

Hidden Figures

Film Discussion Guide

Film Description

From the 1930s to the advent of the digital computer in the early 1960s, several hundred female "human computers" were hired by the federal government. Their task was to calculate numbers and to solve the equations necessary for new generations of airplanes, the first American rockets, and the first U.S. manned space flights. They worked with



pen, paper, and analog calculating machines. The need for these workers was so great that even in those days of rampant racial discrimination, black women were hired as well as whites. The human computers reported to the Langley Research Center in Hampton, Virginia, operated by the National Advisory Committee on Aeronautics (NACA) and its successor, the National Aeronautics and Space Administration (NASA).

Hidden Figures is the story of three black women who made important contributions to the U.S. Space program both before and after the "human computers" were replaced by digital computers. The three real-life heroines of the film are:

- Dorothy Vaughan, who supervises the "colored computers." She sees that digital computers are the wave of the future and learns the prototype programming language FORTRAN, orients herself to a room-sized IBM computer, and encourages the women in her section to do the same.
- Katherine Goble Johnson, a gifted mathematician, performs essential calculations and makes important theoretical contributions for determining the trajectories and orbits of America's first satellites and manned space missions. Backing up a digital computer's early efforts, she confirms final calculations for John Glenn's history-making orbit of the Earth.
- Mary Jackson takes on Virginia's stridently segregationist education system to attain the graduate qualifications that allow her to become NASA's first female African-American engineer.



Dorothy Vaughan



Katherine Johnson



Mary Jackson

The women face entrenched racist and sexist attitudes. However, their persistence and outstanding work boost the U.S. presence in space and blaze a path forward for achievement based on merit. The film closely follows Margot Shetterly's meticulously researched, award-winning, 2016 historical work of the same name. The validity of the film is confirmed by Katherine Johnson's posthumously published memoir, *My Remarkable Journey*, at page 7, in which she states, that, "75% of what was shown in the movie is accurate."

Discussion Questions

Q1: What or who are the "Hidden Figures" referred to in the title to this film?

Q2: Do you think this film paints an accurate picture of racism in the Southern United States under Jim Crow?

Q3: What role does the scene with the policeman and the three women play in the story? What does this tell you about the position of the black women in Virginia society in 1961?

Q4: Three characters in the film exhibit racist tendencies. Identify them, describe how their racism is shown, and what happens to their attitudes through the course of the film.

Q5: Al Harrison, Katherine's boss, saw Katherine's genius. Yet he didn't see discrimination against her in the Space Task Group – his own department – until she confronted him with it. Why not?

Q6: Coffee serves as a symbol in this film. What does it symbolize?

Q7. Do you think NASA was a socially progressive organization in 1961? Why or why not?

Q8. Why did racism break down at NASA?

Q9. Describe three acts of courage by the heroines in the film. Why are these actions particularly courageous?

Q10. Who are the hidden figures in our community today? Why do we not see them?

Q11. What would you do if you were told you could not pursue a career or job because of how you look or who you are?

Q12. Is there anything you would like to discuss about the film that has not been discussed already?



Katherine Johnson is awarded a Presidential Medal of Freedom by former President Barack Obama in 2015. In 2016, he cited her in his State of the Union Address as an example of America's spirit of discovery.