



10/17/2024: The World From A to Z with Carl Azuz

Mr. Lautzenheiser - 8th Grade American History - Crestview MS (Convoy, Ohio)

Today is October 17th, 2024. It's been exactly three weeks since Hurricane Helen, a powerful Category 4 storm, hit Florida's Big Bend region. It then moved through the southeastern United States, causing major damage in six states. This is the deadliest Atlantic hurricane to hit the United States since Hurricane Katrina in 2005.

Hurricane Helen has been blamed for over 230 deaths, with almost half of those happening in North Carolina. The state had days of heavy rain before the hurricane hit. The actual number of deaths could be even higher because the governor says at least 92 people are still missing. Thousands of homes were damaged, businesses were flooded, and it will take a long time for the area to recover. Many places now have running water again, but people are being told to boil it before drinking. Tens of thousands are still without power, but it's slowly coming back. First responders have reached many areas that were cut off because of washed-out roads. There have been many stories of neighbors helping each other and communities coming together to support those in need.

Now, let's talk about something a little different: microbes! You might not want to think about the tiny creatures that live on your showerhead or toothbrush, but scientists have been studying them. It's not surprising that they find microbes everywhere, but what was surprising is how many different types of viruses they found, and how different they looked from anything they'd seen before.

Microbiologist Erica Hartman led a study that found something called "bacteriophages" on showerheads and toothbrushes. That might sound scary, but these aren't the kind of viruses that make you sick. Instead, they infect bacteria. These bacteriophages could actually be used to save lives!

For a long time, we've relied on antibiotics to treat infections. But now, antibiotic resistance is a major problem around the world. There's a lot of hope that we can use bacteriophages to treat infections that antibiotics can't handle anymore. Hartman says that these phages, or what we learn from them, could help us develop better drugs or new biotechnologies.

We need microbes! They help us digest food in our gut and protect us from harmful bacteria on our skin. It's actually good for us to be exposed to microbes sometimes.

On October 17th, 1910, the first tornado ever recorded in England hit. Experts say it had winds over 207 miles per hour, which is incredibly strong. The tornado destroyed churches, hundreds of homes, and possibly even damaged the London Bridge. Two people died, which is considered a small number compared to the amount of damage. * On October 17th, 1907, a wireless communication service was established across the Atlantic Ocean. This invention, by Guglielmo Marconi, allowed people to communicate overseas without using underwater cables. * On October 17th, 1979, Mother Teresa, a Catholic nun, won the Nobel Peace Prize. She was recognized for her work helping the poor in India.

Did you know that in the 2008 US presidential election, Barack Obama was the first candidate to use social media in his campaign? If you like infographics and presidential history, check out "We the People and the President."

Today's "Where in the World" takes us to Zimbabwe, a country in southern Africa. Zimbabwe gained independence from Britain in 1980. It's a presidential republic with a population of over 17 million people. The capital city is Harare.

Zimbabwe is home to a huge number of elephants, over 100,000! That's the second largest elephant population in the world. More than half of these elephants live in Hwange National Park, which is just a few miles from where some students live and go to school. This means that people and elephants often cross paths. Elephants have killed people several times and destroyed crops. Last year, wild animals killed 50 people and injured 85 more in Zimbabwe. That might seem like a small number, but villagers say it doesn't include the number of children who are chased or threatened by wild animals every year. Animals often wander out of the park, including elephants, lions, and others. Students often have to walk more than 5 kilometers to school, which is a long way.

To make it safer for students, a program was started to give bicycles to children in western Zimbabwe. This program is a partnership between the Zimbabwe National Parks Authority and the International Fund for Animal Welfare. Before the program, students had to leave for school before dawn when animals are most active. Now, they can leave later and arrive sooner. The program also helps reduce the time children spend walking, which makes them less likely to be attacked by wild animals. This helps promote harmony between people and wildlife.

Albany Area High School in Albany, Minnesota * Jones Middle School in Jones, Oklahoma * Dodge City High School in Dodge City, Kansas

And finally, we have some news about space fashion! NASA is getting ready for its next mission to the moon, and they've partnered with Italian fashion brand Prada to design the new spacesuits. The American company Axiom Space, which is building the suits, received a \$228 million contract from NASA. Some people have criticized the use of a luxury brand for a project funded by taxpayer

money. But if you're going to the moon, you might want to look good!

Reading Summary

- Hurricane Helen caused major damage in the southeastern United States, killing over 230 people and leaving thousands without power.
- Scientists are studying microbes, including bacteriophages, which could be used to treat infections that are resistant to antibiotics.
- A program in Zimbabwe is giving bicycles to students to help them travel safely to school and avoid dangerous encounters with wild animals.

Vocabulary

Term	Definition	Example Sentence
bacteriophages (noun)	Viruses that infect bacteria. They can be used to treat infections that antibiotics can't handle.	Scientists are studying bacteriophages to see if they can be used to fight antibiotic-resistant bacteria.
microbes (noun)	Tiny living things that are too small to be seen without a microscope, such as bacteria, viruses, and fungi.	Microbes are found everywhere, even on your skin and in your gut.
antibiotic (noun)	A medicine that kills or slows the growth of bacteria.	Doctors prescribe antibiotics to treat bacterial infections.
resistance (noun)	The ability of bacteria to survive and grow even when exposed to antibiotics.	Antibiotic resistance is a growing problem because it makes it harder to treat infections.
biotechnologies (noun)	The use of living organisms or their products to create new products or processes.	Biotechnologies are used to develop new medicines, crops, and industrial products.

Multiple Choice Questions

Question #1	Question #2	Question #3
What was the main reason for the increase in deaths in North Carolina after Hurricane Helene?	What is the main problem with using antibiotics to treat infections?	What is the main reason for the bicycle program in Zimbabwe?
A. The hurricane hit North Carolina directly. B. The state had heavy rain before the hurricane hit. C. The hurricane was a Category 4 storm. D. The hurricane caused major damage in six states.	A. Antibiotics are not effective against all types of bacteria. B. Antibiotics can be expensive. C. Antibiotics can have side effects. D. Bacteria are becoming resistant to antibiotics.	A. To help students get to school faster. B. To reduce the number of elephants in the area. C. To help students avoid wild animals. D. To promote tourism in the area.