



Katherine Johnson, Mathematician

Part 1

Teacher Reads Katherine Johnson’s career as a research mathematician at NASA (the National Aeronautics and Space Administration) began in the 1950s. As a Black woman, Katherine Johnson had to overcome two kinds of discrimination: unequal treatment based on race and gender. At that time, few Black people and few women were hired for jobs like this. This is the first of two passages about her, both of which include information from her autobiography, *Reaching for the Moon: The Autobiography of NASA Mathematician Katherine Johnson*.

Katherine Johnson was a successful NASA mathematician
7 who helped plan missions that sent rockets into space.
16 Several things set the stage for her career at NASA.
26 Katherine’s mother, a former teacher, ensured that her
34 children **received** a quality education. She also taught her
43 children reading, spelling, and math skills. Her father insisted
52 that all his children go to college because education was
62 their path to a better life. Katherine excelled in mathematics
72 throughout her schooling, which prepared her for **future**
80 work at NASA. Finally, her parents told her when faced with
91 discrimination to remember: “You are no better than anyone
100 else, but nobody is better than you.”

Part 2

Teacher Reads Katherine showed her interest in numbers and math at a young age, which continued as she got older.

107 Katherine was born in the summer of 1918. When she was
118 little, she liked to keep track of numbers. She would always
129 find something to count: the cracks in the sidewalk, the trees
140 she walked by, the dishes she washed, and the number of steps
152 to the school. At four, she knew her multiplication tables and
163 could read and spell many words.



Part 2 continued

169 When she was five, she started school and was
178 placed in second grade. Katherine was skilled in math
187 calculations and worked hard, so she skipped some
195 grades in school. She began high school when she
204 was 10. Because the town where Katherine was born
213 did not have a high school for Black students, her
223 family moved to a town 120 miles away so she and
234 her siblings could attend high school.

240 After completing high school at 14, Katherine
247 entered **West Virginia State College** to study
254 mathematics and French. She took all the math classes
263 offered at the college. One of her math professors
272 even developed classes about orbits in outer space
280 just for her. She finished at the top of her class when
292 she was 18.

Part 3

Teacher Reads Math was important to Katherine Johnson. She wanted a career where she could use her knowledge of mathematics. After college, getting a job dealing with math became her goal.

295 Johnson began her working life as a teacher in
304 Black public schools. For eight years she taught math,
313 French, and music. She shared her love of math,
322 including integers, decimal points, and fractions.
328 She taught students to calculate answers to difficult
336 math problems and to use math tools such as rulers,
346 compasses, and protractors.

349 After some time, she left teaching for a different
358 job that also used math. She did not see it at the
370 time, but she had just lifted off on her life's work in
382 space flights.

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