



Mae Jemison: Astronaut Biography

When the space shuttle Endeavour blasted off on its second mission, it carried the first African American woman into space. But Mae Jemison was more than an astronaut – she's also a physician, a Peace Corps volunteer, a teacher, and founder and president of two technology companies. Let's take a look at this remarkable woman.

Early life The youngest of three children born to a maintenance worker and an elementary schoolteacher, she had a fascination with all things science from an early age. Once, after receiving an infection, she performed an extended experiment on pus. Jemison's parents supported her desire to be a scientist.

Jemison did well in high school, and attended Stanford University on scholarship at the age of 16. There, she attained her Bachelor of Science in Chemical Engineering and a Bachelor of Arts in African and African-American studies. She went on to earn her doctorate in medicine from Cornell University in 1981. After working as a general practitioner, Jemison served two and a half years as a volunteer in the Peace Corps, spending time in the African countries of Sierra Leone and Liberia. In addition to English, she speaks Russian, Japanese, and Swahili.

Reaching the stars

Although employed as a general practitioner again following her return to the United States, Jemison decided to pursue a childhood dream. After the historic flight of Sally Ride, the first American woman in space, Jemison applied to NASA's astronaut program, feeling that more opportunities had opened up. The explosion of the Challenger shuttle put a hold on applicants, but in 1987, she became one of the fifteen candidates selected out of more than 2,000 people. After a year of training, she became the first female African American astronaut.

In Sept. 12, 1992, Mae Jemison became the first African American woman in space when the space shuttle Endeavour carried her and six other astronauts on 126 orbits around the Earth. A mission specialist, Jemison was a co-investigator of two bone cell research experiments, one of 43 investigations that were done on mission STS-47. The shuttle landed at Kennedy Space Center in Florida on Sept.

20th. Over the course of her only off-planet voyage, Jemison logged 190 hours, 30 minutes, and 23 seconds in space.

Jemison left NASA in March 1993. She went on to teach at Dartmouth College. She also founded her own company, the Jemison Group, seeking to encourage a love of science in students and bring advanced technology around the world. She is a strong **advocate** for science, establishing an international science camp for high school students and working on the 100-Year Starship program.

Quote from Mae Jemison "I want to make sure we use all our talent, not just 25 percent. **Don't let anyone rob you of your imagination, your creativity, or your curiosity.** It's your place in the world; it's your life. Go on and do all you can with it, and make it the life you want to live."

Marie Curie (1867- 1934): Did she live and die for science?

Marie Curie was a Polish born physicist and chemist and one of the most famous scientists of her time. Together with her husband Pierre, she was awarded the Nobel Prize in 1903, and she went on to win another in 1911.



Marie Sklodowska was born in Warsaw (Poland) on 7th November 1867. She was the daughter of a teacher. In 1891, she went to Paris to study physics and mathematics at the Sorbonne where she met Pierre Curie, professor of the School of Physics. They were married in 1895. The Curies worked together investigating radioactivity, building on the work of the German physicist Roentgen (inventor of X-Rays) and the French physicist Becquerel.

In July 1898, the Curies announced the discovery of a new chemical element, polonium; at the end of the year, they announced the discovery of another, radium. The Curies, along with Becquerel, were awarded the Nobel Prize for Physics in 1903.

Pierre's life was cut short in 1906 when he was knocked down and killed by a carriage. Marie took over his teaching post, becoming the first woman to teach at the Sorbonne, and **devoted** herself to continuing the work that they had begun together. She received a second Nobel Prize, for Chemistry, in 1911. The Curie's

research was crucial in the development of X-Rays in surgery. During World War One Curie helped to equip ambulances with X-Ray equipment, which she herself drove to the front lines.

The International Red Cross made her head of its radiological service and she held training courses for medical orderlies and doctors in the new techniques. Despite her success, Marie continued to face great opposition from male scientists in France, and she never received significant financial benefits from her work. By the late 1920s her health was beginning to deteriorate. She died on 4 July 1934 from leukemia, caused by exposure to high-energy radiation from her research. The Curies' eldest daughter Irene was herself a scientist and winner of the Nobel Prize for Chemistry.

Comprehension questions

1. Evaluate how each woman helped people around them change their mindset regarding women in the field of science and math. (10 pts)

Marie Curie and Mae Jemison helped to change the mindset regarding women in the field of science and math by ...

2. Why might male scientists give Marie Curie a hard time? (5 pts)

Male scientist may have given Marie Curie a hard time because...

3. Read the quote from Mae Jemison, explain the quote in your own words? (10 pts) **The quote from Mae Jemison means.....**

4. Summarize the first passage using 3 quotes (10 pts) **The first passage is about the first African American women in space. According to paragraph one, "....." But science was not her only love, she, ", ". Also, she, "" She is an inspiration to girls around the nation who are interested in science and space.**

5. Summarize the second passage using 3 quotes (10 pts)

6. Complete a vocabulary tree for the first passage on the back of the first passage (15 pts)

7. Complete a vocabulary tree for the second passage on the back of the second passage. (15 pts)

Product Choices: Choose one to complete for 15 points

1. Create a 5 page flip book based on one of the women.
2. Create an Acrostic poem based on one of the women
3. Create a Public Service announcement recruiting girls to join science and math clubs using Mae Jemison and Marie Curie as examples
4. Research one more influential female scientist/mathematician. Explain the similarities between them and Marie Curie and Mae Jemison. One Paragraph
5. _____ points of out 100