



EDUCATOR'S GUIDE



2022-2023

EDUCATOR'S GUIDE

TEACHER'S CHOICE PROGRAM

ECHO, Vermont's innovative science and nature museum, welcomes school groups year round. With our incredible location on the historic Burlington waterfront, ECHO serves as the perfect destination for your half-day or full-day adventure, no matter what the season.

3 Easy Steps to Booking Your Echo Adventure

Step 1: Choose between our 3 field trip options

Step 2: Check out our changing exhibits, calendar of events, and theater schedule at echovt.org

Step 3: Book your trip by completing our online reservation form at echovt.org/schoolfieldtrips.

Group Rates

\$8.00 PreK - 12th grade student admission

FREE One adult admission for every five youth (including teachers)

\$10.00 Each additional adult admission

\$3.00 Student and adult Northfield Savings Bank 3D film ticket (additional to admission)



Teachers can purchase an **ECHO Classroom Membership** that gives unlimited admission to ECHO for 1 year. Sign up at echovt.org.

Field Trip Option 1: Self-Guided Group Experiences

Self-guided tours give your group access to more than 100 hands-on exhibits, 70 species of live animals, daily activities, and pre-/post-visit slideshows, worksheets, and lessons. Groups receive a personalized welcome by ECHO staff.

Field Trip Option 2: Teacher's Choice Program (additional \$80/program)

Our most popular option. Designed for students grades K-12, each 50-min, educator-led program builds on the VT State Standards. Offerings include Engineering in Action programs that encourage hands-on problem solving and other STEM-focused programs. Includes everything listed in the self-guided program option.

Field Trip Option 3: 3D Science & Nature Film (additional \$3/person)

Add this to your visit and experience stunning 3D educational films.

Check out current film offerings at echovt.org



Visit our Teacher Resource page for more materials to support your visit.

50-minute ECHO educator-led programs based on the Next Generation Science Standards.

Available September 12, 2022 - May 19, 2023



Wetland Wonders (K - 3)

It's a sponge, it's a filter, it's a nursery...it's a wetland! Explore the living and nonliving elements of this important habitat as we bring a wetland to life by evoking its unique sights and sounds.

Rock and Roll Geology (3 - 6)

Explore 20,000 years of geologic history in the Lake Champlain Basin. Students will discover the forces that shaped the land and identify local rock types during a hands-on geology lab.

Native American Artifact Inquiry (3 - 6)

Explore Native American artifacts to illuminate the sophistication of pre-1800s Abenaki life. Students will learn how to interpret historical objects in order to better understand traditional ways of life.

Basin Biodiversity (6 - 12)

Explore the variety and importance of species in the Lake Champlain Basin. Students will discover the local threats to native biodiversity and how they can become stewards of the Lake Champlain Basin.

Engineering in Action: Zipcarts (K - 6)

Students will use the Engineering Design Process to transport model turtles to safety as they plan, build, and evaluate solutions to ECHO's zipline challenge.

Engineering in Action: Launch, Fling, Fly (K - 6)

Students will learn about the ecology of Vermont butterflies and practice engineering design skills as they plan, build, and test a solution to an engineering challenge.

Engineering in Action: Fish Assist (K - 6)

Students will learn about Lake Champlain's elusive, endangered lake sturgeon as they use the Engineering Design Process to plan, build and test a solution to an engineering challenge.

Engineering in Action: Renewable Ride (K - 6)

Students will develop their understanding of climate change before planning, building, and testing a wind-powered solution to an engineering challenge.

Featured Program Available May 22 - June 9, 2023

This is the only program offered during this period.

Engineering in Action: Nest Rescue (K - 6)

Students will learn about the pressures threatening native birds and about local recovery efforts. They will then use the Engineering Design Process to plan, build, and test a solution to a related engineering design challenge.

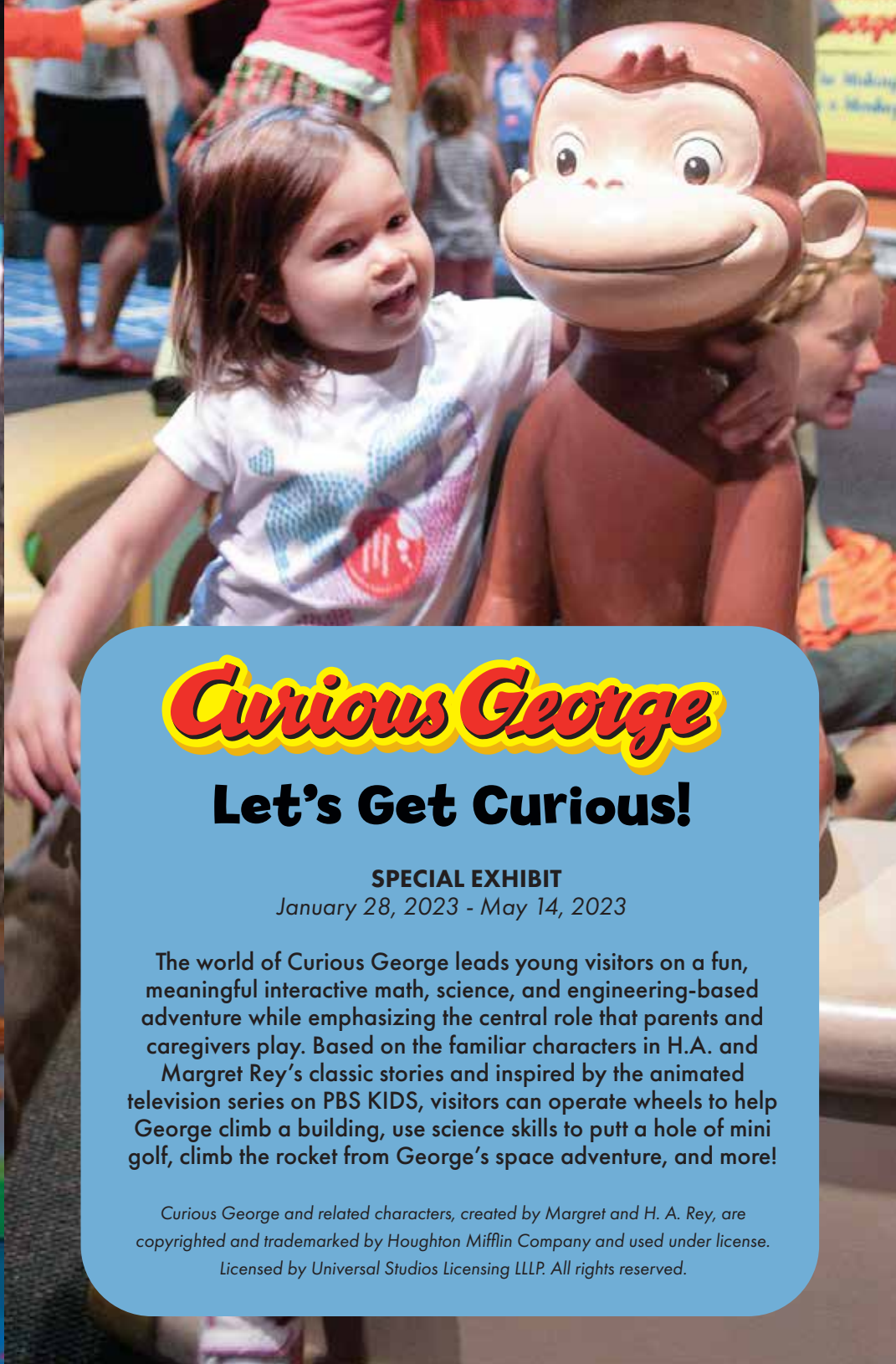


SPECIAL EXHIBIT

September 24, 2022 - January 15, 2023

In this exhibit for young explorers, visitors will roam forests, navigate streams, and become backyard adventurers—all while learning how to be thoughtful stewards of the land. Get active navigating a rock wall, standing watch in a fire lookout, rowing a boat, and tending a garden amidst immersive wilderness scenes. Practice hands-on conservation actions, such as safely putting out a campfire, composting kitchen scraps, and managing stormwater.

The Great Outdoors is calling. Will you answer the call?



Curious George

Let's Get Curious!

SPECIAL EXHIBIT

January 28, 2023 - May 14, 2023

The world of Curious George leads young visitors on a fun, meaningful interactive math, science, and engineering-based adventure while emphasizing the central role that parents and caregivers play. Based on the familiar characters in H.A. and Margret Rey's classic stories and inspired by the animated television series on PBS KIDS, visitors can operate wheels to help George climb a building, use science skills to putt a hole of mini golf, climb the rocket from George's space adventure, and more!

Curious George and related characters, created by Margret and H. A. Rey, are copyrighted and trademarked by Houghton Mifflin Company and used under license. Licensed by Universal Studios Licensing LLLP. All rights reserved.



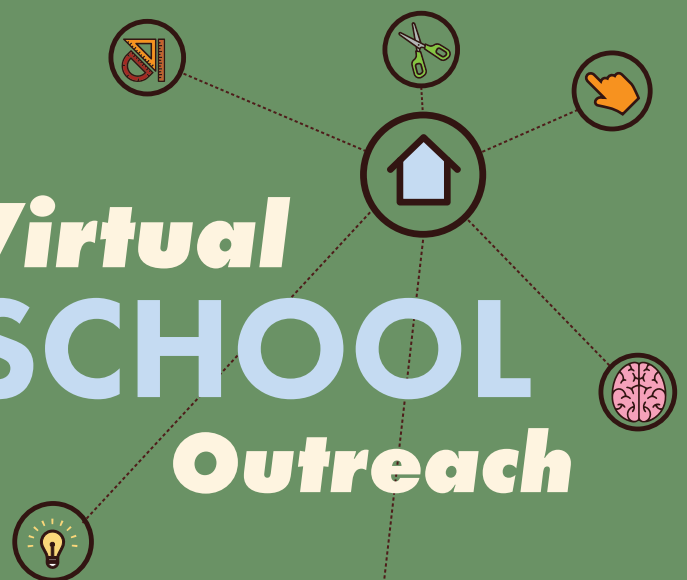
SPECIAL EXHIBIT

May 27, 2023 - September 4, 2023

XOXO: An Exhibit About Love & Forgiveness is an exhibit about feelings where you are encouraged to play, act silly, and consider what makes you sad, mad, and happy. Using facial expressions, words, movement, and art making, XOXO explores what love and forgiveness mean to you, and to others. Explore how we learn about love and forgiveness through activities that get us to feel and talk about these emotions.

An Exhibit about Love and Forgiveness logo was created by the Children's Museum of Pittsburgh with support from The Fetzer Institute, which works to foster awareness of the power of love and forgiveness in the emerging global community.

Virtual SCHOOL Outreach



Virtual Engineering in Action Outreach

An ECHO Educator meets with students live over Zoom to present an engineering design challenge along with an introduction that establishes the context and provides inspiration for the activity. Students build a tool to solve a problem, test their designs, and then gather again for a brief discussion led by the ECHO STEM educator. Materials are provided. To learn more and schedule your virtual outreach program today go to echovt.org.





Periods of drought are becoming more common

This leads to outbreaks of spongy moth caterpillars and other pests. Spongy moth caterpillars can eat the leaves off an entire tree!



Extreme rainstorms are happening more often

This causes flooding and soil erosion. When soil washes downhill, rivers and lakes become murky and animal habitats are damaged.



Lakes and ponds are melting earlier in the spring

This increases the risk of harmful algae blooms. Beaches are sometimes closed because algae blooms make the water unsafe for people and pets.



Maple sugaring season is becoming unpredictable

This causes problems for maple syrup producers. Sap starts to run earlier for shorter periods of time.



Some animals are moving away

This includes our state bird, the hermit thrush. An additional 92 types of birds may shift their range northward in search of cooler climates.



The number of ticks is increasing

This means bad news for moose. Up to 90,000 ticks have been found on one moose. Moose struggle to survive with that many ticks attached to their skin.

What can you do?



Travel Lightly

Carpool, ride bikes, walk, and use public transportation.

Eat Locally

Buy local food or plant your own garden.

Lend Support

Help scientists! Check out citizen science projects at:

- Vermont Center for Ecostudies
- GLOBE Observer
- Great Backyard Bird Count

Ask Questions

- How else is climate change affecting us?
- What else can I do to combat climate change?

How does CLIMATE CHANGE affect Vermont's land & animals?

