HEROES OF SCIENCE Mae Jemison

The woman who broke down boundaries and made it to the stars.

ost people in life are happy if they can excel in one field. Mae Jemison, however, has managed to master several over the course of her career. She is the first African-American to become an astronaut, and she is an author, doctor and engineer. Her journey to becoming a hero of science was not straightforward, and she had to overcome several challenges to get to the top. Let's find out how this remarkable scientist achieved her dreams and continues to inspire others today.

Dreaming of space

Jemison was born in Decatur, a city in the US state of Alabama, on 17 October 1956, but grew up in the bigger city of Chicago. From an early age, she loved art, fashion and all types of science – especially anything to do with space. When asked on her first day of kindergarten (the American name for nursery school) what she wanted to become, Jemison replied, "A scientist."

Her interest in space continued to grow as she got older. She loved Star Trek, a TV show set on board a spaceship, and was particularly inspired by Nichelle Nichols, an African-American actor. She was also fascinated by the Apollo space programme, which the US government launched in 1961 to try and get humans to the Moon. Jemison loved watching the Apollo missions on TV but was disappointed that there were no female astronauts. She read a lot about science and science-fiction, and won a scholarship to one of the top US universities.

From Apollo to Artemis

The US space agency NASA has launched a new programme to land the first woman on the Moon by 2024. The Artemis programme has been described as "humanity's return to the Moon". It aims to use resources on the Moon to allow astronauts to travel further, carry out more experiments, and build a base on the Moon that could be used as a launch pad for the first human voyages to Mars. To achieve this, the most powerful rocket of all time has been created, called the Space Launch System. A new capsule called Orion has also been built, to try and enable astronauts to travel into deep space.



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Tough times

WIW

Jemison can

speak four different

Japanese, Russian

and Swahili.

At the age of 16, Jemison went to Stanford University to study chemical engineering (designing industrial processes to make products and materials). She also attended classes in African-American studies. She was one of the only black people in her class, and one of very few women. Jemison experienced racism at the university, including from her teachers. Racism is when people are treated badly or unfairly because of their skin colour, culture or nationality. Jemison remembers one professor who made her feel stupid when she asked questions, but praised white students for

> the same thing. Jemison overcame these challenges, and in 1977 she left university with degrees in chemical engineering and African-American studies.

From doctor to astronaut

languages – English, After graduating, space seemed to Jemison to be out of reach. She went to medical school at Cornell University, New York, to become a doctor. She volunteered in Cambodia in Asia, and Kenva in Africa. and worked as a doctor in the US.

> Then, in 1983, Sally Ride blasted off on the space shuttle Challenger, becoming the first American woman to fly to space. It inspired Jemison to follow her dream, and in 1985, she applied to NASA, the US space agency, to become an astronaut.

She had to wait, because the following year Challenger blew up shortly after take-off. It was one of the worst accidents of the US space programme and the tragedy led to a pause in recruitment. However, in 1987, Jemison was one of just 15 people out of 2,000 applicants accepted onto the astronaut programme. "I didn't care if there had been 1,000 people in space before me or whether there had been none. I wanted to go," she says.

Reaching the stars

After years of training, Jemison finally left Earth on board the space shuttle Endeavor, on 12 September 1992, with six other astronauts. Her mission was to see how the human body and other materials react to the conditions in space. Jemison took along a few special items. She chose things that represented people who are sometimes not included: a poster of a black dancer called Judith Jamison; a small statue from a West Africa women's society; and the flag of the oldest African-American female student group.

Jemison and her team spent 190 hours, 30 minutes and 23 seconds in space, and orbited the Earth 127 times. She says the experience made her feel very connected to the universe.

Down to Earth

After six years as an astronaut, Jemison retired from NASA, and has now set up a company that uses science and technology to solve everyday problems, such as a lack of power supplies in developing countries. She also began to teach and write, and is currently leading the 100 Year Starship project, which aims to make travel outside our solar system possible within the next 100 years. With so many inspirational achievements already behind her, it seems inevitable that Jemison will make it happen.



n 1993. Jemison became the rst real astronaut to appear on the TV show, Star Trek, after the producers heard she was a fan.

MAE JEMISON

Mae Jemison made history