



Science Expeditions

Exhibit Guide

Key

Use this key to find out more about the many activities listed in this guide! Please remember that many of the events include multiple categories, so be sure to read the descriptions to find out what fun is in store!



Biology and Health

Find fun learning activities next to this icon that involve learning about animal and human bodies, how they work, and how to keep them healthy!



Explore Spaces

Explore the UW- Madison campus and other science facilities. Check out tours or history lessons relating to a wide array of science topics.



Engineering

This logo has everything to do with engineering and creating something from few materials. Learn about engineering at the UW- Madison campus with these awesome events.



Nature and the Outdoors

Find fun learning activities next to this icon that involve everything outdoors. From weather to plants, this green logo has to do with any science happening outdoors.



Cells and More

Learn more about the parts of science that we can't always see with our naked eye. This logo will included everything including bacteria, genetics, and DNA!



Physics

From electricity to density and everything inbetween. Check out this logo to find fun activities and learn more about how physics is in our everyday life.

All live virtual events can be found at the [Science Expeditions Youtube](#)
All events available all weekend can be found at the [Science Expeditions Website](#)

Live Virtual Events

THURSDAY, APRIL 8th



Artificial Intelligence in Animal Sciences | 7:00 PM - 8:00 PM

Animal & Dairy Sciences

We will be working with animals to show how this technology works. Please register by signing up via the zoom link given below.

Zoom Link: <https://go.wisc.edu/r3x8lh>

FRIDAY, APRIL 9th



Wisconsin Idea Spotlight: Movers in the UW-Madison Kinesiology Department | 12:00 PM - 1:00 PM

Wisconsin Alumni Association

More information to come!

Zoom Link:



A "Vert'ual" journey: what we can learn from dinosaur backbones | 1:00 PM - 1:45 PM

UW-Madison Geology Museum

Learn about the physics and biology of dinosaur backbones, how they work and how they compare to other animals.



Science Strikes Back | 2:00 PM - 2:45 PM

Upham Woods Outdoor Learning Center

Winners from Science Strikes Back will have the opportunity to co-present and reflect on their projects from the February event and guide attendees on how to conduct their own or engage with the presenters on theirs.



Tour of Washburn Observatory | 5:00 PM - 5:30 PM

Astronomy Department

Take a virtual tour of historic Washburn Observatory

All live events can be found at the [Science Expeditions Youtube](#) at the designated time



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Live Virtual Events

SATURDAY, APRIL 10th



Dive Under Water, Into History, Online! | 9:00 AM - 9:45 AM

UW Wisconsin Water Library

This program for families begins with the Titanic and ends in a time machine. After an introduction to maritime archaeology and what we can learn from shipwrecks, Ms. Moser will ask that you suspend all formality and take a ride in a time machine to learn all about a tragic voyage on Lake Michigan.



Gardening without Gravity | 10:00 AM - 10:45 AM

Botany

Plants don't need much to thrive: sunlight, water and some soil, but how do you garden on the International Space Station (ISS) where even the air has to be shipped from the Earth and a watering can simply doesn't work? We will first discuss the challenges of growing plants in space and then explore how to design and build a growth chamber able to grow healthy plants on board the ISS, even when traveling at 17,500 miles per hour and 250 miles straight up.



The Joy of Science | 11:00 AM - 11:45 AM

Wisconsin Initiative for Science Literacy

Celebrate the joy of science with Professor Bassam Shakhshiri and learn how to do home experiments safely. Kids of all ages are welcomed.

Materials: A tall, clear glass filled about 3/4 with water, a blank (white) sheet of paper, a writing utensil, 3-4 rubber bands.



The Amazing Human Brain | 12:00 PM - 12:30 PM

Neuroscience Training Program

Come see a real human brain, learn all about it, and hear amazing stories of how we learned about the brain's workings!

All live events can be found at the [Science Expeditions Youtube](#) at the designated time



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Live Virtual Events

SUNDAY, APRIL 11th



Meet the Marmosets | 10:00 AM - 10:30 AM

Primate Center

Meet the marmosets at the Wisconsin National Primate Research Center. Learn about science and animal care activities with them for home or classroom.



Exploring the Aldo Leopold Archives | 10:40 AM - 11:00 AM

Aldo Leopold Foundation and UW Archives

You will have a guided tour of the extensive archives documenting Aldo Leopold's life.



The Physics Experience | 11:15 AM - 12:00 PM

The Physics Experience LLC

Physics is the study of how things move, how they push and pull on each other, and how they exchange energy. The Physics Experience show is a fast-paced, engaging, and educational physics program, filled with demonstrations that help people better understand the physics in the world around them, while having fun at the same time!



Shipwreck Activities for Kids! | 12:15 PM - 1:00 PM

Wisconsin Historical Society

Join us for 6 fun activities within the program: dressing a scuba diver (to learn about scuba equipment), matching artifacts to shipwreck stories, drawing ship routes through the Great Lakes, examining photo mosaics to learn nautical vocabulary, puzzles that show silhouettes of different vessel types that were used on the Great Lakes, and word games about some of the different causes of shipwrecks.

All live events can be found at the [Science Expeditions Youtube](#) at the designated time



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SUNDAY, APRIL 11th



Build-a-Bug | 1:15 PM - 1:30 PM

Entomology

Our activity lets participants explore the ways that insects have adapted to their environment. Insects are incredibly diverse, both in terms of species and body shapes. This activity focuses on the various physical adaptations that insects have - such as different wing shapes or leg types - and lets visitors create their own fantasy insect while learning about real insects.



Bacteria All Around Us LIVE | 2:00 - 2:30 PM

Genetics

Watch the live reveal of what the bacteria looks like from different locations you selected after being collected on Saturday and grown overnight! Be sure to watch the pre-recorded video (in the "Available All Weekend" section) and submit your choices by 12:00 PM Saturday for where bacteria should be collected from using this [google form link](#). If you don't submit your choices in time, no worries, but still tune in live to see how much bacteria can grow overnight!

All live events can be found at the [Science Expeditions Youtube](#) at the designated time



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Available All Weekend OUTDOOR EVENTS

Come explore the UW- Madison Campus for yourself! These outdoor self- guided activities are a perfect way to get active outside and enjoy the campus. Check the website below and event details for more instructions for these self- guided events.



Lakeshore Nature Preserve Self-Guided Outdoor Activities

Lakeshore Nature Preserve

Explore the Rock Wall at the entrance to Picnic Point, Grow your birding skills with Beyond Backyard Birding; and Discover the oh-so-cool Lichens in the Preserve. Three different self-guided activities for exploration are being offered, virtually, for the UW's Lakeshore Nature Preserve.



Planet Trek Dane County

UW Space Place

This is a self guided tour of our solar system along the Southwest Commuter Bike Path. All or part of the path can be biked or walked.



Calling You All to Explore Outdoors!

UW Madison Arboretum

When you arrive at the Arboretum Visitor Center check out the kiosk near the front door for places to hike to see signs of spring, cool springtime phenomena, and activities to do while out on the trails and in the gardens. Looking and listening for birds is one great activity. Use the birding journal to record your bird observations.

Find these events at the [Science Expeditions Website](#)



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Available All Weekend VIRTUAL EVENTS



Bacteria All Around Us

Genetics

Watch this video to learn more about bacteria, how it is collected, and how to grow it! After watching this video, submit your choices for where you think a UW- Madison scientist should collect bacteria from by 12:00 PM Saturday using this [google form link](#). Be sure to tune in live on Sunday, April 11th at 2:00pm to see where the bacteria was collected from and how much bacteria can grow overnight!



Research Spotlight: Bacteria & Biofuels

Great Lakes Bioenergy Research Center

In this podcast, science writer Jill Sakai joins researcher Amy Enright to learn how we can use bacteria to make sustainable fuels out of plants.



Exploring the Cosmos from the South Pole: A Virtual Tour of the IceCube Neutrino Observatory

WIPAC

We'd like to share a virtual tour of the IceCube laboratory at the South Pole, which includes day-to-day life there.



In the Dark and In the Light

McPherson Eye Research Institute

"In the Dark and In the Light" is an interactive video that compares the adaptations in the eyes of animals that are active in the dark (nocturnal) to those that are active in the day (diurnal) to those with behaviors in between (arhythmic).

Materials: download the worksheet from the website



Step behind-the-scenes, into a 360-tour of an active laboratory in the Wisconsin Energy Institute!

Wisconsin Energy Institute, Great Lakes Bioenergy Research Center

Step behind-the-scenes, into a 360-tour of an active laboratory in the Wisconsin Energy Institute!

Find these events at the [Science Expeditions Website](#)



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Activities to Learn about your Brain!

Educational Neuroscience Lab

Easy at home activities to learn more about your senses, memory, and right/left sides of your body!



Explore Science at the Museum

Wisconsin Science Museum

Take a virtual tour of the museum with demonstrations and activities that you can try at home with materials found in most homes.



Diabetes Education and Management

Operation Diabetes from Wisconsin Society of Pharmacy Students (WSPS)

During our pre-recorded presentation we explain what diabetes is and what are some signs of diabetes. We also discuss ways to live a healthier lifestyle, from food recommendations to exercise recommendations!



Wonders of Quantum Physics

UW-Madison Department of Physics

By completing two activities focusing on electron transitions and observing spectra, students will gain experience with fundamental quantum science concepts and further build their quantum intuition.

Materials: (the links will take you to examples that can be bought) 1 LED light bulb, 1 fluorescent light bulb, 1 red laser pointer, 1 light bulb socket (a lamp will also work), 1 diffraction grating, 1 LED Flashlight, 2 glow-in-the-dark stars, 1 piece of white paper



Listen Up! Learn About Your Hearing and How to Protect It

Communication Sciences and Disorders

Watch this funny skit to learn how your hearing works, how to protect it, and how to make a delicious treat.

Materials: pretzel sticks, regular sized marshmallows, chocolate chips

Find these events at the [Science Expeditions Website](#)



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Introduction to Stem Cells and Cell Cultures

Student Society of Stem Cell Research Club

Introduction to using microscopes and pipetting to demonstrate how scientists grow and prepare stem cells in a laboratory, includes introductory information about stem cells and their applications.



Milk Fireworks!

Badger Precollege Programs-UW Madison

"Milk Fireworks" is presented by Badger Precollege at the University of Wisconsin- Madison. This fun and easy demonstration combines simple household ingredients to create an eye-popping reaction! To learn more about our programs, please feel free to contact us at: info@precollege.wisc.edu.

Materials: milk, food colors, soap, q-tips, plate or shallow bowl (not paper)



Scientist Work Together Coloring Page

Wisconsin Energy Institute

Learn about how teams of scientists at UW-Madison and beyond work together to find ways to make sustainable fuels as you color in this image!

Materials: printed coloring page, coloring utensils



Virtual Currie Lab

Bacteriology; Currie Lab

Come learn about the microbes from fungus-growing ants and other insects we study!



The Heart

UW-Madison WSPS Operation Heart, School of Pharmacy

This brief presentation helps you learn more about heart health by exploring different daily activities that are both good and bad for your heart.

Find these events at the [Science Expeditions Website](https://science.wisc.edu)



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Science Strikes Back

Upham Woods Outdoor Learning Center

An all-ages community science fair brought together the young and old to share their passions with each other - see how their projects have evolved from collaborating with each other!



Generation Rx- Preventing Prescription Misuse and Abuse

Wisconsin Society of Pharmacy Students (WSPS)

This presentation provides information about prescription misuse and abuse, the opioid epidemic, and what you can do to help improve this public health problem.



Energy BINGO

Wisconsin Energy Institute

We use energy in all aspects of our lives: from the food we eat to how we travel to school. Learn about energy and get a bingo by completing five challenges that line up in a row across, up/down, or diagonal.



Weather and Climate Activities to Explore the Atmosphere

NOAA's Cooperative Institute for Meteorological Satellite Studies

Highly interactive teaching and training activities that allow users to explore physical processes such as tornadoes, air density effects on baseballs, thunderstorms, rainbows, snowflake crystals (and more!) all on a computer screen on any browser.



Weather Satellites – past, present and future

NOAA's Cooperative Institute for Meteorological Satellite Studies (CIMSS)

Narrated movie that chronicles the history of weather satellites from the launch of the Sputnik spacecraft to NOAA's most recent GOES-R series of weather satellites and the many contributions that the UW's Space Science and Engineering Center made over the decades.

Find these events at the [Science Expeditions Website](#)



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Shaking Triboelectric Nanogenerator

Wisconsin MRSEC

Gather some materials and build a device a device that converts movement into electricity! Participants will learn the science behind a triboelectric nanogenerator and will build one using some inexpensive supplies.



Learn about Brain Cells

NTP

Do you want to learn about the different brain cells like neurons and glial cells? Come check it out and see what they are all about!



Science Expeditions Weather Forecast

Department of Oceanic and Atmospheric Sciences (AOS)

Get the weekend weather forecast from UW Weather Guy and AOS Professor Jonathan Martin! New for 2021! Short weather discussions 3 days a week during the 2021 spring semester for Wisconsin High School students featuring UW-Madison Weather Guy & AOS Professor Jonathan Martin.



Missing in Action Research

MIA Project

Join us to learn about online research techniques and methods used in MIA research, including searches on ancestry.com, fold3.com, newspapers.com etc. to show what information is available when trying to research the history and possible location of US service members who were not recovered during wartime.



Basic Urology Laboratory Tour

Department of Urology

We will prepare a recorded lab tour highlighting techniques used in the lab



Crystalization and nucleation

School of Pharmacy

We will use HotSnapZ to demonstrate nucleation and crystal growth.

Find these events at the [Science Expeditions Website](https://science.wisc.edu)



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Learn about Reflexes

Neuroscience Training Program (NTP)

What is a reflex and how in the world do they work?



Soil Safari & Critter Quest

Soil Science

Prepare to set-off on a scavenger hunt! You will go on a quest to find critters living in the soil. On the way, you will explore the different homes they like to live. To explore the critters hiding in leaf litter, you can follow a how-to guide for making an arthropod-catching funnel. See insects and spiders galore! For those with a microscope at-hand, there is a how-to-guide for catching and looking at the small, worm-like nematode.



Lava Action - Density Does It!

Retired Teacher from Hamilton Middle School

Create your own Lava Lamp Action in a glass and find out how density drives this reaction! In this hands on session, families will create a chemical reaction with Alka-seltzer, water and oil. We will observe the action created in the glass.

Materials: Tall clear glass, vegetable oil, water, Alka-Seltzer or generic equivalent, food coloring



Science Behind Ice Cream Making

UW-Madison Food Science Club

Come learn the food science behind making ice cream through creating your own no-churn tasty ice cream.

Materials: 2 cups (1pint) Chilled Heavy whipping cream, 1 ¼ cups of sweetened condensed milk, ¼ cup evaporated milk, 2 teaspoons of vanilla extract, Toppings of Your Choice (Get Creative!) Examples: broken chopped/cookies, sprinkles, caramel or fudge sauce, Mixing Bowl, Stand Mixer or Hand mixer or large mason jar or large food storage container, Large freezable container

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The World of Bees

USDA-ARS VCRU

Learn about the lives of bees and how they locate their favorite sources of food.



Microgrid Mapping

Wisconsin Energy Institute

Microgrid Mapping is a hands-on drawing activity that allows learners to visualize the power grids in their communities and learn what a microgrid is in the process.

Materials: paper and a writing utensil



The Sun and Fusion in the Lab: Plasmas from the Wisconsin Plasma Physics Laboratory

Wisconsin Plasma Physics Laboratory (WiPPL)

This video showcases the plasmas we generate in the WiPPL labs at UW-Madison. Plasma is a state of matter: a fluid that can be manipulated with electromagnetic forces. We create plasma by adding more energy to a gas so that the electrons separate from the nucleus of their atoms.



Wisconsin Insects

Entomology Graduate Student Association

This is a video talking about the ecology and importance of some of the insects native to Wisconsin.



Badger Jump Around

UW-Madison Biocore Outreach Ambassadors

Learn the physics behind how to jump around like a Wisconsin Badger! A presenter will lead a demonstration of an activity where viewers will learn how to jump as high as possible. They will learn a little bit about the physics and physiology behind how animals jump.

Materials: post-it notes, ruler

Find these events at the [Science Expeditions Website](https://science.wisc.edu)



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Elephant Toothpaste

Students Participating in Chemical Education (SPICE)

Make your own toothpaste for your pet elephant! Learn about the science behind a catalyst while making some special growing toothpaste (only for elephants)

Materials: empty plastic bottle, tray, dish soap, 3% hydrogen peroxide, active yeast, warm water, cup, spoon, food coloring (optional)



Balloon Experiment

Students Participating in Chemical Education (SPICE)

Watch what happens to a balloon when you mix vinegar and baking soda!

Materials: balloon, baking soda, vinegar, small plastic bottle



Ice Cream Scientist

Students Participating in Chemical Education (SPICE)

Learn about the science behind making ice cream!

Materials: milk (any type), vanilla, white sugar, small plastic bag, large plastic bag, ice, salt, mittens (optional)



All About OTC's!: An Over-The-Counter Medication Safety Lesson

Wisconsin Society of Pharmacy Students (WSPS)

Learn more about over-the-counter medications and their safe use to care for you, your family, and your friends!



What's the buzz about bugs and bacteria?

Department of Bacteriology

Get crafty: use household items to learn more about insects and the microbes that help them do their job!

Find these events at the [Science Expeditions Website](#)



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At Home Yogurt Fermentation

UW Microbiology Club

Make your own homemade yogurt and learn a little about how fermentation works!

Materials: Microwave, microwave safe bowl, 4 cups fresh milk (any type), 2 tbsp fresh yogurt (plain with active cultures), food thermometer, dish towels, and plate to cover bowl



Dry Marker Experiment

Korean-American Scientists and Engineers Association (KSEA)

Make your drawings come to life! Join this session to learn how to make what you draw with a marker move.

Materials: Dry Erase Marker, Glass Plate, room-temperature water



DIY Lava Lamp

Korean-American Scientists and Engineers Association (KSEA)

Use simple materials around the house to make a lava lamp- with no electricity!

Materials: Clean plastic bottle, vegetable oil, water, food coloring, Alka-Seltzer tablet.



Cloud chamber for visualizing radiation from space

UW Medical Physics

Join us as we talk about radiation and show you how you can make the invisible visible and to see radiation for yourself.

Materials: Dry ice (or ice pack or frozen salt water solution) Isopropyl alcohol (>90%)

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Characteristics of Marine Debris

WI Sea Grant

Learn how different types of marine debris can impact our waters and wildlife.



Battery at home

Graduate Women in Science

The activity involves a demonstration of a simple experiment of making a lemon/potato/salt-water powered battery at home. It is a simple experiment that can be performed at home under the guidance of an adult. It requires easily available household items. It is a simple yet fascinating experiment for someone who is interested in electrical science.

Materials: Lemon/potato/salt-water, copper-wire, paper-clip and galvanized nail



Create your own groundwater model

UW Madison- Extension

Create your own groundwater model with supplies around your home to learn how surface water and groundwater are connected.

Materials: 1 large rectangular plastic container, coarse grained sand (Aquarium gravel works well), a small plastic cup (5 oz), small plastic toy (house, people, car, etc), and a turkey baster.



Plant Science for Kids

Entomology Graduate Student Association

The Plant CMB (cellular and molecular biology) have a collection of short videos that will be scientific demonstrations to show the audience different concepts within plant cellular and molecular biology.

Find these events at the [Science Expeditions Website](#)



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Up, up, & away! Yeast-powered balloon inflation

Bacteriology, Wisconsin Energy Institute

We will feed sugar to baker's yeast, and watch them grow, bubble, fizz, and release gas to puff up a balloon! Yeast use fermentation - the process of breaking down sugars into energy without any oxygen - to eat sugars and make carbon dioxide gas. Next, we ask scientists at home to help answer our big question: What else can yeast eat?

Materials: Instant or Active Dry Yeast, water, table sugar, a balloon OR plastic wrap and a rubber band, small-mouthed vessel (such as a clean soda bottle) that you can fit the balloon opening onto



Cytotechnology- Cell Detectives

Wisconsin State Laboratory of Hygiene

Have you ever wondered what cells from YOUR body look like under a microscope? Join us in taking a look and learning more about what we do in Cytotechnology.



Explore the "Vert" in Virtual

Geology Museum

Join museum staff through short videos to learn about specimens including mammoth backbones (vertebrae), spiny sea creatures, vertical exaggeration in maps, and pokey minerals.



Alumni Park Virtual Tour

Wisconsin Alumni Association

Enjoy a self guided virtual tour of Alumni Park that sits on the shores of Lake Mendota on campus and shares the stories of UW Madison alumni.



What's In Your Blood?

Premedical Association for Latinx Medical school Access (PALMA)

We will be exploring the components of blood, what their functions are, and where they come from!

Find these events at the [Science Expeditions Website](#)



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What's it like to be a scientist in the Center for Sustainable Nanotechnology?

Chemistry

Graduate students and professors in the Center for Sustainable Nanotechnology from across the country talk about nanotechnology and why we love doing science.



At-home DNA extraction

Great Lakes Bioenergy Research Center

Using warm water, table salt, dish soap, and rubbing alcohol, we will extract DNA from wheat germ (or a food item of your choice, e.g., strawberries)



Science at UW-Madison: Sources for its History

Department of Special Collections

More information to come!



Building with Bones: Cat Skeleton

University of Wisconsin-Madison Zoological Museum

Learn about different bone types and build your own paper version of a cat skeleton!

Materials: Scissors, glue, colorful paper to glue bones onto, the provided pdf of cat bones and instructions



Exploring the Zoological Museum

University of Wisconsin-Madison Zoological Museum

Come take a look behind the scenes of the Zoological Museum! This video takes viewers on a virtual tour of the Zoological Museum at UW-Madison, exploring the various natural history collections that help to further conservation studies and ecological research by looking back in time.

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A day in the life of a scientist

Outreach Subcommittee of the Chemistry Department GSFLC

A video compilation showcasing a day in the life of scientist from the UW-Madison Chemistry department.



Surprising patterns in simple mathematics

Department of Chemical & Biological Engineering

Come find out how the process of multiplication defines complex geometric patterns, and learn how to make your own!



Windmill Design Activity

Wisconsin Energy Institute

Join us to complete this windmill design challenge, using household items to construct a windmill that spins, and learn about the benefits of wind energy in the process!

Materials: a fan or hairdryer (anything that can create wind), scissors, tape, something to write with and on, 6 thin wooden dowels if possible, otherwise pencils or other thin long sturdy materials, a straw or other long hollow item, 2 sheets of cardstock paper/notecards, T-pins or paperclips (something with which to attach blades of windmill to a styrofoam ball), styrofoam ball or other round object between 1-2 inches in diameter (into which a wooden dowel attached to your blades could stick), 2 feet of string, a plastic cup, a wooden spool, and coins, washers, or marbles (will come at the very end of the windmill design process, so less important than the previous materials).



Cranberry Genetics Research

USDA / UW Horticulture

Watch this to find out a little of the behind the scenes cranberry research happening on campus.



Gopalan Lab Tour

Materials Research Science and Engineering Center

The Gopalan Group takes you on a tour of their polymer synthesis and characterization lab.

Find these events at the [Science Expeditions Website](#)



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Crystal Cave

Materials Research Science and Engineering Center

Crystal Cave is an interactive, online game that teaches young scientists about one of the main forms of solid materials, crystals! Through nine levels, players will be challenged to grow a variety of crystals and learn about the properties and importance of their unique structures.



Lost at the Forever Mine

Materials Research Science and Engineering Center

You are a materials scientist who crash landed on an abandoned mining planet in this interactive, online game. You must use mathematical models to mine enough fuel to make it off the planet before your oxygen runs out!



Atom Touch

Materials Research Science and Engineering Center

Atom Touch looks at the extremely small building blocks of life—atoms! Choose from a variety of activities or partake in free play, exploring how atoms really behave.



Science of Scuba Diving

Wisconsin Historical Society

Learn about the science of Boyle's Law and how water pressure affects air and then talk to a diver about scuba equipment and the science of breathing underwater.

Materials: A clear plastic water bottle with cap (preferably with the sticker removed), A plastic bendy straw, Scissors, Several paper clips, Enough water to fill the bottle



Tapping Triboelectric Nanogenerator

Materials Research Science and Engineering Center

Gather some materials and build a device a device that converts movement into electricity!

Find these events at the [Science Expeditions Website](https://science.wisc.edu)



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Thin Film Fun

Materials Research Science and Engineering Center

Join the Ediger Group as they show you how to create some nail polish thin films and then measure just how thin they are!



Determining Distances with Diffraction

Materials Research Science and Engineering Center

Measuring the size of small things, like the width of your hair, can be tricky, but Tesia and Carl can show you how to do it with the help of diffraction!



Creating Art with Polarized Light

Materials Research Science and Engineering Center

Polarized light can be used to create works of art in this fun and easy activity.



Atomic Force Microscope Model

Materials Research Science and Engineering Center

Build a model of an Atomic Force Microscope, a tool scientists use to “feel” individual atoms on a surface!



Explore Magnetism with Jello

Materials Research Science and Engineering Center

Use jello in various ways to explore magnetism and its effects.



Studying Single Molecules with the Goldsmith Group

Materials Research Science and Engineering Center

The Goldsmith Group explains how and why they study single molecules as they tour their laser lab.

Find these events at the [Science Expeditions Website](https://science.wisc.edu)



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Serial Dilutions

Materials Research Science and Engineering Center

Sometimes scientists need to work with very dilute substances, but how do they make a solution with only one molecule dissolved in a billion others?



Mitten Challenge

Materials Research Science and Engineering Center

This quick, inexpensive activity helps you understand why scientists and engineers need to find the right tool for the job.



Cutting it Down to Nano

Materials Research Science and Engineering Center

This easy, inexpensive activity helps you understand just how small atoms and the nanoscale are.



Carbon Nanotube Finger Puppets

Materials Research Science and Engineering Center

Learn about the incredible properties of nanotubes while making finger puppets!



Polymer Engineering Center

Materials Research Science and Engineering Center

Gerardo and Camila take a look at the Polymer Engineering Center and the advanced 3D printer within.



Atomic Layer Deposition

Materials Research Science and Engineering Center

Chuck Winter explains the fundamentals of Atomic Layer Deposition, a technique to sequentially lay down layers of single atoms.

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The Wonders of Physics Video Contest 2021

UW Department of Physics

The Wonders of Physics annual show has brought fun and exciting physics demonstrations to the public for the past 37 years. However, this year we need YOUR help to capture the wonders of physics happening in your own home.

Record yourself doing an amazing physics demonstration, explain the science behind it, and enter the video in the 2021 Wonders of Physics video contest. Your video could win you the top award of a Repaper Pencil & Paper Graphic Tablet by iskn, along with many other great awards. Plus, the best videos will be featured in the 2021 Wonders of Physics show!

This video will be an introduction to the contest, example videos, and actual videos already submitted by students. Visit <https://wonders.physics.wisc.edu/contest/> for info.



General Health

Wisconsin Society of Pharmacy Students (WSPS)

More information to come!



History of Pharmacy

Wisconsin Society of Pharmacy Students (WSPS)

More information to come!



Safe disposal of medication

Operation Med-Drop

More information to come!



HPV

Wisconsin Society of Pharmacy Students (WSPS)

More information to come!

Find these events at the [Science Expeditions Website](#)



Biology and
Health



Explore
Spaces



Engineering



Nature and the
Outdoors



Cells and
More



Physics

Available All Weekend VIRTUAL EVENTS



Education about Organ Donation

Operation Organ Donation
More information to come!



Diabetes Education and Management

Operation Diabetes from Wisconsin Society of Pharmacy Students (WSPS)
PharmD students address what diabetes is and what it means to be healthy.



Impacts of Smoking on Your Lungs

Operation Airways
More information to come!

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