

AT THE MOVIES

Summary of 'Hidden Figures'

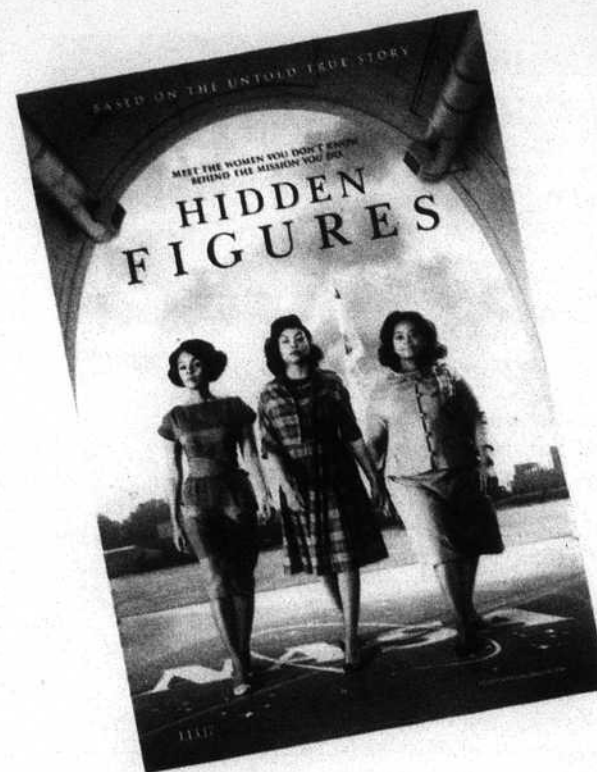
"Hidden Figures" is a 2016 dramatic film, based on the non-fiction book of the same name, that recounts the involvement of three female African-American mathematicians in NASA's space race against the Soviet Union. It follows the women's triumphs over racism and sexism as they rise through the ranks at NASA to eventually work on the historic launch and safe return of John Glenn,

the first American to orbit the Earth. The film is directed by Theodore Melfi with Taraji Henson as Katherine Johnson, Octavia Spencer as Dorothy Vaughan and Janelle Monáe as Mary Jackson. It has received box office success and critical praise for being a crowd-pleasing film that sheds light on a lesser-known part of history.



NASA photo

Pictured from left to right are Dorothy Vaughan, with other women who worked with NASA: Leslie Hunter and Vivian Adair.



The real African-American women of 'Hidden Figures'

Katherine Johnson

Katherine Johnson was a physicist and mathematician at NASA, who was known for her accurate calculations. She was born in 1918 in Sulphur Springs, West Virginia. She'd been a teacher and a stay-at-home mom before NASA's predecessor, National Advisory Committee for Aeronautics (NACA), hired her in 1953 to be a "computer" doing mathematical measurements and calculations. She calculated the trajectory of Alan Shepard, the first American in space in 1961. Even after NASA started using electronic computers, John Glenn requested for her to recheck the

calculations for his Friendship 7 flight that made him the first American to orbit the Earth. Her calculations were also critical to the success of the Apollo moon landing.

She worked for NASA until 1986. In 2015, she received the Presidential Medal of Freedom from President Barack Obama. Last year, the Katherine G. Johnson Computational Research Facility was dedicated at NASA's Langley Research Center in Hampton, Virginia, where Johnson first started working for NASA.

Dorothy Vaughan

Dorothy Vaughan was a mathe-

matician born in 1910 in Kansas City, Missouri. She started working at NASA in 1943 at the West Area Computers of the Langley Research Center. She was promoted to the area's supervisor in 1949, becoming the first African American woman to supervise staff at the center. Katherine Johnson was among her employees there.

To prepare for the coming of digital computers, she taught herself and her staff the programming language of FORTRAN. She later headed the programming section of the Analysis and Computation Division at Langley. She retired from NASA in 1971. She

passed way at the age of 98 in 2008.

Mary Jackson

Mary Jackson was a mathematician and aerospace engineer born in 1921 in Hampton, Virginia. She started work at the Langley Research Center in 1951. After taking advanced engineering classes, she became NASA's first black female engineer. She rose to the most senior title in the engineering department and then served as an administrator in the Equal Opportunity Specialist field. She retired from NASA in 1985. She passed away in 2005 at age 83.