

BIOGRAPHY



Maria Mitchell

In 1848 Maria Mitchell became the first woman elected to the American Academy of Arts and Sciences (there would not be another for nearly a century); in 1850 she was the only woman elected unanimously to the American Association for the Advancement of Science; and in 1869 she became the first woman elected to the American Philosophical Society. The nation's first woman astronomer had this to say of her outstanding achievements, "I was born of only ordinary capacity, but of extraordinary persistency."

As you read, think about how Mitchell advanced both astronomy and the movement for women's rights.

Maria Mitchell was born in 1818 on Nantucket, an island off the coast of Massachusetts. At that time, Nantucket was the leading whaling port in the world. In this seafaring community, people took an intense interest in the stars and planets, which were markers for ships' navigators. From the time she was a little girl, Maria climbed to the "widow's walk" on the roof of her house with her father to view the night sky. An avid and knowledgeable astronomer, Maria's father taught her much about the science.

Maria was educated in Nantucket schools and briefly ran her own school for girls. She then became the librarian of the newly opened Nantucket Atheneum, which enabled her to read widely and advance her education. In the evenings, she assisted her father at the island observatory. On October 1, 1847, her father announced her first major contribution to astronomy: "This evening at half past ten Maria discovered a telescopic comet five degrees above Polaris. Persuaded that no nebula could occupy that position unnoticed, it scarcely needed the evidence of motion to give it the character of a comet." This discovery brought Maria Mitchell fame and recognition among astronomers and led to her election to prestigious scientific societies.

In the early 1860s, wealthy Matthew Vassar founded a women's college bearing his name. Vassar wanted the school to rival the best men's colleges—and he sought Maria Mitchell for the faculty. To entice her, Vassar built an observatory equipped with the third largest telescope in the country. Mitchell became professor of astronomy at Vassar College when it opened its doors in September 1865. There she proved herself a superb teacher—magnetic, challenging, and dedicated to the use of the scientific method in education. "If the spirit of science can be developed at all in school rooms," she remarked, "it must be by free debate; free thought and free inquiry are the very first steps in the path of science."

In later years, Mitchell devoted more of her time to the cause of women's rights. "For women," she told students, "there are undoubtedly great difficulties in the path, but so much the more to overcome. First, no woman should say, 'I am but a woman!' But a woman! what more can you ask to be?"

A few years after her death in 1889, Maria Mitchell was elected to the Hall of Fame at New York University. Under her statue there appears this inscription: "Every formula which expresses a law of nature is a hymn of praise to God."

Questions to Think About

1. What set Maria Mitchell on the path to becoming an astronomer? What first brought her fame as an astronomer?
2. **Determining Relevance** How might Mitchell's work in science have been related to her work for women's rights?