



*New
Programs
Inside!*



McWane Science Center

EDUCATION GUIDE

2026-2027

A Comprehensive Guide for Educators On
All Things McWane Science Center



*McWane Science Center is a 501(C)(3) nonprofit organization.
Our mission is to spark wonder and curiosity about our world through
hands-on science experiences.*

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Design Your Learning Experience

Bring hands-on STEM learning to your students at McWane or in your classroom, all aligned with Alabama Course of Study State Standards.

Field Trips to McWane

Visit McWane for a full-day experience!

Best for immersive, high-impact learning experiences

- 2 | Inside the Museum**
Explore 4 floors of interactive exhibits
- 4 | Enhance Your Visit**
Engage in a hands-on lab, live science demonstration, or immersive IMAX® documentary movie
- 4 | Real Science Labs**
Hands-on investigations
- 7 | Live Science Shows**
Themed high-energy science demonstrations
- 8 | IMAX® Dome Theater**
Large-format films that bring science to life
- 9 | How to Book Your Field Trip**

McWane on the Move

We bring the magic of McWane directly to your school!

Best for easy scheduling and maximum access

- 11 | Hand-on Labs**
Interactive classroom engagement
- 14 | Live Science Shows**
Awesome large-group science experiences
- 14 | McWane on the Web**
McWane magic without the travel
- 14 | Sci Sparks**
Bite-sized science videos built to support classroom learning
- 15 | How to Book McWane on the Move**

Teacher Professional Development

Learn how McWane supports educators.

Best for teachers wanting to learn new ways to engage their students

- 16 | Educator Advisory Committee**
Shape science learning, enjoy exclusive perks
- 17 | Teacher Professional Development**
AMSTI-affiliated teacher workshops with CEU credit
- 19 | Celebrate Science**
Explore an opportunity for 3rd-5th grade classes to win cash prizes while learning

Pricing at a Glance

Field Trip Experience	Students	Teachers	Chaperones
<i>Best Field Trip Experience</i> Adventure Halls, IMAX, & Education Program	\$19	\$9	\$15
<i>Classic McWane Experience</i> Adventure Halls & IMAX	\$15	\$9	\$15
IMAX Only	\$9	\$9	\$9
Adventure Halls Only	\$10	Free	\$10
Field Trip Enhancements	Price		
Hands-on Lab	\$4/student Minimum of \$40*		
Live Science Show	\$4/student Minimum of \$200*		
Small IMAX Concessions Package	\$8/person		
McWane on the Move	Price		
<i>Best Experience</i> Live Science Show	\$400 (up to 150 students)		
Additional Live Science Shows	\$325		
Hands-on Lab Program	\$275 (up to 30 students)		
Additional Hands-on Lab Programs	\$200		
Virtual Program	\$250/session		
STEM Festival & Event Booth	\$150		
Mileage Fees (Outside Jefferson County Only)	Federal Mileage Rate		
Teacher Professional Development	Price		
Workshop for 5-15 teachers	\$300		
Workshop for 16-30 teachers	\$600		

*Field trip programs have minimum participation requirements. If your group does not meet the minimum, you may still book the program at a flat rate equal to the minimum number of participants. Learn more about those minimum requirements on pages 4 & 7. **Questions? Contact our Reservations Team at (205) 714-8414 or reservations@mcwane.org.**

4 Floors of Learning & FUN!

Inside the Museum

Explore all four levels of our Adventure Halls and experience engaging, live science demonstrations. Sometimes interaction is key to *getting it*. Seeing truly is believing! At McWane Science Center, we believe that nothing satisfies curiosity as much as learning in a hands-on environment, and that is what you will find in every exhibit throughout our Adventure Halls.

New Traveling Exhibit



Survival of the Slowest invites your class to explore how animals survive and thrive using surprising strategies. Students will encounter animals such as a sloth, reptiles, amphibians, and more while learning how different traits help each species navigate its environment.

Through real-world examples, the exhibit introduces key life science concepts such as adaptation, ecosystems, and biological trade-offs. Students discover that survival in the natural world is not about being the fastest or strongest, but about using the right strategy.

With live animals and engaging interpretation, *Survival of the Slowest* supports curriculum connections while offering a memorable, up-close experience that encourages curiosity and critical thinking. This exhibit provides a fresh way to bring science standards to life during your next field trip. Visit mcwane.org for the latest information about current or upcoming exhibits.

Disciplines Covered: Ecosystems, From Molecules to Organisms, Unity and Diversity, Heredity

LL

Lower Level: Aquarium & Water Science

Immerse your students in Birmingham's largest aquarium, home to more than 50 species across salt and fresh water habitats. This exhibit invites up-close discovery with highlights like the Shark and Ray Touch Tank and the Cahaba River Biorama, while daily programs connect aquatic life to environmental stewardship through live demonstrations and animal encounters.

Disciplines Covered: Ecosystems; From Molecules to Organisms; Unity and Diversity; Earth and Human Activity

1

Level 1: Hands-On Physics & Engineering

On Level 1, students can test simple machines, explore forces through tactile exhibits like the Bed of Nails and Pulley Chairs, and engage in daily engineering challenges in the Workshop. Educators can enhance their visit with live demonstrations in the Rushton Theater or book deeper learning experiences in the GENEius Lab (learn more on page 6).

Disciplines Covered: Motion and Stability; Waves and their Applications; Energy

2

Level 2: Natural History & Early Learning

Travel through time and the natural world on Level 2, where students encounter Alabama's fossil record, from ancient oceans to the Ice Age. Hands-on lab experiences invite learners to dig, build, and investigate real-world science topics, while students 6 and under can explore STEM concepts through imaginative, play-based learning in Itty Bitty Magic City.

Disciplines Covered: Ecosystems; From Molecules to Organisms; Unity and Diversity; Earth's Systems; Earth's Place in the Universe

3

Level 3: STEAM & Classroom Learning

Level 3 blends science with creativity through interactive exhibits that explore art and technology, including digital and sensory experiences that encourage experimentation. This floor also houses McWane's dedicated classrooms, where structured laboratories provide focused, standard-aligned learning opportunities for field trip groups.

Disciplines Covered: Waves and their Applications; Energy





Pictured: Frantic Friction

Level Up Learning

K-2nd Grade

Student Capacity: Max 25
Programs are 30 minutes long.

Terrapin Tales

Discipline: Life Science

Journey through the Alabama wetlands with the Diamondback Terrapin as we take a look at the adaptation and behaviors that help these critters thrive in their natural habitat.

SC23: K.4, K.5, K.6, 1.5, 1.6, 2.7

Curious Critters

Discipline: Life Science

Join us as we introduce you to a wild world of fur, scales, and exoskeletons. With hands-on activities and a special meet-and-greet, we'll explore the diets and habitats of some of McWane's animal friends.

SC23: K.4, K.6, 1.5, 2.7

ASELD: SEK Biological Science 1bOP-2, 1bOP-3

Frantic Friction

Discipline: Physical Science

Have you ever wondered why a racecar has smooth wheels? Learn how texture impacts speed as your car zooms (or slows) across our all-terrain ramps. The race is on!

SC23: K.1, K.2

ASELD: SEK Physical Science 1cYP-1, 1cOP-1

Embark on an unforgettable educational journey with your students at McWane Science Center. Our hands-on learning experiences are tailored to grade level to align with Alabama education standards. Choose from our diverse range of program topics designed to spark wonder and curiosity and enrich your McWane field trip experience.

Cost: \$4 per student (10-student minimum). Groups below the minimum will be charged a \$40 flat rate.

3rd-5th Grades

Student Capacity: Max 25

2 or more children may be partnered for activities.

Programs are 60 minutes long unless otherwise noted.

Marsh Math

Discipline: Life Science & Math

Explore food webs, keystone species, and ecosystem dynamics with the Diamondback Terrapin. Students link science and math using data collection to monitor terrapin populations and make predictions based on environmental changes.

SC23: 3.10, 3.12, 5.14

Molecular Mysteries

Discipline: Physical Science

Unravel a molecular mystery with your team of lab detectives. Student sleuths will suit up with goggles and gloves to examine physical and chemical properties, mix solutions, collect data, and use their newfound knowledge to crack the code of chemical reactions.

SC23: Grade 5: 2, 3, 4

Earth Science! Ingenious Geology

Rocks and minerals have a story. Discover it by engaging your senses and using tools like microscopes, ultraviolet light, and density tests. Students will examine properties like texture, shape, color, and smell, then test local Alabama rocks alongside samples from around the world to become junior geologists.

SC23: 4.11, 5.12, 5.14, 6.5a, 6.5b, 6.5c, 6.5d, 6.7

3rd-5th grades continued

Digital Literacy! Jr. LEGO Robotics

Duration: Program is 90 minutes upon request
Discipline: Technology/Engineering/Computer Science
 Imagination meets innovation with LEGO robotics. Students build and program their own robots through hands-on challenges that spark curiosity, creativity, teamwork, and problem solving.

SC23: 3.3, 3.4, 4.2, 5.5, 5.7 | **Technology:** 3rd-5th grade: 1,2,3,7,12 | **Digital Literacy Standards:** R4, Grade: 3:2, 3, 4, 5, 7, 18, 19; Grade 4: 3, 4, 7, 17; Grade 5:2, 6, 8

Oceans of Energy

Discipline: Earth Science/Engineering
 The ocean is a great source of renewable energy! Students will create energy farms over a model ocean. As various obstacles arise, they must use their critical thinking skills to adapt and harvest as much energy as they can.

SC23: 3.12, 3.15, 4.4, 4.11, 4.14, 5.14, 6.11; **Env:** 6a, 6b, 8b

6th - 8th Grades

Student Capacity: Max 25

Programs are 60 minutes long unless otherwise noted.

Blueprints for Tomorrow

Discipline: Engineering

Design a city for tomorrow as you face real-world challenges, make high-stakes decisions, and race against time! Build, strategize, and harness real data to create a thriving, balanced community where every choice shapes the future.

SC23: 5.14, 6.9c, 6.11, 7.7, 7.9; **Earth & Space** 7b, 8a, 8b, 8c; **Env.** 7, 11b; **Tech** 5, 7, 14

Engineering Challenge: Bridges

Discipline: Physical Science

Put those engineering skills to the test! Through this hands-on engineering challenge, students will design and build bridges to resist the pull of gravity. Their success depends on innovation, ingenuity and what they can make with a given set of supplies.

SC23: 8.10, 8.11, 8.12, 8.14

Robotics Challenge

Duration: Program is 90 minutes upon request

Discipline: Technology/Computer Science

Spark curiosity and build coding skills with our Edison robotics system. Students program in languages like Scratch or Python, tackle hands-on challenges, and strengthen problem solving and teamwork as they navigate a robo obstacle course.

SC23: Grade 8:8, 9, 10 | **Technology:** 6th - 8th grade: 1
Math: Grade 6:20 (6-EE9); Grade 6:5, 6; Grade 7:3, 5; Grade 8:3, 5

Under the Scope

Discipline: Life Science

Magnify your curiosity with Under the Scope. Learn biotechnology skills with hands-on experience of real lab tools to observe and prepare slides, capture images, and uncover the hidden wonders of the microscopic world.

SC23: 7.1a, 7.1b, 7.4, 7.6, 7.8, 7.9

9th - 12th Grades

Student Capacity: Max 25

Life on a Slide

Duration: 60 minutes

Discipline: Biology, Anatomy & Physiology

Explore the most basic form of life as we take a closer look at cells. Gain experience with the process of cell sample collection, slide preparation and staining, and microscopy.

SC23: Bio1, 3; **HAP:** 1

3D Printing Lab

Duration: 90 minutes

Discipline: Technology

Explore the world of 3D printing from basic principles to the tech's far-reaching impacts across industries. This project-based workshop encourages creativity, develops critical thinking skills, and empowers students to discuss the ethical and social implications of this technology.

Computer Science! VEX Robotics Lab

Duration: 90 minutes

Discipline: Technology/Engineering/Computer Science

Ignite innovation in our advanced robotics lab with cutting-edge VEX robotics. This lab immerses students in project-based lessons that tackle real world STEM challenges and help students develop problem-solving and teamwork skills.

Physics: 1 | **Technology:** 2, 10 | **Digital Literacy Standards:** (HS) R4, 3, 6, 9, 10 | **NSES:** Science as Inquiry, Science and Technology

The Rube Challenge

Duration: 90 minutes

Discipline: Physical Science, Physics

Take the Rube Challenge! Use the properties of physics to design a complex way to solve a simple problem. Explore the engineering process from start to finish in this fun-filled, hands-on program.

SC23: Phys Sci: 1a, 1d, 5a; **Phys:** 1d, 2d, 3b, 3d, 3e

Exhibit Connection! Terrapin**Conservation Lab**

Duration: 60 minutes

Discipline: Life Science

Explore the real-world conservation efforts behind our Terrapin Nursery. Using case studies and conservation data, students analyze population trends, human impacts, and restoration strategies shaping the future of Alabama's Diamondback Terrapins.

SC23: Bio: 6, 8, 9, 10; **Env.:** 3.a.b, 8, 9, 10





LabWorks & GENEius Lab

LabWorks Programs

6th-8th Grades

Times: 9-11 AM or 12-2 PM

New! DNA Analysis

Step into the role of a geneticist as students explore biotechnology through hands-on investigation. Using gel electrophoresis and restriction enzymes, they analyze DNA to diagnose patients and learn how biotechnology treats genetic disorders.

SC23: 7.11, 7.12, 7.13, 7.14

A Light in a Dark Room

How do we know what the universe is made of? In this lab, students explore the connections between elements and light as they investigate pigment, fluorescence, invisible ink, and even stars all while learning about chemical reactions and wavelengths.

SC23: 8.17, 8.4, 8.2

The Eyes Have It

Have you ever wondered how we know if everyone sees the same colors? Students explore these questions through simulations, visual illusions, and a real sheep eye dissection for an unforgettable, eye-opening experience.

SC23: 7.1, 7.4, 7.14

Isn't That a Crime?

One of McWane's most beloved animals has gone missing. In this fast-paced lab, students analyze evidence like DNA, blood, and fingerprints as they put their critical thinking to the test.

SC23: 7.11, 7.12, 7.14

Carter Creek Mystery

A local factory is blamed for polluting the city's water supply. As EPA agents, students test water samples, solve the mystery, and work to save the day.

SC23: 6.11, 6.10

LabWorks and GENEius offer engaging experiments for middle and high school students. Developed with UAB's CORD, these programs use modern tools and protocols to explore real-world topics in biology, chemistry, and physics.

Capacity: 25 students

GENEius Programs

9th-12th Grades

Times: 9 AM-1:30 PM

Huntington's Disease Lab

Students explore brain structure and function through a sheep brain dissection and sensory testing. They then examine Huntington's disease, acting as medical examiners to assess damage and its effects on the body.

SC23: Biology: 1, 4

DNA Fingerprinting and Exploration Lab

Can DNA predict traits? Students isolate their own DNA, use PCR and gel electrophoresis to analyze a taste gene, and compare their genetic results to observable traits.

SC23: Biology: 2, 11, 12

Sickle-Cell Anemia: Tracking Down an Inherited Trait

Students investigate sickle-cell disease by analyzing hemoglobin at the protein and DNA levels using electrophoresis and restriction enzymes. They diagnose patients and explore emerging treatments like gene editing.

SC23: Biology: 2, 11, 12

HIV Detection and Medical Cures Lab

Students explore the HIV life cycle and use ELISA testing to determine viral status in simulated samples. Through discussions, activities, and a mock fluid exchange, they examine real-world public health challenges related to HIV/AIDS.

SC23: Biology: 2, 11



Pictured: Science Spectacular

Science Takes the Stage!

The Rushton Theater hosts many of our most explosive programs. These large-scale demonstrations are scaffolded for various age levels and will leave students wowed by science.

Live Science Programs

Seating Capacity: Max 100

Cost: \$4 per student (50-student minimum). Groups below the minimum will be charged a \$200 flat rate. Programs are 30 minutes long, unless otherwise noted

Sensory Friendly! Fire and Ice

Duration: 20 minutes

Discipline: Physical Science

It's heating up and cooling down in this program that explores the extreme temperatures of hot and cold. Join us for a series of thermal demonstrations as we investigate icy concoctions and colorful flames.

SC23: Grade 1.1 | **ASELD:** SEK Scientific Inquiry 1aYP-4, 1aOP-3

Sound of Science

Discipline: Physical Science

See frequency, feel amplitude, and grab a front-row seat to an electrifying performance of musical lightning. From sounds that make a splash to bizarre tricks of the mind, experience the science of sound like never before.

SC23: 4.6, 8.17

May the Forces Be with You

Discipline: Physical Science

From gravity to air pressure, explore the forces that shape motion. Through dynamic demonstrations like rocket launches, bouncing experiments, and the world's fastest pencil, students experience physics in action.

SC23: 3.1, 5.6, 8.8, 8.9, 8.10

Lightning Strikes

Discipline: Physical Science

Explore the power of electricity as students compare AC and DC and experience electromagnetic forces in action. Watch static from a Van de Graaff generator, light tubes without wires, and witness giant Tesla coils in action.

SC23: 3.3, 4.2, 5.1, 8.12

Student Favorite! Science Spectacular

Discipline: Physical Science

Brace yourself for our most incredible demonstrations, featuring high voltage electricity, red-hot combustion reactions, and super-cold liquid nitrogen.

SC23: 2.4, 3.3, 4.2 & 2b, 5.3, 8.5 | **Physical Science:** 3
Physics: 5 & 11

Chem Possible

Discipline: Physical Science/Chemistry

Explore the 6 signs of a chemical reaction as students go hands-on with larger-than-life chemistry demonstrations that will glow, bubble, change color, and even explode!

SC23: 5.1, 5.3, 5.4, 8.6, 8.7, 8.8; **Chem** 2b, 3c, 6a

Don't Just Watch the Movie. Experience It!

IMAX® Dome Theater

The IMAX® Dome Theater surrounds students with a 5-story, 79-foot screen, creating an immersive experience that brings science to life. With advanced laser projection and powerful digital sound, these films spark curiosity, deepen understanding, and enhance any McWane field trip. **Concessions can also be booked in advance, so the popcorn is ready when you arrive!**



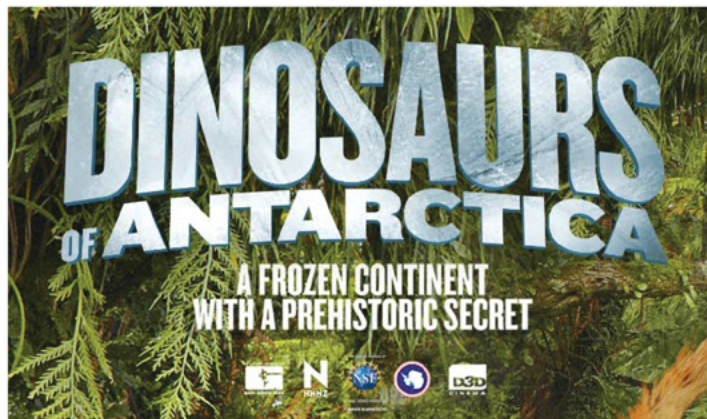
Wild Rescue

Showing May 15, 2026-March 18, 2027

Experience the inspiring journey of rescued wildlife in this giant screen adventure, following the teams who care for injured and orphaned animals before returning them to the wild. From bobcats to birds and pelicans, students will see real-world conservation, medical care, and the connections between species in action.

Duration: 20 minutes

Standards: SC23: 1.5, 2.7, 3.10, 4.8, 7.6, 7.7



Dinosaurs of Antarctica

Showing September 25, 2026-May 13, 2027

Dinosaurs of Antarctica tells the story of a changing environment at the bottom of the world where dinosaurs and prehistoric creatures once roamed freely in a lush landscape. As the climate changes again today, melting Antarctic ice is allowing discovery of the continent's history—including the fossils of new dinosaurs.

Duration: 20 minutes

Standards: SC23: 1.6, 1.7, 2.7, 2.10, 3.8, 3.14, 4.11, 6.6, 6.6b, 6.6c, 6.7, 7.8, BIO 15, ESS 5b, ESS 5c, ESS 6a, ENV 4

Ready to Book Your Field Trip?

Start Here

Visit our website at mcwane.org/learning/teachers/field-trips/ or scan the QR code & fill out the form.



Booking Your Reservation

A Reservation Specialist will build your reservation and email your confirmation. If you have not received an email within 1 week, please call us at **(205) 714-8414** or email: reservations@mcwane.org



Finalizing Your Reservation

We will reach out to you 4 weeks before your field trip to confirm arrival details and your wristband packet mailing address.

Reservation Guidelines

- Deposits are not required to book a field trip.
- Please provide a valid email address and cell phone number.
- Schools or groups will need to provide a State Tax Exemption form to be tax exempt.
- It is recommended that you submit your forms early, as space is booked on a first-come, first-served basis.
- There is a 15-person minimum to book a field trip.



Price Breakdown

Payment can be made with check or credit card.

Classic McWane Experience: IMAX®

Documentary & Adventure Halls Field Trip

- Students: \$15
- Teachers: \$9
- Chaperones: \$15

Adventure Halls Only Field Trip

- Students: \$10
- Teachers: Free!
- Chaperones: \$10

IMAX® Documentary Only Field Trip

- Students: \$9
- Teachers: \$9
- Chaperones: \$9

Enhancement Options

- Hands-on Labs: \$4 per student | \$40 min
- Science Live Shows: \$4 per student | \$200 min
- Concession Packages
 - Small Concessions Package: \$8 per person
 - Kid's Pack: \$4 per child

Parking

- On-site parking: \$5 per car
- Complimentary Bus Parking & Shuttle Service

Chaperone Requirements

School staff are included in chaperone count.

- **Pre K-Kindergarten:** 1 adult for every 5 students
- **Elementary School (1-5 grades):** 1 adult for every 10 students
- **Middle School (6-8 grades):** 1 adult for every 15 students
- **High School (9-12 grades):** 1 adult for every 20 students

NOTE: McWane Science Center reserves the right to reject booking requests and entry into the center should your group not meet chaperone requirements.

Cool Stuff Store Gift Shop

Spark wonder and curiosity with hands-on STEM toys, animal & nature souvenirs, and experiments that make learning feel like play! Students must be supervised while shopping.



Lunch Policies

- Lunch times must be scheduled for use of McWane Science Center lunchrooms (subject to availability).
- Scheduled lunchtimes are 30 minutes.
- Lunches may be brought from home or school. No commercial food delivery is allowed.
- Lunches may also be purchased from Bean Sprouts Cafe located inside the museum. Learn about their hours and menu at mcwane.org/bean-sprouts-cafe/

Pre-purchased Concessions

- Concessions packages are prepared ahead of time and ready for pickup by your group as they enter the IMAX® Theater.
- Concession packages must be added to your reservation before your field trip date.
- Small Concession Package: \$8 (popcorn and 12oz soft drink) | Kid's Pack: \$4 (popcorn tray, fruit snacks, fruit juice). No substitutions.



Order Science on the Go!

McWane on the Move brings the magic of McWane to your school! These interactive outreach experiences are tailored and grade level to align with Alabama Course of Study, Next Generation Science Standards (NGSS), and Alabama Performance Standards for 4-year-olds (APKS). Choose from our diverse range of program topics designed to spark wonder and curiosity while enriching the experience in classrooms, assemblies, libraries, and community events.

NOTE: Mileage charge for Lab Programs, Live Science Shows, and STEM booths outside of Jefferson County is charged at the federal mileage rate. This will be invoiced.

STEM Festivals & Event Booths

Our interactive table lets attendees explore scientific concepts at their own pace while sparking curiosity and creativity. Perfect for family-friendly events and local festivals! **Booking can be found at mcwane.org/learning/teachers/mcwane-on-the-move/**

Price: \$150

Program Type: Table

Hands-on Lab Programs:

Price:

- 1 classroom (maximum of 30 students program is \$275.
- Each additional classroom program is \$200

Programs are 45 minutes unless otherwise noted

PreK-2nd Grade

Build-a-Bug

Discipline: Life Science

Duration: 30 minutes

Meet one of McWane's 6-legged friends and assemble your own unique species as we learn the numbers and patterns that help us identify some of the world's smallest creatures.

SC23: K.6, 1.5, 2.7 | ASEL: SEK Technology 2dYP-2, 2dOP-2

Numeracy Act! Measure Up

Discipline: Mathematics

Duration: 30 minutes

Get ready to rule the school as we explore the foundations of measurement! Using non-standard units, we'll tip the scale and find the height to investigate the concepts of equal, more, and less.

Math: Grade K: 16, 17 | ASEL: SEK Math 4aYP-2, 4aOP-5

Sun Blocks

Discipline: Physical Science

Duration: 30 minutes

We're catching some rays in a design challenge that combines sun safety and engineering. Using a variety of materials, you'll construct shady shelters that protect UV-sensitive critters from sunburn.

SC23: K.8 | ASEL: SEK Physical Science 1cYP-4, 1cOP-4



Pictured: Sun Blocks

PreK-2nd grade continued

Matter Matters

Discipline: Chemistry

Duration: 30 minutes

Explore the properties of states of matter and phase changes from solids to gases and more! Students will witness dazzling and sensory-friendly displays, including liquid nitrogen and colorful, glowing plasma.

SC23: 2.1, 2.3, 2.4

Amazing Animals

Discipline: Life Science

Duration: 30 minutes

Bring animals right into your classroom! Students will learn about each animal's natural habitat, diet, adaptations, and what makes them different from other living things.

NOTE: This program cannot travel more than 60 miles from McWane Science Center

SC23: K.5, 2.7, 3.6, 3.9, 7.8 | **Biology:** 9-12

3rd-5th Grades

Amazing Animals

Discipline: Life Science

Duration: 30 minutes

Bring animals right into your classroom! Students will learn about each animal's natural habitat, diet, adaptations, and what makes them different from other living things.

NOTE: This program cannot travel more than 60 miles from McWane Science Center

SC23: K.5, 2.7, 3.6, 3.9, 7.8 | **Biology:** 9-12

ACAP-Ready! Enlightening Electricity:

Circuits

Discipline: Physical Science

It's electric! Students will explore circuits and how they work in order to create functioning electrical systems.

SC23: 3.3, 4.3, 4.4

Solids and Liquids: The Science of Slime

Discipline: Physical Science

Prepare to examine the strange chemical chains called polymers, as students make their own long-lasting slime – and get to keep it! Is slime a solid? Or a liquid? Only testing for the properties of the different states of matter will tell.

SC23: 2.1, 2.2, 5.2, 5.41

Inventive Engineering

Discipline: Physical Science

Students will need to use creativity, determination, and the engineering design process when they face off in a kinetic and potential energy challenge. Get ready to plan, build, and test a motion machine in this highly interactive program.

SC23: 3.1, 3.2, 4.1, 4.2, 4.3, 4.4, 8.14, 8.15

Reactions in Action

Discipline: Physical Science

Students will get fired up about science as we explore combustion and dazzle them with color-changing reactions. These fascinating experiments teach students about chemical and physical changes.

SC23: 2.1, 2.2, 2.3, 2.4, 5.1, 5.2, 5.4, 8.2, 8.6, 8.7, 8.8, 8.15



Pictured: Solids and Liquids

3rd-5th grades continued

A-MAZE-ing Robots

Discipline: Physical Science

Experience the world of computer coding using Ozobots, one of the world's smallest programmable robots.

Technology: Grade 3rd-5th 3, 7 | **Digital Literacy:** Grade 3:2, 3, 4, 5, 7, 18, 19; Grade 4:2, 3, 4 & 7; Grade 5:2, 4, 5, 6; Grade 6:6, 15, 21, 30; Grade 7:5; Grade 8:5

6th-8th Grades

Amazing Animals

Discipline: Life Science

Duration: 30 minutes

Bring animals right into your classroom! Students will learn about each animal's natural habitat, diet, adaptations, and what makes them different from other living things.

NOTE: This program cannot travel more than 60 miles from McWane Science Center

SC23: K.5, 2.7, 3.6, 3.9, 7.8 | **Biology:** 9-12

Reactions in Action

Discipline: Physical Science

Students will get fired up about science as we explore combustion and dazzle them with color-changing reactions. These fascinating experiments teach students about chemical and physical changes.

SC23: 2.1, 2.2, 2.3, 2.4, 5.1, 5.2, 5.4, 8.2, 8.6, 8.7, 8.8, 8.15

A-MAZE-ing Robots

Discipline: Physical Science

Experience the world of computer coding using Ozobots, one of the world's smallest programmable robots.

Technology: Grade 3rd-5th 3, 7 | **Digital Literacy:** Grade 3:2, 3, 4, 5, 7, 18, 19; Grade 4:2, 3, 4 & 7; Grade 5:2, 4, 5, 6; Grade 6:6, 15, 21, 30; Grade 7:5; Grade 8:5

6th-8th grades continued

ACAP-Ready! Ice Age Fossil Lab

Discipline: Earth Science

Step into the role of a paleontologist to investigate real Ice Age fossil matrix from Alabama. Uncover and analyze evidence from the past as rock layers reveal changes in Earth's surface over time.

SC23: 6.7, 6.10c, 6.11; **Bio:** 14, 15; **ESS:** 4e, 5b, 5c, 5d; | **Env:** 3b

Amp'd Up

Discipline: Physical Science/Physics

Time to get amped up! In this lab, students will explore the electrical engineering field, designing series and parallel circuits and calculating voltage, resistance, and current using Ohm's Law. Nobody will be left in the dark with this one!

SC23: 8.16; **Phys Sci:** 3; **Phys:** 6.b.c.d; **Env.:** 6

9th-12th Grades

Amazing Animals

Discipline: Life Science

Duration: 30 minutes

Bring animals right into your classroom! Students will learn about each animal's natural habitat, diet, adaptations, and what makes them different from other living things.

NOTE: This program cannot travel more than 60 miles from McWane Science Center

SC23: K.5, 2.7, 3.6, 3.9, 7.8 | **Biology:** 9-12

Amp'd Up

Discipline: Physical Science/Physics

Time to get amped up! In this lab, students will explore the electrical engineering field, designing series and parallel circuits and calculating voltage, resistance, and current using Ohm's Law. Nobody will be left in the dark with this one!

SC23: 8.16; **Phys Sci:** 3; **Phys:** 6.b.c.d; **Env.:** 6

Earth Science! Ice Age Fossil Lab

Discipline: Earth Science

Step into the role of a paleontologist to investigate real Ice Age fossil matrix from Alabama. Uncover and analyze evidence from the past as rock layers reveal changes in Earth's surface over time.

SC23: 6.7, 6.10c, 6.11; **Bio:** 14, 15; **ESS:** 4e, 5b, 5c, 5d; | **Env:** 3b



Pictured: Recipe for a Storm

Live Science Shows:

Price: \$400 | 150 student maximum

Each additional Live Science Show is \$325.

Programs are 45 minutes

Earth Science! Recipe for a Storm

Discipline: Earth Science

3rd-8th Grades

Forecasts call for wet, windy, and wild weather as we reveal the secret ingredients behind our planet's most extreme weather. Students will marvel at the meteorology of subzero temperatures, gale-force winds, and more as they learn what it takes to brew up a storm.

SC23: 4.10, 5.12, 6.9, 6.10

Superhero Science

Discipline: Physical Science, Chemistry

2nd-8th Grades

Leap into action with *Superhero Science*, a high-energy live show where comic book powers meet real-world science.

Through jaw-dropping demonstrations featuring fire, liquid nitrogen, electricity, and more, students discover how science makes superpowers real.

SC23: Grade 2:4; Grade 3:3; Grade 4: 2a; Grade 5:1, 3, 4; Grade 8:2, 4, 5, 11, 12

Alabama Scientists

Discipline: Physical Science, Life Science

2nd-8th Grades

From electricity to rocket science, medicine to ecology, Alabama has a rich scientific heritage! Students will get an exciting introduction to famous Alabama scientists and amazing discoveries from our home state.

SC23: Grade 2:2; Grade 3:3, 9; Grade 8:3, 18



Pictured: Amazing Animals

Virtual Programs:

Plug in the excitement of McWane directly in your classroom with our live stream and recorded sessions led by expert educators.

Price: \$250 per session

SURGERY

UAB MEDICINE

Surgical Systems

Discipline: Life Science, Biology, Human Anatomy/
Physiology

6th-12th Grades

60 minutes

See the human body like you've never seen it before with footage from a real surgery! No scrubs or scalpel required, this program connects students with medical professionals from the UAB Department of Surgery to explore human anatomy, surgical tools, and future STEM careers.

Options:

- Live Stream - Offered on a limited basis and scheduled around the surgeons' availability.
- On Demand - Watch a recorded session when it works for your schedule.



McWane on the Web

SCI*SPARKS on YouTube



Need a quick spark to ignite curiosity in your classroom? Sci Sparks is our bite-sized video series designed to share spectacular science fast. Perfect for brain breaks or science warm-ups, these videos are available on YouTube. Subscribe to McWane Science Center's channel to get the newest episode as soon as it airs!



Scan the QR code to check out our Sci Sparks playlist on McWane's YouTube page or visit youtube.com/c/McWaneScienceCenter



How Mirrors Work

Standards Covered: SC23:1.3. 2.2, 5.2, 5.4, 8.6



The Ocean is Always Moving, but Why?

Standards Covered: SC23: 4.1, 4.10, 6.10a



Bring McWane to Your School!

Bring *McWane on the Move* to you with hands-on programs led by expert educators. Booking is simple, with flexible options for assemblies or classrooms — reserve early to secure your date.

Start Here

Visit our website by going to mcwane.org/learning/teachers/mcwane-on-the-move/ or scan the QR code & fill out the form.



Reservation Guidelines

- Deposits are not required to book a *McWane on the Move* program.
- Please provide a valid email address and cell phone number.
- Schools or groups will need to provide a State Tax Exemption form to be tax exempt.
- It is recommended that you submit your forms early, as space is booked on a first-come, first-served basis.
- Live Science Show price is \$400 and accommodates up to 150 students. Each additional assembly program is \$325. Discount applies only when booking the same program on the same day.
- Hands-on Lab program price is \$275 for one classroom, with a maximum of 30 students. Each additional classroom program is \$200. Discount applies only when booking the same program on the same day.





Empowering Educators

Discover ways McWane Science Center partners with educators to support meaningful, hands-on STEM learning. This section highlights opportunities to collaborate, grow professionally, and bring engaging science experiences into your classroom throughout the year. **For more information on our professional development workshops, visit mcwane.org/learning/teachers/teacher-workshops.**



Educator Advisory Committee

Help shape STEM learning at McWane! Our Educator Advisory Committee creates space for educator voices to:

- Guide curriculum development
- Test new ideas and resources
- Advise on standards alignment
- Identify access barriers schools face
- Serve as ambassadors for McWane within their districts and networks
- Participating teachers receive a free McWane on the Move outreach for their classroom.

Want to lend your voice? Learn more at mcwane.org/learning/teachers/teacher-resources/



Professional Development Workshops

Our teacher professional development workshops combine research-based instructional practice with hands-on STEM experiences designed to support immediate classroom application. Educators leave each workshop with practical curriculum resources like ready-to-use lesson plans and frameworks for designing their own experiences.

Cost: \$300 per workshop for 5-15 teachers; \$600 per workshop for 16-30 teachers.

Duration: 1-2 hours

Numeracy Act! It All Adds Up

Demystify the enigma of math by exploring its foundations in logical and spatial reasoning. By connecting pre-math concepts taught in early learning classrooms to high mathematical thinking, teachers build the confidence to see themselves as math people.

Storybook STEM: Accessing STEM through Storytime

Step into a world of imagination with techniques that empower educators to expand story time with STEM activities that enrich lessons and encourage STEM exploration.



Design Challenge in the Classroom

Transform the classroom into a hub of creative exploration by examining real-world problems that inspire students to think critically and find innovative solutions.

The SCIENCE of STEM Education

Discover the key elements that make STEM Education engaging and transformative using our SCIENCE framework. Explore how to spark curiosity, build science capital, and strengthen science identity – essential steps to inspiring lifelong STEM engagement.

Digital Literacy! Tech Talks: Navigating Classroom Conversations about Future Technology

Embrace the ever-changing technological landscape as we grapple with ethical dilemmas, examine diverse values and perspectives, and build confidence to guide classroom conversations about our future.

Looking for Something Different?

We partner with schools and districts to design custom professional learning experiences tailored to meet their STEM needs. Whether you're tackling challenging standards, exploring a specific content area, or building skills with tools and tech, we can support your goals and provide practical resources for teachers.

Learn more at mcwane.org/learning/teachers/teacher-workshops/



Spend the Night at Mcwane!

Bring your group for an unforgettable Overnight Adventure at McWane Science Center! These customizable experiences are designed to engage school groups, scouts, churches, and other groups with hands-on science fun after hours. Each adventure combines the excitement of IMAX, exclusive time in the Adventure Halls, and engaging science programming to create a comprehensive, one-of-a-kind experience. Groups of 100 or more can book exclusive overnight events, while select Open Nights are available for smaller groups.

For more information or to book your adventure, please contact overnights@mcwane.org.



Prices:

Base Price: \$60 per person

Science Program: +\$150

Includes:

- Dinner
- Continental Breakfast
- Live Science Show
- IMAX® Documentary Film
- After-hours Museum Access

Group Requirements:

- Minimum of 100 people or flat rate applied
- Children must be kindergarten age or older





Pictured: 2024 Celebrate Science winners, F.E. Rudelson Elementary

Attention 3rd-5th Grade Teachers!

You and your students are cordially invited to apply for McWane Science Center's year long exhibit design competition, *Celebrate Science!* Students become exhibit designers and compete against other schools by creating innovative exhibit prototypes. The project help incorporate STEM across curriculum with a chance to win cash prizes!

 **McWane Science Center**
CELEBRATE SCIENCE
 Exhibit Design Challenge

Details of Participation

- One team per school; 30 students max per team.
- 20 teams max will be accepted.
- Mixed groups of 3rd-5th grade students are allowed.
- Includes two free field trips, one in Fall and one in Spring, and one free outreach to your school in Spring.
- Winning classes will be awarded cash prizes.
- Teachers are responsible for transportation, bus cost, and chaperones for the field trips.

Learn more at mcwane.org/learning/teachers/teacher-resources/





Science is For Everyone

Because of the generosity of our supporters, McWane Science Center offers scholarships to Title I and other qualifying schools and youth-serving organizations across Alabama. Scholarships may be used for McWane on the Move outreach programs, field trips to the science center, Adventure Hall admission, and educational programs (based on availability). Funds are limited and awarded on a first-come, first-served basis. Scholarships typically do not cover transportation, food service, or IMAX movies, so please plan to cover those costs separately. We are grateful to the donors listed on this page for making hands-on science learning possible for Alabama students.

To see if your school or organization is eligible for the Education Scholarship Fund, scan the QR code or visit the webpage below.



Field trips
mcwane.org/ft-educational-scholarship-form/



McWane on the Move
mcwane.org/motm-educational-scholarship-form/

Thank You to Our Supporters!

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 - Vestavia Hills • Walmart Supercenter -
 Hueytown

Meet Our Education Team

At the heart of our science center is an exceptional team of science communicators and educators dedicated to sparking wonder and curiosity about our world through hands-on science experiences.

Where to Find Us:



Public Programs

Engage in workshops and demonstrations on every floor of the museum. Check our website's calendar to learn more.



Labs

Participate in hands-on experiences and innovative projects in our McWane Field Trip Labs.



Exhibit Interpretation

Look out for our educators around the exhibits for insightful explanations and answers to your questions.



McWane on the Move

Our commitment to STEM education extends beyond our walls! Our educators bring the McWane magic to schools and community events across Alabama.



Dear Teachers,

Every school day you lead your students down an educational path teaching them the required science, technology, engineering, and math (STEM) learning concepts relevant to their grade level. We know the challenges of incorporating captivating experiences. McWane Science Center wants to be a part of the science education journey with you and your students this school year. Together, we can make learning a fun and engaging adventure for all students.

As you explore the 2026-2027 Education Guide, you'll find a variety of standards-based programs designed for students from PreK through 12th grade. From unforgettable field trips and immersive IMAX documentaries to in-classroom programs and teacher professional development, McWane offers experiences that help make STEM relevant, accessible, and exciting for learners of all ages.

We hope this guide has introduced you to the many ways McWane Science Center can enhance learning throughout the school year. I look forward to working with and getting to know you during the 2026-2027 school year.

Peggy Chouring

Vice President of Education,
McWane Science Center

Program Index

Find the right program for your students.
Explore McWane programs by grade level and experience.

<i>K-2 Grades</i>	
Experience	Options
Hands-on Labs (pg. 4)	Terrapin Tales, Curious Critters, Frantic Friction
Live Science Shows (pg. 7)	Fire and Ice, Sound of Science, May the Forces Be with You, Lightning Strikes, Science Spectacular, Chem Possible
McWane on the Move (pg. 11 & 12)	Build-a-Bug, Sun Blocks, Measure Up, Matter Matters, Amazing Animals, Superhero Science (2 nd grade), Alabama Scientists (2 nd grade)
<i>3-5 Grades</i>	
Experience	Options
Hands-on Labs (pg. 4 & 5)	Marsh Math, Molecular Mysteries, Ingenious Geology, Jr Robotics, Oceans of Energy
Live Science Shows (pg. 7)	Fire and Ice, Sound of Science, May the Forces Be with You, Lightning Strikes, Science Spectacular, Chem Possible
McWane on the Move (pg. 12 & 13)	Enlightening Electricity, Inventive Engineering, Reactions in Action, Solids & Liquids, a-MAZE-ing Robots, Amazing Animals, Recipe for a Storm, Superhero Science, Alabama Scientists
<i>6-8 Grades</i>	
Experience	Options
Hands-on Labs (pg. 5 & 6)	Blueprints for Tomorrow, Engineering Challenge: Bridges, Robotics Challenge, Under the Scope, DNA Analysis, A Light in a Dark Room, The Eyes Have It, Isn't That a Crime?, Carter Creek Mystery
Live Science Shows (pg. 7)	Fire and Ice, Sound of Science, May the Forces Be with You, Lightning Strikes, Science Spectacular, Chem Possible
McWane on the Move (pg. 12 & 13)	Amp'd Up, Reactions in Action, a-MAZE-ing Robots, Ice Age Fossil Lab, Recipe for a Storm, Superhero Science, Alabama Scientists, Surgical Systems
<i>9-12 Grades</i>	
Experience	Options
Hands-on Labs (pg. 5 & 6)	Life on a Slide, 3D Printing Lab, VEX Robotics Lab, Rube Challenge, Terrapin Conservation Lab, Huntington's Disease Lab, DNA Fingerprinting & Exploration Lab, Sickle-Cell Anemia: Tracking Down an Inherited Trait, HIV Detection & Medical Cures Lab
Live Science Shows (pg. 7)	Fire and Ice, Sound of Science, May the Forces Be with You, Lightning Strikes, Science Spectacular, Chem Possible
McWane on the Move (pg. 13)	Amp'd Up, a-MAZE-ing Robots, Ice Age Fossil Lab, Surgical Systems

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Teachers can visit McWane Science Center for FREE! Just bring your valid teacher's ID and you will be granted admission into the Adventure Halls.
Let us show you what we have to offer you and your school.



200 19TH STREET NORTH, BIRMINGHAM, AL 35203
MCWANE.ORG