



## Katherine Johnson: “Hidden Figure” and NASA Pioneer

### Critical Thinking Questions

#### Race and Gender Discrimination

What did Black Americans do to overcome the unfortunate consequences of the 1896 *Plessy vs. Ferguson* decision and unequal realities of “separate but equal” community facilities and schools that ruling created?

What mindset helped Katherine Johnson be unafraid of the possible consequences for ignoring Virginia’s segregation laws and using “White-only” restrooms? Have you encountered a regulation, mandate, or law that prohibited you from accessing public or private services?

Not only was Johnson Black, but she was a woman in a male-dominant field. Name other Black women that have defied societal barriers and set the stage for others to follow.

Name a cause that you have resolved to fight for despite any challenges that may arise.

#### Personal Achievement

Do you think women today have an easier or harder time managing a career and a family simultaneously than in the 1950s and 60s? List some pros and cons of Johnson’s decision to raise her daughters before pursuing a career.

As a Black American, what positive changes did Johnson see in this nation at the end of her life? What problems would you like to see resolved in your lifetime?

Katherine Johnson had supportive parents, later a supportive husband, and a good work ethic. What goals, dreams, and talents do you have? How can those around you support you better?

### Mentorship

Which of the Woodson Principles do you see displayed in Katherine Johnson's life? (See list on the next page.) In what ways do these principles help people make a difference in their sphere of influence?

What role did W.W. Scheffelin Claytor provide for Katherine Johnson? Who do you look up to as you think about the pursuits you have? Name the ways various family and community members enrich your life.

### Science and Technology

Look up the acronym STEM. What academic disciplines do the letters represent?

What careers benefit from a STEM background?

The Soviet satellite, *Sputnik 1*, was the first to be placed in Earth's orbit. How do satellites help us today?

### Societal Change

The convictions instilled by her support system – parents, mentor, and husband – and her strong sense of self-worth compelled Johnson to ignore Virginia's segregation laws. Every generation and society deals with unjust or outmoded social conventions.



1. Use this list of different ways to bring about societal change and give examples of them being used in the United States.

Protest  
Boycotts  
Petitions  
Banners  
Prayer and Worship  
Marches  
Vigils  
Walk-outs  
Civil Disobedience  
Sit-ins  
Strikes  
Election

2. Here are a few Black or female historical figures. Can you name what they did to bring forth societal change or pave the way to shift a social convention?

Biddy Mason  
Harriet Tubman  
Susan B. Anthony  
Bessie Coleman  
Rosa Parks  
Harriet Beecher Stowe

### Activities

Katherine Johnson was born in 1918 and died in 2020. Research a few major national and world events that occurred during her lifetime.

Look up men and women that became U.S. astronauts. How many of them were Black? Who was the first African American to go into space? The first woman? The first Black woman?

Look up Dorothy Vaughn and Mary Jackson. Where did they go to college and what did they study?

These three women remained “hidden” until Margot Lee Shetterly researched and wrote a book about them. Have you ever thought about writing a book? Name a person or group of people that you would like to read more about.

Some of Johnson’s co-workers, as well as some Black people in her time, believed a stereotype that communicated Black women did not belong in the field of science. Which stereotypes persist in STEM fields? What can we do to erode stereotypes?

Research what projects NASA is working on this year.

Here is a list of Bob Woodson’s 10 Principles:

<i>Competence</i>	<i>Integrity</i>
<i>Transparency</i>	<i>Resilience</i>
<i>Witness</i>	<i>Innovation</i>
<i>Inspiration</i>	<i>Agency</i>
<i>Access</i>	<i>Grace</i>