



Shining Light Ambassador

Maths





Maths at Polehampton

At Polehampton we want every child to develop a strong grounding in number so that they develop the necessary building blocks to excel mathematically.

It is important that children develop positive attitudes and interests in mathematics, look for patterns and relationships, spot connections, 'have a go', talk to adults and peers about what they notice and not be afraid to make mistakes.

[Maths rationale](#)





Our Maths quote is:

"The universal language that helps you make connections, challenge your understanding and build resilience."

Miss Ackerman and Mrs Franklin



Katherine Johnson

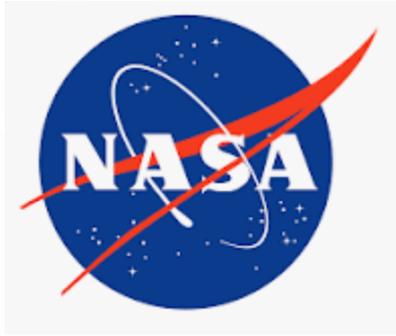
Our shining light
ambassador for Maths is
Katherine Johnson, who
loved Maths and was
nicknamed 'The
Computer'.

'If you attack the problem
right, you'll get the
answer.'



Who is Katherine Johnson?

Katherine Johnson was an American who worked with NASA. She helped them put an astronaut into orbit around Earth. Then she helped put a man on the Moon.



Early life

As a young girl, Katherine loved to count. She counted everything. She would count the number of steps she took to the road. She counted the steps into church. She even counted the forks and plates when she washed the dishes.

Katherine loved to learn. She loved learning Maths the most. Katherine went through school quickly. She started high school when she was just 10 years old!

When she was 15, Katherine began college. She took classes to become a mathematician. That is someone who is an expert in math. She learned how to solve big problems by using math, especially geometry. Geometry is a kind of math that uses lines, shapes and angles. Katherine studied hard. She graduated from college when she was 18.





After college, Katherine became a teacher. She taught school until she got married and had children. When her husband became very sick, she started teaching again to support her family.

When Katherine was 34, she heard that NACA (later called NASA) was hiring African American women to solve math problems. These workers were called “computers.” Katherine applied for one of the jobs, but the jobs were already taken. Still, she did not give up. She applied again the next year, and this time NACA hired her. She worked with a large group of women who were all computers like she was.



But Katherine was different from the other human computers. She asked a lot of questions. She wanted to learn more about her work and about NASA. So she started going to meetings. Before Katherine, only men attended these meetings. She changed that! She learned so much that she left her job as a computer. She became a team member who worked on different space projects for NASA.



In 1962, the United States decided to send people to the Moon. That was *big* news. Getting to and from the Moon would take a lot of work. As the U.S. space agency, NASA would have to solve many, many problems. So NASA created large teams to solve them.

Katherine studied how to use geometry for space travel. She figured out the paths for the spacecraft to orbit (go around) Earth and to land on the Moon. NASA used Katherine's math, and it worked! NASA sent astronauts into orbit around Earth. Later, her Maths helped send astronauts to the Moon and back. NASA could not have done these things without Katherine Johnson and her love for Maths!





This video shows some of her many achievements by using her Maths skills:

<https://www.youtube.com/watch?v=nKxgieXQ82w>

Shining Moments (achievements)

In 2015, Katherine Johnson was awarded the Presidential Medal of Freedom by Barack Obama, the US president of the time. These medals are given to people like Katherine, who have helped America progress in the world.

In 2016, she received a Silver Snoopy Award which is given to those who have made an outstanding contribution to flight safety and mission success. A building at NASA has been named after her and a Hollywood film has been made about her career.

<https://www.youtube.com/watch?v=MYWqGxQ4SqM>





How you can be inspired at Polehampton

- What have you learnt from Katherine's story?
- What can you do to make your Maths shine? Share your ideas with your class.