

A Scientific
Spotlight on...

Black History Month

Shirley Ann
Jackson



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Dr. Shirley Ann Jackson

Shirley is an American physicist and eighteenth president of the Rensselaer Polytechnic Institute. She was fascinated with science from a young age, studying the circadian rhythm of honeybees that she captured from her garden as a child. Shirley was top of her class at school and as a result she earned herself a place at Massachusetts Institute of Technology (MIT), she was one of only a few black students. She tried to join her fellow female classmates in the study room and at lunch, but they rejected her. This made Shirley feel very isolated, but she was determined to do well in her studies despite this treatment.

After the assassination of the civil rights leader, Martin Luther King in 1969, Shirley did not stand by whilst racial discrimination continued at MIT. She created a Black Student Union which campaigned for the university to recruit more underrepresented students, support them and their experience at MIT, and offer them financially. They also campaigned for greater diversity of the faculty members to be recruited.

Jackson created a program called 'Project Interphase' to academically support incoming underrepresented students. She was determined for MIT to become more diverse and more accessible. Shirley was passionate that black students should have the same opportunities as white students.

Jackson was extremely hardworking, bright and resilient and spent nine years at MIT. She became the first African American woman to receive a PhD from MIT, and went onto work as a theoretical physicist at Bell Laboratories as well as chairing the U.S. Nuclear Regulatory Commission. Her work in the commission included developing regulatory systems for assessing risk at the country's nuclear power plants. She made this her primary focus after the tragedy of Chernobyl in 1986. In 1999 she became president of Rensselaer Polytechnic Institute in New York, which is America's oldest technological research university. Later, she also cochaired President Obama's President's Intelligence Advisory Board.

Find the Answer!

Fill in the gaps for each question. Then use the first letter of each answer to reveal the hidden word and fill this in on the next page.

Note: Some answers in the gaps may be two-word answers. Only use the first letter of the first word of each answer for the hidden word.

1. Shirley Ann Jackson was the first woman of _____ descent to receive a PhD from MIT.
2. The assassination of Martin _____ King prompted Shirley to take action against racial discrimination in education.
3. Her peers made her feel rejected when she tried to join them to study or to eat _____.
4. Shirley was at MIT for a long time. She studied there for a total of nine _____.
5. In order to support minority students, she set up a Black _____.
6. When she was a young girl Shirley had a fascination with the circadian rhythm of _____.
7. She worked with the US government and was cochair on President Obama's President's _____ Advisory Board.
8. Dr Shirley Ann Jackson worked as a theoretical _____ at Bell Laboratories.

Discovering the Hidden Word...

Using the first letter of each answer from the previous page, spell out the hidden word!

What was the hidden word revealed from your answers?



What does this word mean to you?

Use the space below to express what the word means to you. You can use words, drawings, or a combination of both. If you need help with understanding the definition of the hidden word, ask your peers or your teacher.

