Educator Program Guide

2022

Museum | Planetarium | Outreach | Nature Center

the children's museum

Where Learning & Fun Connect

950 Trout Brook Drive • West Hartford, CT 06119 • Phone: (860) 231-2830

Aligned With The Next Generation Science Standards

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Three Entities, One Great Team!

The Children's Museum Group includes The Children's Museum, Roaring Brook Nature Center and The Children's Museum Preschool.

The Children's Museum (TCM) has been offering comprehensive programming for children for over 95 years. We are proud to find new ways to meet the ever-changing needs of the times. TCM looks forward to igniting the spark of excitement and curiousity through engaging programs, both in-person and virtually. The Children's Museum Group follows all CDC and local health department recommendations to keep all our visitors and staff safe.

Our entire staff takes great pride in bringing you this Education Program Guide. Please do not hesistate to reach out with any questions.

Programs from

The Children's Museum

Three Ways to Learn with The Children's Museum Group!

Field Trips to the Museum

Come to the Museum and explore our interactive exhibits. Choose a program (or two!) that aligns with your curriculum featuring the Gengras Planetarium, live animals, STEAM demonstrations, or hands-on experiments all taught by our highly trained educators.

Outreach Programs at Your Site

We can come to you! Museum educators will arrive at your school ready to wow your students with STEAM topics. Whether you select a live animal program or a hands-on engineering challenge, our educators will deliver a fun and exciting experience at your location.

Live Virtual Programs on ZOOM or Google Meet

Welcome our educators virually for a one-of-a-kind live online class.

Field Trips	Length of Program	Max Number of Students	Classroom Program or Planetarium Class		
			One	Two	Three
	45 Min	75	$10/student	$18/student	$25/student

$250 minimum for Planetarium programs
$150 minimum for all other program options

$8.00 per chaperone
FREE - Teacher/School Staff admission

Outreach Programs	Length of Program	Max Number of Students	Price
In-Person Class-Sized	45 Min	30	$225
In-Person Starlab	45 Min	30	$300
In-Person Early Childhood	45 Min	18	$175
In-Person Assembly	45 Min	100	$400
Wizards Lab	60 Min	100	$550
Virtual Class-Sized	45 Min	30	$200
Virtual Assembly	45 Min	100	$350
Virtual Family STEM Night	90 Min	100	$500

All traveling outreach programs incur an additional fee based on mileage. A $25 fee is applied for locations greater than 25 miles from the Museum. A $50 fee is applied for locations requiring travel greater than 50 miles.

$ Indicates programs with an additional material fee.

Book your program today!

Contact us at:
Phone: 860.726.4008
E-mail: Events@TheChildrensMuseumCT.org

After your reservation is made you will receive a confirmation letter that includes details of your visit.

Please Note: Your trip is NOT confirmed until you receive this notification.

All Children's Museum programs are aligned with the Next Generation Science Standards. For more information, call 860.726.4008, or see our website: www.TheChildrensMuseumCT.org/educators

S.T.E.A.M. Programs

Live Animal Programs	Page	Grade	ESS1	ESS2	ESS3	PS1	PS2	PS3	PS4	LS1	LS2	LS3	LS4	ETS1
Animal Adaptations & Habitats	10	K-8								✸			✸	
Featuring Frogs	10	K-2								✸			✸	
Animal Life Cycles	10	2-8								✸			✸	
Endangered Species	10	K-8								✸	✸		✸	
Connecticut Wildlife	10	K-8								✸			✸	
Cold-Blooded Creatures	10	K-8								✸			✸	
Earth's Biomes	10	K-8								✸			✸	
Food Webs	10	K-8								✸	✸		✸	

Hands-On Class Size Programs	Page	Grade	ESS1	ESS2	ESS3	PS1	PS2	PS3	PS4	LS1	LS2	LS3	LS4	ETS1
Weather Wonders	11	K-1		✸										
Budding Botanists	11	K-2									✸			
Sound	11	K-3							✸					
Kids Can Compost	11	K-3								✸				
Polymer Power	11	K-6				✸								✸
Environmental Science	11	2-8		✸	✸									
Water Cycle	11	K-4		✸	✸									
Paleontology	11	4-8											✸	
Can You Dig It?	11	2-4		✸										
Crime Lab	11	1-4												✸
Inventing	11	1-8												✸
Landforms and Mapping	11	2-4		✸	✸									
Simple Machines	11	3-5					✸							✸
Building Better Bridges	11	2-8					✸							✸
Rock On!	11	3-4		✸										
Chem Tech	11	4-8				✸								
Electricity & Magnetism	11	4-8				✸								✸

C.Y.O. Science Adventure	Page	Grade	ESS1	ESS2	ESS3	PS1	PS2	PS3	PS4	LS1	LS2	LS3	LS4	ETS1
Adaptations & Habitats Live Animal Program	9	K-8								✸			✸	
Chemistry	9	K-8				✸								
Combustion	9	K-8				✸								
Electricity	9	K-8				✸								
Flight (includes Combustion)	9	K-8				✸	✸							✸
Light	9	K-8							✸					
Liquid Nitrogen	9	K-8				✸								
Physics	9	K-8					✸	✸						
Sound	9	K-8							✸					
Create Your Own	9	K-8	Let our educators create an one-of-a-kind assembly that meets your learning goals.											

Starlabs	Page	Grade	ESS1	ESS2	ESS3	PS1	PS2	PS3	PS4	LS1	LS2	LS3	LS4	ETS1
Starry Safari	14	PreK-2	✸								✸			
Junior Night Owls	14	K-2	✸											
Might Moon	14	2-6	✸											
Out of this World	14	2-6	✸											
Stories by Starlight	14	2-6	✸											

Planetarium Classes

Night Sky Presentations	Page	Grade	ESS1	ESS2	ESS3	PS1	PS2	PS3	PS4	LS1	LS2	LS3	LS4	ETS1
Space Shapes	15	PK-K	✸											
Clockwork Skies	15	1-5	✸											
Sizing Up Space	15	3-5	✸											
Stars of the Seasons	15	3-8	✸											
Sun, Earth, Moon	15	4-8	✸											
Losing the Dark	15	4-8			✸					✸				✸

Full-Dome Presentations	Page	Grade	ESS1	ESS2	ESS3	PS1	PS2	PS3	PS4	LS1	LS2	LS3	LS4	ETS1
Dancing with the Dinosaurs	16	PK-3		✸	✸					✸			✸	
Larry Cat in Space	16	PK-3	✸				✸							
Lars the Little Polar Bear	16	PK-3		✸	✸					✸			✸	
Secret of the Cardboard Rocket	16	PK-3	✸		✸								✸	
In My Backyard	16	K-3	✸	✸	✸			✸		✸			✸	
Amazing Stargazing	16	1-4	✸											
Xtreme Weather	16	1-5	✸	✸	✸			✸						
Molecularium	16	2-6				✸		✸						
Flight Adventures	16	3-5					✸							✸
Astronaut	16	3-8					✸							✸
Oasis in Space	16	3-8	✸	✸										
Extreme Planets	16	3-8	✸											
From the Blue Planet to the Red Planet	16	3-8	✸	✸	✸									✸
Two Small Pieces of Glass: The AmazingTelescope	16	3-8	✸						✸					✸
Cosmic Colors	16	3-8						✸	✸					
Moon Shadows	16	3-8	✸											

NGSS Core Ideas		
ESS1 : Earth's Place in the Universe	PS1: Matter & Its Interactions	LS1: From Molecules to Organisms
ESS2: Earth's Systems	PS2: Motion & Stability	LS2: Ecosystems: Interactions, Energy & Dynamics
ESS3: Earth & Human Activity	PS3: Energy	LS3: Heredity: Inheritance and Variation of Traits
ETS1: Engineering Design	PS4: Waves and Their Applications	LS4: Biological Evolution: Unity and Diversity

For more information regarding our museum and/or our educational programming, please go to www.TheChildrensMuseumCT.org

Field Trips to The Children's Museum

The Children's Museum and Roaring Brook Nature Center are committed to offering an environment that not only maximizes learning, but provides an outstanding level of service, from our quick and easy reservations system to a warm goodbye as you depart. We pride ourselves in creating memorable learning experiences from start to finish.

Program Scheduling

- Museum field trips are scheduled for Monday - Wednesday visits between the hours of 9:00 a.m. and 2:00 p.m. while the Museum is closed to the general public. *Please have alternate dates and times in mind when booking, as our schedule fills up quickly.*
- Programs are approximately 45 minutes.
- Classrooms accommodate up to 30 students and 4 adults.
- The Gengras Planetarium seats up to 145 people.

To adhere to fire regulations, we must limit the number of people in the classrooms and planetarium.

To ensure the safety of all our visitors and staff, The Children's Museum follows all current CDC and local health department recommendations.

School Group Rates

The provided rates are per student and include a two-hour visit with a 45-minute Museum Educator-led program and a self-guided tour of the museum.
Please note that some classes/shows require additional fees.
There is a minimum fee of $150 per program for classes presented by Museum staff and a $250 minimum fee for groups attending a Planetarium Show.

Payment

Payment in full is necessary upon arrival.
We accept: Cash *(large bills only, please),* Check *(Business or bank)*, MasterCard, Visa
PLEASE NOTE: The Children's Museum *does not* accept the following forms of payment for students or chaperones:

- Discount tickets or Library Passes
- Purchase Orders *(unless prior arrangements are made)*
- The Children's Museum or reciprocal memberships.
  (Memberships at our museum are valid for family visits only.)

Chaperone Policy

- **One chaperone is required for every 10 students.**
- Requests to add chaperones after the reservation is completed will be accommodated subject to availability.

Lunch Arrangements

Food is not permitted to be eaten inside the Museum at this time. Outdoor picnic areas are available, but may not be reserved. Space is limited and is weather-permitting.

Special Needs

Please inform the Registration Department of any special needs including learning or physical disabilities, behavioral issues, or language barriers. Wheelchair accessibility is limited to outside entrances. There are no elevators nor ramps within the Museum.

Outreach Programs

Let us come to you!

Welcome our educators into your classroom, gymnasium, or other space for a unique and educational S.T.E.A.M. experience in-person or virtually! The Children's Museum's Outreach Programs can bring almost any of our classes to you safely. Covering a wide variety of Science, Technology, Engineering, Art, and Math related topics, our programs are the perfect addition to your curriculum. Our educators travel to schools, libraries, community centers, afterschool programs, camps, homeschool groups, science fairs, family events, scout meetings, and more. Virtual programs are a great way to engage with students wherever they may be—invite their families into the fun too!

Virtual Family STEM Night

Grades K-8: Join our educators online for a 90-minute live virtual experience, covering a variety of engaging science, nature, and/or astronomy topics. This program is designed to bring the whole family together for some fun with STEM through the screen. Perfect for afterschool programs, family engagement events, science nights, and scout programs.

The Wizard's Lab Science Showcase

Grades K-8: In this center-style program, participants will engage in hands-on science experiments and activities covering a wide variety of interesting S.T.E.A.M. topics. Fun and educational for all ages, including parents and caregivers! This program is designed to accompany larger events like science fairs, back to school nights, and other happenings.

Create a Children's Museum Series

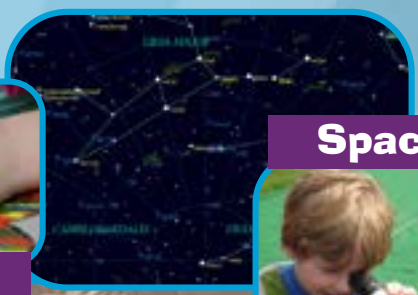
Make the museum a regular part of your learning! Let us design a custom plan to meet your learning goals and bring programming to your students on a regular basis.

Possible options might include:

- A set of fall, winter, spring and summer seasonal programs
- Monthly programs held at your site exploring different STEAM topics
- Recurring virtual visits with our animal ambassadors
- Mix and match a set of hands-on programs to complement a planetarium field trip and/or a virtual family STEM night.

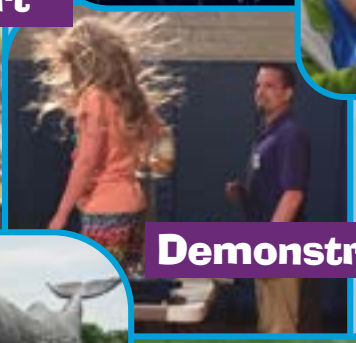
Choose from any of our program styles and options or have our highly trained educators create something to meet your specific needs. Contact us to start planning!

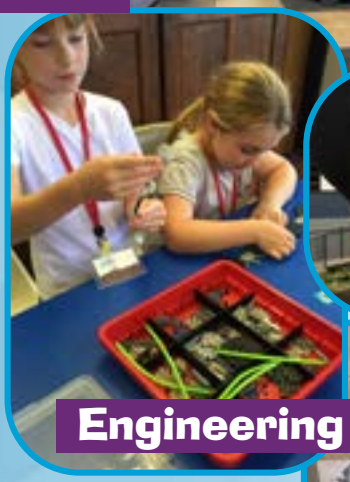
What you'll find at
The Children's Museum


Space


Art

Math


Demonstrations


Engineering


Live Animals

Hands On Exhibits


Science


Technology

Or let us bring the museum to you through in-person or virtual outreach!

C.Y.O.S.A. Programs

Choose Your Own Science Adventure

Field Trips OR Outreach OR Virtual

Create a unique S.T.E.A.M. experience with The Children's Museum's Choose Your Own Science Adventure programs. Choose from a variety of topics, each filled with spectacular and educational demonstrations designed to excite kindergarteners through eighth graders. Select field trip, outreach, or virtual formats.

Program Type	Length of Program	Max. Number of Students	Number of Topics to Choose
In-Person Assembly*	60 Min	100	3
In-Person Class	45 Min	30	2
Virtual Assembly	45 Min	100	2
Virtual Class	45 Min	30	2

**As of February 2022, The Children's Museum has not yet resumed large in person assemblies.*

- **Animals:** Meet and learn about two live animal ambassadors from our Wildlife Sanctuary. Choose an **Animal Ambassador** assembly for an all animal-focused program, meeting up to six animals.

$ - **Chemistry:** The amazing reactions in this module will glow, ooze, change color, and explode!

$ - **Combustion:** Learn about heat, matter, and the fire triangle. Brace yourself for the flaming vortex and chemical cannon!

- **Electricity:** Your students will have a hair-raising experience as we compare static electricity with high-frequency alternating current.

$ - **Flight:** Students will learn about the physics of air pressure and the fundamentals of flight. We will launch balloons, helicopters, rockets and more! This module includes Combustion and is a one-hour program.

- **Light:** Students will enjoy watching experiments with ultraviolet light, and bending laser beams. The program ends with a high powered musical finale. *To be most effective, we must be able to work in a darkened room.*

$ - **Liquid Nitrogen:** Witness a liquid that is 321 degrees below zero! Experience the astonishing results that liquid nitrogen can create. This module is a great companion to the combustion module for a real fire and ice experience.

- **Physics:** Your students will be amazed by Newton's Laws of Motion and how they apply to everyday life. Watch a tablecloth disappear and see the world's fastest pencil.

- **Sound:** Now hear this! Students will find out how vibrations make sound, see how it moves, and hear a sonic boom!

- **Create Your Own:** Let our educators design an exciting program with the Museum's unique resources that meet your specific learning goals.

All Children's Museum programs are aligned with the Next Generation Science Standards. For more information, call 860.726.4008, or see our website: www.TheChildrensMuseumCT.org/educators

Class-Sized Programs

Live Animal Programs

Field Trips OR Outreach OR Virtual

Animal Adaptations & Habitats

Grades K-8: Study some of our Wildlife Sanctuary animals and determine the unique ways they have adapted to meet their specific needs. Compare similarities and differences between mammals, reptiles, amphibians and insects. *NGSS: LS1.A/B, LS4.B/C*

Featuring Frogs

Grades K-2: Learn about amphibians' unique life cycles. Compare and contrast frogs from around the world as you discover what makes them so unique. *NGSS: LS1.A/B, LS4.B/C*

Animal Life Cycles

Grades 2-8: Learn about the unique life cycles of amphibians and insects and their amazing adaptations that help them to survive. *NGSS: LS1.A/B, LS4.B/C*

Endangered Species

Grades K-8: Explore the reasons why some animals become extinct while other thrive. *NGSS: LS1.A/B, LS2.C, LS4.B/C*

Connecticut Wildlife

Grades K-8: Get up close and personal with some native Connecticut animals and learn about the human activities that affect them. *NGSS: LS1.A/B, LS4.B/C*

Cold-Blooded Creatures

Grades K-8: Encounter Reptiles and Amphibians from around the world and discover what it takes to live in their different habitats *NGSS: LS1.A/B, LS4.B/C*

Earth's Biomes

Grades K-8: Some animals thrive in the humid rainforest, others in the dry desert. Examine the adaptations of these animals from such dramatically contrasting habitats. *NGSS: LS1.A/B, LS4.B/C*

Food Webs

Grades K-8: Meet a group of animals and discuss how they would fit together as a food web in their natural habitats. *NGSS: LS1.A/B, LS2.A/B/D, LS4.B/C*

Live Animal Programs can be done in an in-person or a virtual setting.

All Children's Museum programs are aligned with the Next Generation Science Standards. For more information, call 860.726.4008, or see our website: www.TheChildrensMuseumCT.org/educators

Class-Sized Programs

Hands-On Classroom Programs

Field Trips OR Outreach

$ Weather Wonders Grades K-1:
Get students excited about paying attention to the weather around them. Learn about the seasons and how they impact our day to day weather *NGSS: ESS2.D*

Budding Botanists Grades K-2:
Investigate plants from the inside out by dissecting flowers. Learn about their lifecycles and why plants are so important to humans. *NGSS: LS2.A*

$ Sound Grades K-3:
Using demonstrations and class activities students will explore how sound is made from vibrations and travels as waves. See a wave and explore the effects of its length and amplitude. Students will build musical instruments they get to keep. *NGSS: PS4.A*

$ Kids Can Compost K-3:
Emphasizing the Reduce, Reuse, Recycle principles. By designing, building, and maintaining a vermicomposting bin, students will be introduced to a variety of topics, including how nutrients are recycled in an ecosystem, how humans can create less waste, and the biology and habitat requirements of the organisms that make this all possible. *NGSS: LS1.A/C*

$ Polymer Power Grades K-6:
Students will conduct slimy experiments to learn about solids, liquids and the strange chains called polymers. *NGSS: PS1.A/B, ETS1*

Environmental Science Grades K-8:
Study how human activities affect our environment, including air, water, and land. Describe ways to reduce human impact on the environment. *NGSS: ESS2.C/E, ESS3.A/C*

Water Cycle Grades K-8:
Study how rain, groundwater, and streams can change the shape of the land and identify our effect on the water cycle. Describe how rain can be runoff, standing water, streams, or groundwater and explain how water carries dirt, pollution and other natural and human-derived substances. *NGSS: ESS2.A/C, ESS3.A/B/C/D*

Paleontology Grades 4-8:
Learn how fossils tell us about life in the past. Compare modern and fossil forms to understand the similarities and differences over time as evolution shapes all life. *NGSS: LS4.A/B*

Can You Dig It? Grades 2-4:
Examine different types of soil and find out how they are formed. Students will conduct hands-on experiments with dirt. *NGSS: ESS2.A*

Crime Lab Grades 1-4:
Students become super sleuths as they decode fingerprints and analyze ink composition. They will be challenged to solve a crime using their new skills.
NGSS: ETS1

Inventing Grades 1-8:
Student teams use critical thinking skills to invent a new machine. What will your students create? *NGSS: ETS1*

Landforms and Mapping Grades 2-4:
Study different types of maps and learn how to read them. Describe the shape of the land, how that affects human activities, and identify patterns and major features such as volcanoes, mountains, and rivers. *NGSS: ESS2.B, ESS3.C*

Simple Machines Grades 3-5:
Students will learn how to identify the six types of simple machines and demonstrate how these machines make work easier every day. *NGSS: EST1, PS2*

Building Better Bridges Grades 2-8:
Discover shapes and designs that have helped bridges bear heavy loads for centuries.
NGSS: EST1, PS2

Rock On Grades 3-4:
Learn how igneous, sedimentary and metamorphic rocks form. Examine rocks and minerals for geologic clues. *NGSS: ESS2.A*

$ Chem Tech Grades 4-8:
This microchemistry program challenges students to analyze variables and discover the causes of more than 25 surprising chemical experiments. *NGSS: PS1.A/B*

Electricity and Magnetism Grades 4-8:
Students will tinker with electricity and magnets in stations as well as see some electrifying demonstrations. *NGSS: PS1.A*

Early Childhood Programs

Field Trip OR Outreach OR Virtual
Hands-On Class-Sized Programs

Our early childhood programs serve children ages 3-5 and are aligned with the Connecticut Early Learning and Development Standards (CT ELDS). Featuring cross-disciplinary connections and center-style activities, each program is designed to spark curiousity, introduce new vocabulary, and make learning fun.

Early Childhood Pricing & Program Information

Program Length: 45 minutes
Maximum: 18 children per program
Cost: $175

Traveling programs incur an added fee based on mileage. Additional rates apply for distances greater than 25 miles.

Please note that most of these programs are centered-based and require space to set up different areas for students to work in small groups throughout the room.

Live Animal Lessons

Our Wildlife Sanctuary is filled with a variety of animal ambassadors ready to make some new friends. Animal lessons focus on interacting with live animals, noticing their unique charateristics, and discovering their special adaptations. *Learning Strands: unity and diversity of life, living things and their interactions with the environment and each other, observing similarities and differences, adaptations, extinction, life cycles, camouflage*

Meet the Animals- Investigate the differences between a mammal, a reptile, an amphibian and an insect.

Furry Friends- They may be furry, but what else makes an animal a mammal?

Something Froggy- Hop to it! Learn all about the metamorphosis from tadpoles to frogs.

Encountering Dragons- Leaping lizards! Don't be afraid when you come face to face with living dragons and learn more about reptiles.

Turtles, Tortoises and Terrapins- Have a visit from one of the most unique and longest living creatures on earth.

Insect Investigators-
Some are creepy, others are crawly, but all are fascinating as we learn about these 6 legged friends.

Early Childhood Programs

Color Play- This class features colorful hands-on science experiments. Explore and experiment with color using a variety of materials. Mix, match and make discoveries. *Learning Strands: applying scientifc practices, investigating cause and effect, using evidence to make connections*

Construction Zone- Design your own structures and learn about some amazing man-made and creature-made structures in our world. *Learning Strands: properties of matter; attributes and functions, problem solving, cause and effect, adaptations*

We Like to Move It!- Investigate energy, force and motion! Does it slide, roll or stay put? Use ramps to explore concepts of movement and how movement can be changed. *Learning Strands: properties of matter, how speed and direction can be varied, making observations and predictions, experimenting with cause and effect*

From Seed to Plants- Learn how those tricky seeds can travel and how they grow into plants. Experiment with the different parts of a plant or flower. *Learning Strands: unity and diversity of life living things and their interactions with the Environment and each other, observing similarities and differences, life cycles*

Astronomy Adventures

An introduction to astronomy for preschoolers! These classes can be added to an in-house planetarium program, our Traveling STARLAB* Planetarium, or done independently. *Learning strands: Making observations and predictions, investigating cause and effect, change over time, and the use of technology to help us understand the world around us, using evidence to make connections*

Moon's Mysteries- Learn all about the moon, why it seems to change and what we know about this mysterious thing we see in the sky.

Starry Safari STARLAB- A special tour of creature constellations from around the world. Hear the amazing tales people told about how those animals got placed in the night sky. Bring a constellation to life and meet a live animal from our wildlife sanctuary!

For STARLAB details, see page 14

STARLAB Traveling Planetarium

Outreach OR Virtual

Have the whole universe come to your space with the STARLAB planetarium! With a gym, auditorium, or a large multipurpose room you can experience an immersive 360° projection about stars, planets, moons, and much more. To allow for social distancing, STARLAB projections can be done without the dome in a very dark room with a smooth ceiling. Call for specific requirement details. All STARLAB programs can be adapted to a virtual format.

Program length: 45 minutes
Maximum # of Children: 30
Room requirements: A large room with a clear space of at least 25'x25' with at least 11' ceilings and access to an electrical outlet. Please allow 45 minutes for set up and take down.

Starry Safari
Grades PreK-2: A special tour of creature constellations from around the world. Hear the amazing tales people told about how those animals got placed in the night sky. Bring a constellation to life and meet a live animal from our wildlife sanctuary! *ESS1.A/B, LS1.A*

Junior Night Owls
Grades K-2: Introduces young astronomers to the night sky. Learn what causes day and night, and how to form the constellations. Key concepts: apparent movement of the sun across the sky, cause of day and night *NGSS: ESS1.A/B*

Mighty Moon
Grades 2-6: A deeper look into our Earth's next door neighbor. Learn about moon phases, eclipses, the moon's critical role in space exploration, and about the moons orbiting other planets of the solar system. *NGSS: ESS1.A/B*

Out of this World
Grades 2-6: Travel the Solar System to meet your planetary neighbors as you journey to exotic worlds and strange moons. *Key concepts: motion of objects in the solar system, moon phases, causes of night and day, uses of instruments to enhance vision. NGSS: ESS1.A/B*

Stories by Starlight
Grades 2-6: The folklore from Greece, Africa, Native American tribes, and other cultures comes alive. Learn how different cultures view the constellations and the science behind them. *Key concepts: language arts, use of instruments to enhance vision. NGSS: ESS1.A/B*

Look for this symbol to find programs that can be done virtually.

All Children's Museum programs are aligned with the Next Generation Science Standards. For more information, call 860.726.4008, or see our website: www.TheChildrensMuseumCT.org/educators

Immersive Planetarium Classes

Field Trip

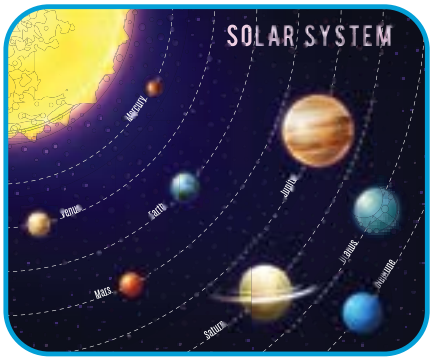
The Traveler's Science Dome at the Gengras Planetarium

The planetarium has programs appropriate for all ages from preschool through high school and beyond. These programs are held on-site at the Museum. We can accommodate class sizes of 20 to 145. Ask us about combining planetarium shows, hands-on classes, and exhibits for an in-depth day of fun and discovery.

LIVE Night Sky Presentations:

Space Shapes
Grades PreK-K: This friendly introduction to the planetarium environment explores the shapes of things in space. We leave Earth for a close-up view of the Moon and planets. A planetarium educator concludes this program with a tour of the night sky including emphasis on the shapes of space objects.

Clockwork Skies
Grades 1-5: Explore the timely motions of the Sun, Moon and Planets. This class is a live tour of the night sky, with emphasis on repeating sky patterns such as the phases of the moon and constellations of the seasons, as presented by a planetarium educator.



Sizing Up Space
Grades 3-5: This program explores distances and the scale of the solar system. A planetarium educator continues the journey by taking students on a live tour of the universe with emphasis on celestial distances.

Stars of the Season:
Live Sky Tour - Grades 3-8:
In this live tour of the night sky, we see connections between day and night with Earth's rotation. Seasonal changes in the path of the Sun and seasonal constellations connect with Earth's revolution about the Sun. We examine the changing phases of the moon and view seasonal constellations and visible planets.

Sun, Earth, Moon:
Grades 4-8: We observe how Earth's rotation creates our day and night, how the tilt of the Earth is responsible for the seasons, and how the orbit of the Moon produces its phases. This live program includes stories used by ancient peoples from all over the globe, such as Native American tribes and the ancient Egyptians, to explain these observations. A planetarium educator will answer questions at the end of the program.

Losing the Dark
Grades 4-8: Explore issues regarding light pollution and its environmental effects on humans and animals. Engineers have designed strategies to help us preserve the night sky. Losing the Dark includes a live tour of the constellations and visible planets in the night sky with a planetarium educator.

All Children's Museum programs are aligned with the Next Generation Science Standards. For more information, call 860.726.4008, or see our website: www.TheChildrensMuseumCT.org/educators

Planetarium Classes

Field Trip

Call for more details about our complete list of Planetarium programs available covering topics such as:

SPACE EXPLORATION

- **Secret of the Cardboard Rocket**
  Grades PreK-3
- **Amazing Stargazing**
  Grades 1-4
- **Oasis in Space**
  Grades 3-8
- **Extreme Planets**
  Grades 3-8
- **Two Small Pieces of Glass: The Amazing Telescope**
  Grades 3-8

HUMAN SPACE TRAVEL

- **Larry Cat in Space**
  Grades PreK-3
- **Astronaut**
  Grades 3-8
- **From the Blue Planet to the Red Planet - Grades 3-8**
- **Moon Shadows**
  Grades 3-8

OTHER STEAM TOPICS

- **Dancing with the Dinosaurs**
  Grades PreK-3
- **Lars the Little Polar Bear**
  Grades PreK-3
- **In My Backyard**
  Grades K-3
- **Xtreme Weather**
  Grades 1-5
- **Molecularium**
  Grades 2-6
- **Flight Adventures**
  Grades 3-5
- **Cosmic Colors**
  Grades 4-8

See Page 5 for NGSS Core Ideas covered during the programs listed above.

We value you and your support as educators in our community. Please reach out to us if you are aware of community partners who might be interested in supporting our mission.

Support for The Children's Museum's educational offerings is generously provided by:

- 3M Foundation
- Ahearn Family Foundation
- Anonymous Foundation
- Bree Pelczar
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Roaring Brook Nature Center

the children's museum
Where Learning & Fun Connect

the children's museum Preschool

For more information go to:
http://www.thechildrensmuseumct.org/support

Roaring Brook Nature Center

The Nature Center is located at 70 Gracey Road in Canton, CT and offers programs that take advantage of the beauty that surrounds us in nature.

Nature Center Contact Information
Phone: **860.693.0263**
Email: **rbnc@thechildrensmuseumct.org**
Website: **www.roaringbrook.org**

Field Trips

Make sure you schedule your field trips early because space fills up quickly!

(All Programs are aligned with Connecticut Science Standards and the Next Generation Science Standards. Key concepts are listed below each program)

Times:

- Programs typically begin at 9:30 am, 11:00 am, or 1:00 pm.
- Programs are approximately 1 hour and 15 minutes unless otherwise noted
- Scheduled times may vary slightly for two hour programs or when two consecutive programs are booked.

Booking Your Field Trip

To schedule your field trip please contact the Center by calling 860-693-0263 or emailing us at rbnc@thechildrensmuseumct.org. Remember that the Nature Center does not arrange for transportation from your school to the Center.

Arrival and Teacher Check-In

Upon arrival, a teacher should check in at the Gift Shop or Office. It is very important that you arrive on time to the program. Late arrivals will often result in shorter programs. Refunds are not issued for reduced time due to tardiness.

Cost of Field Trips

The following rates are per student:

$9.00	For 1 hour and 15 minute programs with a $115 minimum cost
$14.00	For 2 hour programs with a $150 minimum cost
$18.00	All-Day Programs with a $250 minimum cost
$8.00	For 1 hour preschool program with a $115 minimum cost

(maximum of 15 students per RBNC instructor in preschool program)

Chaperones and Teachers

- Teachers and School Staff are admitted free of charge
- One Teacher or Chaperone is required for every 15 students
- Additional Chaperones may be accommodated if there is space available but will be charged at an additional $6 per chaperone

While we enjoy working with children of all ages, we are not equipped for siblings or additional children to accompany your group. Please make alternate arrangements for a family visit to the Center.

Gift Shop

The Nature Center Gift Shop will be open for purchases if requested at the time of the field trip registration. Souvenir gift bags may also be ordered in advance! Give us a theme and a cost per bag and we can provide a fun memory of the trip!

Picnic Facilities

Facilities are available but reservations should be made in advance. These sites fill up quickly and some are dependent on the weather and time of the year.

Special Needs

Please notify the Nature Center if any of your students have special needs. Our building is wheelchair accessible and we have an ADA compliant restroom. We also have assisted listening devices for hearing impaired students. However, many of our trails are not wheelchair accessible.

Outreach Programs

No time to join us at the Nature Center? We'll bring the nature to you through our in-person traveling programs or virtual offerings. Perfect for classroom enrichment, afterschool programs, youth groups, assemblies, and more!

Booking Your Outreach Program

To schedule your Outreach Program please contact the Center by calling 860-693-0263 or emailing us at rbnc@thechildrensmuseumct.org.

Details:

- Teachers or other adults must stay with students during the program
- Many of our programs require a smart board or a projector, screen and power outlet. Please let us know when booking your program if these items are available.

Cost of Outreach Programs :

Classroom Programs (45-minute program with a limit of 30 students per program)

- In-Person Classroom Programs: $225 plus mileage
- Virtual Classroom Programs: $200
- In-Person Preschool Classroom Programs: $175 plus mileage for up to 15 students

Assembly Programs (45-minute program with a limit of 100 students per program)

- Virtual Assembly Programs: $350

All traveling programs incur an added fee based on mileage, additional rates apply for distances greater than 25 and 50 miles.

What you'll find at
Roaring Brook Nature Center:

Changing Land/ Changing Wildlife Exhibit


Thicket exhibit


Return of the Forest exhibit


Beaver Wetland exhibit


Native American Long House


Native Plant Garden

Miles of Walking Trails & Butterfly Garden

Live Animals

Birds of Prey
Connecticut Native Animals
Non-Native Animals

Roaring Brook Classes			Earth Sciences			Physical Sciences				Life Sciences			
RBNC Field Trips	**Page**	**Grade**	**ESS1**	**ESS2**	**ESS3**	**PS1**	**PS2**	**PS3**	**PS4**	**LS1**	**LS2**	**LS3**	**LS4**
It's Alive!	6	K - 2								✸			
All in the Family	6	K - 2										✸	
From Seed to Seed	6	K - 2								✸	✸		
It's Not Just Dirt!	6	K - 2		✸	✸			✸					
Home Sweet Home: Habitats	6	K - 2			✸						✸		
Our Watery World: Ice, Water, Vapor	6	K - 2		✸		✸							
Insects and Their Relatives	6	K - 2								✸		✸	
Animals on the Move	6	K - 2						✸		✸	✸		
Changing Seasons	6	K - 2		✸				✸					
Who's For Dinner?	6	K - 8					✸	✸		✸	✸		
Nature's Engineers	7	K - 8		✸							✸		
Animal & Plant Life Cycles (various programs)	7	K - 8								✸		✸	
Adaptations (various programs)	7	K - 8								✸			✸
Living With Nature	7	K - 8			✸								✸
Animal Super Senses	7	K - 8							✸	✸			
Native Americans of the Eastern Woodlands	7	K - 8											✸
CT Rocks!	8	2 - 8	✸	✸									
Family Matters	8	3 - 8								✸		✸	✸
The Amazing Soil Food Web	8	3 - 8						✸		✸	✸		
Soil: Earth's Thinnest Crust	8	3 - 8		✸	✸			✸		✸			
Changing Land, Changing Wildlife	8	3 - 8		✸	✸						✸		✸
Bedrock to Stone Walls	8	3 - 8		✸									
Water Life: Big and Small	8	3 - 8								✸			✸
Keeping Water Clean	8	3 - 8			✸								
Earth's Water Cycle	9	3 - 8		✸		✸							
Gravity, Electromagnetism and Nature	9	5 - 8					✸	✸					✸
Survival Skills	9	5 - 8		✸	✸								
Insect Chemists	9	5 - 8						✸		✸			
Outreach Programs - Classroom	**Page**	**Grade**	**ESS1**	**ESS2**	**ESS3**	**PS1**	**PS2**	**PS3**	**PS4**	**LS1**	**LS2**	**LS3**	**LS4**
It's Not Just Dirt	10	K - 2		✸	✸			✸					
Home Sweet Home: Habitats	10	K - 2			✸						✸		
Animals on the Move	10	K - 2						✸		✸	✸		
From Seed to Seed	10	K - 2								✸	✸		
Animal & Plant Life Cycles (various programs)	10	K - 8								✸		✸	
Survival: Plants & Animals	10	K - 8											✸
Frogs & Friends	10	K - 8								✸		✸	
Nature's Engineers	10	K - 8		✸							✸		
Native Americans of the Eastern Woodlands	11	K - 8											✸
CT Rocks!	11	2- 8	✸	✸									
Food Chains & Webs	11	K - 8								✸	✸		
Adaptations	11	K - 8								✸			✸
Animal Super Senses	11	K - 8							✸	✸			
The Amazing Soil Food Web	11	3 - 8						✸		✸	✸		
Soil: Earth's Thinnest Crust	11	3 - 8		✸	✸			✸		✸			
Changing Land, Changing Wildlife	12	3 - 8		✸	✸						✸		✸
The Secret World of Plants	12	3 - 8								✸	✸		
Keeping Water Clean	12	3 - 8			✸								
Earth's Water Cyles	12	3 - 8		✸		✸							
Invisible World	12	3 - 8								✸			
Gravity, Electromagnetism and Nature	12	5 - 8					✸	✸					✸
Insect Chemists	12	5 - 8						✸		✸			
Outreach Programs - Assemblies	**Page**	**Grade**	**ESS1**	**ESS2**	**ESS3**	**PS1**	**PS2**	**PS3**	**PS4**	**LS1**	**LS2**	**LS3**	**LS4**
Animal Life Cycles	13	K - 8								✸		✸	
Adaptations (various programs)	13	K - 8								✸			✸
Reptiles & Amphibians	13	K - 8								✸			✸
Snakes Alive	13	K - 8								✸			✸
Endangered Species	13	3 - 8								✸	✸	✸	✸
CT Wildlife Digest	13	3 - 8								✸	✸	✸	✸
Changing Land, Changing Wildlife	13	3 - 8		✸	✸								✸

NGSS Core Ideas

ESS1 : Earth's Place in the Universe	PS1: Matter & Its Interactions	LS1: From Molecules to Organisms
ESS2: Earth's Systems	PS2: Motion & Stability	LS2: Ecosystems: Interactions, Energy & Dynamics
ESS3: Earth & Human Activity	PS3: Energy	LS3: Heredity: Inheritance and Variation of Traits
	PS4: Waves and Their Applications	LS4: Biological Evolution: Unity and Diversity

Bring a Breath of Fresh Air to your Curriculum

It's Alive
Grades K – 2
Learn how to distinguish living creatures from the non-living components of their environment. What do living things need in order to survive?
Key concepts: Life cycles, reproduction, growth, energy, properties of living and non-living things, response to stimuli, growth, observing similarities and differences
NGSS: LS1.A/B/C

All in the Family
Grades K – 2
Learn how animal families are similar and how they are different.
Key concepts: life cycles, metamorphosis, body structure, describing/sorting/classifying organisms
NGSS: LS3.A/B

From Seed to Seed (Fall and Spring Only)
Grades K – 2
Explore how flowering plants change throughout their life cycles in order to survive.
Key concepts: plant structures, life cycles of flowering plants, seed production and distribution
NGSS: LS1.A/C, LS2.A

It's Not Just Dirt
Grades K – 2
What is soil and why is it so important to our survival?
Key concepts: Soil quality, food chain, ecosystems, physical properties of soil, Earth materials, soil types, textures, biodiversity, erosion
NGSS: ESS2.C, ESS3.A, PS3.D

Home Sweet Home: Habitats
Grades K – 2
Find out how our local wildlife uses natural resources to meet their survival needs.
Key concepts: habitats, adaptation, ecosystems, sorting and classification of characteristics, resources, food web
NGSS: ESS3.A, LS2.A/B

Our Watery World: Ice, Water, Vapor (Winter Program)
Grades K – 2
Water is the only substance on Earth that is present in all three states of matter; as a solid, liquid or gas. Each state has different observable properties.
Key concepts: states of matter; temperature; solid, liquid, gas; seasonal changes; observation of physical phenomena.
NGSS: ESS2.C, PS1.A/B

Insects and their Relatives (May to October Only)
Grades K – 2
Observe insects close up and see what special adaptations they have developed to help them survive.
Key concepts: insect body parts, metamorphosis, adaptations, habitats, ecosystems, sorting and classification of characteristics
NGSS: LS1.B, LS3.A/B

Animals on the Move
Grades K – 2
All living things move but they all move in different ways. Find out about fins, wings and animal movements!
Key Concepts: Organism, adaptations, energy, structures, motion
NGSS: PS3.A, LS1.A, LS2.A

Changing Seasons
Grades K – 2
How do plants and animals deal with the weather and a changing climate?
- What's Up With Fall?
- Frozen
- Spring Fling!

Key concepts: making observations, weather, seasons, animal and plant observations.
NGSS: ESS2.D, PS3.B

Who's For Dinner?
Grades K – 8
Explore the basic concepts of food chains and webs. Learn how energy cycles through Connecticut's ecosystems.
Key concepts: Food webs and chains, energy flow in ecosystems, recycling, decomposers, herbivores, carnivores, producers, consumers, photosynthesis, stability of system
NGSS: PS2.C, PS3.D, LS1.C, LS2.A/B

Nature's Engineers
Grades K – 8
Animal engineers build structures to help them raise their young, survive the winter, store food, or escape predators. Learn how some animals change their environment and what we can learn from them.
Key concepts: Habitat, structures and behaviors that allow animals to meet basic needs, ecosystem, adaptation, food chains, interdependent relationships
NGSS: ESS2.E, LS2.A

Animal & Plant Life Cycles (various programs)
Grades K – 8
Plants and animals have unique and diverse life cycles. Choose our general life cycle program or a topic from the list below:
- Insects and Their Relatives
- Birds and Butterflies
- Reptiles & Amphibians
- Marvelous Mammals
- From Seed to Seed

Key concepts: structural body parts, metamorphosis, adaptations, habitats, ecosystems, sorting and classification of characteristics, inheritance and variation of traits, interactions with the environment, diversity of life cycles
NGSS: LS1.B, LS3.A/B

Adaptations (various programs)
Grades K – 8
Choose our general Adaptations program or a topic from the list below:
- Flowers, Poisons and Thorns
- Predator and Prey
- Claws, Paws & Jaws
- Going, Going, Gone
- Leader of the Pack
- Alien Invaders!
- Species specific programs tailored to your students' interests (e.g. Reptiles, Birds) *Key concepts: Ecosystems, adaptations, life cycle, structures of living things, extinction, animal survival, fossil, camouflage, natural selection*

MORE INFO ONLINE

NGSS: LS1.A, LS4.B/C

Living With Nature
Grades K – 8
Learn how we share our backyards with wildlife and what we can learn from them.
Key concepts: human impacts, habitat, adaptions, life cycles, interaction, plant and animal observation, observing similarities and differences, biodiversity, natural resources
NGSS: ESS3.A/C, LS4.D

Animal Super Senses
Grades K – 8
Animals have body parts that capture and convey information needed for their growth and survival. How do animals perceive the world? Discover animals' super senses and their odd ones, too!
Key concepts: Adaptations, sensory organs, animal structures, senses, information processing, responses to stimuli, structures of body parts, observations, adaptation, electromagnetic spectrum
NGSS: LS1.A/D, PS4.B

Native Americans of the Eastern Woodlands
Grades K – 8
Discover how Native Americans relied on their natural environment for all their survival needs including shelter, clothing , and food.
Key concepts: shelter, adaptations, crops, ways humans obtain water and other goods, social studies
NGSS: LS4.D

Connecticut Rocks!
Grades 2 – 8
Every rock tells a story. Connecticut's rocks can tell us how Connecticut's landforms came to be.
Key concepts: geology, earth materials, erosion, catastrophic and gradual change.
NGSS: ESS1.C, ESS2.B/C

Family Matters
Grades 3 – 8
Genetics, natural selection, and environment influence plant and animal survival. Selective breeding also can change species traits.
Key concepts: inheritance of traits, variation in traits, natural selection
NGSS: LS1.B, LS3.A/B, LS4.B

The Amazing Soil Food Web
Grades 3 – 8
Learn how energy cycles through soils and, in turn, through other ecosystems.
Key concepts: Food webs and chains, energy flow in ecosystems, recycling, decomposers, herbivores, carnivores, producers, consumers, interdependent relationships in ecosystems
NGSS: PS3.D, LS1.C, LS2.A/B

Soil: Earth's Thinnest Crust
Grades 3 – 8
Soil is the connection between the Earth's geology and its biology. More than sediment, soil is an ecosystem as complex as a forest, savanna, or jungle. Learn how soil is formed and why it is so important to our own survival.
Key concepts: Soil quality, food chain, ecosystems, physical properties of soil, Earth materials, soil types, textures, biodiversity
NGSS: ESS2.C, ESS3.A, PS3.D, LS1.C

Changing Land, Changing Wildlife
Grades 3 – 8
As Connecticut's ecosystems have changed over time, the state's wildlife has also changed. Observe, first-hand, how natural phenomena and human activities have impacted animal populations. Tour our Changing Land, Changing Wildlife Exhibits.
Key concepts: Ecosystems, how natural and human activity changes habitats and inhabitants, adaptations, extinction, resources needed by organisms, conservation of resources, biogeology
NGSS: ESS2.E, ESS3.C, LS2.C, LS4.D

Bedrock to Stone Walls
(2 hour program - Spring and Fall only) Grades 3 – 8
Geology, ecology, and human history have combined to create the landscape we see today. This program combines aspects of "Connecticut Rocks" and "Changing Land, Changing Wildlife."
Key concepts: Ecosystems, properties and classification of earth materials, rocks and minerals, conservation of resources, effects of human activities on habitats
NGSS: ESS2.A/C/E

Water Life Both Big and Small
(Available as a 2 hour program) Grades 3 – 8
Use a variety of tools, including microscopes and hand lenses to discover micro and macro organisms found in local streams and ponds. Discover their adaptations and what makes CT's aquatic habitats special.
Key concepts: Adaptation, ecosystems, food chain, erosion, aquatic environment, stream formation
NGSS: LS1.A, LS4.C

Keeping Water Clean
Grades 3 – 8
Human activities in agriculture, industry, and everyday life have had major effects on our water resources. Today, individuals and communities are doing things to help protect Earth's resources and environments. This program uses Enviroscape models demonstrate how to prevent pollution.
Key concepts: why water is essential for life, point and non-point water pollutants, watersheds, how substances dissolve in ground water, natural resources, conservation of resources
NGSS: ESS3.C

Our Watery World: Earth's Water Cycle Grades 3 – 8

Examine the hydrologic cycle and learn how water shapes our land, modifies climate, and affects ecosystems.

Key concepts: water cycle, properties of liquids, surface and ground water, erosion, physical and chemical properties of water, river formation

NGSS: PS1.A/B, ESS2.A/C

Gravity, Electromagnetism and Nature Grades 5 – 8

Learn how plants and animals use light, magnetic fields, and electricity to navigate their world and to survive. This program offers real life examples of physical sciences.

Key concepts: electromagnetic spectrum, gravity, wavelength, magnetic fields, energy

NGSS: PS2.B, PS3.A, LS4.C

Insect Chemists Grades 5 – 8

A class where chemistry, physical sciences and the world of insects collide! Get your students excited about ultraviolet colors, chemical reactions, and magnetic fields while exploring the insect world.

Key concepts: Light, sound, vibrations, thermal energy, magnetic fields, Structure and function, chemical ecology

NGSS: PS3.A, LS1.A

Survival Skills Grades 5 – 8

(2 hour program – Skills learned are based on season)

Learn basic survival skills including reading a map and compass, fire building, shelter construction, appropriate clothing, and food. Dress for the weather!

Key concepts: Adaptation, conflict with nature, weather, natural hazards

NGSS: ESS2.A/D, ESS3.B/C

Don't See What You're Looking For? We Can Customize Our Programs to Fit Your Needs!

All Roaring Brook programs are aligned with the Next Generation Science Standards. For more information, call 860.693-0263, or see our website: www.RoaringBrook.org

Classroom Programs

In-Person at Your Site OR Virtually

It's time to bring a breath of fresh air to your curriculum!

It's Not Just Dirt
Grades K – 2

What is soil and why is it so important to our survival?

Key concepts: Soil quality, food chain, ecosystems, physical properties of soil, Earth materials, soil types, textures, biodiversity, erosion,
NGSS: ESS2.C, ESS3.A, PS3.D

Home Sweet Home: Habitats
Grades K – 2

Find out how local wildlife uses natural resources to meet survival needs.

Key concepts: habitats, adaptation, ecosystems, sorting and classification of characteristics, resources, food web
NGSS: ESS3.A, LS2.A/B

Animals on the Move
Grades K – 2

All living things move but they all move in different ways. Find out about fins, wings and animal movements!

Key Concepts: Organism, adaptations, energy, structures, motion
NGSS: PS3.A, LS1.A, LS2.A

From Seed to Seed (Fall and Spring Only)
Grades K – 2

Explore how flowering plants change throughout their life cycles in order to survive.

Key concepts: plant structures, life cycles of flowering plants, seed production and distribution
NGSS: LS1.A/C, LS2.A

Survival: Plants & Animals
Grades K – 8

How do plants and animals survive in various habitats?

Key concepts: Behavioral and structural adaptations, advantage, survival, camouflage, energy transfer NGSS: LS4.B/C

Animal & Plant Life Cycles (various programs)
Grades K – 8

Plants and animals have unique and diverse life cycles. Choose our general life cycle program or a topic from the list below:

- Insects and Their Relatives
- Birds and Butterflies
- Reptiles & Amphibians
- Marvelous Mammals
- From Seed to Seed

Key concepts: structural body parts, metamorphosis, adaptations, habitats, ecosystems, sorting and classification of characteristics, inheritance and variation of traits, interactions with the environment, diversity of life cycles
NGSS: LS1.B, LS3.A/B

Frogs & Friends
Grades K – 8

From egg to tadpole to frog. What can these amphibians tell us about the health of our environment?

Key concepts: life cycles, metamorphosis, adaptations, describing similarities and differences of adults and offspring
NGSS: LS1.B, LS3.A/B

All Roaring Brook programs are aligned with the Next Generation Science Standards. For more information, call 860.693-0263, or see our website: www.RoaringBrook.org

Nature's Engineers
Grades K – 8
Animal engineers build structures to help them raise their young, survive the winter, store food, or escape predators. Learn how some animals change their environment and what we can learn from them.
Key concepts: Habitat, structures and behaviors that allow animals to meet basic needs, ecosystem, adaptation, food chains, interdependent relationships
NGSS: ESS2.E, LS2.A

Native Americans of the Eastern Woodlands
Grades K – 8
Discover how Native Americans in the past relied on their natural environment for their survival needs including shelter, clothing, and food.
Key concepts: shelter, adaptations, crops, ways humans obtain water and other goods, social studies
NGSS: LS4.D

Connecticut Rocks!
Grades 2 – 8
Every rock tells a story. Connecticut's rocks can tell us how Connecticut's landforms came to be.
Key concepts: geology, earth materials, erosion, catastrophic and gradual change.
NGSS: ESS1.C, ESS2.B/C

Food Chains and Webs
Grades K – 8
Explore interrelationships of all living things.
Key concepts: Food webs and chains, energy flow in ecosystems, recycling, decomposers, herbivores, carnivores, producers, consumers, photosynthesis
NGSS: LS1.C, LS2.A/B

Adaptations (various programs)
Grades K - 8
Choose our general Adaptations program or a topic from the list below:
- Flowers, Poisons and Thorns
- Predator and Prey
- Claws, Paws & Jaws
- Going, Going, Gone
- Leader of the Pack
- Alien Invaders!
- Species specific programs tailored to your students' interests (e.g. Reptiles, Birds)

MORE INFO ONLINE

Key concepts: Ecosystems, adaptations, life cycle, structures of living things, extinction, animal survival, fossil, camouflage, natural selection
NGSS: LS1.A, LS4.B/C

Animals Super Senses
Grades K – 8
Discover the world of animal senses! How do they capture and convey information needed for growth and survival?
Key concepts: Adaptations, sensory organs, animal structures, sense, information processing
NGSS: PS4.B, LS1.A/D

The Amazing Soil Food Web
Grades 3 -8
Soil is the connection between the Earth's geology and its biology. Learn how energy cycles through soils and, in turn, through ecosystems.
Key concepts: Food webs and chains, energy flow in ecosystems, recycling, decomposers, herbivores, carnivores, producers, consumers, interdependent relationships in ecosystems
NGSS: PS3.D, LS1.C, LS2.A/B

All Roaring Brook programs are aligned with the Next Generation Science Standards. For more information, call 860.693-0263, or see our website: www.RoaringBrook.org

Soil: Earth's Thinnest Crust
Grades 3 – 8
More than sediment, soil is an ecosystem as complex as forest, savanna or jungle. Learn how soil is formed and why it is so important to our own survival.
Key concepts: Soil quality, food chain, ecosystems, physical properties of soil, Earth materials, soil types, textures, biodiversity
NGSS: ESS2.C, ESS3.A, PS3.D, LS1.C

Changing Land, Changing Wildlife Grades 3 – 8
As Connecticut's ecosystems have changed over time, so has the state's wildlife. Learn how natural phenomena and human activities have impacted animal populations.
Key concepts: Ecosystems, how natural and human activity changes habitats and inhabitants, adaptations, extinction, resources needed by organisms, conservation of resources, biogeology
NGSS: ESS2.E, ESS3.C, LS2.C, LS4.D

The Secret World of Plants
Grades 3 – 8
Plants are not defenseless. Learn the clever strategies that plants use to win, or sometimes lose, in the battle for survival.
Key concepts: structure of living things, adaptations, life cycles of flowering plants, seed production and distribution
NGSS: LS1.A, LS2.A

Keeping Water Clean
Grades 3 – 8
Human activities in agriculture, industry, and everyday life have had major effects on our water resources. Today, individuals and communities are doing things to help protect Earth's resources and environments. This program uses Enviroscape models demonstrate how to prevent pollution.
Key concepts: why water is essential for life, point and non-point water pollutants, watersheds, how substances dissolve in ground water, natural resources, conservation of resources
NGSS: ESS3.C

Our Watery World: Earth's Water Cycle
Grades 3 – 8
Examine the hydrologic cycle and learn how water shapes our land, modifies climate, and affects ecosystems.
Key concepts: water cycle, properties of liquids, surface and ground water, erosion, physical and chemical properties of water, river formation
NGSS: ESS2.A/C, PS1.A/B

Invisible World
Grades 3 – 8
Open your eyes to a world of life too small to be seen without the help of a microscope.
Key concepts: use of optical instruments to enhance vision, use of eye glasses/magnifiers /microscopes
NGSS: LS1.A

Gravity, Electromagnetism and Nature Grades 5 – 8
Learn how plants and animals use light, magnetic fields, and electricity to navigate their world and to survive. This program offers real life examples of physical sciences.
Key concepts: electromagnetic spectrum, gravity, wavelength, magnetic fields, energy
NGSS: PS2.B, PS3.A, LS4.C

Insect Scientists
Grades 5 – 8
A class where chemistry, physical sciences and the world of insects collide! Get your students excited about ultraviolet colors, chemical reactions and magnetic fields through exploring the insect world.
Key concepts: Light, sound, vibrations, thermal energy, magnetic fields, Structure and function
NGSS: LS1.A, PS3.A

All Roaring Brook programs are aligned with the Next Generation Science Standards. For more information, call 860.693-0263, or see our website: www.RoaringBrook.org

Virtual Assembly Programs

Assembly programs are a great educational tool and great value.
45 minutes with a maximum 100 students per program
NOTE: Some assembly programs may also be scheduled as classroom sized programs.

Animal & Plant Life Cycles (various programs)
Grades K – 8
Plants and animals have unique and diverse life cycles. Choose our general life cycle program or a more specific topic from the list below:

- Insects and Their Relatives
- Birds and Butterflies
- Reptiles & Amphibians
- Marvelous Mammals
- From Seed to Seed

Key concepts: structural body parts, metamorphosis, adaptations, habitats, ecosystems, sorting and classification of characteristics, inheritance and variation of traits, interactions with the environment, diversity of life cycles
NGSS: LS1.B, LS3.A/B

Adaptations (various programs)
Grades K - 8
Choose our general Adaptations program or a more specific topic from the list below:

- Flowers, Poisons and Thorns
- Predator and Prey
- Claws, Paws & Jaws
- Going, Going, Gone
- Leader of the Pack
- Alien Invaders!
- Species specific programs tailored to your students' interests (e.g. Reptiles, Birds)

MORE INFO ONLINE

Key concepts: Ecosystems, adaptations, life cycle, structures of living things, extinction, animal survival, fossil, camouflage, natural selection
NGSS: LS1.A, LS4.B/C

Reptiles and Amphibians
Grades K – 8
Reptiles and amphibians have unique adaptations. Which species live in Connecticut? What environmental threats do these species face?
Key concepts: ecosystem adaptations, camouflage, hibernation, migration, structures of living things, extinction, interdependence, food chains
NGSS: LS1.B/D, LS4.A

Snakes Alive!
Grades K – 8
Separate fact from fiction and learn to appreciate these fascinating creatures.
Key concepts: ecosystem adaptations, camouflage, hibernation, structures of living things, extinction, interdependence, food chains
NGSS: LS1.B/D, LS4.A

Endangered Species
Grades 3 – 8
What is an endangered species? Do they live in Connecticut? Why are they endangered?
Key concepts: ecosystem adaptations, camouflage, hibernation, migration, structures of living things, extinction, interdependence, food chains
NGSS: LS1.A, LS2.B, LS3.A, LS4.A/C

CT Wildlife Digest
Grades 3 – 8
Learn about the diversity of wildlife in our small state and how human activity can impact that diversity.
Key concepts: ecosystem adaptations, camouflage, hibernation, migration, structures of living things, extinction, interdependence, food chains, animal survival
NGSS: LS1.C, LS2.A/B, LS3.B, LS4.A/D

Changing Land, Changing Wildlife
Grades 3 – 8
As Connecticut's ecosystems have changed over time, so have the state's wildlife. Learn how natural phenomena and human activities have impacted animal populations.
Key concepts: Ecosystems, how natural and human activity changes habitats and inhabitants, adaptations, extinction, resources needed by organisms, conservation of resources, biogeology
NGSS: ESS2.E, ESS3.C, LS4.D

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Preschool Classroom Programs

Geared for 3 – 5 year olds

Outreach OR Field Trip
Classroom Programs

Nurturing young minds with nature

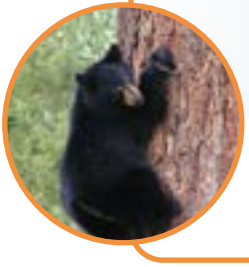
45 minutes with a maximum of 15 children per program

It's Alive
Examine differences between living things and non-living things through hands-on discovery and observation of live plants and animals

All in the Family
Through an interactive show with live animals, learn how animal families are similar and how they differ.

From Seed to Seed
What is a stem, branch, root? What is a seed and what goes on inside it?

It's Not Just Dirt
What is soil and why is it so important to our survival?



Our Watery World
Water is amazing! Learn about all the fascinating forms it comes in.

Animals on the Move
Living things move in many different ways. Find out about fins, wings, and animal movements!

Little Sprouts - Changing Seasons
(seasonal programs)
How do plants and animals deal with the changing seasons?
- Fall Surprises
- Frozen World
- Spring Fling

Sign up for an individual seasonal program or for all three!

Outreach
45 minute program with 15 studens max. per program
$175 program plus mileage

Field trip
1 Hour program with 15 studens max. per RBNC instructor
$8 per student with a minimum $115 for the program

All Roaring Brook programs are aligned with the Next Generation Science Standards. For more information, call 860.693-0263, or see our website: www.RoaringBrook.org

What else can Roaring Brook Nature Center bring to your school?

The Traveling Naturalist

Have a Roaring Brook naturalist use their expertise to bring the outdoors into your classroom and incorporate the natural areas surrounding your school into your curriculum. The Traveling Naturalist program is completely customizable to your learning goals, location, and budget. We will work to put together a comprehensive place-based package including in person or virtual enrichment programming, curriculum development, staff training, and field experiences. Contact us to start planning today.

Professional Development

Let's face it- Science and outdoor education is not everyone's specialty. However, it is ours! Have a Naturalist from the Nature Center visit your school to work with staff to develop and integrate grade-level science curriculum. Visiting Naturalists can also show teachers how to best utilize school grounds to complement the lesson plans in the classroom.

Contact the Nature Center at 860-693-0263 or rbnc@thechildrensmuseumct.org for additional information on these programs.

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Educator Program Guide 2022

Roaring Brook Nature Center

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