

SCIENCE



HISTORY



EDUCATION



2023 - 2024 SCHOOL YEAR

Educator's Guide: 2023 - 2024

Spark your students' interest and curiosity while reinforcing concepts taught in the classroom through TEKS-aligned tours, outreach programs, traveling STEM trunks, and STEM program offerings.

TEACHER ADMISSION

We Teachers



All teachers enjoy free admission to the Museum at any time.

QUESTIONS?



432.683.4403



education@petroleummuseum.org

BOOKMARK OUR WEBSITE

To keep in touch with the latest news and information about our educational offerings, visit the Education section of our website at www.pbpetro.org.



1500 Interstate 20 West
Midland, Texas 79701



www.pbpetro.org

Ways to Engage with the Museum



Field Trips at the Museum

- TEKS-aligned tours.
- Customizable to fit your curriculum.
- Class & Tour Packages.
- School group pricing available.



Campus Wide Outreach Programs

- TEKS-aligned programs.
- Topics include: Robotics, Geology, Dinosaurs, Animals, and Astronomy.
- Grades PreK-8th
- Booking available by class or entire campus.
- In-person & virtual options available.



In Your Classroom Traveling STEM Trunks

- TEKS-aligned lessons.
- Grades PreK-12.
- Topics include Earth Science, Life Science, Physical Science, Simple Machines, Robotics and more!
- Comes equipped with all materials and instructions needed for each lesson.



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PLANNING YOUR VISIT

A museum can be an overwhelming place! Students who are informed about the subject matter and prepared for tour procedures will understand the exhibits better and learn more from their experience at the Museum.

TOUR HOURS:

Guided tours are scheduled Monday through Friday from 9:30 am - 3:00 pm. Self-guided group tours can be scheduled Monday through Saturday from 10:00 am - 3:00 pm. Scheduling is done on a first-come, first-serve basis.

RESERVATIONS:

For a docented (guided) tour, please schedule at least a month in advance. Docented tours are based upon availability. If you want a self-guided tour, please call ahead to receive the group rate. Please contact our Education Department to schedule.

ADMISSION:

Group rates are available. Please call the Museum for admission prices. Teachers and drivers are admitted free. Parents wishing to attend will receive a discounted rate. If students are paying their own admission, please collect the money and make one payment. We can bill the school if arrangements are made in advance.

CHAPERONES

We try to divide into groups of 20-25. This provides the best opportunity to view the exhibits and interact with the docent. Please provide one teacher or adult chaperone for each group.

ARRIVAL:

Please be on time. If you are delayed more than twenty minutes, call us. Late arrival may result in a scheduling conflict and/or dismissal of docents. We will make every effort to adjust and tour your group as planned.

MUSEUM ETIQUETTE

FOR STUDENTS

- If possible, leave coats, backpacks, and large bags at school or on the bus.
- No cell phone use during tours.
- Photography is allowed in our galleries, but no flash, please.
- For your safety, please walk, don't run.
- Students must stay with their chaperone before, during, and after the tour, whether in the galleries, gift shop, or hallways- or near the Museum entrances. Never walk away with strangers.
- Be respectful and kind to the docent (guide) leading your group.
- Questions and comments are great! Please raise your hand when you want to speak and listen quietly when others are talking. Use your polite "inside voice."
- To keep our museum objects clean and safe, food or drink is not allowed in the galleries, do not touch the artifacts on display, or climb on any displays.

FOR TEACHERS AND CHAPERONES

- Be sure to count your students before you arrive and before you leave the Museum.
- You are welcome to join in discussions, encourage students' participation and help students relate museum activities to what they have been studying.
- Teachers and chaperones are responsible for maintaining discipline as you would in the classroom. Please set a good example for students to model.
- For their own security, please be sure the children know the names of the adults in charge of their group.
- No texting or phone calls allowed in the galleries. Photography is allowed in the galleries, but no flash, please.

PERMANENT EXHIBITS

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PETROLEUM MUSEUM FIELD TRIP EXPERIENCE
EXHIBITS

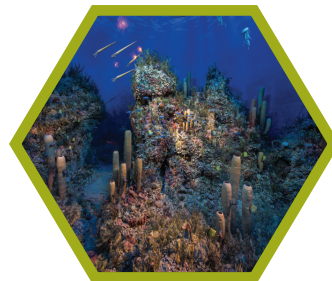


MYTHCRACKERS THEATER

"It's what you think you know that just ain't so!" Step into Mythcrackers Theater and crack some basic myths about the petroleum industry. Mythcracking begins every 15 minutes.

PERMIAN SEA

Step back in time over 250 million years ago, when this area was the Permian Sea. Watch the geologic history of how the Permian Basin was formed. Microscopic viewers tell the story of the formation of oil from microscopic creatures.



BOOM TOWN

Stroll through a 1920's era boom town. Meet people instrumental in the birth of the petroleum industry in the Permian Basin. Visit a land office and the General Store, featuring collections from the early days of settling the vast Permian Basin.

GROWTH OF AN INDUSTRY

Celebrate the growth of America's petroleum industry with icons like Midland's own Pegasus, drill bits, and beautifully restored gas pumps from this era. Watch the marketing strategies of petroleum companies creating their legacies.



PEAKS AND PROPHECIES

Discover the radical and often amusing forecasts for the petroleum industry over the years. What came true and what didn't? Travel through our interactive timeline of prophecies, history, and oil production.

PETROTREKKER

Join the Captain and his crew on a futuristic ride exploring for oil and natural gas resources in the far corners of the earth using out-of-this-world technology. Blast-off every 15 minutes.



PERMANENT EXHIBITS

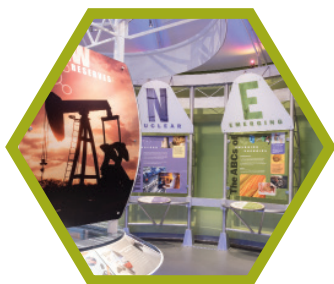


GEOLOGY

Explore the fascinating field of geology and its importance to the petroleum industry. Learn how oil is formed, the concepts of porosity and permeability, and the rocks that hold this precious resource.

DRILLING AND SEISMIC

Choose a drilling location and drill your own well, vertical or horizontal, anywhere on the globe. Will you be successful or will you run into trouble? The clock will run for three minutes as you size up your options to drill. Explore the fields of seismic technology, reservoir management, and perforating.



SUPPLEMENTAL ENERGIES

Discover how we might power our cities in the future. Explore the world of supplemental energies – what might work, what are the obstacles, what are the opportunities for growth?

ENERGY CITY

Power a city, build a car, take a photo with our Energy Superheroes. Kids will love exploring this fun-filled space complete with park benches, cars to play in, and their own recycle bin!



"E"NSPIRATIONS AND CAREERS

Meet inspirational individuals who have made energy their life's work, then explore career opportunities in the industry in our interactive career gallery. The petroleum industry needs creative, dedicated people - explore the variety of jobs available.

PETROLEUM HALL OF FAME

The Petroleum Museum recognizes select individuals who have made remarkable contributions to the Permian Basin and the petroleum industry. Meet the rugged individuals honored here who came to the Permian Basin, changed the course of history, pursued their dreams, and helped build communities.



PERMANENT EXHIBITS

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PETROLEUM MUSEUM FIELD TRIP EXPERIENCE
EXHIBITS



MINERAL GALLERY

Enjoy the breath-taking beauty of nature in the Mineral Gallery. Specimens from across the globe will enchant visitors of all ages. The collection consists of minerals both gifted and loaned.

ABELL FAMILY GALLERY

The cultural history of the Permian Basin is beautifully depicted by award-winning artist, Tom Lovell. From early Native American cultures to cowboys, geologists, and landmen, these captivating works of art showcase the people and landscape of the Permian Basin.



CHAPARRAL GALLERY

Feeling a need for speed? Race back to the 1960's and the world-famous Chaparral race cars. Jim Hall designed, built, and tested these innovative racers right here in Midland, Texas. Explore the science of aerodynamics, which Jim Hall proved to be an important aspect of race cars, both then and now.

OIL PATCH

Capture the history and evolution of mechanics and engineering through the collection of antique equipment outside in the Oil Patch. Take a stroll from the back patio or drive from the east parking lot to view the "patch."



QUICK TOUR FACTS:

- A general tour of the Museum lasts two hours, but the timeframe can be customized to fit the needs of your group.
- We can tailor the focus of each tour and/or class to fit the needs of your classroom.
- Search and finds are available if you would like to self-guide your group through the Museum.
- If you want to preview the Museum before your tour, educators always have free admission!

CLASS & TOUR PACKAGES

Enhance your field trip experience by combining your tour with a program of your choice. Maximize your time at the Museum by engaging students in a one hour class and a one hour tour. The cost is \$10 per student and teachers are always free.

DINOSAURS

Geared for students in PreK through second grade, this hands-on program teaches students about the various species of dinosaurs that lived during the Triassic, Jurassic, and Cretaceous time periods including those that lived in the area now known as Texas. This interactive program introduces fossils, trace evidence, geology, carnivores, herbivores, omnivores, and more.

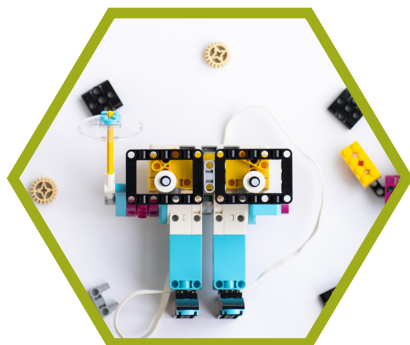


GEOLOGY

Geared for students in third through sixth grade, this interactive program sets a geological foundation for students by covering key concepts such as layers of the earth, the rock cycle, fossil fuel formation, and more. Students learn about the history of the Permian Basin from a geological standpoint. This program can be tailored to fit the needs of your classroom.

ANIMALS

This engaging program is designed for students in PreK through sixth grade. Students will learn about the Museum's live animal collection up close while also learning about important science concepts such as adaptations, ecosystems, food chains, animal classifications, and much more. Animals featured include prairie dogs, rabbits, snakes, bearded dragon, a tortoise and more.



ROBOTICS

Explore the world of robotics and coding with this hands-on program geared for students in Kindergarten through sixth grade. Students will engage in hands-on learning featuring our age-appropriate robotics equipment. Equipment used includes Osmo Coding, Ozobots, LEGO WeDo 2.0, LEGO Spike Essential & Prime, LEGO Mindstorm EV3s, and Spheros. Equipment varies by grade level so please contact our Education Department for more information.

OUTREACH PROGRAMS

Want your students to experience all the Petroleum Museum has to offer, but transportation is an issue? Let our educational programming come to you! We offer STEM based interactive programs that are great opportunities to supplement school curriculum.

ANIMALS

This engaging program is designed for students in PreK through sixth grade. Students will learn about the Museum's live animal collection up close while also learning about important science concepts such as adaptations, ecosystems, food chains, animal classifications, and much more. Animals featured include prairie dogs, rabbits, snakes, a bearded dragon, a tortoise, and more.

ASTRONOMY

Students in grades PreK through high school will learn about various Earth Science topics in this completely immersive program. Inside our inflatable planetarium, students will learn about the solar system, the phases of the moon, the reason for day and night, and much more. Middle and high school students can learn about geology as well using the Layered Earth curriculum inside the planetarium. Educators can customize which lesson is taught to fit the needs of their classroom.

DINOSAURS

Geared for students in PreK through second grade, this hands-on program teaches students about the various species of dinosaurs that lived during the Triassic, Jurassic, and Cretaceous time periods including those that lived in the area now known as Texas. This interactive program introduces fossils, trace evidence, geology, carnivores, herbivores, omnivores, and more.

GEOLOGY

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ROBOTICS

Explore the world of robotics and coding with this hands-on program geared for students in grades Kindergarten through sixth grade. Students will engage in hands-on learning featuring our age-appropriate robotics equipment. Equipment used includes Osmo Coding, Ozobots, LEGO WeDo 2.0, and Spheros. Equipment varies by grade level so please contact our Education Department for more information.

ADD ON PACKAGES

For an additional fee, the Petroleum Museum will provide up to three additional activities to be conducted by either a museum educator or classroom teacher. All instructions and materials are provided. Please contact us for rates.

PRICING INFO

ANIMALS	}	1ST HOUR: \$75 \$25 FOR EACH ADDITIONAL HOUR
DINOSAURS		
GEOLOGY		
ROBOTICS		

*CAN BE BOOKED BY THE HOUR

ASTRONOMY	}	HALF DAY: \$150
		FULL DAY: \$250

*MUST BE BOOKED IN HALF OR
FULL DAY SESSIONS

OUTREACH VIRTUAL PROGRAMS

The Petroleum Museum is pleased to offer distance learning through virtual outreach programs to schools across the nation. In conjunction with Connect2Texas, the Petroleum Museum can bring interactive programs into your classroom! Each 45 minute program is jammed packed with interactive engagement and learning and are all TEKS-aligned (with the exception of Fueled by Science: Fossil Fuels). Materials are mailed for three post-program extension activities. National standard alignment is available upon request.

Please contact virtual@petroleummuseum.org for more information.

DINOS 101

Students in PreK through second grade will journey back in time to learn about the various species of dinosaurs that lived during the Triassic, Jurassic, and Cretaceous time periods including those that lived in the area now known as Texas. Dig into topics including fossils, trace evidence, geology, carnivores, herbivores, omnivores, and more! Special thanks to our sponsor **Diamondback Energy** for making this program free for the 2023 school year.



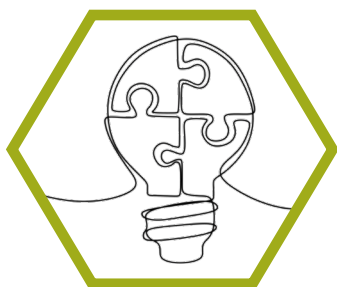
ROCKS ROCK!

Geared for students in third through sixth grade, this interactive program sets a geological foundation for students by covering key concepts such as layers of the earth, the rock cycle, fossil fuel formation, and more. This program can be tailored to fit the needs of your classroom. Special thanks to our sponsor **Diamondback Energy** for making this program free for the 2023 school year.



CREATURE FEATURE

This engaging program is designed for students in PreK through sixth grade. Students will learn about the Museum's live animal collection up close while also learning about important science concepts such as adaptations, ecosystems, food chains, animal classifications, and much more. Animals featured can include prairie dogs, rabbits, snakes, a bearded dragon, and more. Special thanks to our sponsor **Ovintiv** for making this program free for the 2023 - 2024 school year.



FUELED BY SCIENCE (TWO SEPARATE PROGRAM OPTIONS)

Special thanks to our sponsor **Ovintiv** for making this program free for the 2023 - 2024 school year.

Energy: Geared for students in grades Kindergarten through fifth, this interactive program fuels students' insights into the world of energy. Students will explore key concepts such as forms of energy, conservation of energy, real-world examples of energy, and more. This program can be tailored to fit the needs of your classroom.

Fossil Fuels: Geared for students in grades Kindergarten through fifth grade, this interactive program explores the energy around us that is powered by fossil fuels. Students explore how important fossil fuels are to maintain our current civilization and culture. Students will be covering all the different ways we use fossil fuels in our everyday life. This program can be tailored to fit the needs of your classroom.



VIRTUAL TOUR OF THE PETROLEUM MUSEUM

A visit to the Petroleum Museum is an amazing journey through over 230 million years of history. Located in the heart of the Permian Basin, the Petroleum Museum offers over 40,000 square feet of interactive education and entertainment for adventurers of all ages. The mission of the Permian Basin Petroleum Museum is to share the petroleum and energy story and its impact on our lives. We are proud to offer both guided and self-guided virtual tour options. Special thanks to **XTO Energy** for making our virtual tour possible!



STEM TRAVELING TRUNKS

Bring the Petroleum Museum into your classroom with these unique hands-on, cross-curricular STEM teaching tools! These trunks are designed to educate students while building on fundamental disciplines like science, technology, engineering, math, art, social studies, and language arts. Each trunk contains lesson plans and activities that are aligned with the TEKS for K – 12 education as well as all supplies that are needed for each lesson.

SUBJECT	TRUNKS AT A GLANCE	GRADES											PROGRAM DESCRIPTION PAGE
		EC		ELEMENTARY					MS		HS		
		PK	K	1	2	3	4	5	6	7	8	9 - 12	
EARTH SCIENCE	Earth Science					3	4	5	6				11
	Farmer Grady's Challenge*					3	4	5	6				11
	Geology		K	1	2								11
	Little Footprint Exploration*	PK	K										11
	Pam & Ava's Mapping Adventure*	PK	K										11
	Project Park Design*			1	2								11
	Rainwater Runoff Design Challenge*					3	4	5	6				11
	Shrinking Shore Exploration*			1	2								11
LIFE SCIENCE	Coding Mouse Exploration*			1	2								11
	Food Deserts Challenge*					3	4	5	6				11
	Helping Hand Design*					3	4	5	6				11
	Little Footprint Exploration*	PK	K										11
	Ron's Habitat Adventure*	PK	K										11
	Wild Feet Exploration*			1	2								11
	Wildlife Corridors Challenge*					3	4	5	6				11
MATH	LEGO MoreToMath			1	2								12
PHYSICAL SCIENCE	Digital Relay Race*					3	4	5	6				12
	LEGO BricQ Motion Essential		K	1	2	3	4	5					12
	LEGO BricQ Motion Prime								6	7	8		12
	LEGO Maker Simple Machines					3	4	5					12
	Muddy Mats Exploration*			1	2								12
	Pam's Camping Adventure*	PK	K										12
	Ron's Ramp Adventure*	PK	K										12
	Shadow Box Theatre Exploration*			1	2								12
	Sidewalk Safety Exploration*	PK	K										12
	Solar House Design Challenge*					3	4	5	6				12
	Sound Bite Exploration*			1	2								13
	Squeaky Clean Magnets Challenge*					3	4	5	6				13
	Straw Rockets							5	6	7	8	9 - 12	13
	Sunny Sandbox Exploration*	PK	K										13
	The Great Toy Design Challenge*					3	4	5	6				13
STEM	Ozobot Robotics			1	2	3	4	5	6				13
	Treehouse STEM Challenge	PK	K	1									13

*Indicates that trunk is part of the STEM in Action collection from Hand2Mind.

STEM in Action® modules are an easy-to-implement PreK-6 solution for integrating science, math, literacy, and engineering skills into real-world problems. These modules focus on the Engineering Design Practice which is a critical component of NGSS, state standards, and national initiatives. STEM in Action helps students prepare for essential skills of the 21st century. Students work through the Engineering Design Process to learn the value of rethinking and supporting multiple solutions.

STEM TRAVELING TRUNKS

SUBJECT: EARTH SCIENCE

EARTH SCIENCE (3-6)



Students explore the rock cycle, make a model of the earth using clay, find out what makes a volcano erupt, and create landforms through weathering and erosion.

FARMER GRADY'S CHALLENGE (3-6)

Students explore weather-related hazards and materials that can withstand severe weather.

GEOLOGY (K-2)



Students explore the rock cycle, make a volcano, and find out which rocks sink and float. You will also discuss how rocks are used in the world today.

LITTLE FOOTPRINT EXPLORATION (PREK-K)

Students explore habitats and what animals need to survive.

PAM & AVA'S MAPPING ADVENTURE (PREK-K)

Students explore shapes and position as they are challenged to help Pam and Ava plan a new bike path.

PROJECT PARK DESIGN (1-2)

Students explore patterns of the Earth and the Sun to determine when and where shadows cover the park and design a park plan with warm, sunny benches.

RAINWATER RUNOFF CHALLENGE DESIGN (3-6)

Students explore types of water pollution and subsoil in a garden.

SHRINKING SHORE EXPLORATION (1-2)

Students explore the power of ocean waves and create models to protect the beach from erosion.

SUBJECT: LIFE SCIENCE

CODING MOUSE EXPLORATION (1-2)

Students explore the basic needs of animals as they design a code for a programmable mouse to demonstrate their knowledge of what a mouse needs to survive.

FOOD DESERTS CHALLENGE (3-6)

Students explore their own dietary needs and learn how to grow fresh produce without soil.

HELPING HAND DESIGN (3-6)

Students learn about animal adaptations and then use their findings to plan, build, and test an assistive technology for people who cannot bend over to pick up objects.

LITTLE FOOTPRINT EXPLORATION (PREK-K)

Students explore habitats and what animals need to survive.

RON'S HABITAT ADVENTURE (PREK-K)

Students explore habitats and what animals need to survive; they will use critical thinking, communication, and collaboration to design a patch to help an injured turtle survive.

WILD FEET EXPLORATION (1-2)

Students explore the connection between nature and the human-made world by designing hiking shoes that use nature for inspiration.

WILDLIFE CORRIDORS CHALLENGE (3-6)

Students explore animal needs, habitats, and wildlife corridors.

STEM TRAVELING TRUNKS

SUBJECT: MATH

LEGO MORETOMATH (1-2)

LEGO Education MoreToMath is a hands-on educational solution that teaches mathematical problem solving by bridging to math facts. By using the familiar LEGO bricks and real-world challenges, students will feel encouraged and motivated to think, write and speak freely about math. MoreToMath is designed to develop students' problem-solving abilities as well as their vocabulary, reading, thinking, listening, and speaking skills related to mathematical topics.

SUBJECT: PHYSICAL SCIENCE

DIGITAL RELAY RACE (3-6)

Students explore how coding can be used to protect information. Students use critical thinking, communication, and collaboration to design and build a code transmission system.

LEGO BRICQ MOTION ESSENTIAL (K-5)

LEGO® Education BricQ Motion Essential will give your students an understanding of forces and motion as they plan and conduct investigations. Lower elementary students will work towards determining whether design solutions work as they were intended to change the speed or direction of an object with a push or a pull. Upper elementary students will investigate the patterns in an object's motion.

LEGO BRICQ MOTION PRIME (6-8)

LEGO® Education BricQ Motion Prime will challenge your students to apply their scientific inquiry skills to provide evidence of the change in an object's motion based on its force and mass. In the curriculum unit, Science and Sports, they will apply Newton's three laws of motion as they design, develop, and optimize a solution involving the collision of two objects.

LEGO MAKER SIMPLE MACHINES (3-5)

LEGO® Education Simple Machines use LEGO® bricks and creative activities to make interactive, exploration-based learning easier than ever to achieve. Exploring real-world tasks with a hands-on approach, Simple Machines provides students with a deeper understanding of science and engineering concepts and processes such as energy, balance, and mechanics, all while encouraging investigation skills.

MUDDY MATS EXPLORATION (1-2)

Students explore the properties of materials while designing an absorbent, no-slip mat to protect a house from muddy paws.

PAM'S CAMPING ADVENTURE (PREK-K)

Students explore geometry, graphing, and the properties of materials as they are challenged to build a tent for Pam and her friends.

RON'S RAMP ADVENTURE (PREK-K)

Students explore slopes and surfaces as they are challenged to build a ramp that allows Ron, a skateboarding armadillo, to go far distances—but not too far.

SHADOW BOX THEATRE EXPLORATION (1-2)

Students explore light and shadows by planning, resting, and redesigning scenery for a shadow box theater.

SIDEWALK SAFETY EXPLORATION (PREK-K)

Students explore slopes and speed as they design safe ways to slow a bike.

SOLAR HOUSE DESIGN CHALLENGE (3-6)

Students explore energy conversion and design a passive solarhouse based on criteria and constraints.

STEM TRAVELING TRUNKS

SUBJECT: PHYSICAL SCIENCE

SOUND BITE EXPLORATION (1-2)

Students explore sound waves and vibrations to develop a phone that helps friends talk over a distance.

SQUEAKY CLEAN MAGNETS CHALLENGE (3-6)

Students explore the power of magnets and use them to make, test, and redesign a way to clean fish tanks without putting their hands into water.

STRAW ROCKETS (5-12)

This unit contains lessons that will give students a chance to practice the engineering design process and have a better understanding of STEM by using straw rockets.

SUNNY SANDBOX EXPLORATION (PREK-K)

Students explore the warming effects of the sun and engineer a covering to block the sun.

THE GREAT TOY DESIGN CHALLENGE (3-6)

Students explore and conduct tests to identify materials based on their physical properties.

SUBJECT: STEM


OZOBOT ROBOTICS (1-6)

This trunk contains several different lessons for reading, social studies, math and science using small robot called an Ozobot. Your students will be able to create a story map and time lines, calculate measurements, explore life cycles and water cycles, and much more. An introduction to Ozobot and Ozoblockly are included in this unit as resources for teachers to read before teaching the lessons to provide a better understanding of the Ozobots.

TREEHOUSE STEM CHALLENGE (PREK-1)

This hands-on challenge trunk gets children excited about STEM by incorporating literacy into the STEM process. The storybook introduces the challenges in a fun, relatable way – focusing on the different elements that make for a successful tree house and explaining why they are necessary.

QUICK TRUNK FACTS

- Trunks can be checked out for \$25 per week.
- For the 2023 school year, the Earth Science & Geology trunks are free thanks to our sponsor  **COVIA**
- Each trunk comes equipped with all of the supplies needed to teach each lesson.
- We can tailor the focus of each trunk to fit the needs of your classroom.
- Need a trunk longer than a week? No problem! We will work with you on scheduling a timeframe that best fits your classroom.
- Have suggestions on curriculum that would benefit your students? Contact our Education Department - we would love to help!

STEM PROGRAM OFFERINGS

Looking for ways for your students to engage in high quality STEM education outside of the classroom? Look no further! The Petroleum Museum is proud to provide a variety of programs for students starting at age 4! We have included a brief summary and calendar for the 2023-2024 school year. Pre-registration is required for all programs.

Please visit our website at www.pbpetro.org for more information.

FAMILY SCIENCE NIGHTS

The Petroleum Museum is proud to host four Family Science Nights each school year. These free, educational events provide a hands-on way for families in surrounding communities to get excited about science. Each Family Science Night is centered around a different scientific theme and features hands-on experiments, demonstrations, and creative activities.

Family Science Nights are generously sponsored by



August 31, 2023: Out of this World
October 26, 2024: Spooky Science Spectacular
January 25, 2024: Under the Sea
May 2, 2024: LEGO Mania

BUILDING BOTS

Building Bots enables students in Kindergarten through 6th grade to engage in engineering challenges, team building, and creative robotic design. With different themes for each session, students will love coming to every session! This STEAM (Science – Technology – Engineering – Art – Mathematics) educational programming is a great way to excite students about learning. Equipment used includes LEGO Robotics (WeDo 2.0, Mindstorm EV3, SPIKE Essential, and SPIKE Prime), Ozobots, Osmos, and Spheros. K-2nd classes meet on the first Tuesdays of September - November and February - May, while 3rd-6th classes meet on the third Tuesdays.

Building Bots is generously sponsored by



K-2nd
September 5, 2023
October 3, 2023
November 7, 2023
February 6, 2024
March 5, 2024
April 2, 2024
May 7, 2024

3rd-6th
September 19, 2023
October 17, 2023
November 21, 2023
February 20, 2024
March 19, 2024
April 16, 2024
May 21, 2024

STEM

PROGRAM OFFERINGS

STEAM SPROUTS

The Petroleum Museum is excited to present STEAM Sprouts engaging pre-school children ages 4-5 in STEAM-based curriculum and challenges. The Fall 2023 session is themed TinyBots and will feature age appropriate coding and engineering challenges utilizing our new Sphero indi kits! Spring 2024 will feature new Literary STEAM curriculum. Two session options are available: 9:30 - 10:30 am OR 11:30 am - 12:30 pm. STEAM Sprouts is generously sponsored by **SM ENERGY**

2023 Fall STEAM Sprouts Schedule

September 18
September 25
October 2
October 9
October 16
October 23

2024 Spring STEAM Sprouts Schedule

March 25
April 1
April 8
April 15
April 22
April 29

STEAM Break

Join us for STEAM Break at the Petroleum Museum! STEAM Break is designed to assist parents and engage students during the winter and spring breaks and/or for homeschool students. STEAM Break: Toymakers Workshop will be held on December 27 - 29, 2023, STEAM Break: Winter WonderLAB will be held on January 3-5, 2024 and STEAM Break: LEGO ZOOventures will be held March 11-15, 2024.

Each program will have three session options available.
Parents have the option to register their young scientist for:

- A.M. session from 8:00 a.m. – 12:00 p.m.
- P.M. session from 1:00 p.m. – 5:00 p.m.
- All-Day session from 8:00 a.m. – 5:00 p.m.

The A.M. session will feature experiential learning through experiments, engineering challenges, and inventive projects. The P.M. session will include hands-on experiments, collaborative engineering projects, and games all centered around a popular kids' movie STEAM Break is open to students in 1st through 6th grade.

STEAM Break is generously sponsored by  Ovintiv

STEM

PROGRAM OFFERINGS

MAKERS GONNA MAKE COMMUNITY MAKERSPACE EVENT

Join us this fall for our new community makerspace event Makers Gonna Make! Once a month, students in 1st through 12th grade can utilize our new STEAM Education Center and all its resources. Students will have access to our TeacherGeek Makerspace Carts, tools, cutting machines, 3D design/printing materials, and more. These events are also ideal for completing STEAM projects.

Students in first through fifth grade will have access to the makerspace from 10 a.m. to 12 noon, and students in sixth through 12th grade will have access from 2 to 4 p.m.

Students can test the limits of their own creativity during these learner centered events. The cost per session is \$15 for Museum Members and \$25 for non members. Looking to save more? Discounts are available for six and 12 month bundles. Pre registration is required.

MAKERS GONNA MAKE SCHEDULE

September 9, 2023
October 7, 2023*
November 18, 2023*
December 9, 2023
January 13, 2024
February 10, 2024
March 9, 2024
April 13, 2024
May 11, 2024
June 8, 2024
July 13, 2024
August 10, 2024

These dates differ from the second Saturday due to existing programs.