The history of women’s contributions to the fields of science, technology, engineering, & math (STEM) is long and varied, but it has often been underrepresented. This zine highlights a few of the women who have had a crucial impact on STEM fields. Today, women are in every STEM discipline, in every type of job, and represent the widest range of background and experiences.

Hypatia (born in 350) was known as a great thinker in her age. She was one of the earliest women to be a noted astronomer, mathematician and philosopher in ancient Greece and Egypt, and was also the head of an important school in Alexandria.

Katherine Coleman Goble Johnson (b.1918) is an African-American space scientist and mathematician who calculated space flight trajectories for critical NASA projects such as the 1969 Apollo 11 trip to the Moon. Johnson was known for her mathematical accuracy and was asked to double check the computer-based calculations on major space flight missions.

U.S. Air Force Colonel, chemist and astronaut Cady Coleman (b. 1960) helped deploy NASA’s Chandra X-ray Observatory into space in 1999 and has since spent about 180 days aboard the International Space Station.

Melba Roy Mouton (b. 1929) was a mathematician and computer programmer in NASA’s Trajectory and Geodynamics Division, acting as the Assistant Chief of Research Programs. Mouton worked on data from wind tunnel experiments as well as data from various astronautics experiments.

When Eileen Collins (b.1956) joined the Air Force Reserve Office Trainning Corp, women were not allowed to be pilots. This changed in 1976 while she was working on her undergraduate degree in math and economics. After spending over a decade in the Air Force, Collins was selected to the astronaut corps in 1990. She became the first female pilot of NASA’s Space Shuttle in 1993 and the first female commander of a NASA space mission.

Mary Jackson (b. 1921) grew up in Virginia and graduated college with a Bachelor’s degree in math and physics. After spending part of her career as a teacher, she changed paths to become a “computer” (or mathematician) for the National Advisory Committee for Aeronautics (NACA). Jackson worked for the National Advisory Committee for Aeronautics (NACA), which later became NASA, working on data from wind tunnel experiments as well as data from various astronautics experiments.

“By 1976, I was also the head of an important school in Alexandria. It wasn’t until I went to college and Sally Ride came to talk—it just opened up that possibility of if she could do it then I could aspire to do it too.”

Cady Coleman chemist, retired United States Air Force officer, and NASA astronaut

Learn more about these women and others at chandra.si.edu/women
www.nasa.gov

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