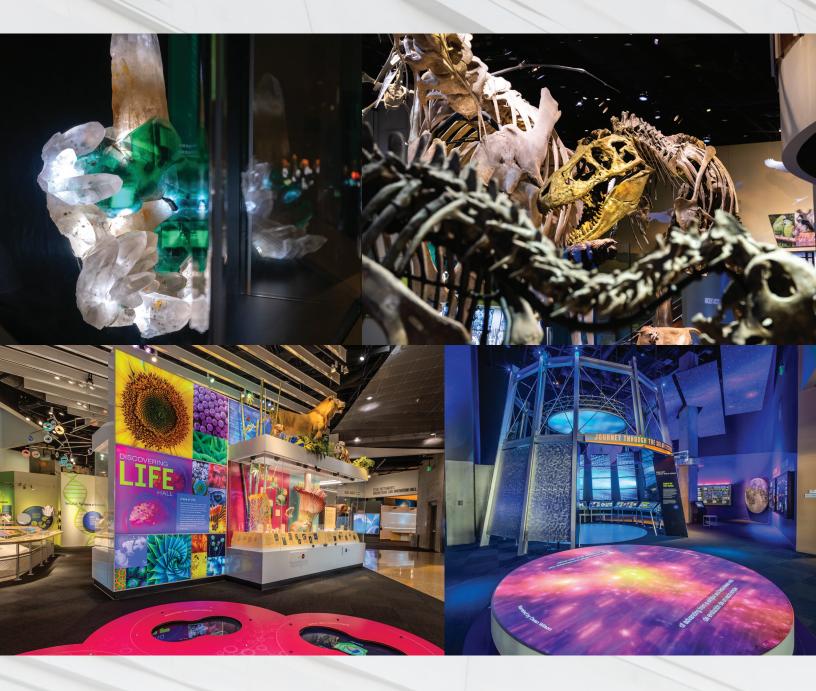


TEACHER'S GUIDE

2024-2025 PK3-12



FINANCIAL AID AVAILABLE FOR TITLE I SCHOOLS **GUIDE SUPPORTED BY**

Central Marker

National Life Group^{*}

TEACHER'S GUIDE: YOUR STEM RESOURCE

- Museum programs reinforce Texas Essential Knowledge and Skills (TEKS).
- Traveling exhibitions, educational films, hands-on labs, 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 Texas, Arkansas, Louisiana, New Mexico, and Oklahoma, as well as Mexico 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 educational programs, visit the educator's section of our website at **PEROTMUSEUM.ORG/EDUCATION**.

The 2024-2025 teacher's guide and reservation forms are available online at **PEROTMUSEUM.ORG/TEACHERSGUIDE**.

TEACHER APPRECIATION AT THURSDAYS ON TAP

Explore the Museum, listen to a band, learn about offerings during the school year, and have a drink to kick off school year 2024-2025! Join us on August 8, 2024, from 6-9pm to view programming options.

SPECIAL SPRING HOURS

From March 31-May 23, 2025, the Museum will open early at 9am for school groups to access increased learning opportunities (Monday through Friday only).

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 or hands-on lab led by Museum educators.
 - + Add an educational film.
- + School group pricing is available for groups of 10 or more students.



ON YOUR CAMPUS OUTREACH PROGRAMS

Host a program led by Museum educators.

- + Lab-based Programs
- Science Show Programs
- + Family Science Nights



THE WHYNAUTS VIRTUAL PROGRAM

Bring a free virtual STEM series to your classroom.

The Whynauts offers:

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



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RESERVE NOW

- **L** 214.428.5555, ext. 8
- <u>reserve@perotmuseum.org</u>
- Perot Museum of Nature and Science Attn: Reservations 2201 N. Field Street Dallas, TX 75201

FINANCIAL AID

Through generous support from our philanthropic community, the Museum provides financial aid to Title I schools for field trips and outreach programming.

Title I schools, as defined by the Texas Education Agency (TEA), serve a student body that is determined to be economically disadvantaged or offer a "targeted assistance program" for at-risk students.

Title I schools may apply for funding to visit the Museum between **August 19, 2024**, and **February 28, 2025**. If approved, a financial aid award will cover general exhibit entrance for students and required chaperones, as well as programming fees (films and traveling exhibits are not included). Additional adults included on the reservation will pay the group rate, and any walk-up students or adults will pay the general admission rate if tickets are available.

Title I schools may apply for funding to cover outreach programs taking place between the dates of **August 19, 2024**, and **May 23, 2025**. If approved, a financial aid award will cover outreach program fees (additional travel fees are not included).

CHECK OUT THE WHYNAUTS AND CREATE A WRAP-AROUND EXPERIENCE!

The Whynauts is a free bilingual virtual series in English and Spanish! See Page 9 for additional details.



BOX LUNCHES AVAILABLE FROM PEROT MUSEUM CAFÉ

Box lunches for children and adults are available for preorder at **PMNS.TFAFORMS.NET/F/LUNCH**.

CHILDREN'S MUSEUM

Exciting news! The *Moody Family Children's Museum* is about to undergo an amazing transformation! The hall will temporarily close its doors starting Tuesday, January 7, 2025, but when it reopens in **early summer 2025** you'll be welcomed into a completely revitalized space brimming with cutting-edge STEM experiences. These new exhibits will beautifully reflect the vibrant diversity of our community. Get ready for a new adventure that will inspire and captivate visitors of all ages!





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

NOTE: Films and film times may be different on weekends.



OCEAN PARADISE (40 MINUTES)

NOW-SEPTEMBER 5, 2024

GRADES PK3-12

Dive into the untouched wonders of the Pacific, and explore some of the most remote islands on Earth. This cinematic odyssey reveals the beauty of several remarkable atolls, the challenges they face, and the work to preserve them for future generations. Come along on an environmental adventure to witness the grandeur and majesty of these sacred places.



BLUE WHALES: RETURN OF THE GIANTS 3D (30 MINUTES)

NOW-MAY 31, 2025

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. This 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, with 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.



T.REX (20 MINUTES)

NOW-MAY 31, 2025

GRADES PK3-12

Chronicling a remarkable discovery in the badlands of Hell Creek in the summer of 2023, this immersive film explores the life and times of the Greatest Of All Tyrants — the GOAT. With hat tips to famous specimens, landmark discoveries, and wild cinematic depictions over the last century, the film explores the interplay between speculation and evidence, and reveal how the process of science refreshes and reimagines our understanding of this legendary dinosaur.



SUPERHUMAN BODY: WORLD OF MEDICAL MARVELS (40 MINUTES)

SEPTEMBER 6, 2024-MAY 31, 2025

GRADES PK3-12

Superhuman Body: World of Medical Marvels explores the inner workings of the human body and the incredible breakthroughs in science and bioengineering that are changing the course of human health. Told through the inspiring stories of researchers, scientists, and everyday people behind these groundbreaking medical innovations, this film shows the extraordinary ways our bodies work — and how science and technology help us to intervene, and even save lives, when our bodies fail us.



TIP

Be sure to book early to save your spot. Films are \$6 per student and teacher/ chaperone. Capacity is currently limited to 200 and may be lower, depending on the showing.



PROGRAMS AT A GLANCE

The Perot Museum is more than a collection of exhibits and specimens – it is also home to 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 I schools (see policies on Page 4).

PROGRAMS AT A GLANCE

GRADE LEVELS

HANDS-ON LABS (up to 25 students per s	essior	ı)									
😫 🎰 Amazing Animals	PK										
💼 Earth Rocks!	PK										
😫 🎰 Space Explorers	PK										
HANDS-ON LABS (up to 30 students per s	sessior	ı)									
😫 🂼 Dig Those Dinos		К	1	2							
😫 🂼 Do Bugs Bug You?		К	1	2							
😫 🂼 Solar Superstars		К	1	2							
😫 🂼 Adapt to Survive 2.0		К	1	2	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	
🚖 ৱ Chemistry Detectives								6	7	8	
🚍 🂼 Dissection: Brain Power								6	7	8	9-12
🚖 🂼 Dissection: More Than Meets the Eye								6	7	8	9-12
鱰 ৱ Dissection: The Heart of the Matter								6	7	8	9-12
😫 🎰 Crash Test Cars											9-12
FAMILY SCIENCE NIGHTS (200-500 atter	ndees)										
💼 Body Systems Science Night NEW		К	1	2	3	4	5	6	7	8	
💼 Earth and Space Science Night		κ	1	2	3	4	5	6	7	8	
💼 Perot Museum Exhibits Science Night		κ	1	2	3	4	5	6	7	8	
💼 Superhero Academy Science Night		Κ	1	2	3	4	5	6	7	8	
SCIENCE ON STAGE SHOWS (up to 250 a	ttende	ees)									
😫 馣 Suiting Up for Space NEW		Κ	1	2	3	4	5	6	7	8	
🚍 촯 The Power of Light		K	1	2	3	4	5	6	7	8	
≢ 🎰 Thermal Reactions		К	1	2	3	4	5	6	7	8	

Lab-based programs are available on Museum field trips.



🔚 Lab-based programs are available on your campus.

LAB-BASED PROGRAMS

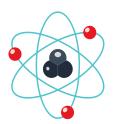
LAB-BASED PROGRAMS

Program descriptions correlate with the program offerings chart on Page 6.

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.

NOTES

- Lab-based programs are available during Museum field trips, as denoted by
- Lab-based programs are available on your campus, as denoted by file.
- All PreK-3-4 lab-based programs are designed for 25 students.
- All K-12 lab-based programs are designed for 30 students.
- All programs are 45 minutes in length unless noted otherwise.
- Lab times at the Museum: 10:30am, 11:30am, 12:30pm



PHYSICAL SCIENCE

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

PHYSICAL SCIENCES LABS

Field Trips: \$7 per student

On Your Campus: \$200 per program

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

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

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

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

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 at the Museum.

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

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



LIFE SCIENCES

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.

LIFE SCIENCES LABS

Field Trips: \$7 per student On Your Campus: \$200 per program LIFE SCIENCES LABS (DISSECTIONS)

Field Trips: \$8 per student On Your Campus: \$250 per program

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, eat, and use their senses! Let's learn more about some unique animals using our bodies and senses!

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

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

ADAPT TO SURVIVE 2.0

(GRADES K-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

DISSECTION: BRAIN POWER

(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

DISSECTION: THE HEART OF THE MATTER

(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

DISSECTION: MORE THAN MEETS THE EYE

(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







EARTH AND SPACE SCIENCES

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

EARTH AND SPACE LABS

Field Trips: \$7 per student

On Your Campus: \$200 per program

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 it and take care of its water and land. **Guidelines:** VI.B.3, VI.C.1, VI.C.4, V.E.1, VIII.A.1

SPACE EXPLORERS

(GRADES PK3-PK4) 🚞 💼

Have you ever looked into the sky and wondered what is up 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

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 the minerals that make up fossils and sort them.

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

AIR AND WEATHER

(GRADES 3-5) 💼

As aspiring meteorologists, students will explore the driving factors of weather — the 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

PUZZLING OUT THE PAST

(GRADES 6-8) 🂼

The

whynauts

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

VIRTUAL PROGRAMMING

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

NOW ON YOUTUBE KIDS:

- Eleven 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

For more information on how to get started, visit us at **PEROTMUSEUM.ORG/EVENTS/CHILDREN-AND-FAMILIES/WHYNAUTS**.



nazing Adapt

SCIENCE ON STAGE SHOWS

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



FIELD TRIPS TO THE MUSEUM

- Each presentation costs \$7 per student, is free for chaperones, and is \$7 per extra adult.
- TEKS alignment is available online.
- All Science on Stage shows are 30 minutes.
- Science on Stage enhances field trips and is designed for up to 175 people.
- Show times: 10:15am, 11:00am, 11:45am, 12:30pm
- The Power of Light is available on Mondays and select Tuesdays (when the Museum is open).
- Thermal Reactions is available on Wednesdays.
- Suiting Up for Space is available on Thursdays and Fridays.

ON YOUR CAMPUS

• Each presentation costs \$400 for the first program and \$200 per additional program of the same title on the same day.

- TEKS alignment is available online.
- All Science on Stage shows are 45 minutes.
- On Your Campus Science on Stage shows are designed for up to 250 people and are available year-round.
- All shows are available to be booked on Monday through Friday.

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

SUITING UP FOR SPACE (GRADES K-8) 🚖 💼



Available Starting October 2024!

Pack your bags — we're going to Mars! Students will discover how the different sciences come together to design modern-day spacesuits. This question- and exploration-driven program will explore survival in space, focusing on temperature, pressure, oxygen, and mobility.

THE POWER OF LIGHT

(GRADES K-8) 🚍 💼

Let there be light! This illuminating show shines a spotlight on the electromagnetic spectrum and the power of light. Students will explore forms of energy, properties of light, and the science behind color.

THERMAL REACTIONS

(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!



FAMILY SCIENCE NIGHTS

Looking for a new 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 events are designed for 200 people. Up to 500 attendees can be accommodated at an additional cost.

Participating schools must provide staff and adult volunteers to run the stations.

Museum staff will set up, train, and assist throughout the evening.

NUMBER OF ATTENDEES	COST
Up to 200	\$500
Up to 250	\$550
Up to 300	\$600
Up to 350	\$650
Up to 400	\$700
Up to 450	\$750
Up to 500	\$800

BODY SYSTEMS FAMILY SCIENCE NIGHT



Available Starting October 2024!

Paging all aspiring doctors! Come to this science night and learn about the human body — STAT! Activities will explore several organ systems, such as the circulatory, skeletal, neurological, respiratory, and digestive systems.

(GRADES K-8) 💼

(GRADES K-8) 💼

Three, two, one ... blast off! 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.

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.

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!



LOOKING FOR COMMUNITY EVENTS?

The community engagement team and TECH Trucks aid in the mission of inspiring minds through nature and science for communities that have experienced underrepresentation and/or lack of resources. If your library, rec center, nonprofit, or other communityfocused 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.



2201 N. FIELD STREET DALLAS, TX 75201

PEROTMUSEUM.ORG

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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.



