

GENTLE.NEWS

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"The clearest way into the Universe is through a forest wilderness."

— John Muir

Students Dream Up Big Ideas for Life on the Moon

NASA is asking college students across America to share their big ideas about living on the Moon. It is an exciting challenge that could shape the future of space exploration.

The competition is called RASC-AL. It has been running every year since 2002. Student teams are invited to think creatively about what life on the Moon might look like one day.

This year, students are exploring some fascinating questions. How might astronauts live and work near the Moon's South Pole? What tools and shelters would they need? The students come up with detailed plans and designs to answer these questions.

NASA leaders are very encouraged by what young people bring to this challenge. One NASA official said the students show "exceptional talent." Their fresh ideas help NASA think in new ways about exploring space.

The competition also builds strong bonds between universities, NASA, and the aerospace industry. Many of today's space discoveries grew from ideas that started in a classroom. Who knows? The next great Moon explorer may be dreaming up ideas right now.

Scientists Use Quantum Tools to Unlock Universe's Secrets

Scientists are exploring one of the biggest mysteries in the universe. They are using a new kind of science called quantum technology. This field studies the tiny building blocks that make up everything around us.

The U.S. Department of Energy has given \$7.3 million to eight science teams. The money will help researchers try exciting new ways to study the universe. This is a big step forward for science.

One project is led by Brookhaven National Laboratory in New York. Scientists there will work with the University of Pittsburgh. Together, they will study what happens when tiny particles crash into each other at very high speeds.

When particles collide, they share information in a special way. Scientists call this "entanglement." It is a fascinating and mysterious process. By studying it, researchers hope to discover things never seen before.

These new tools may help unlock secrets about how the universe works. Scientists believe quantum technology could lead to amazing breakthroughs. The future of discovery looks very bright indeed.

New Study Maps Where Childfree Adults Live in America

A new study has found something interesting about Americans who choose not to have children. These people are called "childfree." Researchers wanted to know if they were more common in some states than others. It turns out they are.

Scientists at Michigan State University led the study. They looked at surveys from more than 20,000 adults across all 50 states. This is the first study to look at childfree people in every US state.

The results were surprising. In California and Michigan, about one in five adults is childfree. But in Louisiana and the Dakotas, only about one in ten adults is childfree. That is a big difference from state to state.

The researchers found that personal things matter most. Things like age and whether someone is married make the biggest difference. Where a person lives matters less than who that person is.

The study helps us understand American families better. Childfree adults are a growing group across the country. Researchers hope to keep learning more about the choices people make and what shapes those choices over time.

Exciting New Treatment Shrinks Lung Cancer Tumors

Scientists have made a big breakthrough in fighting lung cancer. A research team in New York has found a new treatment that works in a remarkable way.

The team is from Stony Brook Cancer Center. They created a special drug by combining two cancer-fighting tools. One is a natural molecule that the body already uses to fight cancer. The other is a well-known cancer medicine.

Together, they made a new drug called Gem-miR-129. This drug can enter cancer cells all on its own. Once inside, it shuts down three different things that help cancer grow. That makes it much harder for cancer to fight back against the treatment.

The results in tests were truly amazing. Tumors shrank by more than 95 percent. The treated subjects also lived much longer. The lead scientist believes this could mean five to fifteen extra years of life for people one day.

This is very hopeful news for lung cancer patients and their families. The researchers are now working to bring this treatment to human trials. Many doctors and scientists around the world are watching this discovery with great excitement.

Ocean Waves Help Scientists Watch Hawaii's Volcanoes

Did you know that ocean waves can help scientists watch for volcanic eruptions? It sounds surprising, but it is true!

Out in the open ocean, waves are always rolling and crashing. That motion creates a steady beating on the ocean floor. Those gentle vibrations travel through the Earth. Special instruments called seismometers pick them up all around the world, including in Hawaii.

Most days, scientists in Hawaii listen for signals coming from inside volcanoes. But now they have found a clever new use for ocean sounds. They measure how fast those ocean vibrations travel through the ground. When the speed changes, it tells them something is happening deep beneath a volcano.

This tool helped before a real eruption. Two months before Hawaii's Kīlauea volcano erupted in 2020, the ocean signals started slowing down. Rising hot magma was cracking the rock below. Those cracks made the vibrations travel more slowly. Scientists noticed the change in time.

This is a wonderful example of nature helping science. The steady rhythm of ocean waves, always rolling day and night, quietly helps keep people safe. Scientists are always finding new ways to listen to our amazing planet.

Activity Time - Word Search

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

Words to Find:

MOLECULE STUDENT CRATER STATES
ROCKET SURVEY ADULTS

V	G	W	D	O	N	U	K	Q	T	F
V	S	F	C	S	S	S	F	O	I	Q
N	T	W	R	C	O	T	N	K	O	F
H	A	M	A	E	V	U	Y	S	A	N
S	T	O	T	P	R	D	D	U	D	O
H	E	L	E	D	R	E	K	R	U	B
C	S	E	R	U	O	N	B	V	L	H
A	W	C	O	D	C	T	E	E	T	O
K	Q	U	F	F	K	Z	C	Y	S	H
V	M	L	I	W	E	L	K	R	R	T
C	I	E	O	M	T	P	H	S	O	S