



**ALL-NEW
LIVE-STREAMING
PROGRAMMING**

OPPORTUNITIES 2020/2021



**The Maryland Science Center's
Educational Programs Guide**



STAY CONNECTED

Email

Camp-In campin@marylandsciencecenter.org

Family Science Night famscinight@marylandsciencecenter.org

Traveling Science Programs outreach@marylandsciencecenter.org

Online

Website www.marylandsciencecenter.org

 [Facebook.com/MarylandScienceCenter](https://www.facebook.com/MarylandScienceCenter)

 [Twitter.com/MDScienceCenter](https://twitter.com/MDScienceCenter)

 [Instagram.com/MDScienceCenter](https://www.instagram.com/MDScienceCenter)

Phone

Field Trip Reservations 410-545-5929

Camp-In Programs 410-545-5958

Family Science Night 410-545-5968

The Science Store 410-545-5924

Traveling Science Program 410-545-5968

24 Hour Information Line 410-685-5225

Join the Maryland Science Center's E-Community and receive information on new exhibits, events, and special educator resources. To sign up visit www.marylandsciencecenter.org and click "Sign Up for Emails" in the top right corner of the screen.

THE SCIENCE STORE

Our store offers a wide selection of items that complement our programs and exhibits. Kits, games, teaching aids, resource books, gifts, and souvenirs are all available for purchase.

The Science Store is open during regular Maryland Science Center hours of operation. We offer educators a 10% discount with proper ID.

For groups who don't have time to shop during a visit, pre-packaged science sacks are available for advance purchase. The sacks are \$3 each and can be customized according to the age of your group. Please order at least two weeks prior to your visit.

Call us at 410-545-5924.

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PRICING AND IMPORTANT INFORMATION

The Maryland Science Center welcomes all Maryland students and chaperones reserving as a group to its exhibit halls free of charge. Plan your visit early and make your reservation today.

Maryland School Groups Only*

Basic Admission	<u>Students</u> FREE	<u>Teachers</u> FREE	<u>Chaperones</u> FREE
Enrichment Experiences and Observatory	<u>Students</u> \$7.50	<u>Teachers</u> FREE	<u>Chaperones</u> FREE
Davis Planetarium	<u>Students</u> \$7.50	<u>Teachers</u> \$7.50	<u>Chaperones</u> \$7.50
St. John Properties IMAX Theater	<u>Students</u> \$7.50	<u>Teachers</u> \$7.50	<u>Chaperones</u> \$7.50
Kids Room	<u>Students</u> \$2.00	<u>Teachers</u> FREE	<u>Chaperones</u> FREE

School Groups Outside of Maryland*

Basic Admission	<u>Students</u> \$8.50	<u>Teachers</u> FREE	<u>Chaperones</u> \$5.00
Enrichment Experiences and Observatory	<u>Students</u> \$7.50	<u>Teachers</u> FREE	<u>Chaperones</u> FREE
Davis Planetarium	<u>Students</u> \$7.50	<u>Teachers</u> \$7.50	<u>Chaperones</u> \$7.50
St. John Properties IMAX Theater	<u>Students</u> \$7.50	<u>Teachers</u> \$7.50	<u>Chaperones</u> \$7.50
Kids Room	<u>Students</u> \$2.00	<u>Teachers</u> FREE	<u>Chaperones</u> FREE

*Prices valid weekdays only, October 6th - June 18th (excluding major holidays)

Important Policies To Know

- Chaperones are required to remain with their students at all times.
- Groups of students are not permitted to visit MSC without an adult chaperone.
- Chaperones are responsible for appropriate behavior of all students in their group.
- Groups exhibiting inappropriate behavior will be asked to leave the Science Center without a refund.

Payment

No deposits are needed. All payments are due on the date of arrival. Payments can be made in the form of cash, credit (Visa, MasterCard, American Express, or Discover), or a check made out to the Maryland Science Center.

Non-Maryland schools must bring payment on the day of their visit. Maryland schools who plan on using a purchase order or requesting an invoice must do so at the time of their reservation—not on the day of their visit.

Cancellations

If you must cancel your field trip, please call the MSC reservationist at least one full calendar week before your scheduled visit. Those who fail to provide a week's notice will be charged a late cancellation fee of \$75 or 25% of the total reservation, whichever is higher. There is no charge to reschedule due to a school closure or weather emergency.

In the event of severe weather, the Maryland Science Center may close. Watch WBAL-TV for weather-related closings. To verify we are open in case of inclement weather, please phone the 24-hour information line after 7am on the day of your visit: 410-685-5225. Following a weather emergency, call the MSC reservationist.

SPECIAL OPPORTUNITIES FOR SCHOOL GROUPS

Camp-In Sleepover For School Groups!

Grades: 3-6

Capacity: 90 children per night, plus adult chaperones

Time: Fridays and Saturdays, Winter-Spring

Campers will

- Participate in hands-on animal themed workshops
- View a planetarium show
- View an IMAX movie
- Visit three floors of interactive exhibits
- Spend a night at the museum

Also includes

- Snack and Breakfast
- Participation patch

Call 410-545-5958 or email campin@mdsci.org
for more information and to begin your reservation.

Family Science Night (FSN) & Family Engineering Night (FEN)

Bring the Maryland Science Center to your school for an evening devoted to family fun, community-building, and learning. Family Science Night is a two-hour program designed to engage students and their families in STEM related activities. An additional offering of Family Engineering Night is available for an evening focused exclusively on design challenges and engineering concepts.

Your reservation includes

- 8 hands-on science or engineering activities
- 8 Maryland Science Center staff members, one for each activity
- Promotional flyer
- Activity passport for students
- 8 Maryland Science Center visitor vouchers for prizes

The fee for either FSN or FEN is \$1500. Additional activities can be included for an added fee. Pricing is based on schools within an hour of Baltimore City. Additional fees may apply for schools at a greater distance. This program may be eligible for Title I Parent Involvement funding.

Call 410-545-5968 or email famscinight@mdsci.org for more information and to begin your reservation.

EDUCATOR RESOURCES

Free Admission For Teachers

The Maryland Science Center offers FREE ADMISSION to our exhibit halls to all credentialed Maryland teachers, when not visiting with a school group throughout the year.

Upon arrival, present your educator identification (school ID, payroll receipt, etc.) to a ticket agent.

Online Resources

Information identifying links between Next Generation Science Standards and MSC exhibits, enrichment experiences, and theater shows is available from the MSC website. This and other resources including a scavenger hunt for use during your visit and step-by-step science experiments are all available for download.

Visit www.marylandsciencecenter.org and navigate to “Learn” and select “Resources.” Links and materials can be found within the “Educator Resources” section.



VIRTUAL EXPERIENCES FOR SCHOOL GROUPS

Live Turnkey Science Block Content.

VIRTUAL IN-CLASSROOM OR DISTANCE-LEARNING PROGRAMS

All planetarium programs are presented live via Zoom. Alternate platforms may be available. Dinosaur program utilizes a unique link. Teachers must have internet access and be able to project feed for in classroom programs. Each program is \$225 unless stated otherwise. Payment is due one week in advance.

Exploring Planets

Grades: 3-5

Capacity: 30 students

Length: 45 minutes

Students will:

- Fly through the solar system to investigate features of planets and dwarf planets
- Explore characteristics of a planet
- Learn about current space missions

Dinosaur Mysteries Virtual Tour

Grades: K-2, 3-5

Capacity: 30 students

Length: 45 minutes

Students will:

- Take a virtual tour of the Dinosaur Mysteries exhibit led by our very own paleontologist
- Learn about how we find fossils and what they tell us about dinosaur life cycles, diet, behavior and the ecosystems in which they lived
- After the pre-recorded tour, do two hands-on activities in your classroom to explore paleontology further

**NEW
THIS YEAR**



Shapes in the Sky

Grades: 1-2

Capacity: 30 students

Length: 35 minutes

Students will:

- Look for familiar shapes among the stars in the sky
- Imagine and create personal star patterns
- Observe patterns of the motion of stars and the Moon

The Sky Tonight

Grades: 3-5, 6-8

Capacity: 30 students

Length: 45 minutes

Students will:

- Observe seasonal constellations of the night sky
- Find and identify stars, planets, and phases of the Moon
- Learn how to use a starmap for backyard stargazing



VIRTUAL EXPERIENCES FOR SCHOOL GROUPS

VIRTUAL IN-CLASSROOM PROGRAMS

All enrichment programs are presented live via Zoom. Alternate platforms may be available. Teachers must have internet access and be able to project feed. Materials kit will be sent for 30 students and one instructor. Each program is \$225 unless stated otherwise. Payment is due one week in advance.

Radical Reactions

Grades: 1-2

Capacity: 30 students

Length: 45 minutes

Students will:

- Use real science tools to run experiments
- Learn the science behind various chemical reactions
- Explore simple chemistry



Soap Bubble Math

Grades: 2-3

Capacity: 30 students

Length: 45 minutes

Students will:

- Participate in a mathematical problem-based learning experience
- Gather and share data through group participation
- Design a question and procedure, guided by standards, to determine measurable information about soap bubbles



What is That?

Grades: 4-8, 9-12

Capacity: 30 students

Length: 45 minutes

(Materials for this program will not be sent. Teachers will be instructed on how to make the necessary materials which should take less than 15 minutes.)

Students will:

- Use the scientific process to investigate mystery boxes
- Make hypotheses based on sensory perceptions and memories
- Defend their hypothesis using empirical evidence

Ziplock Chemistry

Grades: 3-8

Capacity: 30 students

Length: 45 minutes

Students will:

- Conduct chemical reaction experiments inside plastic bags
- Uncover how matter and energy are transformed

OUT-OF-SCHOOL TIME PROGRAMMING

This program allows students to

explore Maryland Science Center

exhibits inside the classroom through

pre-recorded video components, as well

as instruction for related hands-on science

activities. Teachers must have internet

access and be able to project video. Students

should have access to the classroom supplies required for

activities on provided materials list.

Newton's Alley Virtual Tour

Grades: 3-6

Capacity: 30 students

Length: 45 min or 90 minutes

Pricing for this program is \$225 for a 45 minute tour and

\$450 for a 90 minute tour.

Students will:

- Explore scientific concepts of physics covered in our Newtons Alley exhibit: air pressure, centripetal force, distribution of mass, momentum and energy transfer, pulleys, or sound waves
- Engage in hands-on activities related to our exhibit components
- Make informed scientific arguments based on the activity result

**NEW
THIS YEAR**

*Don't see
what you need?
Just ask.*

ENRICHMENT EXPERIENCES

Enrichment Experiences are small group, classroom-style programs designed to enhance our field trips by offering in-depth content and more hands-on examples of learning by doing.

Advance reservation is required. Programs available on the half hour from 10:30am to 1:30pm.

Circuit Solutions

Grades: 3-5, 6-8

Capacity: 30 students

Length: 45 minutes

Students will:

- Assemble a working simple circuit
- Test insulators and conductors to learn about the transfer of energy (grades 3-5)
- Experiment with polarity and create a parallel circuit to study the strength of electric forces (grades 6-8)

DNA Discovery

Grades: 4-8

Capacity: 30 students

Length: 45 minutes

Students will:

- Observe and analyze their personal genetic traits
- Translate genetic code into traits to make a unique creature
- Extract plant DNA to see what it looks like up close and in person



Radical Reactions

Grades: 1-2

Capacity: 30 students

Length: 45 minutes

Students will:

- Use real science tools to run experiments
- Learn the science behind various chemical reactions
- Explore simple chemistry

Sensory Mystery

Grades: PreK4-1

Capacity: 30 students

Length: 45 minutes

Students will:

- Use senses to solve a mystery
- Discover how the brain is connected to other parts of the body by nerves
- Experiment to see how eyes, ears, skin, and noses function

Soap Bubble Math

Grades: 2-3

Capacity: 30 students

Length: 45 minutes

Students will:

- Participate in a mathematical problem-based learning experience
- Gather and share data through group participation
- Design a question and procedure, guided by standards, to determine measurable information about soap bubbles

Stats Lab

Grades: 6-8

Capacity: 30 students

Length: 45 minutes

Students will:

- Collect and analyze statistical data generated by toys and games
- Calculate frequencies and probabilities
- Compare predicted and observed outcomes

ENRICHMENT EXPERIENCES

Sudsy Science

Grades: PreK4-1

Capacity: 30 students

Length: 45 minutes

Students will:

- Experiment with various bubble wands and predict bubble shapes
- Combine materials to make a better bubble solution

Synthetic Biology

Grades: 9-12

Capacity: 30 students

Length: 45 minutes

Students will:

- Survey ways that humans alter DNA to benefit themselves
- Explore the intersection of technology and society
- Discuss ethical issues related to engineered organisms

What is That?

Grades: 4-8, 9-12

Capacity: 30 students

Length: 45 minutes

Students will:

- Use the scientific process to investigate mystery boxes
- Make hypotheses based on sensory perceptions and memories
- Defend their hypothesis using empirical evidence



Wind and Waves

Grades: 2-5, 6-8

Capacity: 30 students

Length: 45 minutes

Students will:

- Determine what energy sources are derived from renewable and non-renewable resources and how their use affects the environment
- Create a model of an offshore wind and wave energy farm to maximize energy output then optimize your solution to tackle multiple challenges
- Create an efficient, cost effective design within a defined set of parameters (grades 6-8)

Ziplock Chemistry

Grades: 3-8

Capacity: 30 students

Length: 45 minutes

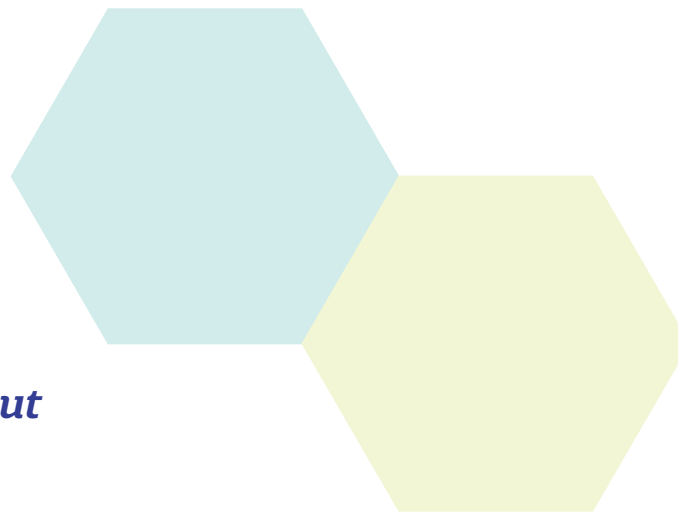
Students will:

- Conduct chemical reaction experiments inside plastic bags
- Uncover how matter and energy are transformed

We want every group to have the best experience possible and recognize that the special needs of some student groups may require attendance in enrichment experiences outside their grade level.

Please ask the reservationist for advice about suggested accommodations.

Advance reservation is required. Programs available on the half hour from 10:30am to 1:30pm.



ST. JOHN PROPERTIES IMAX THEATER

IMAX films offer an immersive, larger-than-life exploration of key topics directly related to our core programs.

Films available on the half hour from 10:30am to 1:30pm.

A Beautiful Planet 3D

Grades: 3-12

Capacity: 330

Length: 45 minutes



- Gaze down on the wonders of Earth from the International Space Station for a breathtaking view of the planet
- Discover how humanity and natural powers have changed the world
- Explore life on the International Space Station and how research done in space pushes the boundaries of human knowledge

Beavers

Grades: PreK4-8

Capacity: 390

Length: 35 minutes

- Trek through the Canadian Rockies with a family of beavers, one of nature's greatest engineers
- Travel underwater and inside a beaver lodge for a rare look at these industrious creatures
- Watch them fell trees, construct their lodge, evade the forest's predators, and transform their environment



Dream Big 3D

Grades: 3-12

Capacity: 330

Length: 40 minutes

- See engineering in a new light, as an exciting, creative, heroic field
- Watch today's young engineers as they create life-saving, world-altering marvels to make the world safer, more connected and more awe-inspiring
- Inspire students of all backgrounds to become the innovators of the 21st century

Expedition Chesapeake

Grades: 3-12

Capacity: 390

Length: 45 minutes

- Meet scientists who study the diverse species in the Chesapeake Bay watershed
- Travel from the headwaters of the Susquehanna River to the southern end of the bay and explore the human impacts on the watershed
- Learn about how the ecosystem is changing and the efforts to protect its future health

ST. JOHN PROPERTIES IMAX THEATER

Extreme Weather 3D

Grades: 3-12

Capacity: 330

Length: 40 minutes

- Explore the interconnected system of weather that causes tornadoes, collapsing glaciers, and draught-driven wildfires
- Discover some of the ways the dynamic forces of weather are shaping planet Earth
- Follow researchers as they uncover information to help us adapt to our ever-changing weather

Flight of the Butterflies 3D

Grades: 2-12

Capacity: 330

Length: 45 minutes

- Follow the migration of the monarch butterfly from Mexico to Canada and a determined scientist's decades-long search to find their hidden overwintering sites
- Watch the amazing transformation from pupa to adult monarch
- See hundreds of millions of migrating monarchs in the remote mountains of central Mexico

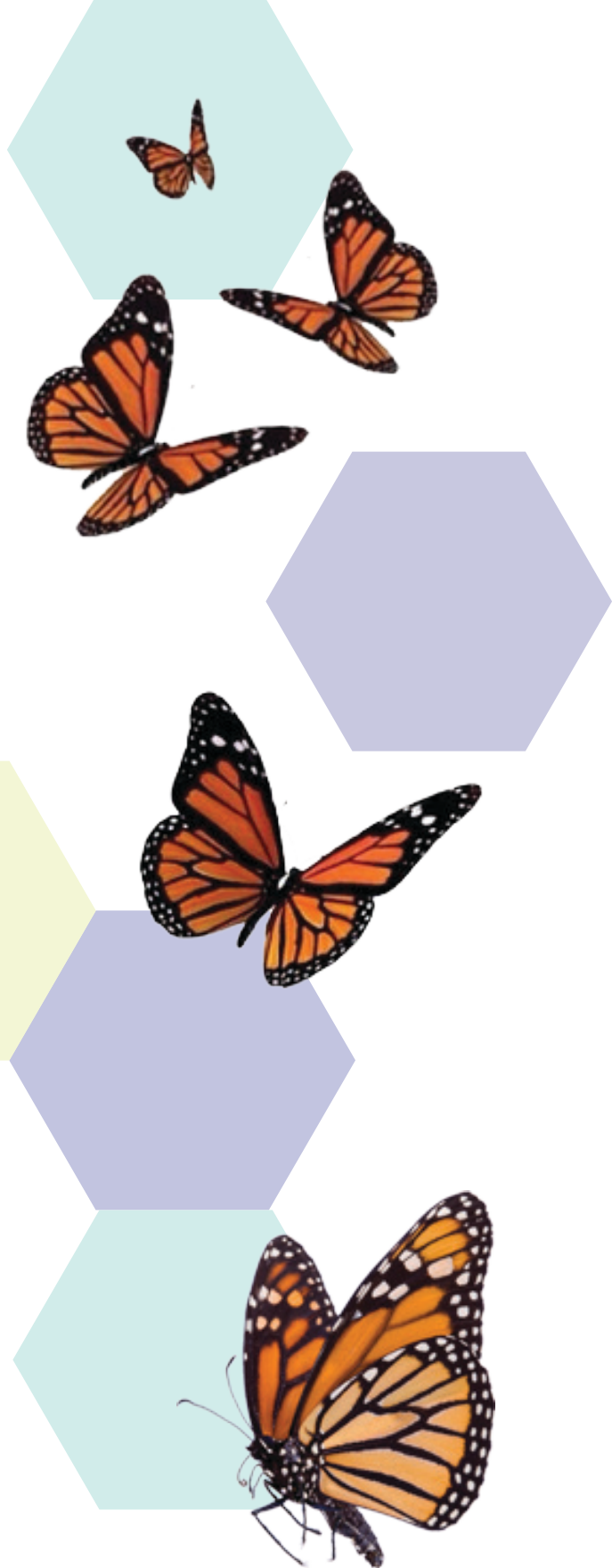
Journey To Space 3D

Grades: 3-12

Capacity: 330

Length: 40 minutes

- Examine the challenges of sending humans into deep space, including a round-trip voyage to Mars brought to life on the IMAX screen
- Learn about the important role of the International Space Station
- Discover how NASA's shuttle program has led to an exciting new era of space exploration



Films available on the half hour from 10:30am to 1:30pm.

PLANETARIUM

Planetarium programs for school groups are by advance reservation only. Programs available at 10:30am, 11:30am, and 1:30pm.

Live Programs

Beyond Your Backyard Sky

Grades: 6-12

Capacity: 140

Length: 45 minutes

- Explore the current sky and compare observations of stars and planets
- Launch from a backyard view of the sky into space and through the solar system and Milky Way galaxy
- See how the stars and planets of the nighttime sky fit into the universe as a whole

Exploring Planets

Grades: 3-5

Capacity: 140

Length: 45 minutes

- Fly through the solar system to investigate features of planets and dwarf planets
- Explore characteristics of a planet
- Learn about current space missions

Seasons in the Sky

Grades: 5-7

Capacity: 140

Length: 45 minutes

- Tour seasonal constellations of the night sky
- Explore reasons for the seasons
- Learn how to use a starmap for backyard stargazing

Shapes in the Sky

Grades: 1-2

Capacity: 140

Length: 35 minutes

- Look for familiar shapes among the stars in the sky
- Imagine and create personal star patterns
- Observe patterns of the motion of stars and the Moon

Stories in the Stars

Grades: 3-8

Capacity: 140

Length: 45 minutes

- See how different or similar the night sky looks in a tour around the world
- Find out how people from all around the world look up at the same stars and see different pictures
- Explore the night sky and hear stories that bring new pictures to life

The Sky Tonight

Grades: 3-5

Capacity: 140

Length: 45 minutes

- Observe current objects in the night sky
- Find and identify stars, planets, and phases of the Moon
- Learn how to use a starmap for backyard stargazing

Recorded Programs

Black Holes: Journey into the Unknown

Grades: 5-12

Capacity: 140

Length: 35 minutes

- Find out how a black hole is formed and where they can be found
- Discover what effect a black hole can have on celestial bodies in the universe
- Use a model to imagine what might happen if you got too close to a black hole



PLANETARIUM

Programs available at 10:30am, 11:30am, and 1:30pm.

Cosmic Colors

Grades: 4-12

Capacity: 140

Length: 35 minutes

- View the human eye up close and discover what structures allow us to see the visible light spectrum
- Discover the many reasons for color to find out why the sky is blue and why Mars is red
- Explore the invisible side of the electromagnetic spectrum and see how different wavelengths can be used in everyday life

Meet the Solar System

Grades: PreK4 - 2

Capacity: 140

Length: 25 minutes

- Tour our solar system through crayon likenesses of the Sun, Moon, and planets
- Explore the solar system's primary members and what makes them special
- Make comparisons to different places in our solar system



One World One Sky: Big Bird's Adventure

Grades: PreK4-2

Capacity: 140

Length: 35 minutes

- Follow Sesame Street's Big Bird and Elmo as they explore the night sky
- Meet Hu Hu Zhu, a Muppet from the Chinese co-production of Sesame Street
- Take an imaginary trip to the Moon with Elmo and Hu Hu Zhu

Solar Superstorms

Grades: 5-12

Capacity: 140

Length: 35 minutes

- Discover the inner workings of the Sun
- Learn how changes in the magnetic fields that surround the Sun can result in solar flares and eruptions
- Understand how modern life technologies are vulnerable to the power of the Sun

Solar System Odyssey

Grades: 3-7

Capacity: 140

Length: 35 minutes

- Go on a futuristic journey through the solar system
- Set out on a mission to discover a new home to colonize
- Learn what makes a world an ideal habitat for life and what it would take for humans to live there

Observatory

See the Sun

Grades: 3-12

Capacity: 25 people
(includes students & chaperones)

Length: 45 minutes

- Observe the Sun through safe solar filters to reveal sunspots, flares, and prominences
- Learn the power of the Sun as a star by exploring its many wavelengths of light with special attention to ultra-violet (UV) light
- Solar viewing as weather permits—telescope views of ground-based objects substituted under cloudy conditions

Night Under the Stars

Grades: 3-12

Capacity: 25 people
(includes students & chaperones)

Length: 2 evening hours

- View the Moon, planets, and stars according to the season
- Admission is \$10.00 per person (\$100 minimum)
- Program depends on the weather, so rain dates will be arranged

THE TRAVELING SCIENCE PROGRAM

Questions About the Traveling Science Program (TSP)

Our Traveling Science Program (TSP) vans begin their educational journeys in Maryland and beyond for the 2020-2021 school year starting October 6th.

How do I arrange for TSP to visit my school?

Bookings are accepted on a first-come, first-served basis. Contact the TSP Reservations Department at 410.545.5968 or email outreach@mdsci.org. A member of the TSP Reservations Department can answer questions, offer scheduling suggestions, review costs, and book the date you selected for TSP to visit your school.

Can I bring TSP to my local library, community center, or other non-school setting?

Yes, an additional program model is available for libraries, community centers, and non-school settings. Please contact the TSP Reservations Line at 410-545-5968 for more information.

When can I phone the TSP Reservations Department?

Staff are available Monday through Friday from 2pm - 9pm. Certain months fill up quickly so phone early with your desired program, date, and time.

Assembly Programs

Dinosaurs

Grades: PreK4-1

Capacity: 250 students per day, maximum
100 students per show

Length: 30 minutes

- Apply prior knowledge of self and other animals to determine how dinosaurs are different
- Observe similar patterns within dinosaurs and humans and describe what all animals need to survive
- Discuss how parent dinosaurs were like their offspring and unlike other dinosaurs and other animals

Let's Science That

Grades 2-5

Capacity 250 students

Length: 30 minutes

Requires the ability to turn the overhead lights off for part of the program

- Explore the process of science through physical and chemical demonstrations
- Investigate light reflection, absorption, and shadow making
- Observe the formation of new substances through chemical reactions

Activity Pricing

Assembly Programs
30 minutes each
Maximum 3 per day

Up to 250 participants
\$575
1-3 presentations

Additional daily programs may be scheduled through our reservations department on a case by case basis.

Classroom Programs
50 minutes each
Maximum 5 per day

Up to 90 participants
\$435
1-5 presentations, same title

Additional daily programs may be scheduled through our reservations department on a case by case basis.

THE TRAVELING SCIENCE PROGRAM

Mixing Up Science

Grades: PreK4-1

Capacity: 250 students, maximum 100 students per show

Length: 30 minutes

- Practice describing observations during hands-on demonstrations
- Define properties of different materials and relate them to states of matter
- Witness some surprising chemical reactions

Science Unscripted

Grades: 1-5

Capacity: 250 students

Length: 30 minutes

- Compose a unique science show by selecting experiments from our science topic cards
- Partake in a range of demonstrations including liquid nitrogen, chemical mixing, and combustion reactions

Use the Force

Grades: 1-5

Capacity: 250 students

Length: 30 minutes

- Observe the properties of materials and how they can change by heating, cooling, or adding a force
- Discover how energy is transferred between objects
- Explore the conservation of energy involving light, heat, and sound



What's the Matter?

Grades: K-5

Capacity: 250 students

Length: 30 minutes

- Describe different states of matter with models and demonstrations
- Observe properties of different materials and predict their use
- Witness results of chemical reactions as substances combine and change

Who Invented Electricity?

Grades: 3-8

Capacity: 250 students

Length: 30 minutes

- Determine the cause and effect relationships of electric and magnetic interactions between objects
- Consider evidence that electrical current can be transferred through conductive material
- Discover the cooperation of worldwide scientists in discoveries of electromagnetic phenomena

Classroom Programs

Beyond Building

Grades: 3-5

Capacity: 90 students

Length: 50 minutes

- Participate in three engineering activities designed to engage in the engineering design processes
- Practice engineering skills beyond building, including manipulating light with lenses and amplifying sound with different materials
- Explore various real-world careers that use engineering to get the job done

Circuit Masters

Grades: 2-3, 4-6

Capacity: 90 students

Length: 50 minutes

- Explore the basics of electricity
- Incorporate different types of switches
- Test and compare insulators and conductors



THE TRAVELING SCIENCE PROGRAM



Engineered by Design

Grades: 3-8

Capacity: 90 students

Length: 50 minutes

- Explore the engineering design process (imagine, plan, create, test, improve)
- Be challenged to follow the design process in order to create a solution for a given task

Fairy Tale Engineering

Grades: K-2

Capacity: 90 students

Length: 50 minutes

- Participate in three engineering activities inspired by classic fairy tale stories
- Act as heroes of a story by overcoming problems using engineering
- Experience the engineering design process



It's Cool in Your School

Grades: 6-12

Capacity: 90 students

Length: 50 minutes

- Learn about the science of cryogenics using liquid nitrogen
- Find out how different materials react to extreme cold
- Witness the relationship between pressure, volume, and temperature



Solid, Liquid, Slime

Grades: K-2

Capacity: 90 students

Length: 50 minutes

- Discuss the differences between solids and liquids
- Prepare samples of chemical slime
- Conduct an investigation on slime's state of matter



CORE EXHIBITS

Our Core Exhibits are the centerpiece of our educational initiatives and form the foundation for our programs.

EARTH AND NATURE

Dinosaur Mysteries

Follow the trail of dinosaurs from dig site to field laboratory and beyond. Work together to unearth dinosaur bones at the dig site. Examine a 70 million-year-old dinosaur embryo. Get up close and personal with T. rex and over a dozen other full size dinosaurs throughout 10,000 square feet of soaring exhibit space, all in a hands-on environment.

HEALTH AND THE HUMAN BODY

SciLab

Scientists in 3rd grade and up get to work in a real laboratory. Use genuine lab tools and protocols to investigate chemical and biological phenomena.



SciLab is presented by BD Diagnostic Systems

Cells: The Universe Inside Us

Walk through a giant maze to find out how proteins are made. Zoom into a projected image of yourself to see brain, heart, and muscle cells. Participate in a special MSC version of Dance, Dance Revolution to find out how exercise helps your bones, brain, and heart.

Your Body: The Inside Story

Discover the extraordinarily cool (and sometimes gross) things your body does every day. Find out what's happening inside as you digest food and exercise. Walk into a giant, human heart. Squeeze a large intestine and hear some interesting digestive sounds. Test your balance, chart your reaction to stress, and calculate your body's health age.



EARLY CHILDHOOD

The Kids Room

The Kids Room is a sensory adventure for our early childhood visitors, from birth to eight years of age. Dive into water-play, where hand pumps, fountains, dams, river channels, and nozzles keep hands and minds in motion. Send a message racing across the room in a pneumatic tube or create a building to withstand our earthquake table. Our youngest visitors from birth-24 months of age can explore Room to Grow, a special sensory-rich zone where the pace and activity level is scaled appropriately to infant and toddler development. In the Kids Room, children can experiment with cause and effect relationships, discover the forces of gravity and magnetism, explore the natural world, and exercise their imaginations.

The Kids Room is designed as a child-led discovery space. Adult chaperones must accompany and remain in the room with children at all times. School groups are encouraged to divide into age groups as follows, so that a safe and age appropriate experience takes place: birth to five years (Pre-K and K) and six to eight years (1st, 2nd, and 3rd grades). School Groups must have a reservation to visit the Kids Room. Please note there is an additional charge for this exhibit. See pg. 2.

Capacity: 50 students | Time: 50 minutes

CORE EXHIBITS

PHYSICS AND PHENOMENA

Demonstration Stage

Science is an explosive, chilling, electrifying, bubbling experience on the Maryland Science Center's Demonstration Stage. Get in on the action with hands-on audience participation. Presentations are offered daily on a variety of topics.

Newton's Alley

Explore sight, sound, transfer of energy, magnetism, light, and simple machines in this hands-on physics exhibit. Pull yourself to the stars in a pulley chair, play beautiful music on a stringless laser harp, and learn about physical forces by competing in a giant lever tug-of-war.

Power Up—It's Electrifying!

From fuel to power generation to delivery—it takes a lot to make sure the light goes on when you throw that switch. Power Up looks at the people and power that make the electricity we use every day. You are the energy behind the human-powered generator and you take on the role of city planner as you try to figure out the power distribution grid to electrify a city without overloading the system.



Science & Main

Science meets Main Street at the intersection of hands-on learning. Explore how gears work at the bike shop. Learn about sound in the music store. Discover the properties of flight at the airport and lots more in this streetscape exhibit that will have you strolling through science.

Science Aglow

Science Aglow introduces the electromagnetic spectrum, with an emphasis on visible light and its interactions with mirrors, motion, and time. Glimpse the illusion of infinity as light bounces back and forth between mirrored surfaces. See your shadow like never before as it is temporarily captured on our glow-in-the-dark wall. Make a work of “light” art by sculpting light with prisms and lenses. Discover the concept of radiation as information, while exploring and experimenting with optics and the physics of light.

The Shed

The informal activities in this gallery use the design process so visitors can learn new DIY skills or new applications for old ones. Hands-on encounters with tools and materials inspire interest in STEM and

related careers as you engineer solutions to a physical challenge, construct circuits, or prototype gadgets that blend art and STEM. Creativity, innovation, and collaboration are all developed through physical and digital projects.



*The Shed is presented by
Chesapeake Employers Insurance Company*

CORE EXHIBITS



SPACE AND AEROSPACE SCIENCE

Davis Planetarium

Under the dome, the fully digital star theater turns daytime to night. Planetarium programs immerse audiences into the night and through an adventure in space. Program-related educational resources are provided to teachers on the day of your visit. Planetarium programs for school groups are by advance reservation only. Programs are offered at 10:30, 11:30, and 1:30. Please note there is an additional charge. See pg. 2.

Life Beyond Earth

Are we alone in the universe? Is there other life on distant planets or moons? Explore new discoveries of extreme life on Earth and how they suggest where life might exist on planets and moons in our solar system. Follow the hunt for planets outside our solar system, including Earth-like worlds. Special tactile components provide accessibility to visitors with vision limitations, and Braille guides and large type guides are available for use in the exhibit.

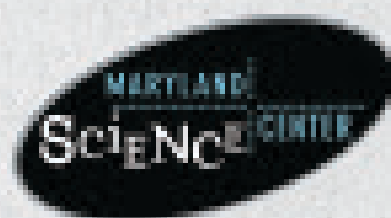
Science On a Sphere

Science On a Sphere is a large visualization system that uses computers and video projectors to display scientific images and animations onto the outside of a sphere. The globe appears as if suspended in air and shows dynamic images of the atmosphere, oceans, and land of a planet.

SpaceLink

Witness the latest and greatest in space science explorations and findings in SpaceLink, a multimedia update center. Learn about the latest news from NASA, human space travel, and planetary exploration.





801 Light Street at Baltimore's Inner Harbor

www.marylandsciencecenter.org

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