



*"Do not look at stars as bright spots only - try to take in the vastness of the universe."*

# *Maria Mitchell*

## *(1818-1889)*



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The first professional woman astronomer in the United States

She remained the only woman ever elected to the American Academy of Arts and Sciences until 1943.



Maria developed her love of astronomy from her father. Early on, she revealed extraordinary observational powers, natural mathematical gifts and unusual sensitivity to stellar movements and colours. At 17, she opened her own school; a school training girls in math and science (1835).

On October 1st, 1847, Maria Mitchell succeeded in establishing the orbit of a new comet. She was the first American scientist to discover a comet and she got a gold medal for this from the Danish King Frederick VI.





The discovery gained her immediate recognition in scientific circles; the following year (1948) she was the first woman elected as a Fellow of the American Academy of Arts and Sciences. In 1850 she became a Fellow of the American Association for the Advancement of Science.

She worked at the U.S. Nautical Almanac Office as an astronomer; she was assigned the orbit of Venus.

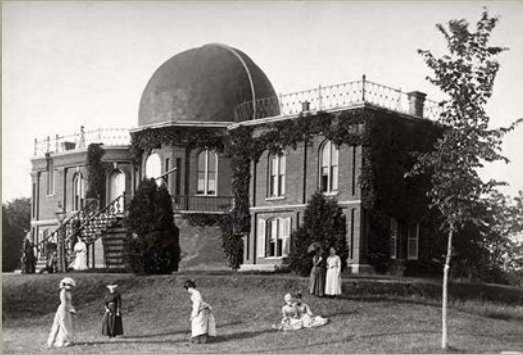
Mitchell's agile mind, pedagogic fire and salty opinions bring extraordinary animation to her varied collection of scientific papers, articles, notebooks and journals.

As a lecturer, Mitchell became known for pithy sayings. One was:

*“Study as if you were going to live forever;  
live as if you were going to die tomorrow.”*



In 1865, she was appointed professor of astronomy at the newly founded Vassar College in Poughkeepsie, New York – one of the earliest women-only US institutes of higher learning. Mitchell lived at the observatory for the next 23 years. Maria was an inspiration to her students.





Mitchell pioneered in the daily photography of sunspots; she was the first to find that they were whirling vertical cavities rather than clouds, as had been earlier believed. She also studied comets, nebulae, double stars, solar eclipses, and the satellites of Saturn and Jupiter.

She was elected to the American Philosophical Society in 1869; she helped found the Association for the Advancement of Women (1873) and served as its president (1875–76).

A pioneer in establishing women in the sciences, she devoted a great deal of time to finding ways for women everywhere to gain greater freedom and have their rights recognized in society. Maria Mitchell was a force behind women's rights and women's education of the nineteenth century.



## References:

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*“We especially need imagination in science. It is not all mathematics, nor all logic, but it is somewhat beauty and poetry.”*



This presentation was created by students taking part in the programme  
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