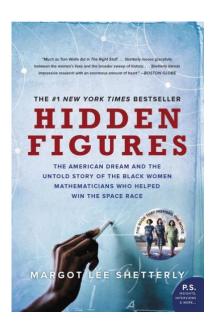
Hidden Figures Viewing Guide and Discussion Questions



Hidden Figures is a movie based on the book Hidden Figures: The American Dream and the Untold Story of the Black Women Mathematicians Who Helped Win the Space Race by Margot Lee Shetterly.

The book was a top book of 2016 for both *TIME* and *Publisher's Weekly*, a *USA Today* bestseller and a #1 *New York Times* bestseller. It received the prestigious Anisfield-Wolf Award for making an important contribution to understanding racism and human diversity.

The movie adaptation, released on December 25, 2016, was a critical and box office success earning numerous nominations and awards.



Getting Started

The movie *Hidden Figures* is our Big Watch for November, 2020, sponsored by the Women's Coordinating Council.

We began our ACTJAM journey to learn about racism with a Big Read, the book *Stamped: Racism, Antiracism, and You*. (Or, the longer and more scholarly option *Stamped: The Definitive History of Race in America*). *Stamped* is a history book that takes us through the 400-year timeline of racism in America. It's our wide-angle lens.

Now, with *Hidden Figures*, we're taking a close up look at one pivotal point in that timeline: the intersection of Jim Crow segregation, the civil rights movement, the cold war with the USSR and the ensuing space race, and the fight for gender equality. Some critics say the movie doesn't go far enough to depict the impact of segregation and racism on Black lives. Others say that's not the point of this story.

Hidden Figures is a true story, more biography than history. Yet like all stories, *Hidden Figures* is set in a particular time and place. We experience a slice of history through the lives of three remarkable Black women. More importantly, we experience history as it's being made by these women.

The story of these history-making women was unknown to the public until *Hidden Figures*.

The story behind the story

Hidden Figures the book is the previously untold true story of the Black women "computers" whose calculations helped America win the space race. (Yes, people were called "computers".) These highly skilled mathematicians worked for NASA in Langley, Virginia at a time when Virginia was still "The South" and Jim Crow laws were still in force, even at NASA.

Hidden Figures the movie is an adaptation of the book that follows the lives of three very real heroes – Katherine Johnson, Mary Jackson and Dorothy Vaughan – and their indispensable contributions to the US space program. The movie focuses on the dramatic chain of events leading to the first manned Earth orbit by John Glenn in February, 1962. John Glenn agreed to the launch only after he knew that Katherine Johnson had calculated and confirmed the trajectories.

Set primarily in 1961, the movie weaves together the post-WWII space race between the US and the USSR with the harsh realities of Jim Crow segregation and gender bias, and the Civil Rights movement.

But *Hidden Figures* isn't a documentary. It's a story. A true story. We're taken into this unique time through the personal stories of three exceptional Black women who triumphed through it: Katherine Johnson, Mary Jackson and Dorothy Vaughan.

About the author

Author Margot Lee Shetterly has a personal connection to the *Hidden Figures* story. She grew up in Hampton, Virginia where her father worked for NASA at its Langley campus as an atmospheric research scientist. She knew Katherine Johnson and Mary Jackson who worked with her father. Yet she didn't know until her husband pointed it out that the accomplishments of these NASA women and many others like them were unknown to the public – hidden. She made it her mission to learn and tell their stories.

NACA, the predecessor to NASA, hired women – including Black women – during World War II and after when the demand for mathematicians far exceeded supply. These were jobs that up until then had been done only by men – white men.

Shetterly writes: "The Langley staff had to prepare for the arrival of the African-American mathematicians. One of the tasks: creating metal bathroom signs that read "Colored Girls."

Shetterly spent six years researching and writing *Hidden Figures* before it was published in 2016. One of the first people she talked with in 2010 was Katherine Johnson.

Katherine Johnson: Watch a 4-minute video about Katherine Johnson <u>here</u>. President Obama awarded Katherine Johnson the Presidential Medal of Freedom on November 24, 2015. Katherine Johnson died February 24, 2020 at the age of 101. She and Jim Johnson, whose courtship is part of the *Hidden Figures* story, were married for sixty years until his death in 2019.

Dorothy Vaughan: Dorothy Vaughan was NASA's first African-American manager. Read a short biography of Dorothy Vaughan here. Read an excerpt from book *Hidden Figures* about Dorothy Vaughn: https://www.thecut.com/2016/08/dorothy-vaughan-space-race-c-v-r.html

Mary W. Jackson: Mary W. Jackson became NASA's first female engineer in 1958 after persuading a judge to let her take courses at an all-white high school. On June 24, 2020, NASA announced that the agency's headquarters building in Washington, D.C., would be named after Mary W. Jackson, the first African American female engineer at NASA. Read a short biography of Mary W. Jackson here.

Searching beyond the obvious

The title *Hidden Figures* is an invitation to look beyond what's obvious. In the movie the need to look beyond applies both to people and to the mathematics that will safely send astronauts into space and back.

At one point in the film, Al Harrison, Katherine's boss says to her, "What I'm asking everyone in that room to do, all my geniuses, is to look beyond the numbers. To look around them, through them, for answers to questions we don't even know to ask."

The women are hidden in plain sight, a fact accentuated by their jewel-toned dresses that stand out against the white shirts worn by the men.



Controversy about the white savior trope in the movie

Some of the white characters in the movie have been fictionalized, including Al Harrison who is played by Kevin Costner. Harrison is an amalgam of several real men. In the movie, Harrison destroys and removes outward signs of segregation, actions that make for a dramatic story yet didn't really happen. Some have criticized these actions as examples of the white savior or white hero trope. The director Theodore Melfi didn't see it that way. He said: "There needs to be white people who do the right thing, there needs to be black people who do the right thing."

Jim Crow Laws and Etiquette

There are many examples of Jim Crow laws and etiquette in *Hidden Figures*.

In 1865 the 13th amendment to the constitution outlawed slavery and in 1870 the 15th amendment granted full citizenship and voting rights to African Americans. However, state and local governments, primarily in the south, then passed laws the legalized segregation. These laws would come to be known as the Jim Crow laws, named after a character in Black minstrel shows. Jim Crow laws would be enforced until 1965.

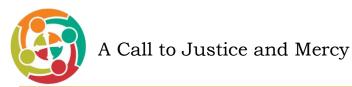
Jim Crow laws were upheld by the US Supreme Court in 1896 in the case of *Plessy vs. Ferguson*, in which the court set forth its "separate but equal" legal doctrine. In practice, the separate facilities for Blacks, if they existed, were usually underfunded and inferior compared to the facilities for whites.

In 1964, President Lyndon B. Johnson signed the Civil Rights Act, which legally ended segregation. In 1965, the Voting Rights Act ended laws that kept people of color from voting. The Fair Housing Act of 1968 ended discrimination in renting and selling homes.

Under Jim Crow, separate facilities included: restaurants, water fountains, restrooms, telephone booths, schools, buses, neighborhoods, hospitals, parks, beaches, sports teams, movie theatres, and cemeteries.

In addition to Jim Crow laws, there was also Jim Crow etiquette. These were social norms such as:

- A black male could not offer his hand to shake hands with a white male.
- Blacks and whites were not to eat together. If they did, whites were to be served first, and a partition was to be placed between them.
- A Black male could not light the cigarette of a white female.
- Blacks were not allowed to show public affection toward one another in public.
- Blacks were introduced to whites, never whites to blacks.



- Whites did not use courtesy titles when referring to Blacks such as Mr., Mrs., Miss. Instead, Blacks were called by their first names. Blacks had to use courtesy titles when referring to whites, and were not allowed to call them by their first names.
- If a Black person rode in a car driven by a white person, the Black person sat in the back seat, or the back of a truck.
- White motorists had the right-of-way at all intersections.

Timeline of important dates

1890-1965: Jim Crow laws

1947-1991: Cold War between the US and USSR

1954-1968: Civil Rights Movement

17 May 1954: Brown vs. Board of Education declares segregated schools unconstitutional

1 December 1955: Rosa Parks refuses to give up her seat in the front of the bus and move to the "colored" section in the back.

4 October 1957: The USSR launches Sputnik 1, the first Earth-orbiting satellite.

31 January 1958: The US launches Explorer 1, the first US satellite to reach orbit.

1 October 1958: The National Aeronautics and Space Administration (NASA) is created, headquartered in Hampton, Virginia.

12 April 1961: The USSR sends astronaut Yuri Gagarin into space, making a single orbit around the earth.

5 May 1961: The US sends Alan Shepard into space aboard the Mercury-Redstone spacecraft. Shepard flew 116 miles high but did not orbit Earth. The flight lasted 15 minutes.

20 February 1962: The US sends John Glenn into Earth orbit aboard the Mercury-Redstone (Freedom 7) spacecraft.

Discussion questions:

- Who or what are the "hidden figures" in the movie?
- Where in the movie do you see Jim Crow laws? How did you feel when you witnessed this overt discrimination?
- Do you think the movie paints an accurate picture of racism in the south under Jim Crow? Why or why not?
- What is the significance of the scene with the policeman? What does it say about then (1961) and now?
- Consider the many moments of joy in the movie. Why include them?
- What risky acts of courage do Katherine, Mary and Dorothy take? How are they rewarded?
- The film shows the strong relationships that Katherine, Mary and Dorothy have with each other and with their families. Why do these relationships matter?
- What is the role of the Black church during the civil rights movement? Why was the church scene important to include?
- Do you think NASA was a socially progressive organization in 1961? Why or why not?
- What Jim Crow etiquette is observed at NASA? How does it change from the beginning to the end of the movie?
- Why did racism break down at NASA?
- 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?
- In what ways does the space race parallel the civil rights movement? What kinds of freedoms are driving them?
- Transformation is the story-line of the movie. What characters are transformed? What characters are not transformed in some way?
- What is the role of coffee and the coffee pot? What does it symbolize?
- Who are the hidden figures in our community today? Why do we not see them?