

2018-2019

CONNECTICUT SCIENCE CENTER

Educator Guide



Field Trip Planning

The Connecticut Science Center is your very own larger-than-life learning lab. Customize a day of fun and learning that fits your curriculum, time, and budget.



Connecticut
Science Center

To begin your adventure, go to CTScienceCenter.org/BookNow

Field Trip Hours

Tuesday–Friday, 9AM–5PM

Field Trip Pricing *per person*

General Admission.....	\$11
(with one free adult per 24 students)	
Add Butterfly Encounter Program.....	\$6
Add a 3D Movie	\$6
Add a Stage Show	\$6.50
Add a 45 minute Exploration Lab.....	\$7.50
Add a 60 minute Exploration Lab.....	\$9.50
Add a 90 minute Exploration Lab.....	\$15
Add a Subway Boxed Lunch*	\$7.50

* Your group may order boxed lunches from our on-site SUBWAY® restaurant by submitting a boxed lunch order form. Boxed lunches include a 6" sub, potato chips, a chocolate chip cookie, and one beverage.

TEACHERS AND CHAPERONES

- An 8:1 student to chaperone ratio is required for groups bringing grades K–7, and a 12:1 ratio is required for groups bringing grades 8–12.
- 1 adult per 24 students is admitted at no charge. All other adults will pay the same rate as students and will be listed on your Booking Notice as chaperones.

Reservation Center

Phone: 860.520.2150

Email: reservations@CTScienceCenter.org

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NEW & UPCOMING EXHIBITS

NEW PERMANENT EXHIBIT

UPCOMING TRAVELING EXHIBITS



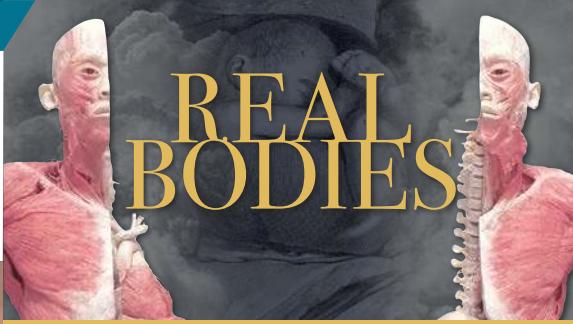
Open through December 2018

Bionic Me explores the inventive and ingenious medical and industrial breakthroughs that have helped humans change the world. With a mix of hands-on and full body experiences, **Bionic Me** focuses on technology that takes its inspiration from the natural world, in order for humans to overcome difficulties and enhance their lives.



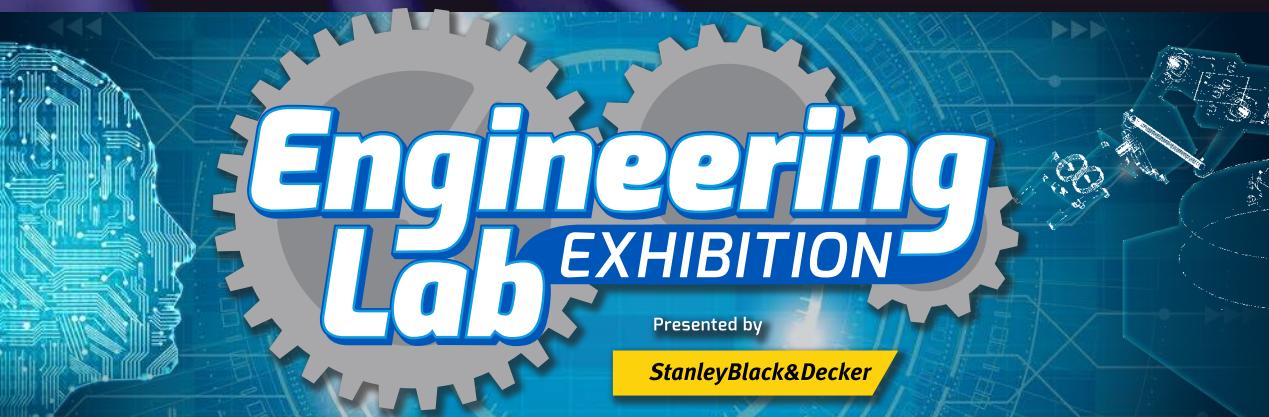
Opens March 1, 2019

Real Bodies uses real human specimens that have been respectfully preserved to explore the complex inner workings of the human form in a refreshing and thought-provoking style. System by system, the exhibition provides an approachable and fascinating insight into what's happening inside every one of us. More than a simple display of human specimens, **Real Bodies** will connect audiences to a deeper sense of what it means to be alive.



REAL
BODIES

YOU'LL NEVER SEE YOUR BODY
THE SAME WAY AGAIN!

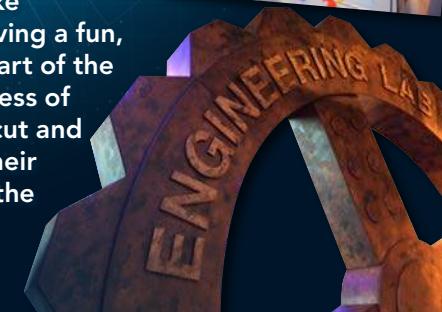


Presented by

StanleyBlack&Decker

The Engineering Lab showcases state-of-the-art technology alongside classic mechanical marvels in an immersive, hands-on exhibition with 18 brand new experiences inspired by engineering from the past, present, and future.

This new exhibit educates students on various engineering disciplines and will help make connections to career paths, all while having a fun, hands-on experience. The exhibition is part of the Science Center's mission to raise awareness of STEM-related opportunities in Connecticut and to cultivate interest among children at their most impressionable ages while driving the state's new science curriculum.



SPECIAL PROGRAMMING



WADSWORTH JOINT FIELD TRIP

Two amazing field trips for one low price? We've got it! Visit the Connecticut Science Center as well as the Wadsworth Atheneum. You will have the option of a themed or general tour at the Atheneum plus a self-guided experience at the Science Center.

*Tour must be reserved at least 3 weeks before desired tour date. General tours are appropriate for all ages. Themed tours are ideal for grades 6-12.

\$12 per person



SENSORY FRIENDLY DAYS

We are lowering the volume and dimming the lights to accommodate our groups with children on the autism spectrum or with other developmental disabilities. Presented by the Miracle League of Connecticut, Sensory Friendly Days offer all the fun of the Science Center without all the loud sounds and bright lights.

Sunday, September 23, 2018

Wednesday, October 3, 2018

Sunday, January 27, 2019

Tuesday, March 12, 2019



OVERNIGHT FIELD TRIPS

Make it a field trip to remember with a sleepover at the Connecticut Science Center! The exclusive, overnight experience starts at 6PM. Students and chaperones will explore our exhibits and experience unique, hands-on activities only available at night. Your group can view a 3D movie in our theater, sleep in our exhibit spaces, and enjoy admission to the Science Center the following day. School groups of any size in grades 1-6 can join in one of our planned dates or book your own private date for larger groups (must guarantee a minimum of 200 participants). Groups may vary in size, but must maintain a minimum 1:8 ratio of chaperones to children. Chaperones must be at least 18 years old.

Group pricing is \$55 per person.

Upcoming Overnight Dates:

November 3, 2018; March 2, 2019;
March 23, 2019; and April 6, 2019



SPECIAL THEMED WEEKS – Save the Date!

Make your field trip memorable and unique by visiting during one of our special themed weeks. We're amping up your field trip experience with extra opportunities for content-rich, hands-on science in our exhibit galleries.

Earth Science Week, October 16-19

Exploring Matter Week, December 11-14

National Engineers Week, February 18-22

Brain Awareness Week, March 11-17

DNA Days, April 23-26



LEGO® CODE: Connecticut

Join LEGO® Education for an immersive hands-on workshop. Your students will have the chance to explore coding, critical thinking, collaboration and problem solving by participating in learning through play activities. During your visit, children will run building and programming activities with LEGO® Education WeDo 2.0.

These fun workshops are led by LEGO® employee volunteers. Open to Grades 2-4, availability is limited and seats will fill quickly.

Grades 2-4
October 10, 11, & 12, 2018

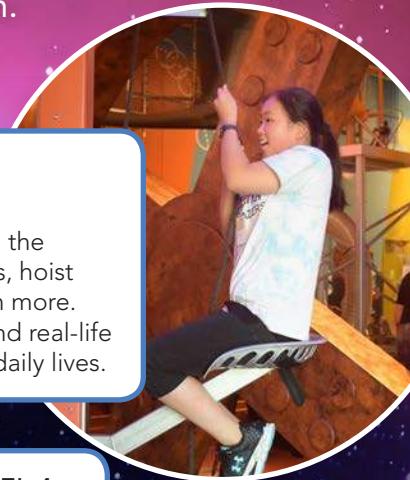
During a field trip to the Science Center, students can explore more than 165 fascinating exhibits that were designed to support the Connecticut Science Framework. They'll take part in immersive science activities that will inspire their curiosity about the world around them.

New

Engineering Lab Exhibition

Presented by Stanley Black & Decker: LEVEL 4

Explore 18 brand new hands-on experiences inspired by engineering from the past, present, and future in this new permanent exhibition. Build structures, hoist yourself into the air with pulleys, practice coding, create circuits, and much more. Engage with all areas of engineering, from electrical to mechanical, and find real-life examples of engineering heroes who show how engineering impacts our daily lives.



Forces in Motion | Eversource Gallery: LEVEL 4

Welcome to the world of extreme engineering, where you can race against gravity, build a unique structure with Imagination Playground blocks, and explore the physics of motion through a variety of interactive activities that investigate motion-related phenomena.



Sight and Sound Experience

Chase Family Foundations Gallery: LEVEL 4

Discover the hands-on scientific fun behind music and art. In this laboratory of artistic expression, you will use your eyes, ears, emotions, and full body to hear, see and feel the energy forces behind all light and sound.



Invention Dimension | Travelers Gallery: LEVEL 5

Challenge yourself to create the next great invention. Think outside the box, like the scientists, engineers, and technicians behind Connecticut's rich history of ingenuity, invention, and innovation. For inspiration, check out the unique inventions created by Connecticut students participating in the Connecticut Invention Convention.



Exploring Space

United Technologies Corporation Gallery: LEVEL 5

Step beyond the light-lock entrance of this gallery and enter into a dark and dramatic abyss of the spectacular and the unknown. Here, Earth, the Moon, Mars, galaxies, solar systems, remote planets, and the rest of the universe await your exploration. Travel to a black hole, create a crater, pilot a lunar lander, and more.

EXHIBIT GALLERIES

The Picture of Health

Aetna Foundation Gallery: LEVEL 5

Unravel the mysterious inner workings of the human body to discover how much of our health and well being is a matter of choice, and how much is a matter of chance. Examine the powerful (and often surprising) connections between your mind and body, strength and flexibility, and diet and exercise.



The Sports Lab

The Hartford Financial Services Group Gallery: LEVEL 5

Push, pull, pedal, touch, observe, examine, and analyze the connections between body and mind and how they each affect our performance in everyday activities and competitive athletics. In the process, you'll learn a little more about the inner athlete in each of us.

River of Life | LEVEL 6

Encounter the Connecticut River from unique and perhaps unfamiliar perspectives. Dive deep into the river's past, starting at its geological origins, and then journey through time into the modern era where you can assess how our everyday human activity has had an impact on the life of this river and all the ecosystems it sustains.

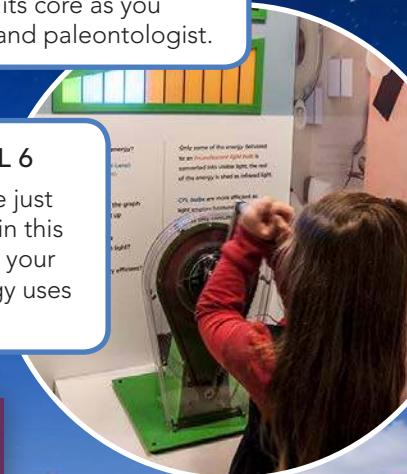


Planet Earth | FM Facilities Maintenance Gallery: LEVEL 6

Earth is a living planet with countless stories to tell about its rich history. Explore our home planet from its atmosphere down to its core as you become a geologist, meteorologist, environmentalist, and paleontologist.

Energy City | Energize Connecticut Gallery: LEVEL 6

Wind turbines. Solar panels. Hydropower. Fuel cells. These are just a few of the alternative energy technologies you will discover in this gallery. Find out how electricity travels from energy sources to your home. Tour this virtual city to measure the effect of your energy uses and how they affect the planet.

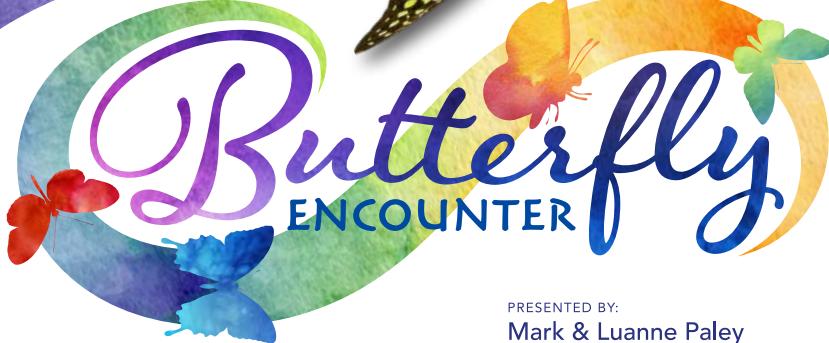


MAKE CURRICULUM CONNECTIONS WITH MORE THAN 165 PERMANENT EXHIBITS

Our exhibits and lab experiences tie directly to state science standards in subject areas including light, sound, the human body, weather, river ecology, motion, and much more.

► CTScienceCenter.org/CurriculumConnections

DISCOVERY CENTER PROGRAMS



MEDIA SPONSOR: **Hartford Courant**

PRESENTED BY:
Mark & Luanne Paley
and Roger & Sondra Beit

- All-season butterfly habitat and greenhouse.
- Experience 40-50 different species of butterflies. New species added weekly to showcase their amazing diversity.
- Observe the magic of the final stage of metamorphosis by watching butterflies emerge from their chrysalis and then be released.
- Features more than 30 different species of plants chosen specifically with our butterflies in mind.

20 Minute Programs\$6.00 per person*

Butterfly Spy (Grades K-2)
Wild Wings (Grades 3-8)

60 Minute Program.....\$9.50 per person*

Butterfly Biomes (Grades 6-8)

*must also purchase General Admission

Dive into a live, tropical environment at the new **Butterfly Encounter**.

Experience life science at its best in a unique and immersive exhibit with free flying butterflies. With new species added regularly and a variety of tropical plants, this exhibit is not only fully living, but constantly growing.



Scheduling: Complete and submit the Reservation Request Worksheet:
► CTScienceCenter.org/BookNow

For more information, please call 860.520.2150.



DISCOVERY CENTER PROGRAMS

Discovery Center Programs

During a hands-on program in the Science Center's Pfizer Discovery Center, students perform investigations and learn how science is part of their everyday life.

Students are active participants, performing experiments and making discoveries while having FUN with science.

Descriptions available online:

► CTScienceCenter.org/DiscoveryCenter

Discovery Center Programs
supported by



Discovery Center Programs

Each program models a classroom period that aligns with the Next Generation Science Standards.



Grades K-2	Grades 3-5	Grades 6-8	Grades 9-12
On A Roll NEW What's the Weather? Sound Breakdown The Secret Life of Plants What's the Matter? Pollen-Nation NEW Wash Out! Butterfly Spy	Crash Lab Make it Magnetic Choose Your Chompers Streaming Away A Chem-Mystery Share the Air NEW Oceans in Motion NEW Into the Shadows NEW Wild Wings Energy Through Time and Space (Grades 4&5)	Cloud Sourced Breaking Up Is Hard To Do Roller Coasters Refraction Action NEW Solving the Solstice Lights, Color, Action! NEW Wild Wings Butterfly Biomes NEW Energy Through Time and Space Be A Molecular Biologist	Energy Through Time and Space Be A Molecular Biologist

Discovery Center Add-On Programs per person

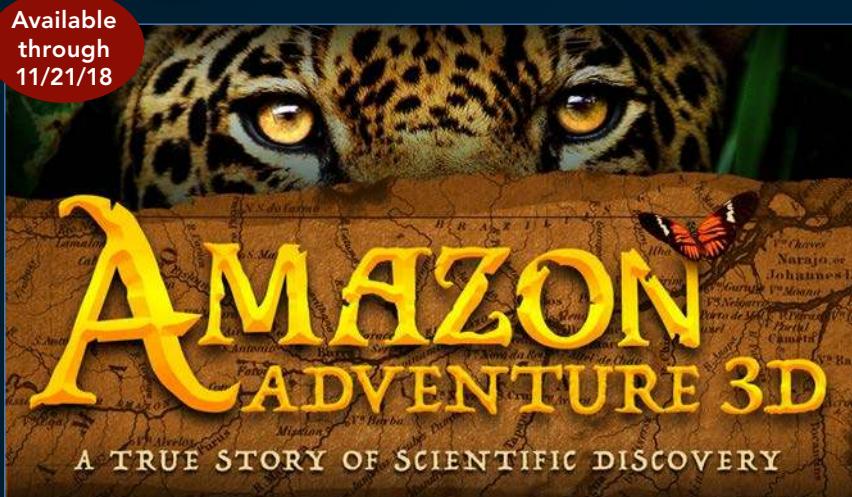
- 20 minute Butterfly Encounter Program** \$6.00
- 45 minute Exploration Lab** \$7.50
- 60 minute Exploration Lab** \$9.50
- 90 minute Exploration Lab** \$15.00

Maximilian E. and Marion O. Hoffman Foundation Science Theater

Experience science in an engaging environment with a visit to our Hoffman Foundation Science Theater. Each show is carefully selected for science content and offers relevant connections to the Connecticut Science Framework.

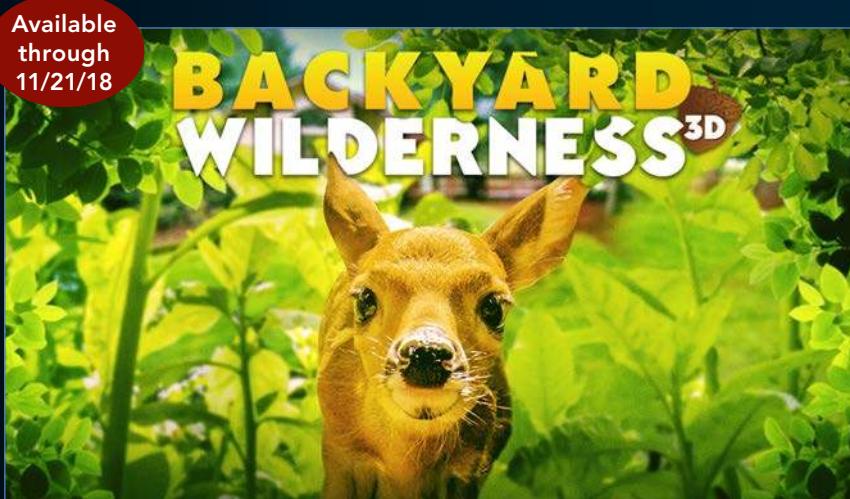
3D MOVIES

3D Movies offer a unique three-dimensional experience enabling students to learn about the science that affects our lives.



Amazon Adventure tells the epic, true story of explorer Henry Bates' fascinating 11-year journey through the visually stunning and biodiverse Amazon rainforest as a young man who risks his life for science in the 1850s. Audiences will experience the compelling clues Bates unearths in his major discovery of the phenomenon of mimicry, whereby certain animals adopt the look of others that helps them deceive predators and gain an advantage to survive.

Recommended for All Ages;
40 minutes



Backyard Wilderness will surprise and entertain viewers with the unexpected wonders of nature that are right under our noses – in our own backyards. The film displays a stunning array of unique wildlife images and behavior – all captured by cameras mounted inside dens and nests, and moving along the forest floor and pond bottom, to reveal its inhabitants in rare and breathtaking intimacy.

Recommended for All Ages;
40 minutes

Educator guides and details are available on our website:

► CTScienceCenter.org/SchoolShows

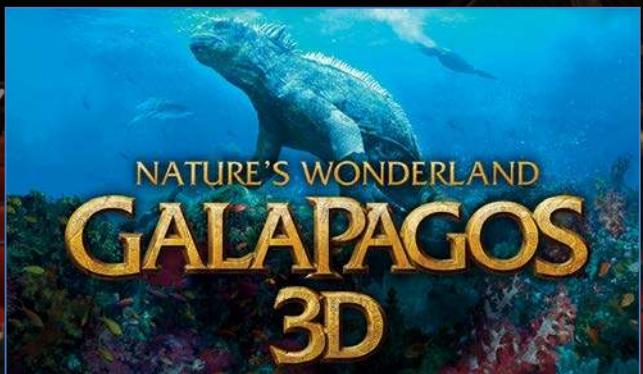
Special Movies for School Groups Only

Available year-round.



Dream Big

Recommended for Grades 3 and up; 40 minutes



Galapagos

Recommended for Grades 3 and up; 40 minutes



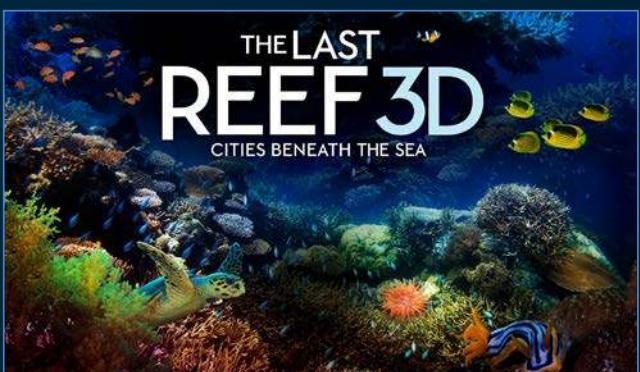
Extreme Weather

Recommended for Grades 3 and up; 40 minutes



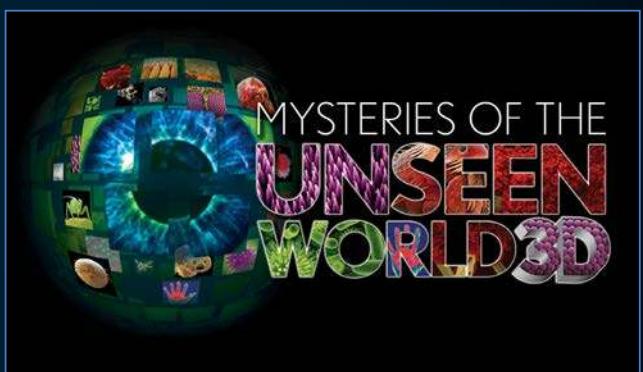
Journey to Space

Recommended for Grades 3 and up; 40 minutes



The Last Reef

Recommended for Grades 3 and up; 40 minutes



Mysteries of the Unseen World

Recommended for Grades 3 and up; 40 minutes

LIVE STAGE SHOWS

Join us for an interactive
LIVE stage show hosted
by our STEM Educators.



Global Soundscapes

Recommended for Grades 4–8; 45 minutes

Embark on a mission to investigate the dramatic soundscapes of Costa Rica's rainforests, Hawaii's coral reefs, and Mongolia's vast grasslands. Learn how animals use sounds to survive and communicate in lush, but threatened environments. Funded by the National Science Foundation.



Forces and Motion

Recommended for Grades 4–8;
45 minutes

A unique program to engage your students in physics and introduce them to Newton's Laws. Combines live demonstrations with video and other imagery projected on the theater's 30 ft x 40 ft screen.

3D Movie and Stage Show Pricing per person

Add a 3D Movie \$6

Add a Stage Show \$6.50

Scheduling:

Complete and submit the
Reservation Request Worksheet:
CTScienceCenter.org/BookNow



LIVE GALLERY SCIENCE



Join us daily for fun, interactive, LIVE science demonstrations. Program a robot, build an electric circuit, or get up close and personal with a lizard to learn how it's adapted to survive. Experience hair raising science with our Van de Graaff generator or even extract a dog's DNA.

With dozens of programs on a variety of science topics, every visit promises a unique experience. **LIVE Gallery Science is FREE with Group General Admission.**

Programs vary and change weekly – demonstration times and locations are posted throughout the building, just look for the *LIVE Gallery Science* signs.





SCIENCE IN MOTION

TRAVELING PROGRAMS



We bring science to you

Traveling Programs are a mix of science demonstrations and hands-on activities that spark students' scientific curiosity. All programs are aligned with the Next Generation Science Standards.



Traveling Classroom Programs

We bring fun, hands-on science activities to your classroom with these programs that accommodate up to 25 students and last 50 minutes:

Pre-K (30 minutes)	Grades K-2	Grades 3-5	Grades 6-8
Weather Wonders Need for Seed Wiggly Worms Bubble-ology	On A Roll NEW What's the Weather? Sound Breakdown NEW Let It Grow Mystery Detectives Pollen-Nation NEW Bubble-ology Playing with Polymers	Crash Lab What's The Attraction? Where Does the Water Go? Choose Your Chompers Chem-Mystery NEW Share the Air NEW Into the Shadows NEW Alchemy Lab Roller Coasters Zip Lines Playing with Polymers Living In Space (Grade 5)	What Makes Weather Refraction Action NEW Lights, Color, Action! NEW Bouncing Around Roller Coasters Pollution's Path Toppling Towers Living in Space

For more information on Traveling Programs visit:

CTScienceCenter.org/Outreach



Traveling Assembly Shows

45-minute assembly-style shows are designed to get students excited about science in a fun and interactive way. Shows are available for groups of 100–250.

The Science of "Suds"	Grades PreK-5
Rockin' Robots	Grades 2-12
Forces and Motion	Grades 4-8

Traveling Activity Stations for Grades K-9

Ideal for larger events, Activity Stations are tabletop demonstrations and hands-on activities designed to engage groups of students or families in 5-10 minute walk-up experiences. More than one station can be booked for an event. Please be sure to mention audience size when booking.

Electricity	Dry Ice	Polymers
Air Pressure	Bubbles	Magnets
Robots		

Traveling Program Pricing

Classroom Program	\$250
Add an additional session of the same topic	\$200
Pre-K Classroom Program.....	\$175
Add an additional session of the same topic	\$150
Assembly Show	\$500 per show
Activity Stations*	\$250 per station

Please note: Programs require tables and chairs, access to water and/or electricity, and 30 minutes for set up and clean up. **Travel charges may apply.**

* Polymer Activity Station has a \$50 materials fee.

Scheduling: Complete and submit the Reservation Request Worksheet:

► CTScienceCenter.org/BookNow

For more information, please call 860.520.2165.





Mandell Academy for Teachers Powerful Professional Development

The Joyce D. and Andrew J. Mandell Academy for Teachers provides professional development programs for educators, offering training that supports rigorous science, technology, engineering, and math (STEM) instruction and Next Generation Science Standards (NGSS). Our programs transform classroom learning by giving teachers the skills, tools, and confidence to increase interest and performance significantly in the sciences as well as other subjects.

Offerings range from multi-day workshops and week-long classes, to multi-year, full-school engagements with embedded Connecticut Science Center Professional Development Specialists for schools and leaders who have a vision for significant, lasting transformation in their teaching and learning environments.



Inquiry for Teaching and Learning Series

Our professional development in inquiry-based learning and teaching helps you transform classroom teaching using students' natural curiosity. The series includes five-day immersion workshops and flexible lesson coaching models to support putting the workshops into practice.

► CTScienceCenter.org/Inquiry



The Practice of NGSS

This program offers a solid foundation around NGSS instructional practices designed to help teams of K-12 science educators shift their teaching to support the Next Generation Science Standards.

► CTScienceCenter.org/Practices



The Next-Gen Science Exemplar System

NGSX is a suite of blended professional learning pathways designed to help teams of K-12 science educators apply the pedagogical shifts described in the Framework for K-12 Science Education and NGSS to their own teaching and to help principals in providing support along the way.

Look for additional professional development opportunities in these areas and more at ► CTScienceCenter.org/PD or contact us at MandellAcademy@CTScienceCenter.org or 860.520.2193



FUNDRAISING PROGRAM

EARN
\$4.95
PER TICKET

FREQUENTLY ASKED QUESTIONS

Must I sell a minimum number of tickets?
No, but there are prizes for the top sellers!

For how long should we run our fundraiser?

Fundraisers have no set length of time, but we recommend a 10-day sale.

Can we sell tickets for one specific date?

Yes; we can create a special day for your school or organization at the Connecticut Science Center. Tickets will be valid for a few months beyond the set date just in case your buyers can't attend on that day.

Will I have support?

Yes! You will have full support from a member of our sales team.



ADVANTAGES OF THE PROGRAM

- Everyone pays kids' price
- Your organization earns \$4.95 per ticket
- Pay only for the tickets that are sold
- Marketing materials and posters are provided

For more information or to start a program please contact:

Brit Montmeat, Group Sales Account Manager at 860.520.2112
or bmontmeat@CTScienceCenter.org

► CTScienceCenter.org/Fundraising

GENERAL INFORMATION

Reservation Center

Phone: 860.520.2150

Email: reservations@CTScienceCenter.org

Payments

- Full payment is due 30 days before your scheduled visit. Failure to submit payment, or make payment arrangements, may result in the release of your reservation. Please contact the Reservation Center if you need to make alternate payment arrangements.
- Accepted forms of payment include organizational check, credit card, or cash. Please note that purchase orders are not accepted.

Arrival

- Science Center staff will greet your group at your bus(es) when you arrive. For your convenience, we will provide bus driver instructions to drivers upon arrival.
- Bus Parking at the Market Street Lot is \$10 per bus.
- We recommend building in extra time for your arrival in anticipation of morning traffic.
- Backpacks, coats, and other personal belongings should be left on the bus, as there is no storage for such items within the Science Center. The Connecticut Science Center is not responsible for lost or stolen items.
- Teachers and chaperones are responsible for student behavior. We reserve the right to ask your group to leave if your group displays inappropriate behavior or is disrespectful to Science Center exhibits or guests.

Lunch

- We recommend that all groups request a lunch room when booking. In fair weather, groups may eat outside. However, in the event of inclement weather, the Science Center does not have alternative indoor lunch venues.
- If you are scheduled for a lunch time, please have your lunches ready for collection when you exit the bus.
- Lunches must require no refrigeration.



Departure

- Please be sure your entire group is ready and waiting at the main entrance on Columbus Boulevard at least 10 minutes prior to your scheduled departure time.



Cancelling or Rescheduling

- If you must cancel or reschedule your trip, please call the Reservation Center at least 1 week in advance. Your trip may be rescheduled for up to one year from the scheduled date.
- For same-day emergency cancellations, or if you will be late, please contact us on the emergency hotline at 860.520.2151.

Refunds

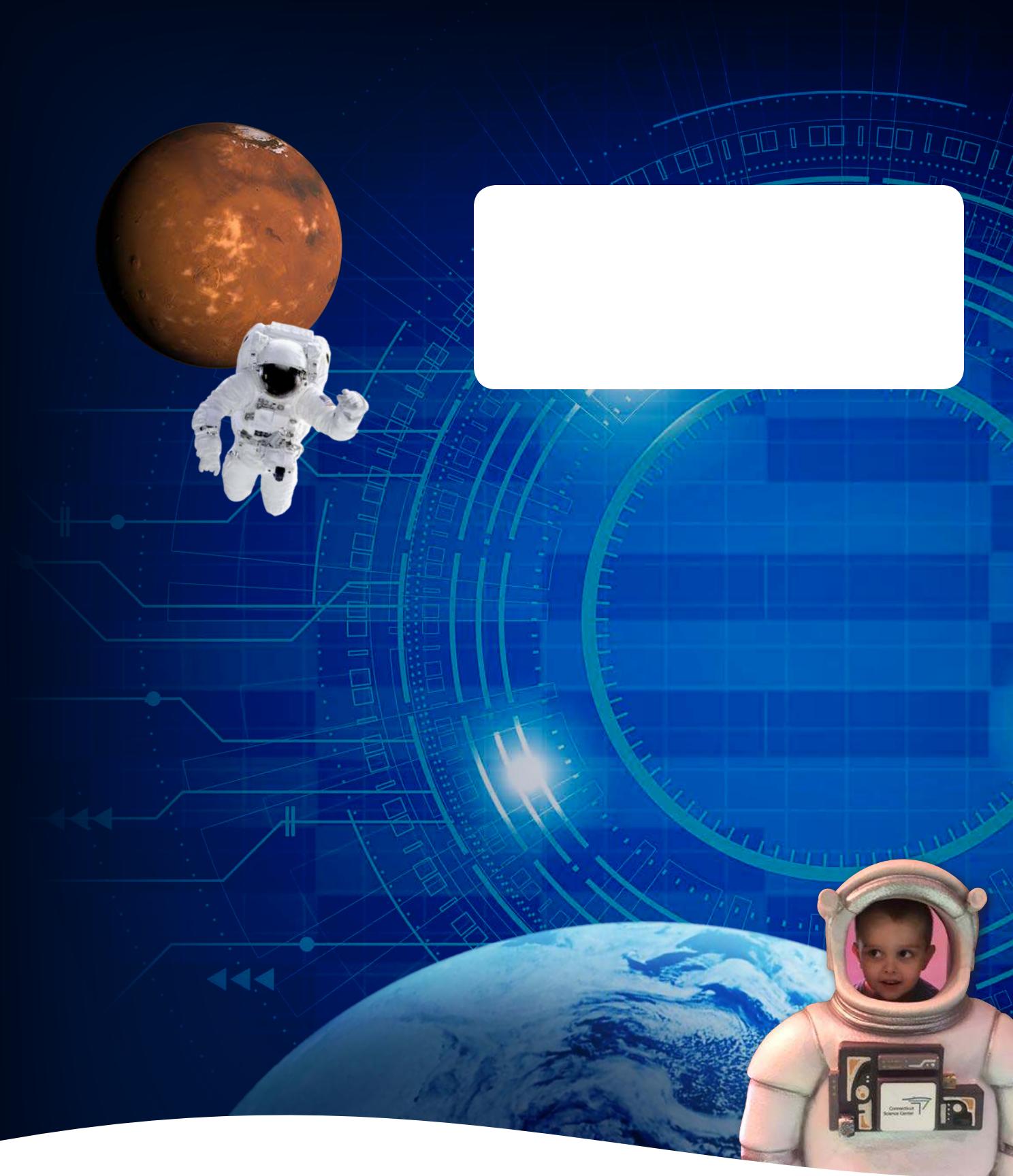
- Field trips are non-refundable. No refunds or credits will be issued if your group arrives with fewer guests than anticipated.
- If the Science Center is forced to cancel your reservation for reasons beyond our control (scheduling conflict, emergency closing, etc.), you will have the option of rescheduling or receiving a 100% refund.

Inclement Weather

- During times of inclement weather, the best way to reach us is via email at reservations@CTScienceCenter.org.
- In the case of an impending weather event, you may contact us and provide alternative dates that you may attend. We will verify availability and reschedule your trip only if your organization officially closes.
- The Reservation Center checks official sources (news provider/school website) on mornings when inclement weather is expected.

Accessibility

- We are wheelchair accessible, with elevators linking all parking, gallery, and lab areas. Exhibit display panels are positioned for comfortable viewing from a wheelchair.
- If someone in your party requires a wheelchair, they are available on a first come, first served basis at our Security Kiosk.
- If you have other mobility requirements, please let us know when making your reservation so we can better accommodate your needs.
- Licensed guide and service dogs are always welcome in the Science Center.
- Infrared Assistive Listening Devices and a Rear Window Captioning system for theater presentations are available upon request.



CTScienceCenter.org | 860.SCIENCE [724.3623] | 250 Columbus Blvd | Hartford, CT 06103