

GENTLE.NEWS

In Today's Edition

Science & Discovery

Astronaut Spends Eight Months Helping People on Earth

Nature & Environment

Scientists Map a Hidden Underwater Volcano Chain

Animals & Wildlife

Team Rescues Tangled Humpback Whale in Monterey Bay

Technology & Innovation

Smart Computers Are Helping Scientists Make Big Discoveries

The World Today

Scientists Around the World Team Up to Explore Matter

Activity Time

Word Search Puzzle

*"The meek may inherit the earth, but at the moment it belongs to the
conceited. Like me."*

— Cassandra Clare

Astronaut Spends Eight Months Helping People on Earth

An American astronaut has just finished a long and important mission in space. Chris Williams lived and worked on the International Space Station for eight months. It was his very first trip to space.

While up there, Williams worked on research to help people right here on Earth. One big project looked at better ways to fight cancer. Scientists made tiny rod-shaped materials in space. These formed more smoothly in space than they do on Earth. Doctors hope to use them to treat tumors more carefully, with fewer side effects for patients.

Williams also helped grow special crystals in space. These crystals are very hard to make perfectly on Earth. In space, they grow better and more evenly. These crystals could one day improve computers, medical devices, and even artificial intelligence tools.

Williams also put on a spacesuit and walked in space twice. Walking outside a space station takes great courage and skill. These spacewalks helped keep the station running smoothly for everyone on board.

His mission also helped prepare for future trips to the Moon and Mars. The things scientists learned from his work will help astronauts travel farther and stay safer. It has been a wonderful and rewarding journey for Chris Williams and for all of us on Earth.

Scientists Map a Hidden Underwater Volcano Chain

Far off the coast of Oregon and California, something amazing lies deep beneath the ocean. It is called Escanaba Trough. It is a chain of underwater volcanoes buried under thick layers of mud and sand.

Most underwater volcano chains sit on bare rock on the ocean floor. Escanaba Trough is different. Rivers from the nearby coast have slowly buried it under deep sediment over millions of years. This makes it one of the most unusual places on Earth.

Scientists from the USGS recently used special tools to see through all that mud. They created a detailed 3D map of the volcanoes hidden below. This is the first time anyone has seen such a clear picture of this buried underwater world.

The map showed hot water vents on the seafloor. These vents push warm, mineral-rich water up from deep inside the Earth. Tiny living creatures thrive around these vents. They use the minerals for energy instead of sunlight.

This discovery helps scientists learn how our planet works deep under the sea. Every new map like this adds to our understanding of Earth's amazing hidden landscapes. The ocean still holds many wonderful secrets waiting to be found.

Team Rescues Tangled Humpback Whale in Monterey Bay

A humpback whale got a second chance at life this summer. A caring team of experts freed it from fishing ropes in Monterey Bay, California.

The whale had been tangled in ropes and buoys for over a month. The ropes were wrapped tightly around its tail and had cut into its body. This was very dangerous for the whale.

Whale-watching boats spotted the whale in late May. Their captains and naturalists took photos and shared details about where the whale was. This helped a rescue team called the Whale Entanglement Team make a plan to help.

On July 11, the whale came close to the rescue team's offices. The team acted quickly and freed it. Leader Peggy Stap praised the whale-watch crews. "We could not do it without them," she said.

Many groups worked together to save this magnificent animal. Scientists, marine labs, and wildlife experts all played a part. Their teamwork shows how much people care about protecting these gentle giants of the sea. The whale swam away free.

Smart Computers Are Helping Scientists Make Big Discoveries

Scientists are using a powerful new kind of computer program to help solve big problems. This program uses artificial intelligence, which means it can learn and improve on its own over time.

A national effort called the Genesis Mission brings together some of America's best minds. Their goal is to use AI to speed up scientific discovery. This could help us learn more about energy, health, and materials that make our lives better.

At the heart of this effort is a group called ModCon. Think of ModCon as the engine room. It builds AI tools that scientists across many fields can share and use. This saves time and helps everyone work better together.

A scientist named Stefan Wild helps lead this work. He works at a famous lab in California. His team builds the basic tools that every other science team can use. It is like building a strong foundation for a house.

The hope is that these smart computer tools will help scientists make breakthroughs much faster than before. Discoveries that once took many years might now happen in far less time. That is good news for all of us.

Scientists Around the World Team Up to Explore Matter

Scientists from many countries are working together on an exciting project. They want to learn more about what everything in the universe is made of.

A special machine called the Electron-Ion Collider is being built in the United States. It will smash tiny particles together at very high speeds. This helps scientists see what is inside them.

Experts from America and Europe recently met in France. They shared ideas and made plans to help each other. Working together means the project will be even better.

A top scientist said it best. She explained that this machine belongs to the whole world. People from many nations are helping to design and build it together. That teamwork makes everyone proud.

Projects like this show what humans can do together. When scientists share knowledge across borders, wonderful things happen. One day, this machine may help answer some of the biggest questions about our universe.

Activity Time - Word Search

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

Words to Find:

COLLIDER SCIENCE SCIENCE MISSION
VOLCANO FLUKES ROPES

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