

Hidden Figures Interactive Lesson

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Wright-Lewis, Cobb and Cody

Movie Summary

HIDDEN FIGURES is the incredible untold story of Katherine G. Johnson (Taraji P. Henson), Dorothy Vaughan (Octavia Spencer) and Mary Jackson (Janelle Monáe)-brilliant African-American women working at NASA, who served as the brains behind one of the greatest operations in history: the launch of astronaut John Glenn into orbit, a stunning achievement that restored the nation's confidence, turned around the Space Race, and galvanized the world. The visionary trio crossed all gender and race lines to inspire generations to dream big.

Careers in Science, Technology, Engineering and Math: What do the numbers look like?

Let's do the math...

Women hold 57% of professional jobs in the U.S., but just 26% of technology jobs and 19% of software development positions.

Women hold just 5% of leadership positions in technology.

Black and Hispanic people make up 30% of the U.S. population (12% black and 18% Hispanic).

Black and Hispanic men hold 9% of U.S. computing jobs. (Black men hold 4% of these jobs and Hispanic men hold 5%.)

Black and Hispanic women hold 4% of U.S. computing jobs. (Black women hold 3% and Hispanic women hold 1%.)

Math Problems:

1. If 200 men and women have professional jobs in the U.S., how many women hold professional jobs?

2. Using the number, you calculated in Question 1, 26% of those women have Technology jobs. How many women are in Technology jobs?

3. You have 300 men in Computing Jobs. 9% of those men are Black and Hispanic. How many Black and Hispanic men are in Computing Jobs?

Movie Discussion Questions: Use complete sentences to answer your questions.

1. At the beginning of the film, Katherine appears in a flashback at school; she is several years younger than her classmates and is asked to demonstrate the answer to a math question at the chalkboard.

- What does this scene say about her early ability and character?

2. Consider the scene early in the film when Dorothy is trying to restart the stalled car and a police officer drives up.

- What is the women's reaction to the arrival of the officer? Why?

- Why does he initially doubt their identities—because of their race or their gender?

- Why does he eventually give them an escort to Langley?

3. When Katherine first appears in her new workroom after leaving West Computing, she is mistaken for the custodian.

- What information does this incident say about the historical time period? How is she treated by her male co-workers? Give specific examples to support your response.

4. Symbols are often used to make significant points in a film. How do the following repeated symbols help to tell the story?

Coffee:

° The placement of an extra coffee pot in Katherine's work area

° Katherine's reaction to the coffee pot

° Stafford's offering her a cup of coffee at the end of the film

The restroom

° The existence of a "colored" restroom in another building a half mile away

° Katherine's need to run the distance

° removal of the sign by Al Harrison (played by Kevin Costner)

5. The way that people address one another says a great deal about relative position. In most areas of the South during the period before the Civil War, slaves had no last names. Even after 1865, when freedmen chose last names for themselves, whites generally called them only by first names.

- How do Stafford, Mitchell, and Harrison regularly address the women of West Computing in the film?
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- What does this say about the working relationship of these supervisors and these workers?

- What is the significance of Mrs. Mitchell addressing Dorothy as “Mrs. Vaughan” at the end of the film?

6. Dorothy stole a FORTRAN manual from the public library.

- Why did she do this? Was it necessary?

- How did she explain this decision to herself and to her children?

By the late 1940s the United States and its wartime ally the Soviet Union had become enemies again, competing for prestige and for influence over the rest of the world. By 1949 the Soviet nuclear development program had been successful in building their own atomic bomb, and within a few years both nations had developed even more powerful hydrogen bombs. The “arms race” to stockpile ever more dangerous weapons was on. When the Russians launched the first satellite to orbit the Earth in 1957, U.S. citizens were shocked and horrified. Fear that the Soviets could launch an attack from space led to a massive campaign to catch up, and the National Aeronautics and Space Administration (NASA) was organized. Many engineers and mathematicians from Langley became part of this effort.

7. The Soviets, having achieved the atomic bomb in 1949 and the more powerful hydrogen bomb in 1955, now turned to space.

- What achievements by the Soviets led to increased urgency in the United States space program?

- Were Americans being paranoid or did they have a legitimate reason for fearing Soviet accomplishments?

- How does Harrison respond to the increased pressure? Are the demands he places on his team reasonable? How do they respond?

8. After the labor shortage of World War II, many women who had worked in war industries returned to domestic life, as men returned from overseas. That assignment of women to the domestic sphere was still considered ideal in the 1950s. Instead of returning to family life like many others, the “human computers” of NASA continued to work long hours at Langley in addition to caring for their families.

- How does working at NASA affect Katherine’s family life?

- How well do her children seem to adjust?

- What support does she have in raising her family?

- Why does Levi Jackson (played by Aldis Hodge) oppose Mary’s efforts to take classes to become an engineer?
