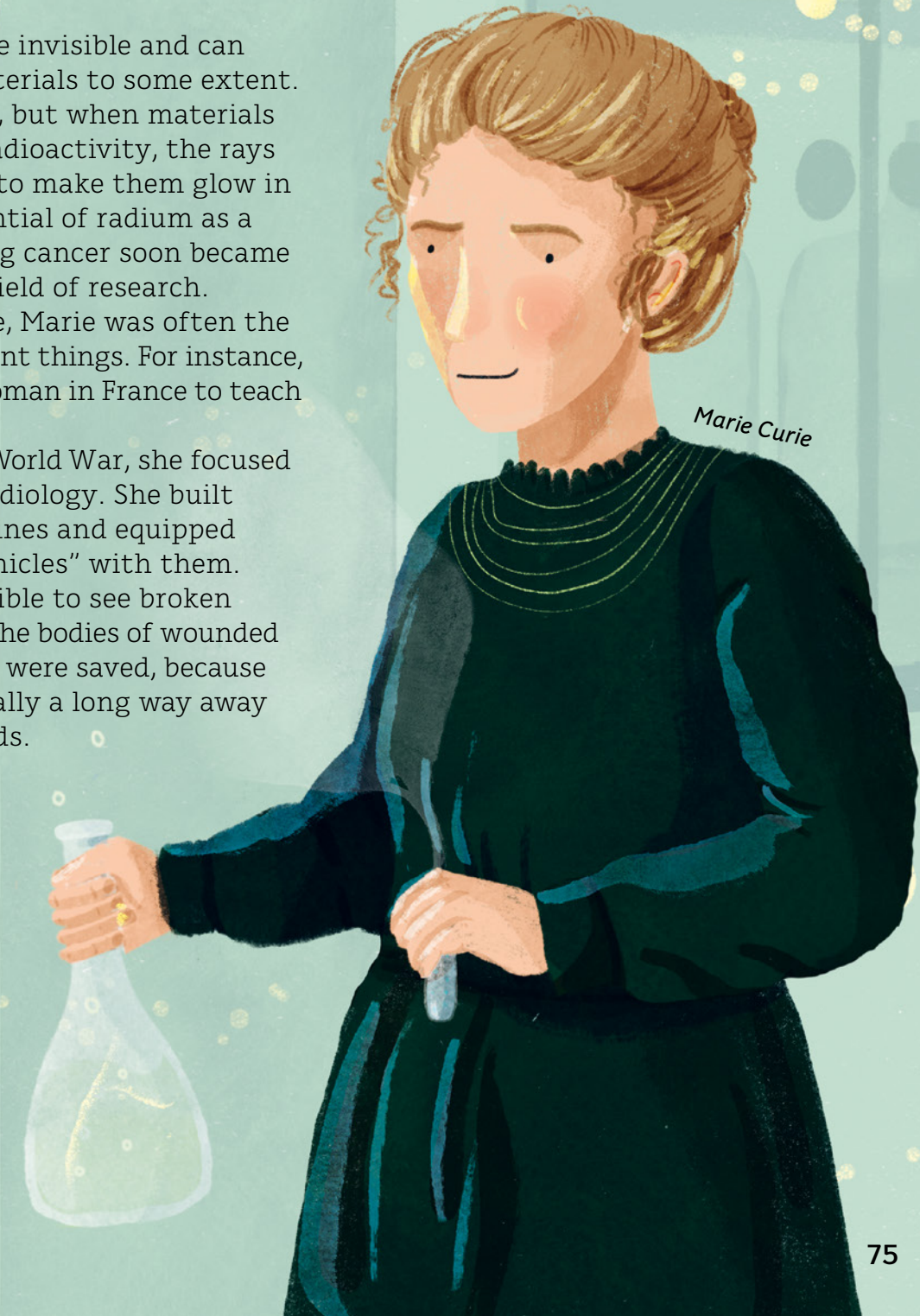
compared to more than 1,800 men. When Marie took her exams, she came top in all her subjects. In 1894, she got to know the physicist Pierre Curie and they fell in love, got married, and from then on always worked together. Marie discovered the previously unknown chemical elements polonium and radium and the nature of their radiation, for which she coined the term “radioactive.”

The word “radium” became fashionable, and restaurants and movie theaters were named after the element Marie had discovered.

In 1921, the U.S. president Warren G. Harding presented Marie with one gram of radium after an American journalist had appealed for donations on her behalf. This was worth a huge amount, and it enabled her to continue with her research.

Radioactive rays are invisible and can penetrate solid materials to some extent. You can't feel them, but when materials are charged with radioactivity, the rays are strong enough to make them glow in the dark. The potential of radium as a means of combating cancer soon became a hot topic in the field of research. Throughout her life, Marie was often the first to start or invent things. For instance, she was the first woman in France to teach at a university.

During the First World War, she focused her attention on radiology. She built mobile X-ray machines and equipped 20 “radiological vehicles” with them. These made it possible to see broken bones or bullets in the bodies of wounded soldiers. Many lives were saved, because hospitals were usually a long way away from the battlefields.



Marie Curie