PINK PALACE FAMILY OF MUSEUMS

EDUCATOR’S GUIDE 2019-2020

NEW YEAR! NEW THINGS TO DO!

WWW.MEMPHISMUSEUMS.ORG
The year had a different feel when I was a schoolkid. New Year’s was Labor Day. There were special smells—new textbooks; the ink in ballpoints. (The pens don’t have it any more. Maybe it was toxic?) And, the smells of art supplies, cafeteria food, and locker rooms. Sun’s angle changes, wind blows a chilly touch, and soon a leaf falls. For me, all that added up to excitement. I was a lucky kid. My parents and teachers cared, and we had wonderful museums in my town where Mom and Dad and my teachers would take us. Like most luck, I took mine for granted.

I hope that special feel is still there for you and for your students. And I really hope you will help us share our museums with them. Make it part of this special, lucky year for them.

Steve Pike
Director of Museums, Pink Palace Family of Museums

TENNESSEE SCIENCE ALLIANCE
The Pink Palace Family of Museums receives funding from the State of Tennessee for the Tennessee Science Alliance program, providing instructor-led, museum-based science education for Tennessee students. Both the Governor and Legislature are involved in affirming the importance of science education efforts and promoting museums as valued partners with school systems across the state. During the 2018-2019 school year, the Pink Palace Family of Museums served 146,017 students with this unique program.

EDUCATIONAL STANDARDS ARE NOTED NEXT TO EACH PROGRAM.
Tennessee Science Standards 2018
Mississippi College and Career Readiness Standards for Science 2018
Arkansas K-8 Science Standards 2015
Tennessee Social Studies Standards 2019
Mississippi College and Career Readiness Standards for Social Studies 2019
Arkansas Social Studies Curriculum Framework 2014
A List of standards is on pages 27 - 28.

OPEN DOORS, OPEN MINDS PROVIDES NO-COST ADMISSION FOR STUDENTS WHO QUALIFY
The Pink Palace Family of Museums believes students need to ‘see it to be it.’ To ensure no child is excluded from an entertaining and educational field trip, students who attend Title I schools in Tennessee receive select admission and programs at no cost to them. The following is provided at no cost through February 29, 2020: exhibits at the Pink Palace Museum, shows in the AutoZone Dome at the Sharpe Planetarium, tours at Mallory-Neely historic house, and Exploring Nature Your Way program at Lichterman Nature Center. The classroom outreach program Suitcases is available for two-week free rentals during the entire academic year.

Support of the Open Doors, Open Minds program is provided by:

Title 1 students served 2018-2019: 128,821

HAPPY NEW (SCHOOL) YEAR
The year had a different feel when I was a schoolkid. New Year’s was Labor Day. There were special smells—new textbooks; the ink in ballpoints. (The pens don’t have it any more. Maybe it was toxic?) And, the smells of art supplies, cafeteria food, and locker rooms. Sun’s angle changes, wind blows a chilly touch, and soon a leaf falls. For me, all that added up to excitement. I was a lucky kid. My parents and teachers cared, and we had wonderful museums in my town where Mom and Dad and my teachers would take us. Like most luck, I took mine for granted.

I hope that special feel is still there for you and for your students. And I really hope you will help us share our museums with them. Make it part of this special, lucky year for them.

Steve Pike
Director of Museums, Pink Palace Family of Museums
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* New Programs
CTI 3D GIANT THEATER
TEACHER’S CHOICE MOVIES

These movies are available through May 22, 2020. Educator’s guides for movies are available at www.memphismuseums.org

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**CTI 3D GIANT THEATER**

**TEACHER’S CHOICE MOVIES**

Follow singer/songwriter Aloe Blacc as he traces the roots of American music and explores the great musical cities – places like Memphis, New Orleans, Chicago, Nashville, Miami, New York City and more – where such electrifying art forms as jazz, the blues, country, soul and rock and roll were born.

**SUPPORTS CURRICULUM STANDARDS RELATED TO:**
- TN Soc St: C, H, TN
- MS Soc St: CR/HR
- AR Soc St: 12

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**Flight of Butterflies 3D**

An awe-inspiring tale of extraordinary insect endurance and human perseverance. Learn about the Monarch butterfly migration and the determined scientist who spent 40 years trying to discover exactly where the butterflies mysteriously disappeared when they flew south for winter.

**SUPPORTS CURRICULUM STANDARDS RELATED TO:**
- TN Sci: LS1, LS2, LS3, LS4
- MS Sci: L2, L3, L4
- AR Sci: LS2, LS3, LS4

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**JOURNEY TO THE SOUTH PACIFIC 3D**

Go on a breathtaking Giant Screen adventure to the lush tropical islands of remote West Papua, where life flourishes above and below the sea.

**SUPPORTS CURRICULUM STANDARDS RELATED TO:**
- TN Sci: LS1, LS2, LS4
- AR Sci: LS1, LS2, LS4/Soc St: 8, 9, 11

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**NATIONAL PARKS ADVENTURE 3D**

The U.S. National Park Service turned 100 years old in 2016, marking a major milestone in the preservation of America’s wild, untamed spaces. Go on the ultimate off-trail adventure into the mountains and canyons of our great outdoors.

**SUPPORTS CURRICULUM STANDARDS RELATED TO:**
- TN Sci: LS1, LS2, LS4
- MS Sci: LS1, LS3, LS4
- AR Sci: LS2, LS3, LS4

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**PREHISTORIC PLANET 3D**

On a thrilling ride, we spin back in time to an extraordinary prehistoric world: Alaska in the Cretaceous period, 70 million years ago – the last great flourish of the dinosaur era.

**SUPPORTS CURRICULUM STANDARDS RELATED TO:**
- TN: LS1, LS2, LS3, LS4, ESS2, ESS3
- MS: L1, L3, L4, E7, E9, E10
- AR: LS1, LS2, LS4, ESS2

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**Visit www.memphismuseums.org for more information and pricing!**

For Pricing & Booking Information, see pages 25 - 26
CTI 3D GIANT THEATER
TEACHER’S CHOICE MOVIES

Fly from the highest snow-covered mountains in Kenya, along great rivers, into steamy rainforests and wide-open savannahs.

EXTREME WEATHER 3D
Famed storm chaser Sean Casey once again thrills audiences with his cutting-edge look at tornadoes, hurricanes and lightning. Hold on to your seats!

DREAM BIG
From the Great Wall of China and the world’s tallest buildings, to underwater robots, solar cars and smart, sustainable cities, Dream Big celebrates the human ingenuity behind engineering marvels big and small, and reveals the heart that drives engineers to create better lives for people around the world.

MYSTERIES OF CHINA 3D
Through the lens of one of the great archaeological events of the modern age – the discovery of the Terracotta Warriors and the First Emperor’s Tomb. Mysteries of China reveals the underlying story of how this world superpower came to be.

tiny GIANTS 3D
A chipmunk in the wild woods and a grasshopper mouse in Arizona’s scorched deserts are both forced to grow up fast when they find themselves alone for the first time. Only by using their ingenious superpowers can our heroes not only stay alive, but also become masters of their universe.

SUPPORTS CURRICULUM STANDARDS RELATED TO:
» TN: LS2, LS4, ESS2, ESS3
» MS: L1, L3, L4, E7
» AR: LS2, LS4, ESS2, ESS3

SUPPORTS CURRICULUM STANDARDS RELATED TO:
» TN: ESS2, ESS3, ETS2
» MS: E9
» AR: ESS2, ESS3, ETS2

SUPPORTS CURRICULUM STANDARDS RELATED TO:
» TN: LS2, LS4, ESS2
» MS: L1, L3, L4
» AR: LS2, LS4, ESS2

SUPPORTS CURRICULUM STANDARDS RELATED TO:
» TN: LS1, LS2, LS4
» MS: Sci: 3, 4
» AR: Sci: LS1, LS2, LS4

SUPPORTS CURRICULUM STANDARDS RELATED TO:
» TN: LS2, LS4, ESS2, ESS3
» MS: L1, L3, L4, E7
» AR: LS2, LS4, ESS2, ESS3

SUPPORTS CURRICULUM STANDARDS RELATED TO:
» TN: ESS2, ESS3
» MS: E9
» AR: ESS2, ESS3, ETS2

SUPPORTS CURRICULUM STANDARDS RELATED TO:
» TN: EST1, EST2, EST3
» MS: Engineering
» AR: EST1, EST2, EST3

SUPPORTS CURRICULUM STANDARDS RELATED TO:
» TN Sci: LS1, LS2, LS4
» MS Sci: 3, 4
» AR Sci: LS1, LS2, LS4

SUPPORTS CURRICULUM STANDARDS RELATED TO:
» TN Soc St: C, G
» MS Soc St: G, H
» AR Soc St: 9, 12, 13

SUPPORTS CURRICULUM STANDARDS RELATED TO:
» TN: LS1, LS2, LS4
» MS Sci: 3, 4
» AR Sci: LS1, LS2, LS4
CTI 3D GIANT THEATER
NEW FEATURE FILMS

Super Power Dogs 3D
DATES: AVAILABLE BEGINNING SEPTEMBER 14, 2019.
Experience the life-saving superpowers and extraordinary bravery of some of the world's most amazing dogs. In this inspiring true story, our best friends are also real-life superheroes. Journey around the globe to meet remarkable dogs who save lives and discover the powerful bond they share with their human partners.

Dinosaurs of Antarctica
Dinosaurs of Antarctica will introduce audiences to the amazing and bizarre prehistoric creatures that inhabited Antarctic forests and swamps hundreds of millions of years ago. The film follows a team of paleoecologists on a quest to understand the southern continent’s profound transformation, from a warm and bio-diverse Mesozoic to the frozen desert we know today.

Turtle Odyssey
Turtle Odyssey explores the unique lifecycle of an Australian green sea turtle named Bunji and her incredible journey across the open ocean. The film follows Bunji the green sea turtle from a hatchling into adulthood as she swims thousands of miles, meets incredible creatures and has some really wild encounters.
CTI 3D GIANT THEATER
FEATURE FILMS

Apollo 11: First Steps 2D
DATES: AVAILABLE SCHOOL YEAR 2019/2020

A thrilling experience of NASA’s historic Apollo 11 mission. The filmmakers have unearthed a treasure trove of never-before-seen footage and audio recordings to reconstruct the mission in astonishing detail.

SUPPORTS CURRICULUM
STANDARDS RELATED TO:
» TN Sci: ESS2, ETS2
» MS Sci: E8
» AR Sci: ESS2, ETS2

Mysteries Of China 3D
DATES: AVAILABLE SCHOOL YEAR 2019/2020

Through the lens of one of the great archaeological events of the modern age – the discovery of the Terracotta Warriors and the First Emperor’s Tomb. Mysteries of China reveals the underlying story of how this world superpower came to be.

SUPPORTS CURRICULUM
STANDARDS RELATED TO:
» TN Soc St: C, G
» MS Soc St: G, H
» AR Soc St: 9, 12, 13

CTI 3D GIANT THEATER
HOLIDAY MOVIES

The Light Before Christmas 3D

NOVEMBER 16 - DECEMBER 24, 2019

Featuring state-of-the-art stop motion animation, this holiday movie casts a cozy Christmas spell, while examining holiday traditions and history.

SUPPORTS CURRICULUM
STANDARDS RELATED TO:
» TN Fun for all ages!
» AR Fun for all ages!
» MS Fun for all ages!
MAKING MEMPHIS: 200 YEARS OF COMMUNITY
ENDS OCTOBER 20, 2019
In 2019, Memphis celebrates 200 years since the city’s founding. At this special Bicentennial exhibit, the past, present, and future intertwine to tell the city’s history through the people, places, and events that have shaped our community.

Visitors can participate in the exhibit through interactive components, including choosing an artifact of the month and tracing their Memphis journey.
Visit the Mallory-Neely House and Lichterman Nature Center for additional Bicentennial exhibits.

SUN, EARTH, UNIVERSE
SHOWING THROUGHOUT 2019/20
In this hands on exhibition, you’ll learn about how scientists study the Earth, Sun, solar system and universe; design, build and test your own model spacecraft; use tools to see the invisible; and see how scientists use color to help us understand data.

CITY OF HOPE
Resurrection City & The 1968 Poor People’s Campaign
SEPTEMBER 14, 2019 – JUNE 21, 2020
City of Hope: Resurrection City and the 1968 Poor People's Campaign honors Dr. Martin Luther King, Jr.'s daring vision for economic justice and opportunity for every U.S. citizen. The poster exhibition examines the Poor People's Campaign — a grassroots, multiracial movement that drew thousands of people to Washington, D.C. for 43 days between May and June 1968. Demonstrators demanded social reforms while living side-by-side on the National Mall in a tent city known as Resurrection City. City of Hope: Resurrection City and the 1968 Poor People's Campaign is organized by the Smithsonian Institution Traveling Exhibition Service in collaboration with the National Museum of African American History and Culture.

Enchanted Forest Festival of Trees
NOVEMBER 16 – DECEMBER 31, 2019
A Memphis holiday tradition, the Enchanted Forest is full of delightful animated characters, model trains and dozens of beautifully decorated trees. This is a fundraiser on behalf of Le Bonheur Children's Hospital.

Note: Special ticketing prices apply to Enchanted Forest.
November: Monday - Saturday 9am-5pm, Sunday 12noon - 5pm
December: Monday - Thursday & Saturday 9am - 5pm, Friday 9am - 8pm, Sunday 12noon - 5pm
Enchanted Forest Fridays: December 6, 13, 20, 27
PINK PALACE
TEMPORARY EXHIBITS

RACE to the End OF THE EARTH

FEBRUARY 8 – MAY 17, 2020

Race to the End of the Earth recounts one of the most stirring tales in the annals of Antarctic exploration, the contest to reach the South Pole. This exhibition focuses on the challenges that the two leaders—Roald Amundsen on the Norwegian side and Robert Falcon Scott on the British — faced as they undertook their separate 1,800-mile journeys from the edge of the Ross Ice Shelf to the South Pole and back.

Photographs, paintings, and rare historical artifacts from these expeditions place visitors in the midst of Antarctic exploration and research at the dawn of the last century. Highlights include clothing and equipment used by both crews during their journeys; life-sized models of portions of their base camps; and a diorama featuring the largest penguin species alive today — the Emperor Penguin.

Hands-on activities help visitors of all ages understand what it would have been like to travel to the coldest place on Earth 100 years ago, as well as what it is like to conduct research there today. Visitors choose a character card featuring a member of one of the expeditionary teams and, while moving through the show, find clues about the character’s experiences on the way to the South Pole.

TIGER HOOPS: 100 YEARS OF MEMPHIS BASKETBALL

MARCH 7 – OCTOBER 4, 2020

Tiger Hoops: 100 Years of Memphis Basketball explores the history of the women’s and men’s basketball programs from their beginnings as the West Tennessee State Normal School to the present. The men’s team at what is now the University of Memphis is celebrating its 100th anniversary. Over the course of its history, this squad has not only reflected the state of this educational institution, but also evolved into a representation of the city itself. Sometimes for better, and sometimes for worse, Tiger basketball tells a story about Memphis. The exhibit is guest curated by Dr. Aram Goudsouzian, University of Memphis History Department Chair. You can find more information at www.tigerhoops100years.com.

ONE HALF OF THE PEOPLE

APRIL 6 – MAY 25, 2020

One Half of the People highlights stories from American history about women’s rights and roles in our society. At the founding of our country, women’s roles were rigidly defined. The women’s sphere dictated that as wife, and then mother, women were caretakers for domestic issues. Sometimes quietly, sometimes with a roar, women have redefined that sphere. From the campaign for full voting rights, to expanding equality through legislation, see how those before us obtained many of the rights and privileges of citizenship enjoyed by women today.
SKELETONS
Skeletons and skulls of reptiles, amphibians, fish, birds and mammals illustrate biological adaptation and evolution. See how an animal’s skeleton reflects its way of life.

HUMAN EVOLUTION TIMELINE
From discoveries made at different locations in Africa, Europe and Asia, scientists have found evidence of how our ancestors evolved. Track the progression of our species from our humble beginnings to the cunning, social creatures we are today.

OXBOW LAKE
Detailed dioramas and color photographs show animals and plants that inhabit river, lowland, upland and disturbed environments in this unique Mississippi Valley ecosystem.

SMALL WORLDS
Learn about the history of biology illustrated by the development of the microscope. Replica microscopes include those used by Anton van Leeuwenhoek and Charles Darwin. Peek into one today.

COON CREEK & FRANKSTOWN FOSSIL SITES
70 million years ago, the Mid-South lay beneath an inland sea. Examine fossil remains of a 30-foot mosasaur and hundreds of other plant and animal species excavated from a west TN creek bed. Identify fossil sharks’ teeth, shells, reptile and dinosaur bones discovered during road construction in north MS.

GEOLOGY
See exceptional examples of rock and mineral specimens. Trace the history of Earth from its formation 4.6 billion years ago to the last Ice Age. Learn about dinosaurs, mastodons, giant amphibians and other fascinating creatures. Monitor earthquakes as they happen.

NATIVE AMERICANS
The Museum’s extraordinary collection of beautiful pottery and finely-crafted tools reveals much about the myths, beliefs and lifestyle of these First Americans. Learn how contact with explorers and settlers changed this thriving civilization forever.

HISTORY OF MEMPHIS 1800-1900
Discover Memphis’ fascinating story, from a sleepy frontier river town to a modern city. See a reconstructed log cabin from the 1840s, an upscale 1850s parlor, a Civil War cannon and crew, and an elaborate 1890s music room.

SADDLEBAGS TO SCIENCE 1830-1930
Explore the history of medicine, dentistry, nursing and pharmacy in Memphis. See a frontier doctor leeching a woman with tuberculosis, an 1890s doctor’s office and a 1920s dentist office. Visit a well-stocked drugstore and pharmacist’s workroom of the early 1900s.

VISIT THE NEWLY-RENOVATED PINK PALACE MANSION!
Clyde Parke Circus… Piggly Wiggly… Country Store… come experience some of our most popular exhibits and renovated mansion.
PINK PALACE
PERMANENT MANSION EXHIBITS

COUNTRY STORE

Before self-service grocery stores, there were country stores, which supplied people with goods from the cradle to the grave. Shoppers gave clerks a list, and then the clerks selected the goods. They also served as neighborhood gathering places and as the post office. This exhibit recreates an early twentieth century country store with a wood burning stove, post office window, back office and sundry goods.

PIGGY WIGGLY

Clarence Saunders revolutionized the shopping world with his innovation of the self-service grocery store. Our recreated model allows visitors to walk through a 1916 Piggly Wiggly the way shoppers did then. Saunders designed his stores so that everyone entered through a turnstile, walked past all of the goods in the store, checked out and exited through a turnstile.

MANSION INTO MUSEUM

This gallery features construction images of the mansion and panels explaining what happened to the Pink Palace after Clarence Saunders declared bankruptcy. Panels include discussion of how the city developed a plan to open a museum in the former house.

MANSION AS MUSEUM

This gallery chronologically traces the growth of the Memphis Museum (later renamed the Pink Palace Museum) by displaying artifacts in order of their acquisition, beginning with objects that were in the mansion when it opened as a museum in 1930 and ending with what was here when the mansion closed to the public in 1975.

The shrunken head is in this gallery.

MEMPHIS STREET LIFE 1915 - 1930

The cases in this area explain aspects of Memphis life in the period surrounding the early years of the Piggly Wiggly. Cases include commerce, World War I and music. Two important artifacts are on display in this area — W.C. Handy’s trumpet and a stained-glass window from T.H. Hayes & Sons Funeral Home, one of the longest operating black-owned business in Memphis.

ROTONDA

There is a graphic timeline that is repeated on both sides of the rotunda. It uses graphics and words to explain the history of the mansion and its life as a museum. This area also contains architectural drawings of the mansion.

COSSITT LIBRARY

The Cossitt Gallery recreates the first museum in Memphis, which was on the upper floor of the Cossitt Library’s tower. There are over 600 artifacts on display in a manner similar to how they were shown in the early 19th century. Artifacts include taxidermied birds, curios, Mississippian pottery, antiquities and weapons. The artifacts at the Cossitt Library became one of the first collections acquired by the Pink Palace.

CLARENCE SAUNDERS AND THE PINK PALACE

This area tells the story of Clarence Saunders’ early life and the beginnings of his idea for Piggly Wiggly. Panels discuss his early life, his work as a wholesale drummer selling to country stores, and his joint wholesale business venture.

The panels in “Saunders Loses His Fortune” detail how Clarence Saunders lost control of Piggly Wiggly, his fortune and the Pink Palace mansion.

CLYDE PARKE MINIATURE CIRCUS GALLERY

Stationed on the second floor of the mansion, interpretive panels detail the history of circuses in Memphis, Clyde Parke’s biography and interesting facts about the circus. There is also an interactive area where kids can make their own circus on our magnet wall, take a photo in a circus poster and explore a life-size version of the miniature circus’ ticket wagon.
### AUTOZONE DOME AT THE SHARPE PLANETARIUM

**TEACHER’S CHOICE SHOWS**

These shows are available through May 22, 2020.

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<tr>
<th>SHOW</th>
<th>GRADES</th>
<th>DESCRIPTION</th>
<th>SUPPORTS CURRICULUM STANDARDS RELATED TO:</th>
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</table>
| **ASTRONAUT (GRADES 4 – 12)** | | The exploration of space is the greatest endeavour that humankind has ever undertaken. What does it take to become an astronaut? Find out the answers in this show. | » TN: ESS1  
» MS: E8  
» AR: ESS1 |
| **BLACK HOLES (GRADES 4 – 12)** | | Where do they come from? Where do they go? How do we find them? Is there one on Earth’s horizon? What was Einstein’s connection to them? Find out the answers in Black Holes. | » TN: ESS1  
» MS: E8  
» AR: ESS1 |
| **EARTH, MOON AND SUN (GRADES 4 – 7)** | | Explore the relationship between the Earth, Moon and Sun with the help of Coyote, an amusing character adapted from Native American oral traditions who has many misconceptions about our home planet and its most familiar neighbors. | » TN: ESS1  
» MS: E8  
» AR: ESS1 |
| **FIREFALL (GRADES 4 – 12)** | | From possibly providing water and life, to the threat of worldwide destruction, this is the story of comets. | » TN: ESS1  
» MS: E8  
» AR: ESS1 |
| **LIFE: A COSMIC STORY (GRADES 4 – 12)** | | Take a journey through time, see how life began and evolved right here in our own Milky Way Galaxy. | » TN: ESS1  
» MS: E8  
» AR: ESS1 |
| **ONE WORLD, ONE SKY (PRE-K – 2)** | | Follow Sesame Street’s Big Bird and Elmo as they explore the night sky with Hu Hu Zhu, a Muppet from Zhima Jie, the Chinese co-production of Sesame Street. | » TN: ESS1  
» MS: E8  
» AR: ESS1 |
| **PERFECT LITTLE PLANET (GRADES 3 – 5)** | | Imagine the ultimate space vacation. Discover our solar system through a different set of eyes – a family from another star system seeking the perfect vacation spot. Fly over the surface of Pluto. Sail through the rings of Saturn. Feel the lightning storms at Jupiter. And walk on the surface of Mars. Which destination would you choose? | » TN: ESS1, ESS2  
» MS: E7, E8  
» AR: ESS1 |
| **PHANTOM OF THE UNIVERSE (GRADES 6 – 12)** | | Witness an exciting exploration of dark matter, from the Big Bang to its anticipated discovery at the Large Hadron Collider. | » TN: ESS1  
» MS: E8  
» AR: ESS1 |
| **SEASONAL STARGAZING (GRADES 4 – 12)** | | Hop through constellations, learn cool star names, and groove to planetarium space music in this full-dome audiovisual experience. | » TN: ESS1  
» MS: E8  
» AR: ESS1 |
SECRET OF THE CARDBOARD ROCKET (GRADES 1 – 3)
Embark on an amazing adventure as two children spend a night touring the solar system alongside their ship's navigator, a talking astronomy book.

SUNSTRUCK (GRADES 4 – 12)
Travel back to the beginning of time and experience the birth of the Sun. Discover how it came to support life, how it threatens life as we know it, and how its energy will one day fade away.

WE ARE ALIENS (GRADES 4 – 12)
Earth. It's now a small world. The human race is connected better and faster than ever before but what about elsewhere? Could we one day be part of a galactic community sharing our knowledge and ideas? Or, is Earth the only planet with life?

WE ARE ASTRONOMERS (GRADES 4 – 12)
We Are Astronomers reveals the global collaboration, technology and dedication required to answer the unresolved questions of the Universe.

SEASON OF LIGHT (GRADES ALL AGES)
Our planetarium show for the holidays, Season of Light is an exploration of the astronomical meanings behind seasonal traditions, including the “Star over Bethlehem.”

LASER LIGHT SHOW - LEGENDS OF THE NIGHT SKY: ORION
A lighthearted and imaginative look at the myths and stories associated with the constellation Orion, the great hunter of the winter sky.

BONUS! PARADIGM SHIFT
Two laser shows for the price of one. Add this 6-minute show to other Laser Shows at no additional cost.
Take a journey through constellations, sail across a starry night sky, and experience the wonders of our universe told through story and laser light.

LASER LIGHT SHOW - LEGENDS OF THE NIGHT SKY: PERSEUS AND ANDROMEDA
A lighthearted and imaginative look at the myths and stories associated with the constellations Perseus and Andromeda.

BONUS! PARADIGM SHIFT
Two laser shows for the price of one. Add this 6-minute show to other Laser Shows at no additional cost.
Take a journey through constellations, sail across a starry night sky, and experience the wonders of our universe told through story and laser light.
## EDUCATION

### SCIENCE LAB EXPLORATIONS

#### (GRADES K – 8) LENGTH: 45 – 60 MINUTES

**From glaciers to reindeer, students discover the similarities and differences between the Arctic and Antarctic. Investigate the climate and explore the adaptations of the many animals living in these extreme environments.**

**SUPPORTS CURRICULUM STANDARDS RELATED TO:**
- TN Sci: LS1, LS2, LS4
- MS Sci: L1, L3, L4
- AR Sci: LS1, LS2, LS4

#### (GRADES PRE-K – 2) LENGTH: 45 – 60 MINUTES

**This “please touch” class has eye-opening experiments, aromas to sniff, sounds to hear and treats to taste. Learn how our sense organs help us explore the world and avoid danger.**

**SUPPORTS CURRICULUM STANDARDS RELATED TO:**
- TN Sci: LS1
- TN Health: 3, 5
- MS Sci: L1, L4
- MS Health: N
- AR Sci: LS1
- AR Health: 3

#### (GRADES PRE-K – 3) LENGTH: 45 – 60 MINUTES

**OLDER STUDENTS WELCOME**

Become a young paleontologist. Excavate dinosaur fossils. Compare eggs, teeth, skulls, claws and sizes of various dinosaurs. Investigate the “dino” diet and touch real dinosaur eggs and bones.

**SUPPORTS CURRICULUM STANDARDS RELATED TO:**
- TN Sci: LS1, LS4
- MS Sci: L1, L3, L4
- AR Sci: LS1, LS4

#### (GRADES 1 – 5) LENGTH: 45 – 60 MINUTES

Build a density column. Float a paper clip on water. Test the strength of a magnet. Use household materials to explore properties of matter including density, surface tension and magnetism.

**SUPPORTS CURRICULUM STANDARDS RELATED TO:**
- TN Sci: P51, P52
- MS Sci: P5, P6
- AR Sci: P51, P52

#### (GRADES K – 8) LENGTH: 45 – 60 MINUTES

Explore three requirements needed to create sound. Use a Slinky to demonstrate different types of waves. Find out how sound waves move through air and water. Learn how our ears receive sound and what we use to interpret sound.

**SUPPORTS CURRICULUM STANDARDS RELATED TO:**
- TN Sci: P51, P53, P54
- MS Sci: P5, P6
- AR Sci: P51, P53, P54

#### (GRADES 3 – 8) LENGTH: 45 – 60 MINUTES

It reflects, it refracts, it colors our world. Join us for an interactive program all about the science of light. Learn how light bends through different materials. Discover how mirrors can alter your perception.

**SUPPORTS CURRICULUM STANDARDS RELATED TO:**
- TN Sci: P51, P53, P54
- MS Sci: P5, P6
- AR Sci: P51, P53, P54

#### (GRADES 1 – 8) LENGTH: 45 – 60 MINUTES

Conduct tests that give clues to a mineral’s identity. Examine minerals that glow in the dark. Find out how rocks are formed and why they look the way they do. Discover some surprising uses for rocks and minerals.

**SUPPORTS CURRICULUM STANDARDS RELATED TO:**
- TN Sci: E552
- MS Sci: E7, E10
- AR Sci: E552

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Pre/post visit materials available at www.memphismuseums.org/guides
Cells & Microscope Techniques

**Cell Structure (GRADES 3 – 8) LENGTH: 45 – 60 MINUTES**
Take a closer look through the lens of a compound microscope. View slides of plant and animal cells. Develop microscope and scientific note-taking skills.

**Mitosis (GRADES 6 – 8) LENGTH: 45 – 60 MINUTES**
Learn to focus a compound light microscope while viewing slides of plant and animal cell mitosis. Draw and identify phases of mitosis.

**SUPPORTS CURRICULUM STANDARDS RELATED TO:**
- TN Sci: L51
- MS Sci: L1
- AR Sci: L51

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**Dive into Sharks**

**(GRADES 3 – 8) LENGTH: 45 – 60 MINUTES**
Discover why sharks are the ocean’s “master predators.” Hold a shark jaw. Inspect a fossil shark tooth. Examine preserved dogfish shark specimens to learn about specialized adaptations of shark skeletons, eyes, teeth and senses.

**SUPPORTS CURRICULUM STANDARDS RELATED TO:**
- TN Sci: L51, L52, L53, L54
- MS Sci: L1, L2, L3, L4
- AR Sci: L51, L52, L53, L54

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**Weather Whys**

**(GRADES K – 8) LENGTH: 45 – 60 MINUTES**
Observe clouds and learn how weather measurement tools can predict the weather. Investigate air pressure while a miniature tornado forms. Learn what you can do to keep safe in floods, thunderstorms and tornadoes.

**SUPPORTS CURRICULUM STANDARDS RELATED TO:**
- TN Sci: ESS2
- MS Sci: E9
- AR Sci: ESS2

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**African American History Trail**

**(GRADES 4 – 8) LENGTH: 45 – 60 MINUTES**
Hear the stories of eight African American residents who contributed to our city’s rich culture. Follow a timeline of their lives. See emancipation papers, medical instruments related to yellow fever, and the uniform of a WWI soldier as we guide you through Memphis history.

*(Note: This program is conducted in the permanent exhibits.)*

**SUPPORTS CURRICULUM STANDARDS RELATED TO:**
- TN Soc St: C, E, H, TN
- MS Soc St: H, CI, CR
- AR Soc St: 5, 10, 12, 13

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**Native Americans of the Mid-South**

**(GRADES K – 5) LENGTH: 45 – 60 MINUTES**
Touch buffalo hide. Inspect spear points. Grind corn. Use museum artifacts to experience how the earliest Americans lived, hunted, grew crops, formed dugout canoes and played games in the Mississippi Valley.

**SUPPORTS CURRICULUM STANDARDS RELATED TO:**
- MS Soc St: H
- AR Soc St: 9, 12, 13

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**On the Mid-South Frontier**

**(GRADES 3 – 8) LENGTH: 45 – 60 MINUTES**
Split a roof shingle. Wash clothes against a metal washboard. Practice rolling an old fashioned hoop. Observe and participate in demonstrations of skills required for survival on the Mid-South frontier.

**SUPPORTS CURRICULUM STANDARDS RELATED TO:**
- TN Soc St: C, E, G, H, TN
- MS Soc St: H, CR, E
- AR Soc St: 1, 5, 9, 12, 13

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*Pre/post visit materials available at www.memphismuseums.org/guides*
EDUCATION
DISCOVERY THEATER EXPLORATIONS
Tuesday – Friday, 9:30am & 11am
For groups of 33 – 100
For Pricing & Booking Information, see pages 25 - 26

(Grades K – 8) Length: 45 – 60 Minutes
From glaciers to reindeer, students discover the similarities and differences between the Arctic and Antarctic. Investigate the climate and explore the adaptations of the many animals living in these extreme environments.

Supports Curriculum Standards Related To:
- TN Sci: L5, L5, L5
- MS Sci: L1, L3, L4
- AR Sci: L5, L5, L5

(Grades K - 8) Length: 45 – 60 Minutes
Explore three requirements needed to create sound. Use a Slinky to demonstrate different types of waves. Find out how sound waves move through air and water. Learn how our ears interpret sound.

Supports Curriculum Standards Related To:
- TN Sci: P5, P5, P5
- MS Sci: P5, P6
- AR Sci: P5, P5, P5

(Grades 3 - 8) Length: 45 – 60 Minutes
It reflects, it refracts, it colors our world. Join us for an interactive program all about the science of light. Learn how light bends through different materials. Discover how mirrors can alter your perception.

Supports Curriculum Standards Related To:
- TN Sci: P5, P5, P5
- MS Sci: P5, P6
- AR Sci: P5, P5, P5

Static Electricity
(Grades 2 – 6) Length: 45-60 Minutes
Charge it up! Watch pie pans float. Create lightning and link hands to light up a light bulb. Learn how atoms, positive and negative charges, conductors and insulators work to produce static electricity.

Supports Curriculum Standards Related To:
- TN Sci: P5, P5
- MS Sci: P5, P6
- AR Sci: P5, P5

Physical Science Sampler
(Grades 2 – 6) Length: 45-60 Minutes
Hold a balloon aloft in a stream of air. Use static electricity to light a fluorescent tube and stand a student’s hair on end. Participate in physical science demonstrations that motivate students to hypothesize “how” and “why” things happen.

Supports Curriculum Standards Related To:
- TN Sci: P5, P5
- MS Sci: P5, P6
- AR Sci: P5, P5

Static Electricity OR
Physical Science Sampler

(Grades K – 3) Length: 45 – 60 Minutes
Older Students Welcome
Explore the life of dinosaurs by examining fossils. Compare their skulls, teeth, claws and sizes of various dinosaurs. Investigate the “dino” diet and touch real dinosaur eggs and bones.

Supports Curriculum Standards Related To:
- TN Sci: L5, L5
- MS Sci: L1, L3, L4
- AR Sci: L5, L5

Pre/post visit materials available at www.memphismuseums.org/guides
EDUCATION
DISCOVERY THEATER EXPLORATIONS (CONT.)

(TUESDAY – FRIDAY, 9:30AM & 11AM)
FOR GROUPS OF 33 – 100
FOR PRICING & BOOKING INFORMATION, SEE PAGES 25 - 26

(GRADES K – 8) LENGTH: 45 – 60 MINUTES
Observe clouds and learn how weather measurement tools can predict the weather. Investigate air pressure while a miniature tornado forms. Learn what you can do to keep safe in floods, thunderstorms and tornadoes.

WEATHER WHYS

SUPPORTS CURRICULUM
STANDARDS RELATED TO:
» TN Sci: ESS2
» MS Sci: E9
» AR Sci: ESS2

(GRADES K – 5) LENGTH: 45 – 60 MINUTES
Touch buffalo hide. Inspect spear points. Grind corn. Use museum artifacts to experience how the earliest Americans lived, hunted, grew crops, formed dugout canoes and played games in the Mississippi Valley.

Native Americans
of the Mid-South

SUPPORTS CURRICULUM
STANDARDS RELATED TO:
» TN Soc St: C, G, H, TN
» MS Soc St: H
» AR Soc St: 9, 12, 13

(GRADES 3 – 8) LENGTH: 45 – 60 MINUTES
Split a roof shingle. Wash clothes against a metal washboard. Practice rolling an old-fashioned hoop. Observe and participate in demonstrations of skills required for survival on the Mid-South frontier.

On the
Mid-South Frontier

SUPPORTS CURRICULUM
STANDARDS RELATED TO:
» TN Soc St: C, E, G, G/C, H, TN
» MS Soc St: CI, H, E
» AR Soc St: 1, 5, 9, 12, 13

(GRADES 4 – 8) LENGTH: 60 MINUTES
Proteins, carbohydrates, fats – oh my! Don’t forget serving sizes and calories! Come learn about nutrition labels and the nutrients that are in the foods we eat. After participating in this class, your students are bound to make healthy food choices!

LEARNING LABELS

SUPPORTS CURRICULUM
STANDARDS RELATED TO:
» TN Health: 3, 5
» MS Health: 5
» AR Health: 3, 12

(GRADES 2 – 6) LENGTH: 45 – 60 MINUTES
AVAILABLE NOVEMBER 18 – DECEMBER 20 ONLY!!
Enjoy the magic of the season with this holiday show. Light the night with chemistry candles, tinker with tinsel, and frolic with magic snow! See how electricity, polymers, and the scientific method make the season merry and bright.

MAGIC OF SCIENCE
Holiday Edition

SUPPORTS CURRICULUM
STANDARDS RELATED TO:
» TN Sci: PS1, PS3
» MS Sci: PS, P6
» AR Sci: PS1, PS3

3050 Central Avenue, Memphis, TN 38111 / www.memphismuseums.org / BOOK YOUR FIELD TRIP TODAY! 901.636.2362
Discover more by bringing the museum to your students’ finger tips. Educators will teach to all ages through interactive activities in the galleries using our permanent and traveling exhibits.

**DISCOVERY DAYS ARE FREE FROM 9 –12 WITH MUSEUM EXHIBIT ADMISSION**

**SPONSORED BY** INTERNATIONAL PAPER

This grant from International Paper Foundation will provide no-cost admission to up to 3,500 Title I students to attend Discovery Days programs between September 2019 and February 2020.

**MEMORABLE MEMPHIANS**

Memphis turned 200 in 2019! Celebrate our city’s birthday by meeting some of the historic figures that called Memphis home. Learn how these Memorable Memphians made their mark on history and science through hands-on demonstrations and artifacts that bring them to life.

**THURSDAY & FRIDAY, SEPTEMBER 12 & 13, 2019**

**THURSDAY & FRIDAY, OCTOBER 3 & 4, 2019**

**THURSDAY & FRIDAY, NOVEMBER 21 & 22, 2019**

**LIFE AT THE ENDS OF THE EARTH**

Our spring exhibit *Race to the Ends of the Earth*, tells of the story of the first intrepid explorers to reach the South Pole. While this forbidding environment is incredibly dangerous for humans, many animals call it home! Join us as we use specimens and hands-on activities to explore the special adaptations that help them survive in this harsh but fragile environment.

**THURSDAY & FRIDAY, DECEMBER 12 & 13, 2019**

**THURSDAY & FRIDAY, APRIL 2 & 3, 2020**

**THURSDAY & FRIDAY, FEBRUARY 6 & 7, 2020**

**THURSDAY & FRIDAY, MARCH 5 & 6, 2020**

**DISCOVERY QUEST**

These worksheets exercise students’ critical thinking skills as they engage with museum exhibits in a new way! Curriculum-aligned activities help students review what they are learning in class while teaching them how to make the most of their museum visit. Activities focus on the Museum’s Natural History exhibits.

Discovery Quests are available for students in grades: K-1, 2-3, 4-5, and 6-8, to meet your student’s needs.

Each Discovery Quest comes with a handy chaperone guide!

Download Discovery Quests and answer keys from the Museum’s website at www.memphismuseums.org/education.

**SCAVENGER HUNT**

Search the museum’s permanent exhibits to find the answers in this scavenger hunt with a simple question and answer format. Download the Scavenger Hunt and answer key from the Museum’s website at www.memphismuseums.org/education or on the Pink Palace app.

**EQUATOR TREK**

Review geography, social studies, and biology concepts by following the journey of our Pink Palace Education Team to the Equator! Learn about the Earth as a whole by taking a closer look at the Amazon Rainforest, Andes Mountains, and Galapagos Islands through journal entries, photos, and printable activities (including worksheets, puzzles, recipes, and more!)

Equator Trek is a free online resource available in both English and Spanish at memphismuseums.wordpress.com/category/equator trek
**Passport Program Topics**

- Pollinators (New this Fall)
- Giant Plant & Animal Cell Models
- Animal & Plant Cell Models (Animal Cell Mitosis Models) (Set of 9 phases)
- Compound Light Microscope (with set of prepared slides - Cell Structure, Cell Mitosis or Household Curiosities)
- Ten Microslide viewers (with slide strips - Cell Structure, Cell Mitosis, or Cells of the Body)
- Extreme Cold Weather Gear
- Sharks
- Weather Instruments
- Tree Cookies (cross-sections of tree branch/trunk)
- Leaves & Seeds
- Insects
- Get Fit
- Learning Labels (Sponsored by Baptist Memorial Health Care)
  - This Kit is FREE with the Learning Labels Program

**Memorable Memphians: Highlighting Our Hometown Heroes**

**New in the Fall of 2019**
- Arts – W. C. Handy, Burton Callcott, and STAX
- Yellow Fever
- The Chickasaw Nation in the Removal Era

**New in the Spring of 2020**
- Sports – The Memphis Red Sox, Sputnik Monroe, and Penny Hardaway
- Clarence Saunders, Entrepreneur
- Millie Swann, Ida B. Wells, Julia B. Hooks, and Rabbi James Wax
- Robert R. Church and Earnest Withers

Our PASSPORT Program is your students’ “Ticket to LEARNING!” These outreach kits feature hands-on science teaching materials available for use in Memphis-area classrooms for two-week reservation periods. Objects are packed into a tool-box style container with photos, activity cards and other materials.

Cost is just $10 per topic.


**Delivery and return** available through Shelby County Schools mail services. All others pick up and return Passports at Pink Palace Security Office Monday - Saturday, 9am - 5pm, and Sunday, noon - 5pm.
LICHTERMAN NATURE CENTER

The first accredited Nature Center in the U.S., Lichterman Nature Center features both live and preserved animal specimens, interactive exhibits, and lake, meadow and forest habitats. Putting students in touch with nature has never been easier. The Backyard Wildlife Center and Visitor’s Center are filled with engaging displays that help students make meaningful connections to major themes in life science.

LNC EDUCATION PROGRAMS & TOURS

Instructor-led programs give students the opportunity to immerse themselves in the natural world. Lichterman offers the ideal culminating experience for science units and will allow students a safe and engaging way to explore nature as they learn.

Please note: Chaperone fee for all programs is $4.00, with one chaperone for every 10 students to receive FREE admission.

HABITAT DETECTIVES (GRADES K – 12)
Investigate the lake, forest and meadow habitats with interactive learning that incorporates live and preserved wildlife specimens highlighting seasonal, environmental, ecological and conservation concepts.

Fee: $7.00 per student
Up to 180 Students
Up to 2 hours

IN YOUR BACKYARD (GRADES K – 8)
Meet your wild neighbors! See live animals, preserved specimens and learn more about animals that call the Mid-South home.

Fees: $6.00 per student
Up to 150 Student
45 minutes

WILD LUNCH (FUN FOR ALL AGES!)
Every Tuesday-Saturday in the Backyard Wildlife Center at noon, come and observe the snakes, turtles or raptors at lunch time. Ask questions, meet animals and find out what the animals are having for lunch!

Free with admission.

COME TO YOUR SENSES (GRADES PRE-K – 1)
Humans use five senses to survive and explore the world around them. Use your own senses to learn more about the senses that other animals use to survive.

Fees: $6.00 per student
Up to 30 Students
Up to 1 hour

EXPLORING NATURE YOUR WAY (GRADES PRE-K – 12, SELF-GUIDED)
Walk a forest boardwalk two stories high. Discover what lives in the lake at our underwater viewing area. Watch fish and turtles from the lake & marsh boardwalks and check out interactive exhibits and beautiful trails!

Fee: $4.00 per student
(FREE for TN Title 1 students)
For $2 add a Naturalist Notebook to enhance your students’ experience.

NATURALIST NOTEBOOKS (GRADES 2 – 6)
Add an educational nature journal experience to enhance your students’ learning experience. Take-home souvenir notebooks encourage students to draw pictures and record observations as they explore habitats, seasonal changes and adaptations at the Nature Center.

Fee: $2.00 per student
(Note: Bring your own pencil to fill out Notebooks, as they are not provided on site.)

SUPPORTS CURRICULUM STANDARDS RELATED TO:

- TN Sci: I, 1, 2, 4, 5
- MS Sci: 1a/b, 1c, 3a, 3b, 3c, 3d, 3e
- AR Sci: 1, 2, 3, 4

SUPPORTS CURRICULUM STANDARDS RELATED TO:

- TN Sci: I, 1, 2, 3, 5
- MS Sci: 1a, 3a, 3b, 3c, 3d, E(10)
- AR Sci: 1, 2, 3, 4
LNC EDUCATION PROGRAMS & TOURS CONT’D

NATURE 2 U: ON & OFFSITE
(GRADES PRE-K – 8)
Available afternoons year-round and selected mornings during the school year.
Come to us or let us travel to your classroom. Activity-packed programs include live or preserved animals, educational games and hands-on exploration.

TOPICS – Amphibians, Arachnids, Bats, Bees, Birds, Butterflies, Insects, Mammals, Nocturnal Animals, Pond life, Reptiles, Spiders

Offsite Fees:
$100 per program.
$75 (2 consecutive programs) per program.
$65 (3 or more consecutive programs) per group.
Each program serves 25 - 30 students. 45 minutes.

Note: Mileage fee added for visits more than 20 miles from the Nature Center.
This program is also offered for larger groups for an additional fee.

ANIMALS ALIVE! GRANT PROGRAMS
(GRADES K – 8)
Students will gain a new respect and appreciation for native wildlife, and sharpen sensory and observation skills. Presentations include live animals, preserved specimen and interactive demonstrations. This program is FREE of charge for up to 2,000 Title 1 students. Programs will be offered in August-September and December-March.
Up to 150 Students. Up to 1 hour.

SUPPORTS CURRICULUM STANDARDS RELATED TO:
» TN: LS (1-4), ESS3
» MS: L (1-4), E10
» AR: LS 1,2,3,4

SPONSORED BY
INTERNATIONAL PAPER

NATURE LAB SERIES

OWL PELLET DISSECTION
(GRADES 4 – 8)
High school groups welcome.
Pre and post-visit materials available.
Discover the WHOOO and why behind owl pellets! Students are introduced to the biology and life history of owls while learning how to use dissecting instruments in the laboratory. Students dissect owl pellets in the lab and use data to determine the habitat use of owls.

SUPPORTS CURRICULUM STANDARDS RELATED TO:
» TN: LS (1,2,4), ESS3, ETS2
» MS: L (1-4), E10
» AR: LS 1,2,3,4

WATER ECOLOGY
(GRADES 5 – 8)
Available March - November.
High school groups welcome.
Pre and post-visit materials available.
Leap into lake life at Lichterman Nature Center! Students learn field collection techniques for sampling water, collecting aquatic invertebrates and testing water quality of Mertie's Lake for parameters including pH, dissolved oxygen, temperature and turbidity. Students then work in the lab area to investigate hypotheses and experiments measuring and recording abiotic and biotic factors to describe the water quality of the Lake using the Scientific Method, technology and math skills.

SUPPORTS CURRICULUM STANDARDS RELATED TO:
» TN: LS (1-4), ESS3, ETS2
» MS: L (1-4), E10
» AR: LS 1,2,3,4

BOOK YOUR FIELD TRIP TODAY! 901.636.2221 or by email: nature.reservations@memphistn.gov

5992 Quince, Memphis, TN 38119 / www.memphismuseums.org
Despite the negative impacts that urbanization can have on an environment, some species adapt and thrive. Coyotes are one species that have adapted to live in urban environments, feeding on the trash and rodents that are associated with human settlements. Originally, red wolves (Canis rufus) were the dominant canines in the Mid-South, but by the 1970s, their population was eradicated from the area. After their elimination, the coyote population spread into the area. Historically, coyotes were confined to the western United States, but they are now found across the country in both rural and urban habitats.

Nine-banded armadillos (Dasypus novemcinctus) are common in modern day Shelby County, but it has not always been that way. The first documented sighting of an armadillo in our county was in 1974, and sightings continued to be rare until the 2000s. Prior to 1850, nine-banded armadillos were not found north of the Rio Grande River. Now armadillos are as far north as Illinois, potentially spreading as far north as New York. Researchers believe the rapid range expansion is because of decreased predators, milder winters, and high reproductive rate of armadillos. The addition of bridges and highways sped up the expansion, serving as routes to new areas and allowing armadillos to cross barriers such as the Rio Grande River.
INCLEMENT WEATHER/CANCELLATION POLICIES

INCLEMENT WEATHER AND CANCELLATION POLICIES: Programs are conducted rain or shine. During inclement weather, programs are presented indoors. If you must cancel your visit, please call no later than 24 hours before planned visit.

SCHEDULING TIPS: Classes are held outdoors. Be sure to dress for the weather and wear walking shoes. Picnic tables are available on a “first-come, first-served” basis. There is a 15-student minimum for all instructor-led programs. No minimum for Exploring Nature Your Way (self-guided visits) or Naturalist Notebooks.

Group rate is only offered if lead teacher pays for all parents as a group. Individuals paying outside of group payment pay regular admission of $9.00 per adult.

HISTORIC PROPERTIES

Visit two of Memphis’ historic house museums and explore what life was like for Memphians in the 19th and early 20th centuries. Learn how people met their needs for food, clothing, shelter, and transportation. Compare their social customs to those we follow today. See and handle everyday household items of the era and consider how historic personal, domestic, and technological objects evolved to modern times.

ADA ACCESSIBILITY
• Handicapped van parking space on site
• The carriage house/visitor’s center is fully accessible
• First floor of the house is fully accessible

MALLORY-NEELY HOUSE GUIDED TOUR
(Grades 3 – 12)
652 Adams Avenue,
Memphis, TN 38105

Step inside a Victorian time capsule to discover everyday life for the people who lived and worked in a wealthy 19th century Memphis home. Located in the Victorian Village National Historic District, this Italianate mansion was built circa 1852 and lavishly redecorated in the 1890s.

PARKING - Metered spaces are available along Adams Avenue.

Fees: $4.00 per student
Program length: approximately 1 hour (depending on group size)
Number of students: 10 (minimum)
Free for TN Title 1 students, August - February

Front door and stairwell restoration projects made possible by The Hitchcock Foundation

SUPPORTS CURRICULUM STANDARDS RELATED TO:
» TN Soc St: C, E, H, TN
» MS Soc St: CR/HR, E, C
» AR Soc St: 5, 10, 12, 13
» TN Sci: EST1
» MS Sci: Tools & Techniques
» AR Sci: EST1

MAGEVNEY HOUSE GUIDED TOUR
(Grades K-8)
198 Adams Avenue, Memphis, TN 38103

Discover Memphis in the mid-1800s while visiting one of the oldest homes still existing in Memphis. Built circa 1836, the Magevney House was home to Eugene Magevney, an Irish immigrant, teacher, and religious leader.

Fee: Free. Suggested donation $2.00 per student
Number of students: 10 (minimum)

SUPPORTS CURRICULUM STANDARDS RELATED TO:
» TN Soc St: C, E, H, TN
» MS Soc St: CR/HR, E, C
» AR Soc St: 5, 10, 12, 13
» TN Sci: EST1
» MS Sci: Tools & Techniques
» AR Sci: EST1

Visit two of Memphis’ historic house museums and explore what life was like for Memphians in the 19th and early 20th centuries. Learn how people met their needs for food, clothing, shelter, and transportation. Compare their social customs to those we follow today. See and handle everyday household items of the era and consider how historic personal, domestic, and technological objects evolved to modern times.

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» TN Soc St: C, E, H, TN
» MS Soc St: CR/HR, E, C
» AR Soc St: 5, 10, 12, 13
» TN Sci: EST1
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» TN Soc St: C, E, H, TN
» MS Soc St: CR/HR, E, C
» AR Soc St: 5, 10, 12, 13
» TN Sci: EST1
» MS Sci: Tools & Techniques
» AR Sci: EST1

Visit two of Memphis’ historic house museums and explore what life was like for Memphians in the 19th and early 20th centuries. Learn how people met their needs for food, clothing, shelter, and transportation. Compare their social customs to those we follow today. See and handle everyday household items of the era and consider how historic personal, domestic, and technological objects evolved to modern times.

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• First floor of the house is fully accessible

MALLORY-NEELY HOUSE GUIDED TOUR
(Grades 3 – 12)
652 Adams Avenue,
Memphis, TN 38105

Step inside a Victorian time capsule to discover everyday life for the people who lived and worked in a wealthy 19th century Memphis home. Located in the Victorian Village National Historic District, this Italianate mansion was built circa 1852 and lavishly redecorated in the 1890s.

PARKING - Metered spaces are available along Adams Avenue.

Fees: $4.00 per student
Program length: approximately 1 hour (depending on group size)
Number of students: 10 (minimum)
Free for TN Title 1 students, August - February

Front door and stairwell restoration projects made possible by The Hitchcock Foundation

SUPPORTS CURRICULUM STANDARDS RELATED TO:
» TN Soc St: C, E, H, TN
» MS Soc St: CR/HR, E, C
» AR Soc St: 5, 10, 12, 13
» TN Sci: EST1
» MS Sci: Tools & Techniques
» AR Sci: EST1

MAGEVNEY HOUSE GUIDED TOUR
(Grades K-8)
198 Adams Avenue, Memphis, TN 38103

Discover Memphis in the mid-1800s while visiting one of the oldest homes still existing in Memphis. Built circa 1836, the Magevney House was home to Eugene Magevney, an Irish immigrant, teacher, and religious leader.

Fee: Free. Suggested donation $2.00 per student
Number of students: 10 (minimum)

SUPPORTS CURRICULUM STANDARDS RELATED TO:
» TN Soc St: C, E, H, TN
» MS Soc St: CR/HR, E, C
» AR Soc St: 5, 10, 12, 13
» TN Sci: EST1
» MS Sci: Tools & Techniques
» AR Sci: EST1
Explore the science of paleontology at the Coon Creek Science Center. Recognized as one of the 10 most important fossil sites in North America, Coon Creek is located on 232 acres in rural McNairy County, about two hours east of Memphis. Over 600 species of marine plants and animals from the Cretaceous period have been excavated from the creek bed. In 1990, a partial mosasaur skeleton (a 25-foot-long marine reptile) was recovered from the site. A second partial mosasaur skeleton was discovered in 2000.

**Please Note:** A minimum of 15 paid participants and maximum of 35 are required to reserve a Coon Creek Field Excursion. Groups of less than 15 pay the minimum 15-participant rate. Chaperones are required (1 adult for every 10 students) and must remain with the group at all times. Food, drinks and transportation are not provided by the Pink Palace Family of Museums. Picnic tables are available on the grounds. Please dress appropriately for your outdoor excursion.

**FIELD EXCURSIONS**

**FOSSIL FUN WITH ALLY ALLIGATOR**  
**GRADES K – 2**  
**LENGTH:** 90 MINUTES  
**FEE:** $10 PER STUDENT  
Let our puppet Ally Alligator introduce your students to Coon Creek fossils and the famous Mosasaur (a swimming reptile that inhabited the site long ago). With the help of adults, students collect real fossils to take home. One adult chaperone for every four students is required and will be admitted for free.

**CAN YOU DIG IT? INTRODUCTION TO COON CREEK**  
**GRADES 3 – 12**  
**LENGTH:** 2 HOURS  
**FEE:** $10 PER STUDENT  
Discover the fascinating science of paleontology! Students are involved in an introductory discussion about the abundant fossils at the site. They learn to collect and prepare their own 70-million-year-old specimens. Participants are able to keep many of the fossils they find.

**FIELD PALEONTOLOGY**  
**GRADES 5 – 12**  
**LENGTH:** 4 HOURS  
**FEE:** $15 PER STUDENT  
Engage your students in an in-depth study of the Cretaceous fossil deposits at Coon Creek as they learn about the ancient ocean environment of West Tennessee. Participants collect and study fossils from the creek bed, learn how to clean and preserve the fossils and are able to keep many of the fossils they find.

**SUPPORTS CURRICULUM STANDARDS RELATED TO:**
- **TN Sci:** LS1, LS2, LS4
- **MS Sci:** L1, L3, L4
- **AR Sci:** LS1, LS2, LS4

**PTERO: THE OFFICIAL STATE FOSSIL OF TENNESSEE**

Found in abundance at Coon Creek Science Center, *Pterotrigonia thoracica* basks in the limelight as the Official State Fossil of Tennessee. Ptero (the fossil’s nickname) is an extinct bivalve that lived 70 million years ago during the Cretaceous period. Ptero’s habitat was the sea floor of the ocean that covered part of what is now West Tennessee.
TEACHERS, YOU'RE INVITED!

*May be eligible for Professional Development credit.*

**TUESDAY, SEPTEMBER 17, 2019 • 3:30 PM - 7:30 PM**

Grab a passport and voyage through the Museum to learn what the Pink Palace Museum, Lichterman Nature Center, Mallory-Neely House, and Coon Creek Science Center have to offer!

Preview AutoZone Dome at the Sharpe Planetarium shows:
- 4:00 PM - Seasonal Stargazing/Legends of the Night Sky
- 5:00 PM - We Are Aliens
- 6:00 PM - Black Holes
- 7:00 PM - Firefall

Preview CTI 3D Giant Theater movies:
- 4:00 PM - Super Power Dogs 3D
- 5:00 PM - Apollo 11
- 6:00 PM - Super Power Dogs 3D

Reservations are required for both CTI 3D Giant Theater movies and Planetarium Shows. Sorry, no seating available after movie begins. Reservations can be made online through www.brownpapertickets.com by searching for 2019 Fall Pink Palace Teacher Orientation.

Plan to come early or stay late; wine and hors d’oeuvres will be served from 5:00 to 7:00 pm. Teacher-friendly door prizes will also be a highlight of the night! Please tell your colleagues!

**PINK PALACE CRAFTS FAIR IN AUDUBON PARK**

**PRICES FOR SCHOOL GROUPS ONLY:**

<table>
<thead>
<tr>
<th>Grade</th>
<th>Price</th>
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<tbody>
<tr>
<td>1st – 6th</td>
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<tr>
<td>7th – 12th</td>
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ONE FREE ADULT TICKET PER EIGHT STUDENTS

Adult chaperones: $5.00

School tickets will not be sold at the Crafts Fair gate.

Free parking at Perkins Road entrance of Audubon Park.
Free parking at Cherry Road entrance of Audubon Park.

Call the Pink Palace Reservations office at 901.636.2362 for tickets. Tickets may be purchased from September 1 through October 10. Reservation Office Hours: 9am – 4pm, Monday – Friday.

Tickets must be picked up at the Pink Palace Box Office at 3050 Central Avenue. For more information, contact the Friends of the Pink Palace 901.636.2408.
**PINK PALACE STUDENT PACKS**

Available only at Pink Palace Museum

http://www.memphismuseums.org/museum-gift_shop/

Make the trip easy by pre-ordering our special Student Packs. Instructions to order School Packs:

All Packs have been specifically designed to bring home the museum’s educational experience, while saving the child money. Packs are suitable for all school-age children.

- Fill out ONE order form for the ENTIRE class
- Attach one check, payable to Pink Palace Family of Museums
- Bring this order form and your check to the Museum Store upon your arrival (the packs will be ready when you leave)
- You may also fax your order form to the Museum Store up until the day before your visit: 901.636.2353

<table>
<thead>
<tr>
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<th>Item Description</th>
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<td>Dinosaur Pack / Owl Pack (circle one)</td>
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<td>Pendants</td>
<td>Quartz Pendant / Amethyst Pendant / Shark Tooth Necklace/ (circle one)</td>
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<td>Magnets and More Set</td>
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<td>Writing Set</td>
<td>Document Writing Set</td>
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<tr>
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<td>Newton's Cradle</td>
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<tr>
<td>Ionosphere</td>
<td>Ionized bands react to their environment</td>
<td>$19</td>
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<td>Crystal Geode</td>
<td>Grow a beautiful geode; mold a plaster shell then fill with a crystal-forming solution</td>
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<td>Mineral Science Set</td>
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<td>Rock Science</td>
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<tr>
<td>Tee-Adult</td>
<td>T-shirt - Adult “Science is Awesome”</td>
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<td>S  M  L  XL</td>
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Grand Total: $
ENJOY THE TRIP MORE… To most children, a field trip to the Museum just isn’t complete without a trip to the Museum Store! To make this easier on teachers and chaperones, we offer several different packets which bring home the learning experience of the facility. Student packs are made of several carefully selected items which relate to the educational experience and will be suitable for any school-age child. Order forms are included in your confirmation packet.

Teachers, receive a 10% discount every time you shop at the Pink Palace Museum Store with our Educator Reward Program!

To obtain your card, bring your teaching certificate or appropriate identification to the Pink Palace Museum Store. This offer is good throughout the school year. Cards are renewable and non-transferable.

All proceeds from Museum Store sales support the Pink Palace Family of Museums. Items may be substituted according to supply and demand. Tax included. Check our website for color photos and more information including our order form.

Boxed Lunches For Any School
Group Size
901.636.2407
www.memphismuseums.org
MetroEatsMemphis@gmail.com

Check your confirmation packet for our Group Lunch Pre-Order Form and call or email to place your order today! 901.636.2407 • MetroEatsMemphis@gmail.com
PRICING GUIDE

PINK PALACE MUSEUM FACILITIES  Prices subject to change

<table>
<thead>
<tr>
<th>Facility</th>
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<tr>
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<td>Planetarium Show</td>
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<tr>
<td>3D Movies</td>
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<tr>
<td>Lab/Classroom Explorations</td>
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<td>Discovery Theater Programs</td>
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COMBINATION RATES

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<tr>
<td>Any 3 of the above</td>
<td>$12.00</td>
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Museum Suitcase Exhibits for TN Schools  FREE

Museum Suitcase Exhibits for schools outside TN  $25.00

Passport Programs  $10.00

PRICING GUIDE

<table>
<thead>
<tr>
<th>Program</th>
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<tbody>
<tr>
<td>Field Paleontology</td>
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<tr>
<td>Fossil Fun with Ally Alligator</td>
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<td>Nature 2 U: Onsite</td>
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<td>Nature 2 U: Offsite</td>
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<td>Nature Lab Series: Owl Pellet Dissection</td>
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<td>Nature Lab Series: Water Ecology</td>
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<td>Nature Lab Series: Tree Science</td>
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<tr>
<td>Fossil Fun with Ally Alligator</td>
<td>$10.00</td>
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<tr>
<td>Can You Dig It? Intro to Coon Creek</td>
<td>$10.00</td>
</tr>
<tr>
<td>Field Paleontology</td>
<td>$15.00</td>
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</tbody>
</table>

MALLORY-NEELY HOUSE  $4.00

Policies

DEPOSIT POLICY

» An advance deposit of 20% is required to hold reservations for all groups.
» Deposits must be made by check, money order, cash, MasterCard, or cash.
» If a program cannot be rescheduled, the deposit will be refunded.

CANCELLATION POLICY

» Notification of cancellation must be received one week prior to date of reservation.
» Please Note: Coon Creek Science Center deposits are non-refundable unless the Museum cancels the program.
» Cancellation due to weather conditions are made at the discretion of the Museum.

LUNCH POLICY: You are invited to use our front lawn picnic area for brown bag lunches (picnic tables are available on a first-come basis). Please make alternate plans in the event of inclement weather. Seating is available indoors only for groups purchasing food from Metro Eats at the Pink Palace, subject to availability. An order form is included in your reservation packet. (See page 24 for details, or call 901.636.2407)

CTI 3D GIANT THEATER SNACK POLICY: Snacks and drinks are available for pre-order when you make your reservation. Snack and drink orders must be made at least three (3) weeks in advance and must be paid in full when you make your reservation. Your snacks and drinks will be waiting for you at the CTI 3D Giant Theater the day of your visit. An order form is included in your reservation packet.

CHAPERONE POLICY: In order to ensure proper supervision, one adult (teacher or chaperone) is required for every (10) students. These teachers/chaperones will be admitted free of charge. Additional adults over the one to ten ratio will be charged the chaperone rate. Chaperones and teachers are to remain with the students at all times. Chaperone rates will only be provided to those adults that are included with the school reservation and paid for at check-in with the group payment. Additional adults that pay on their own will be charged our regular rates.

PLEASE HAVE THE FOLLOWING INFORMATION READY:

1. Your e-mail address, school address, phone number and fax number.
2. The names of both the school contact and group leader (if different).
3. The grade level of your students.
4. Which program(s) you have chosen.
5. The dates and times you are considering.
6. Total number of students you will be bringing.
7. Total number of ALL adults including teachers, assistants, parents, drivers, etc. in your group. A ratio of 1 chaperone per 10 students is required, and that chaperone receives free admission. Additional chaperones will be charged the chaperone rate. (See chaperone policy.)
8. If a Tennessee School, do you have subsidized/fee waiver students?
   If yes, how many?
FREQUENTLY ASKED QUESTIONS

Q. HOW LONG WILL IT TAKE US TO SEE THE EXHIBITS?
A. We suggest that you allow two hours to tour the Museum exhibits. For specific programs, please see the program listing.

Q. WHEN CAN I MAKE RESERVATIONS?
A. The Pink Palace Reservation Office is open Monday through Friday from 9am - 4pm to schedule school groups. The Lichterman Nature Center Reservation Office is open Monday - Friday, 10am - 4pm. You must speak with a representative and receive a Reservation I.D. number before you have a reservation.

Q. MY GROUP HAS RESERVATIONS AT LICHTERMAN NATURE CENTER. WHAT IF IT RAINS?
A. Lichterman is set up to conduct all instructor-led programming indoors if needed.

Q. HOW FAR IN ADVANCE DO WE HAVE TO MAKE RESERVATIONS?
A. At least two weeks.

Q. WHAT IF I DON’T HAVE ONE ADULT FOR EVERY TEN STUDENTS?
A. It is required that all schools have one adult for every ten students. Your school may be refused admission without the number of required adults.

Q. CAN MY PARENTS CALL TO MAKE THEIR OWN RESERVATIONS?
A. No, they need to be included in the reservation with the students in order to receive their chaperone rate.

Q. CAN WE TAKE PICTURES?
A. You may take pictures without the flash in the Pink Palace Museum exhibits. No photography or recording is allowed during the programs or movies.

Q. IS THERE ANYTHING IN THE MUSEUM THAT WILL SCARE MY STUDENTS?
A.
- The interiors of the CTI 3D Giant Theater and Planetarium are dark.
- Some movies are not appropriate for children under second grade.
- Some children, three years and under, do not respond well to the Planetarium experience.

Q. CAN STUDENTS USE THEIR FAMILY’S MEMBERSHIP?
A. Memberships and vouchers can be used for Self-Guided Visits but Memberships and vouchers may not be used by students or chaperones for free admission to Education Programs.

If you have questions that have not been answered, please call:
Pink Palace Reservation Office at 901.636.2362
Lichterman Nature Center Reservation Office 901.636.2221 or email: nature.reservations@memphistn.gov
Mallory-Neely House 901.523.1484

PINK PALACE MEMBERSHIP

ALL EDUCATORS GET 10% OFF WHEN YOU PURCHASE A MEMBERSHIP.

Members of The Pink Palace Family of Museums receive:

- Unlimited admission for one year to the Pink Palace Museum, Lichterman Nature Center and Historic Properties for two adults and up to 10 related children under 18 years of age (Individual/Dual Level covers 1 Adult and 1 Guest admission)
- CTI 3D Giant Theater and AutoZone® Dome at the Sharpe Planetarium Passes and Discounts (number of passes depends on level purchased)
- Members-only exhibit openings and events (Club Level and above also include CTI 3D Giant Theater movie Premieres)
- Free/discounted admission to over 360 ASTC Science &Technology Museums around the world
- Our bi-monthly membership publication – Museum Scope
- Members’ Day Fossil Dig at Coon Creek Science Center
- 10% discount in the Museum Store (excluding audio, video & sale merchandise)
- 10% discount at Metro Eats

Contact the Membership Office at 901.636.2406 or stop by the Pink Palace Museum or Lichterman Nature Center. Just show us your ID when you purchase your membership to get your discount.
## TENNESSEE

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<td>Physical Sciences</td>
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<td>Matter and Its Interactions</td>
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<td>PS2</td>
<td>Motion and Stability: Forces and Interactions</td>
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<td>PS3</td>
<td>Energy</td>
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<td>PS4</td>
<td>Waves and Their Applications in Technologies for Information Transfer</td>
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<td>LS1</td>
<td>From Molecules to Organisms: Structures and Processes</td>
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<td>LS3</td>
<td>Heredity</td>
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<td>ESS1</td>
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## MISSISSIPPI

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## ARKANSAS

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TENNESSEE, MISSISSIPPI & ARKANSAS SOCIAL STUDIES STANDARDS

TENNESSEE - 2019
SIX CONTENT STRANDS
(C) Culture: Students will use culture and cultural diversity to understand how human beings create, learn, share, and adapt to culture and appreciate the role of culture in shaping their lives and society, as well the lives and societies of others.
(E) Economics: Students will use economic reasoning skills and knowledge of major economic concepts, issues, and systems to make informed choices as producers, consumers, savers, investors, workers, and citizens in an interdependent world.
(G) Geography: Students will use knowledge of geographic locations, patterns, and processes to show the interrelationship between the physical environment and human activity and to explain the interactions that occur in an interdependent world.
(P) Politics/Government: Students will use knowledge of the purposes, structures, and processes of political systems at the local, state, national, and international levels to understand that people create systems of government as structures of power and authority to provide order, maintain stability, and promote general welfare.
(T) Tennessee: Students will use materials drawn from various sources to explore history through a Tennessee lens while focusing on the events, patterns, and themes that impacted both the U.S. and Tennessee.
(TCA) Tennessee Code Annotated: Students will learn mandatory content, as specified in the Tennessee Code Annotated.

MISSISSIPPI - 2019
FIVE CONTENT STRANDS
(E) Economics: This strand emphasizes economic reasoning which helps students gain an understanding of economic concepts, while demonstrating an understanding of economic and financial literacy.
(G) Geography: The geography strand equips students with knowledge, skills, and perspectives of world geography.
(H) History: The history strand investigates events that change the way people live.
(CI) Civics: The civics strand should provide students with a basic understanding of civic life, politics, and government.
(CR) Civil Rights: This strand should lead learners to understand and appreciate issues such as social justice, power relations, diversity, mutual respect, and civic engagement.

ARKANSAS – 2019
FOUR STRANDS/12 CONTENT STANDARDS
CIVICS/GOVERNMENT
1. Civic and Political Institutions: Students will analyze the impact of origins, structures, and functions of institutions on society and citizens.
2. Participation and Deliberation: Students will analyze civic rights, roles, and responsibilities.
3. Processes, Rules, and Laws: Students will analyze the sources and functions of laws as well as the process of making and amending laws.
ECONOMICS
4. Economic Decision Making: Students will analyze economic decision making.
5. Exchange and Markets: Students will analyze the exchange of goods and services and the role of producers, consumers, and government in the market place.
7. Global Economy: Students will analyze economic interdependence within a global economy.
GEOGRAPHY
8. Geographic Representations: Students will use geographic representations and skills to become geographically-informed citizens.
9. Human-Environment Interaction: Students will analyze the interaction between humans and the environment.
10. Spatial Patterns and Movement: Students will interpret the spatial characteristics and patterns of human settlement.
11. Global Interconnections: Students will compare global places and regions and the connections between them.
HISTORY
12. Chronology, Change Over Time, and Contextualization: Students will analyze chronology, patterns of continuity and change over time, and contextualization on historical events.
13. Perspective, Historical Evidence, and Causation: Students will analyze ways people gather, view, construct and interpret historical evidence.
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