



# EDUCATOR'S GUIDE



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# TEACHERS CHOICE PROGRAMS

ECHO, Vermont's innovative science and nature center, 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 exhibit schedule, program schedule, and theater schedule.

**Step 3:** Book your trip by completing our online reservation form at [echovt.org/schoolgroups](http://echovt.org/schoolgroups).

### Group Rates

- \$6.50 PreK - 12th grade student admission
- FREE One adult admission for every five youth (including teachers)
- \$8.50 Each additional adult admission
- \$3.00 Student and adult Northfield Savings Bank 3D film ticket (plus admission)

### Field Trip Option 1: Self-Guided Group Experience

Self-guided tours give your group access to the more than 100 hands-on exhibits, 70 species of live animals, daily activities, student scavenger hunts, and discussion guides. Groups will receive a personalized welcome by ECHO staff.

### Field Trip Option 2: Teacher's Choice Program

(additional \$75/program)

Our most popular option. Designed for students in grades K - 12, each 45 min, educator-led program builds off the VT State Standards and makes connections to the ecology, culture, history, and opportunities for stewardship in the Lake Champlain Basin. This year's offerings also include hands-on STEM focused Engineering in Action programs that encourage creativity, invention, and problem-solving. Includes everything listed in the self-guided option.

### Field Trip Option 3: 3D Science & Nature Film

(Additional \$3/person) Add this to your visit and experience stunning 2D and 3D educational films. Check out current film offerings at [echovt.org](http://echovt.org).



Teachers can purchase an **ECHO Classroom Membership** that gives unlimited admission to ECHO for classroom field trips through the year. Sign up at [echovt.org](http://echovt.org)



For more information visit [echovt.org/schoolgroups](http://echovt.org/schoolgroups)

**45 Minute ECHO Educator-led programs based on the Vermont Common Core and the Next Generation Science Standards.**



**AVAILABLE THROUGH MAY 14, 2019**

#### 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.

#### Native American Games (K - 3)

Experience the games played by the indigenous people of the Lake Champlain Basin. Students will get a hands-on lesson on pre-1800's Native American culture and the important role games played in their lives.

#### 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 we see today 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-1800's 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 get hands on as they use simulations to discover the local threats to native biodiversity and how they can become stewards for the Lake Champlain Basin.

#### Engineering in Action: Zipcarts (K - 5)

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 - 5)

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

#### Engineering in Action: Fish Lift (2 - 5)

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.

## FEATURED PROGRAM AVAILABLE AFTER MAY 14, 2019

During busy school group season, this will be the only program offered.

#### Engineering in Action: Spring Leapers (K - 6)

Amphibians emerging in the spring have more than a cold snap to worry about. Students will learn about annual spring amphibian migrations and the challenges they face as they use the engineering design process to solve an engineering challenge.



## INNOVATION PLAYGROUND V2.0

OPEN NOW THROUGH JANUARY 6, 2019

The Innovation Playground Exhibit celebrates lifelong play and its role in sparking technological, social, and artistic innovation in our community. Visitors of all ages will unleash their imaginations building life-size worlds out of giant blue blocks; swimming and soaring alongside virtual wildlife; and inventing contraptions in our maker space.

*In partnership with the Jefferson Project at Lake George, the Emergent Media Center at Champlain College, YouthBuild at ReSOURCE VT, and American Institute of Architects Vermont. Generously sponsored by Hickok and Boardman Insurance Group, ClearChoice MD, WCAX, FFF Architects, MGF Designs, Architecture.*



## AGE OF DINOSAURS

OPEN JANUARY 19 THROUGH MAY 12, 2019

Families will travel back in time to the Mesozoic era and experience dinosaurs coming alive. Through immersive habitats with life-size animatronic dinosaurs, visitors will witness dinosaur interactions from parental care and herds, to predation. Interactive stations include a fossil dig pit, fossil rubbing and remote-control dinosaurs.



## TRIVIAL PURSUIT: A 50 STATE ADVENTURE

OPEN MAY 25 THROUGH SEPTEMBER 15, 2019

Travel from coast to coast learning about historical sites, iconic tourist destinations, and popular recreation and sports through unique hands-on activities, challenging games, and a blend of classic and special edition Trivial Pursuit® questions. Discover unique customs and activities specific to each region of the United States.

*TRIVIAL PURSUIT, the associated logo, the distinctive design of the game board, trivia cards, game tokens, and scoring wedges are trademarks of Hasbro. © 2018, 2014 Hasbro, Pawtucket, RI 02861-1059 USA. All Rights Reserved. TM & ® denote U.S. Trademarks*





# PREHISTORIC AQUATIC REPTILES

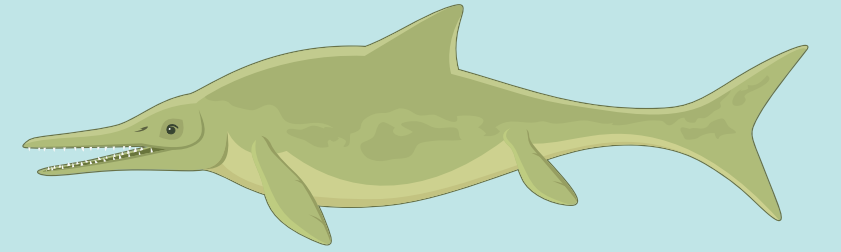
## OF NORTH AMERICA



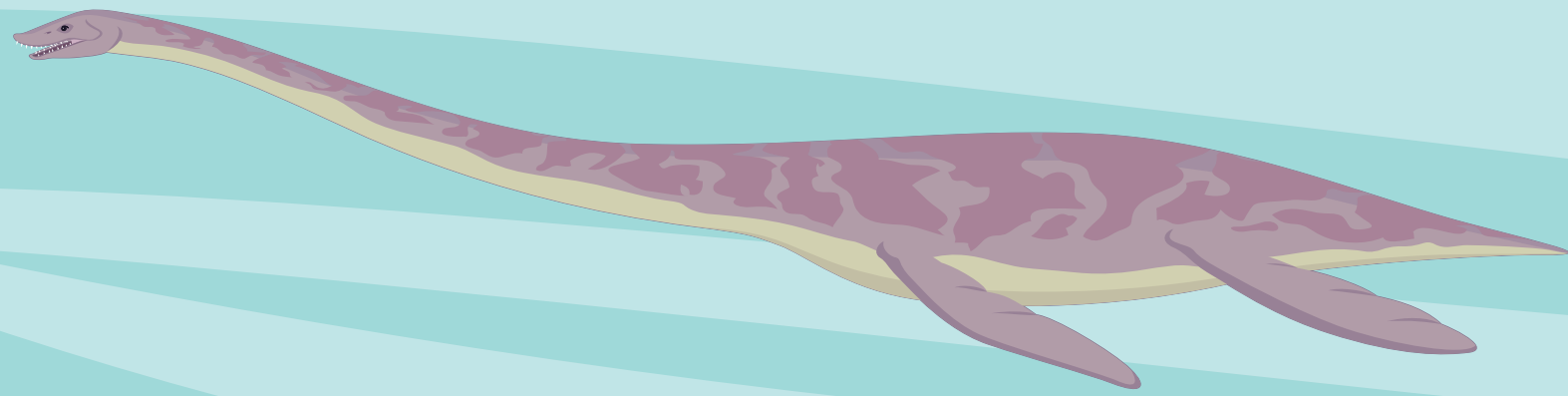
**HOMO SAPIEN**



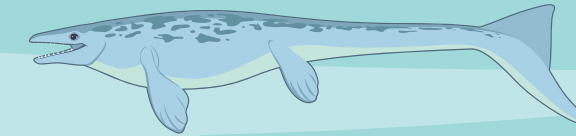
**DOLICHORHYNCHOPS**  
Late Cretaceous  
10 ft long predator  
Type of Plesiosauria



**OPHTHALMOSAURUS**  
Late Jurassic  
20 ft long predator  
Type of Ichthyosaur



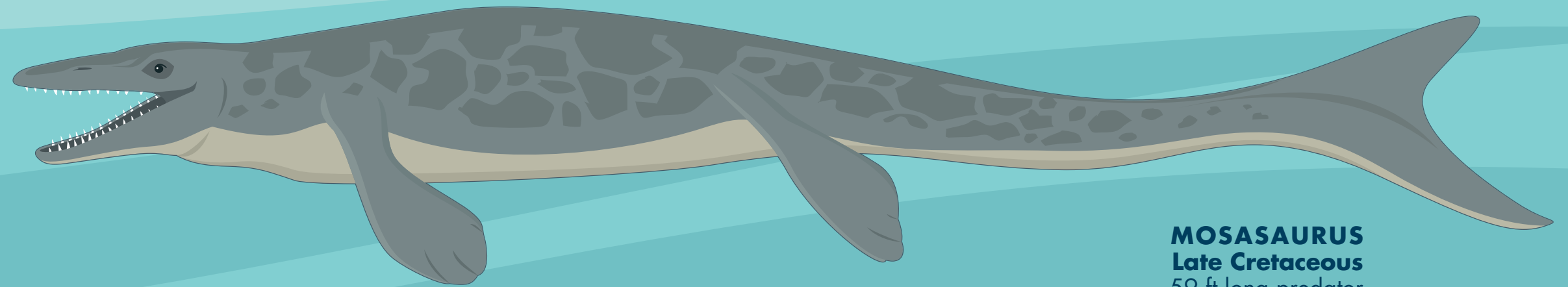
**THALASSOMEDON**  
Late Cretaceous  
39 ft long predator  
Type of Plesiosauria



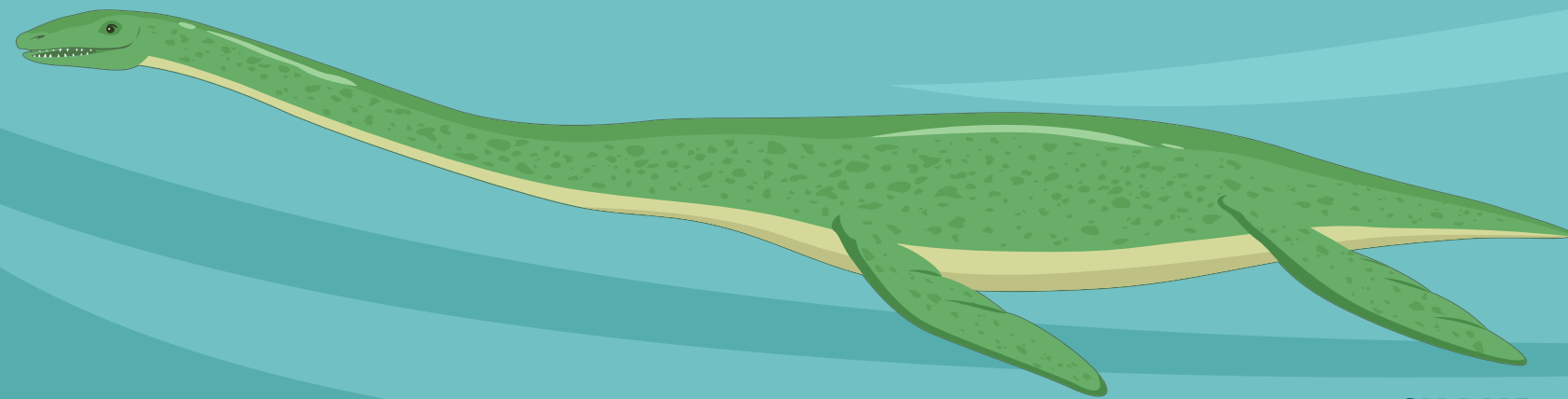
**PLATECARPUS**  
Late Cretaceous  
14 ft long predator  
Type of Mosasaur



**PLATYPTERYGIUS**  
Early Jurassic  
23 ft long predator  
Type of Ichthyosaur



**MOSASAURUS**  
Late Cretaceous  
59 ft long predator  
Type of Mosasaur



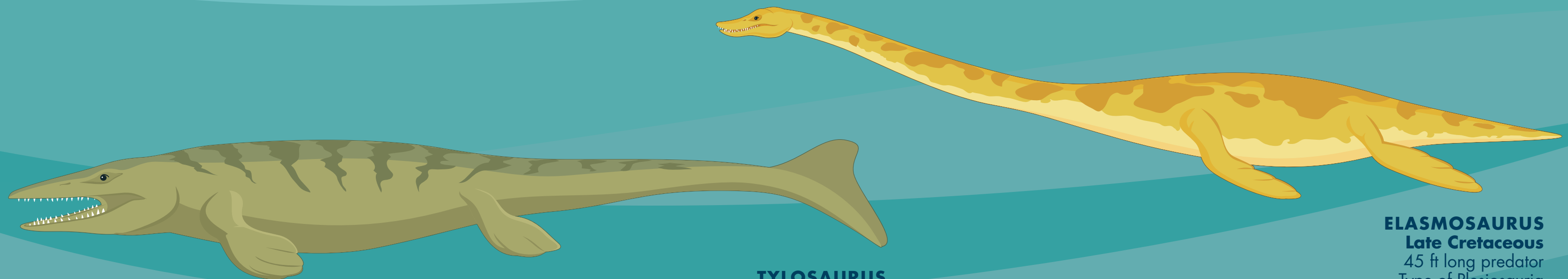
**CHAMP**



**HALISAURUS**  
Late Cretaceous  
13 ft long mid-range predator  
Type of Mosasaur



**MIXOSAURUS**  
Middle Jurassic  
3 ft long predator  
Type of Ichthyosaur



**TYLOSAURUS**  
Late Cretaceous  
50 ft long predator  
Type of Mosasaur

**ELASMOSAURUS**  
Late Cretaceous  
45 ft long predator  
Type of Plesiosauria



LEAHY CENTER  
FOR LAKE CHAMPLAIN