

# The Daily STEM

Volume 7 Issue 5

January 26, 2025

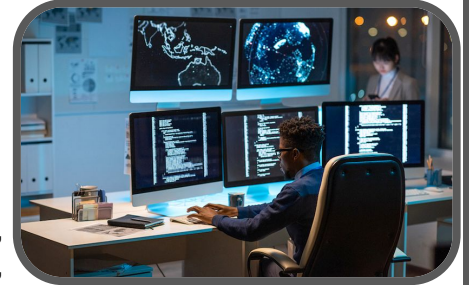
## STEM in the News

Did you know that cars and trucks can be designed to run without gasoline? Hydrogen, one of the elements that makes up water ( $H_2O$ ), can also be used to power engines. The H2Rescue truck, designed by business and government engineers, recently set a record by traveling 1806 miles on a single tank (370 pounds) of Hydrogen. One of the best parts of this vehicle is that the only exhaust is water! Each of these H2Rescue trucks would save over 1800 gallons of gas per year. The hope is that this vehicle can be used in emergency areas to deliver water and supplies. It can even work as a generator, without the loud engine sound of most gas generators. What other things would be good to put on an emergency vehicle? Learn more: [bit.ly/3CBuFVs](https://bit.ly/3CBuFVs) or watch a video of the vehicle [bit.ly/3PQIFt7](https://bit.ly/3PQIFt7)



## STEM Career: Cybersecurity

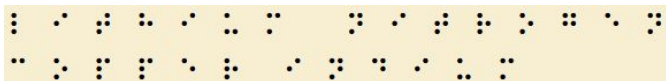
Did you ever wonder who helps keep computers and phones safe from hackers? There are many **Cybersecurity** jobs that keep networks safe and working well. Cyber Forensics experts study hacks to learn from them, fix them, and make sure they don't happen again. A Language Analyst uses their knowledge of language and culture to try and find threats to networks. Encryption experts work with codes to hide personal and other important data. Even Software Developers make sure the apps and programs they write keep the personal data and information of customers secure. If you're interested in Cybersecurity, it's a good idea to learn about computers, coding, math, science, and even government, languages, and ethics. There are college courses as well as internships to work in this field. Currently there are almost 500,000 jobs available in Cybersecurity in the US, and over 5 million worldwide. That's a lot of opportunities! If this sounds like a career you'd be interested in, learn more: [bit.ly/4hnULWc](https://bit.ly/4hnULWc) or watch this video [youtu.be/-AkuKKJ8dN0](https://youtu.be/-AkuKKJ8dN0) or download some cyber career cards [bit.ly/3EaDnG5](https://bit.ly/3EaDnG5)



## The Puzzle

Test your knowledge of some elements in our world:  
⇒ The lightest metal & found in rechargeable batteries?  
⇒ Helps plants grow & makes up most of our air?  
⇒ The metal that makes wire and pennies look orange?  
⇒ Conducts electricity & bonds to glass, so it is used on touchscreens?

Decode the answers using Braille:



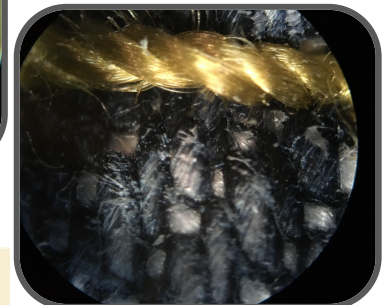
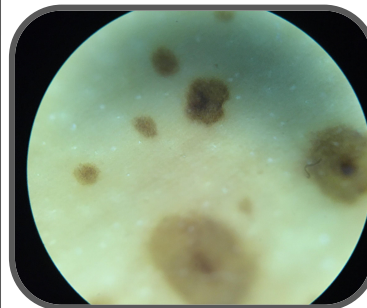
## STEM Challenge

Have you ever made a bird feeder? Birds often have trouble finding food during winter, so providing some birdseed for them can be helpful. A good idea is to learn what types of birds are in your area and what they like to eat. You can make bird feeders out of water bottles or almost anything! Check out some ideas here: [bit.ly/3Cp59xT](https://bit.ly/3Cp59xT)



## Mystery Photos

Can you identify the mystery items under the microscope?



Decode the answers using Braille:

