

GENTLE.NEWS

In Today's Edition

Science & Discovery

Scientists Send Light Through the Air to Share Secrets

The World Today

New Wireless Lighthouse Sends Light Through the Air

Nature & Environment

The Hardworking Heroes Who Watch Hawaii's Volcanoes

Animals & Wildlife

Oil Companies Help Save a Rare Desert Flower

Technology & Innovation

Scientists Use 3D Printing to Build America's Energy Future

Activity Time

Word Search Puzzle

"Knowledge speaks, but wisdom listens"

— Jimi Hendrix

Scientists Send Light Through the Air to Share Secrets

Scientists in New York have made an exciting discovery. They found a way to send special light particles through open air. This is a first for the United States.

Researchers at Brookhaven National Laboratory and Stony Brook University worked together. They sent tiny particles of light called photons from one building to another. The light traveled through the air, not through cables.

This is part of something called a quantum network. Think of it like a telephone network, but using light instead of wires. The network already connects eight different research sites.

Until now, the network only worked through fiber-optic cables. These are thin glass wires that carry light underground. Sending light through open air means the network can grow much further.

Leaders from both schools gathered to celebrate this big moment. A special ribbon was cut to mark the occasion. Scientists hope this discovery will one day help people share information more safely and quickly than ever before.

New Wireless Lighthouse Sends Light Through the Air

There is a new kind of lighthouse on Long Island, New York. It does not guide ships. Instead, it sends tiny particles of light through the open air.

Scientists built this "Quantum Lighthouse" on top of a seven-story building. A researcher named Justine Haupt helped create it. She designed a special telescope to send and receive particles of light.

These light particles carry information. They travel through the air between three places. Those places are Brookhaven National Laboratory, Stony Brook University, and Yale University.

This wireless link joins a much bigger network. That network stretches 161 miles across Long Island and New York. It is the longest quantum network in the whole country.

The light particles used are very special. When two particles are linked together, learning about one tells you about the other. This works even when the particles are very far apart. Scientists say this discovery could one day lead to a powerful new kind of internet. It is an exciting step forward for science.

The Hardworking Heroes Who Watch Hawaii's Volcanoes

Hawaii's volcanoes are some of the most watched mountains in the world. Scientists can check earthquake data, lava cameras, and ground movement all from a computer screen. This amazing system works because of dedicated field teams.

The Hawaiian Volcano Observatory, known as HVO, keeps watch over Hawaii's volcanoes every hour of every day. They share what they learn with everyone, from children to grandparents. Anyone curious can visit their website to see live data.

Many special instruments make this possible. Seismometers feel the ground shake. GPS tracks tiny movements in the earth. Gas detectors sniff the air near the volcano. Webcams let people watch from the safety of their own homes.

But behind all these tools are the real heroes: the field technicians. These hardworking men and women go out into the field to install and care for every single instrument. Without them, none of the data would exist at all.

HVO recently took a moment to say a heartfelt thank you to these dedicated workers. They quietly keep the whole system running, day and night. Because of their care and skill, Hawaii's volcanoes hold fewer surprises for everyone.

Oil Companies Help Save a Rare Desert Flower

In the desert lands of Texas and New Mexico, a very special plant is getting some extra care. It is called Tharp's bluestar. It is a rare flower that grows in a dry, sunny region called the Permian Basin.

Despite its name, this flower is not blue at all! Its blooms are long and tube-shaped with star-like petals. They can be purple, cream, or yellow. One expert says that in bright sunlight, the petals actually sparkle. What a lovely sight that must be!

Oil and gas companies work in this same desert region. You might worry that they could harm the flowers. But something wonderful is happening. These companies are teaming up with wildlife agencies to protect rare plants like this one.

The U.S. Fish and Wildlife Service and the Bureau of Land Management are helping lead the effort. Together with industry partners, they plan energy projects carefully. They work to avoid disturbing places where Tharp's bluestar grows. It is a fine example of people working together for nature.

It is good to know that businesses and government can join hands to protect something fragile and beautiful. This rare sparkling flower has friends looking out for it. And that is very good news indeed.

Scientists Use 3D Printing to Build America's Energy Future

Scientists at two big American research labs are working together on something exciting. They are using 3D printing to make large, important parts for energy plants.

The labs are called Oak Ridge and Idaho National Laboratories. Both are part of the U.S. Department of Energy. Together, they are finding new ways to build strong metal parts right here in America.

These special parts are called pressure vessels. They must be very tough to do their job safely. The new method uses melted metal wire to print these parts layer by layer. It works much like a regular 3D printer, but with metal.

This is good news for America's energy supply. Right now, there are not enough places in the U.S. to make these parts. This new printing method could help solve that problem and create more energy for everyone.

The two labs shared their discovery at a big meeting with leaders from business and science. Many people are excited about what this new technology could mean. It could help power homes and communities across the country for many years to come.

Activity Time - Word Search

Find the words below in the puzzle. Words go across or down only.

Words to Find:

VOLCANO

DESERT

FLOWER

PHOTON

SENSOR

LIGHT

LAVA

