

SCIENCE NEWS

GOODBYE KATHERINE JOHNSON

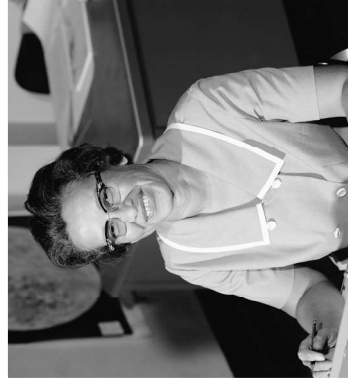
WITHOUT Katherine Johnson, humans wouldn't have made it to the moon.

The amazing American mathematician has died, aged 101.

Katherine worked for NASA for 30 years. She helped put an astronaut into orbit around Earth. And then she helped put the first man on the moon in 1969.

Remember, this was a time before calculators and before computers. Katherine had to do all her maths with a pencil! She calculated the exact journeys that would let Apollo 11 land on the lunar surface and come back to Earth safely.

But despite her amazing work, nobody outside NASA knew about Katherine



The brilliant American mathematician Katherine Johnson, pictured here in 1966



Katherine Johnson receiving the Presidential Medal of Freedom in 2015

Johnson for decades. Why? Because she was a woman and an African-American. Katherine and the other 'human calculators', as they were called, weren't given the credit they deserved.

It may seem ridiculous and awful today, but black Americans were still forced to use separate schools, colleges and public transport until 1964. It's only recently that the record has been put right, and these black women are now celebrated as heroes.

Katherine's story – and that of two other women in the team – was told in the 2016 film *Hidden Figures* (rated PG). Ask if you can take a look. We may not all be brilliant mathematicians, but we can all learn from her story.

Questions on: 'Goodbye Katherine Johnson'

1) Why is Katherine Johnson in the news this week?

- ☐ People have just found out about her amazing work.
- ☐ A film has just been released about her.
- ☐ She has recently passed away.

2) What do you know about Katherine? True or false?

- ☐ She was a mathematician.
- ☐ She was married to an astronaut.
- ☐ She was an African-American.
- ☐ She went to the moon.
- ☐ She worked for NASA.
- ☐ She was an engineer.

3) What nickname was she given at NASA?

4) Which part of the Apollo mission do you know Katherine worked on?

- ☐ Calculating the journey
- ☐ Calculating the fuel
- ☐ Calculating the oxygen needed

5) Why didn't the world know about Katherine's work for so long?

6) Explain how black Americans were treated before 1964.

7) 'Figure' is another word for 'number'. It can also mean 'person'. Why is "Hidden Figures" a good name for the film about Katherine?

8) Had you heard of Katherine Johnson before? What message do you take from her life story?