

# The Daily STEM

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## STEM in the News

People have been wearing shoes to protect their feet for thousands of years. But technology of today is doing more than just protecting feet. Shoes today help the muscles, bones, and tendons stay in place, especially for active people and athletes. Rashad Williams, Senior Director of Footwear at adidas Basketball, helped create the new Futurenatural technology for the Harden Vol 5 shoe. "We looked at the foot scans of thousands of basketball athletes worldwide and conducted extensive research to create a new last (shoe mold) that delivers an anatomically correct representation of an athlete's foot." What ideas do you have to make shoes fit better?



Watch the video: [youtu.be/s6FfGKrLlnI](https://youtu.be/s6FfGKrLlnI)  
Learn more: [bit.ly/3b71umu](https://bit.ly/3b71umu)

## STEM + Inventions

February is Black History Month, and people in the US, Canada, and elsewhere take the opportunity to celebrate and learn from the achievements of amazing women and men. Many things we use each day have been invented by or improved by Black inventors. Did you know that Sarah Boone received a patent for her improvements of the ironing board in 1892? Or that Garrett Morgan, inventor of an improved sewing machine and the gas mask, realized that adding yellow to traffic lights made them safer? Or that Alexander Miles invented elevator doors that automatically open and close after his daughter was hurt by a fall? Learn more about these 3 inventors & 5 more: [bit.ly/3qlbdfv](https://bit.ly/3qlbdfv)



## STEM Challenge

Did you ever see a weather forecast and wonder how they know a storm is headed your way? Thousands of satellites speed around the Earth each day, taking pictures of clouds and oceans, measuring energy, or tracking wildfires and stars. But if a satellite needs repair, and it's spinning while orbiting, how do you grab it? William Harwell, a NASA engineer, created a device to grab and slow down a spinning satellite. If you have a spinning top, give it a spin and see if you can create something to grab the top while it's spinning.



Learn more about William: [go.nasa.gov/3pjK0bG](https://go.nasa.gov/3pjK0bG)  
Learn more about satellites: [go.nasa.gov/3agobW9](https://go.nasa.gov/3agobW9)

## Famous People in STEM

Massachusetts Institute of Technology, or MIT, is one of the best STEM universities in the world. Dr Shirley Ann Jackson was the first African-American woman to earn a doctorate from MIT in 1973. Her degree in Nuclear Physics allowed her to travel the world checking nuclear power plants to make sure they were safe.

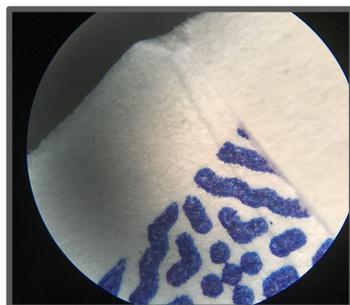


"My mother had us all reading before we were in kindergarten, and my father was mechanically minded and he nurtured my interests in math and science," she said. "My father helped my sisters and I build go-carts, and we had to think about the effects of gravity and friction and so forth." Shirley worked at AT&T, the government, and as a professor. She's also been the President of Rensselaer Polytechnic Institute since 1999, helping double the number of Black students. Learn more: [bit.ly/3tYvslg](https://bit.ly/3tYvslg)

## Mystery Photo

What's under the microscope?  
(answer in next issue)

Last issue's answer:  
A playing card, a ribbon,  
a bungee cord



## The Puzzle

A "rebus" is a word puzzle. Can you guess these famous sayings?

STAND  
TRY 2

M1Y L111F1E

Last issue's answer: The pond needs 17 days to be covered.