

TEACHER'S GUIDE

2023-2024 PRE-K TO 12TH GRADE









TEACHER'S GUIDE: YOUR EDUCATOR RESOURCE

- Museum programs reinforce Texas Essential Knowledge and Skills (TEKS).
- Traveling exhibitions, educational films, and Science on Stage shows enhance Museum visits.

TEACHER ADMISSION

The Perot Museum extends free general admission previews to all currently employed K-12 teachers in Arkansas, Lousiana, Mexico, New Mexico, Oklahoma, and Texas when they present proof of current teaching status at the Museum Box Office. Not valid during field trip visits.

BOOKMARK OUR WEBSITE

For the latest news and information about our educational programs, visit the educator's section of our website at **PEROTMUSEUM.ORG/EDUCATION.**

The reservation forms are available online at PMNS.TFAFORMS.NET/F/EDU.

FINANCIAL AID

All schools receive discounted admissions. Field trip visits are \$8 per student and include all exhibit halls. Required chaperones (1:7) are free. Additional chaperones are \$8 each. Extra adults may pay full price for tickets as available.

Title I schools may apply for financial aid on the reservation request form. If approved, financial assistance may cover fees for field trips or school campus visit programs.

THREE WAYS TO ENGAGE WITH THE MUSEUM



FIELD TRIPS AT THE MUSEUM

Spark curiosity and discovery among students of all ages.

Complete your experience:

- + Add a science show led by Museum educators.
- + Add an educational film.
- + Add a traveling exhibition.

School group pricing is available (groups of 10 or more students).



ON YOUR CAMPUS OUTREACH PROGRAMS

Programs are led by Museum educators.

- + Lab-based programs (up to 30 students)
- + Auditorium programs (up to 250 students and adults)
 - + Family Science Nights (maximum 500 people)



VIRTUAL PROGRAM

Bring a free virtual STEM series to your classroom.

- TEKS-aligned video series and educator guides
- English-Spanish bilingual
 K-8 content
- Career and community connections



TABLE OF CONTENTS

PEROT MUSEUM FIELD TRIP EXPERIENCES

•	Trave	ling	Exhi	bit	tion

- Educational Films
- Science on Stage

PROGRAMMING ON YOUR CAMPUS

• Programs at a Glance

- Lab-Based Programs
- Virtual Programming
- Auditorium Shows

FAMILY SCIENCE NIGHTS ON YOUR CAMPUS

11

9

10

4

5 10

RESERVE NOW





reserve@perotmuseum.org



Perot Museum of Nature and Science





TIP

Traveling exhibitions are \$6 per student/chaperone

DON'T FORGET

Educator guides for traveling exhibitions are available online. These guides will help you prepare for your field trip and provide pre- and postvisit activities for students.

A 1:7 chaperone to student ratio is required for all PreK-12th grade field trips.

SUPPORTED BY



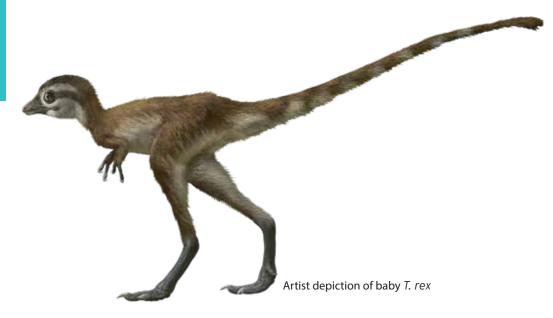
Arts & Culture



TRAVELING EXHIBITION

Come explore the latest research and discoveries about tyrannosaurs, with an emphasis on the most famous and impressive member of the family — *T. rex.* Your students will learn about the powerful hunter's keen senses, examine amazing fossils, and come face-to-face with the most accurate models of *T. rex* ever constructed. The exhibition reveals the amazing story of the most iconic dinosaur in the world through stunning life-sized models, fossil casts, and engaging interactives.

Students will explore our evolving understanding of this theropod, learn about a number of recent tyrannosaur discoveries, and find out how paleontologists study fossil specimens to understand the biology and behavior of *T. rex*.



FILMS Add a whole new dimension to your field trip with a film.

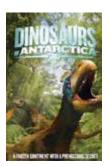


JANE GOODALL: REASONS FOR HOPE

SEPTEMBER 1, 2023 - MAY 24, 2024

40 MINUTES GRADES PK3 - 12

Join Dr. Jane Goodall on an adventure of inspiration and hope in this uplifting journey around the globe highlighting good news stories. Throughout, the film reinforces Jane's four pillars of hope that signal tremendous hope for the future: the amazing human intellect, the resilience of nature, the power and dedication of young people, and the indomitable human spirit.

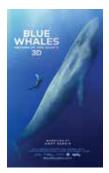


DINOSAURS OF ANTARCTICA 3D

SEPTEMBER 1, 2023 - MAY 24, 2024

20 MINUTES GRADES PK3 – 12

From the Permian through the Jurassic, journey to the south polar landscapes of Antarctica hundreds of millions of years ago. Roam the primitive forests and thick swamps with bizarre dinosaurs and colossal amphibians. Enter a surreal world of bug-eyed giants and egg-laying mammals — where survival means enduring the sunless, six-month polar winter surrounded by meat-eaters with night vision.



BLUE WHALES: RETURN OF THE GIANTS 3D

SEPTEMBER 1, 2023 - MAY 24, 2024

20 MINUTES GRADES PK3 – 12

Experience the journey of a lifetime while exploring the worlds of the magnificent blue whale, a species rebounding from the brink of extinction. The film follows two scientific expeditions: one, a high-risk mission to find a missing population of blue whales, not seen in 50 years; and the other, to join Diane Gendron, the "Blue Whale Whisperer," in Mexico's Gulf of California, where she and her team explore the important role these remarkable animals play in the health of our oceans.



TIP

teacher/chaperone. Capacity is currently limited to 200 and may be lower, depending on the showing. Be sure to book early to save your spot!









PROGRAMS AT A GLANCE

The Perot Museum is more than a collection of exhibits and specimens – it also consists of expert educators who share a commitment to inspiring minds through nature and science. We offer engaging, TEKS-aligned, hands-on programming to help students connect with scientific concepts and principles. Financial aid is available for Title 1 schools.

PROGRAMS AT A GLANCE

GRADE LEVELS

PROGRAMS AT A GLANCE			GRADE LEVELS									
ANDS-ON LABS (up to 20 students per se	ssion)											
Amazing Animals	PK											
Earth Rocks	PK											
Space Explorers	PK											
ANDS-ON LABS (up to 30 students per se	ssion)											
Dig those Dinos		K	1	2								
Do Bugs Bug You?		K	1	2								
Solar Superstars		K	1	2								
Adapt to Survive 2.0					3	4	5					
Air and Weather					3	4	5					
What's the Matter?					3	4	5					
Electrical Exploration					3	4	5					
Engineers, Assemble!					3	4	5					
Puzzling out the Past								6	7	8		
Chemistry Detectives								6	7	8		
Dissection: Brain Power								6	7	8	9-12	
Dissection: More than Meets the Eye								6	7	8	9-12	
Dissection: Heart of the Matter								6	7	8	9-12	
Truss Bridge Challenge											9-12	
Crash Test Cars											9-12	
FAMILY SCIENCE NIGHTS (200-500 atte	ndees)											
Earth and Space Science Night		K	1	2	3	4	5	6	7	8		
Superhero Academy Science Night		K	1	2	3	4	5	6	7	8		
Perot Museum Exhibits Science Night		K	1	2	3	4	5	6	7	8		
SCIENCE DEMOS (up to 250 attendees)												
Superhero Science		K	1	2	3	4	5	6	7	8		
Fire and Ice		K	1	2	3	4	5	6	7	8		
*SCIENCE ON STAGE												
Super Sight and the Power of Light		K	1	2	3	4	5	6	7	8		
Thermal Reactions		K	1	2	3	4	5	6	7	8		

^{*} Science on Stage programming only available onsite at the Perot Museum. All other programs available on your campus.

LAB-BASED PROGRAMS

Program descriptions correlate with the program offerings chart on page six. Programs are listed by subject and grade level. Lab-based programs contain TEKS-aligned activities, support curriculum goals, and pair well with traveling exhibitions, films, and our 11 permanent exhibit halls.

NOTE

- Lab-based programs are available on your campus only.
- All Pre-K lab-based programs include up to 20 students.
- All K-12 lab-based programs include up to 30 students.
- All programs are 45 minutes in length unless noted otherwise.



PHYSICAL SCIENCE

Explore the physical world through physics, chemistry, and engineering. These programs feature exciting topics such as force and motion, matter and energy, & engineering and robotics.

SOLAR SUPERSTARS

(GRADES K-2)

Students will explore light energy and learn about the importance of Sun safety. They will also investigate the effectiveness of sunscreen in blocking UV light.

TEKS: Force, Motion, and Energy K.8A, 1.8A, 3.8A

Cost: \$175 per session

ELECTRICAL EXPLORATION

(GRADES 3-5)

Students will explore electrical circuits and learn about their application in our daily lives — including simple robots! From investigating open and closed circuits to comparing insulators and conductors, students will work in groups to light up and program unique creations.

TEKS: Force, Motion, and Energy 3.9A, 4.8B, 4.8C, 5.8B

Cost: \$175 per session

ENGINEERS, ASSEMBLE!

(GRADES 3-5)

In this team-based engineering challenge, students will engage in the engineering design process to create a structure capable of withstanding a simulated force. They will work together to design and construct their prototype, then test and improve their design as all engineers do!

TEKS: Force, Motion, and Energy 3.7A, 4.7, 5.7B

Cost: \$175 per session

WHAT'S THE MATTER?

(GRADES 3-5)

Students will explore chemistry fundamentals including physical properties of matter, mixtures and solutions, and exciting chemical reactions. This lab uses basic equipment while emphasizing laboratory safety. **TEKS:** Matter and Energy 3.6A, 3.6B, 3.6C, 4.6A, 4.6B, 5.6A, 5.6B, 5.6C

Cost: \$175 per session

CHEMISTRY DETECTIVES

(GRADES 6-8)

Students will investigate physical and chemical changes in matter to identify an unknown substance. They will use their findings to help solve a mystery set at the Museum.

TEKS: Matter and Energy 5.6A, 6.6E, 7.6C

Cost: \$175 per session

CRASH TEST CARS

(GRADES 9-12)

Vehicle safety features, physics, and engineering collide in this lab! Your students will test their knowledge and apply their skills to keep an egg passenger safe in a "high-speed" crash.

TEKS: IPC.5C, PHY.5E, PHY.5G **Cost:** \$225 per session

TRUSS BRIDGE CHALLENGE

(GRADES 9-12)

"Truss" the process. Students will balance the forces acting on a bridge by engineering their own! Will their designs hold up to a weight test?

TEKS: PH.5E, PH.5G **Cost:** \$225 per session

CHECK OUT THE WHYNAUTS AND CREATE A WRAP AROUND EXPERIENCE!

The Whynauts is a free bilingual virtual series in English and Spanish! See page nine for additional details.









LIFE SCIENCE

Explore the diversity of life on Earth through our exciting, hands-on life science programs. Your students will discover topics such as adaptations, life cycles, and dissections.

AMAZING ANIMALS

(GRADES PK3-PK4)

Animals are amazing! We will learn about animals that live in all sorts of environments, all around the world. Animals are just like us: they move, they eat, and they use their senses! Let's learn more about some very unique animals using our bodies and senses!

Guidelines: VI.B.1, VI.B.3, V.E.1, IX.A.2

Cost: \$175 per session

DO BUGS BUG YOU?

(GRADES K-2)

There are lots of bugs in the world, but not all of them are insects. Your students will explore insect characteristics, their basic needs, and how they fit into the animal kingdom.

TEKS: Organisms and Environments K.12B, K.13B, 1.13A, 1.13B, 2.13B, 2.13D

Cost: \$175 per session

ADAPT TO SURVIVE 2.0

(GRADES 3-5)

Investigate ecological clues and signs left behind by nature to help understand how animals have physically and behaviorally adapted to survive in their habitats — and thrive!

TEKS: Organisms and Environments 2.13A, 3.13A, 5.13A

Cost: \$175 per session

BRAIN POWER: DISSECTION

(GRADES 6-12)

Gain insight on basic brain anatomy and function through a guided dissection of a sheep's brain. Working in pairs, students will uncover how the brain controls all our bodily functions and how sheep's brains compare to human brains.

TEKS: Organisms and Environments 7.13A | Anatomy and Physiology AP.11C, AP.11D

Cost: \$350 per session

MORE THAN MEETS THE EYE: DISSECTION

(GRADES 6-12)

Students will work in pairs in this guided dissection to gain a better understanding of vision by exploring the basic structures of a cow's eye, how the parts work together, and its connection to the brain.

TEKS: Organisms and Environments 7.13A | Anatomy and Physiology AP.11C, AP.11D

Cost: \$225 per session

THE HEART OF THE MATTER: DISSECTION

(GRADES 6-12)

Students will work in pairs in this guided dissection of a sheep's heart to learn about the structure and function of a mammal's heart — as well as how oxygen, nutrients, and hormones are transported throughout the body.

TEKS: Organisms and Environments 7.13A | Anatomy and Physiology AP.14A, AP.14C

Cost: \$225 per session









EARTH AND SPACE SCIENCE

Earth and space science include numerous fields of study that examine this planet and beyond. Programs in this area focus on weather, fossils, plate tectonics, rocks, and minerals.

EARTH ROCKS

(GRADES PK3-PK4)

Our Earth is a planet of possibilities. Join us as we discover what makes our Earth unique and then explore different ways that we can protect and take care of its water and land.

Guidelines: VI.B.3, VI.C.1, VI.C.4, V.E.1, VIII.A.1

Cost: \$175 per session

SPACE EXPLORERS

(GRADES PK3-PK4)

Have you ever looked up into the sky and wondered what was there? Higher than the birds, past the clouds, and farther than the Moon, a whole universe of objects spins in outer space. Let's imagine that we can leave Earth behind and explore the solar system that surrounds us.

Guidelines: IV.A.1, V.C.2, V.E.3, VIII.A.1

Cost: \$175 per session

DIG THOSE DINOS

(GRADES K-2)

Students will discover fossils, follow dinosaur tracks, and piece together prehistoric clues in this station-based program. They will also explore and sort the minerals that make up fossils.

TEKS: Earth and Space K.10A, 1.6A and Organisms and Environments K.13B, 1.13A, 2.13B, 3.12D

Cost: \$175 per session

AIR AND WEATHER

(GRADES 3-5)

As aspiring meteorologists, students will explore the driving factors of weather — air, the Sun, and the water cycle — as well as observe, measure, and predict weather.

TEKS: Earth and Space 3.10A, 4.10A, 4.10C, 5.10A

Cost: \$175 per session

PUZZLING OUT THE PAST

(GRADES 6-8)

Students will work as a team of geologists to examine evidence and engage in a hands-on experiment to investigate the processes of plate tectonics and their effect on the Earth's surface.

TEKS: Earth and Space 6.10B, 7.10A, 7.10B

Cost: \$175 per session

VIRTUAL PROGRAMMING

Bring the wonders of the Perot Museum to your classroom through *The Whynauts*, an interactive digital educational series.

The whynauts

SIGN UP FOR COMPLIMENTARY ACCESS TO:

- 10 episodes exploring a variety of science topics, including ecosystems, dinosaurs, and meteorology
- Standards-aligned curriculum and in-depth educator guides with activities
- Community and career connections







AUDITORIUM SHOWS



Have a blast with these interactive auditorium experiences for large groups.

FIRE AND ICE

(GRADES K-8)

This explosive show presents matter and energy in a unique way. Students will see firsthand how matter changes when we add and remove extreme amounts of heat. The program covers states of matter, basic behavior of atoms and molecules, physical and chemical changes of matter, and more!

SUPERHERO SCIENCE



(GRADES K-8)

It's a bird, it's a plane — no, it's Superhero Science! Students will discover the science behind our favorite superheroes and their amazing powers. The program explores topics such as matter and energy, magnetism and electricity, and properties of light.

NOTE

- TEKS alignment available online.
- All auditorium shows are 45 minutes in length.
- On Your Campus Auditorium Shows are \$400. The programs are designed for up to 250 people and are available year-round. Additional shows are \$200 (of the same type, up to a total of four) to accommodate more students.

WARNING: WILL LEAD TO INCREASED LEVELS OF LEARNING AND FUN!

SCIENCE ON STAGE



THERMAL REACTIONS





(GRADES K-8)

AVAILABLE THURSDAYS & FRIDAYS

This explosive show allows students to see firsthand how matter changes when we add and remove extreme amounts of heat.

SUPER SIGHT AND THE POWER OF LIGHT





(GRADES K-8)

AVAILABLE MONDAYS & WEDNESDAYS

Students will discover the science behind our favorite superheroes and their amazing powers. We will explore topics such as energy and the properties of light.

NOTE

- TEKS alignment available online.
- All Science on Stage shows are 30 minutes in length.
- Science on Stage enhances field trips and is designed for up to 175 people until February. From February to end of May 2024, Science on Stage will accommodate up to 100 people.
- Each presentation is \$7 per student, free for chaperones, and \$7 per extra adult.
- Available show times:

10:30am

11:15an

12:00pm

12:45pm



FAMILY SCIENCE NIGHTS



Looking for a way to spice up your next PTA meeting or your school's STEM night? Just leave it to the Perot Museum! Our education team will bring the Museum and all the activity supplies to you!

FAMILY SCIENCE NIGHT PRICE \$500

Family Science Night events are designed for 200 people. Participating schools must provide staff and adult volunteers to run the stations. Museum staff will set up, train, and assist throughout the evening.

Science Nights can accommodate up to 500 people, however, an additional \$50 applies for every additional 50 people over 200.

LOOKING FOR COMMUNITY EVENTS?

The community engagement team and TECH Trucks aid in the mission of inspiring minds through nature and science for communities who have experienced underrepresentation and/or lack of resources. If your library, rec center, non-profit, or other community-focused organization is interested in becoming a community partner or exploring programs such as Community Science Meet-Ups, After School STEM Clubs, or TECH Truck Community Festivals, please visit:

PEROTMUSEUM.ORG/EVENTS/ CHILDREN-AND-FAMILIES/TECH-TRUCK

SUPERHERO ACADEMY FAMILY SCIENCE NIGHT

(GRADES K-8)

No cape needed for this superhero training session! Activities will explore the science behind super powers such as super strength, invisibility, and X-ray vision. Visit every station to become a science superhero!

PEROT MUSEUM EXHIBITS FAMILY SCIENCE NIGHT

(GRADES K-8)

Looking for a unique STEM experience for the whole family We have that! Learn about everything from cell biology to sports medicine and more with activities exploring content featured in each Perot Museum exhibit hall.

EARTH AND SPACE FAMILY SCIENCE NIGHT

(GRADES K-8)

Three, two, one ... blastoff!
Launch into learning about our planet, solar system, and universe. Activities will explore weather and landforms, rockets and rovers, the possibility of life on other planets, and so much more!







2201 N. FIELD STREET DALLAS, TX 75201

PEROTMUSEUM.ORG

NON-PROFIT ORGANIZATION U.S. POSTAGE PAID DALLAS, TX PERMIT NO. 1134

INSPIRING MINDS THROUGH NATURE AND SCIENCE

The Perot Museum of Nature and Science is an AAM accredited institution, supported in part by the City of Dallas Office of Cultural Affairs and the Texas Commission on the Arts. Satellite image of globe used within the Perot Museum logo provided courtesy of NASA.



