



School Program Guide

General Information about School Programs

The Museum of Science and History strives to increase the knowledge and understanding of the natural environment and history of Jacksonville as well as Northeast Florida. We focus on creating an awareness and appreciation of science and history through quality programs that stimulate and inspire learning in all visitors.

How to Make a Program Reservation

School programs are normally offered Monday through Friday at 9:00, 10:00, 11:00, and 12:00. MOSH programs are approximately 45 minutes long. **You may make a reservation by calling our reservationist at (904) 396-7062 ext. 226, Monday through Friday between the hours of 8:30am-5:00pm.** A confirmation packet will be emailed to you one to two months prior to your visit. If you do not receive your confirmation email, please call the reservationist at the number above. *Please make the reservationist aware of any special needs you may have at the time you are making the reservation.* Also, please have your selected program(s), program dates and times, grade level, and number of students and chaperones ready before you call.

Want more information about the programs we offer? Visit Guides containing in-depth program descriptions, SSS Benchmarks, and suggested activities for each program can be found on our website under the “Visit Guides” tab.

2009-2010 Educational Group Rates

Visitor	One program	Two Programs
Student	\$6.00	\$10.00
Chaperone*	\$6.00	\$10.00

*Schools are permitted to bring one adult chaperone (teachers or parents) at no charge for every ten (10) students attending MOSH school programs. Chaperones above the allotted number will pay the same price as students. Should seating not be available for all chaperones during scheduled programs, those individuals may be asked to tour museum exhibits while their group is attending the program. Chaperones are asked not to bring siblings or tagalongs. Prices above include touring of museum exhibits.

Complimentary admission for museum members does not apply to educational programs.

Coupons do not apply to educational programs.

Policies and General Information

- **Arrival time should be at least 15 minutes prior to your first scheduled program.**
Scheduled programs will not be available for groups that arrive more than 10 minutes after their scheduled start time.
- **Combining Groups**
MOSH may combine groups of similar grade levels from different schools into the same program.
- **Late or no show buses.**
MOSH cannot be held responsible for buses being late or failing to show. Groups will be charged for scheduled programs that are missed.
- **A deposit of \$50.00 is due 30 days prior to your scheduled program date.** If the deposit is not received, your reservation will be automatically cancelled. Final payment is due upon arrival.
- **Cancellations must be made in writing to the museum reservationist 30 days prior to your scheduled program date.** Groups that cancel programs with less than 30 days' notice will forfeit their deposit or the Duval County Pre-Paid hours that were scheduled.
- **The maximum number of people allowed in the classrooms cannot be exceeded.** Please ask the museum reservationist about maximum classroom capacity when making a reservation. Teachers are responsible for making sure this number is not exceeded on the day of your scheduled visit.
- **Lunch.** There are **no** indoor or covered lunch facilities at the museum, however there are picnic areas within walking distance along the river walk. They are available on a first come, first serve basis. Please plan accordingly for inclement weather.
- **Student Behavior.** Please remind your students that they are representatives of their school and we ask that, in order for them to get the most from their visit here at MOSH, they be courteous to others and remain on their best behavior. All students, regardless of grade/age, must stay with a chaperone at all times. Classes that are disorderly will be asked to leave without a refund.
- **A contract and visit guide will be emailed or faxed to you.** Please be sure to provide appropriate contact information upon scheduling your trip.

2009/2010 Education Program Descriptions

The following are the descriptions of the education programs offered by MOSH. Please read the descriptions carefully. For your convenience, we have included Sunshine State Standards (Bodies of Knowledge for Science and Strands for Social Studies) in each description. The programs described below are available to groups of 35 students or more.

Natural Science Programs

Happenin' Habitats (Grades K-5)

Where does the Red-Tailed Hawk call home? How about the Gopher Tortoise? Not only will you find out what types of habitats local wildlife species are found in, but why they live there. An animal's relationship to its habitat is very important because it must provide them with everything it needs to survive. Meet some live animals and find out which habitats they call home.

SSS: Life Science

Atlantic Tails (Grades K-6)

Students will learn how marine mammals are similar and different from other mammals using real animal specimens and fun demonstrations. Conservation is a very important topic of this program as well. Students will learn why the Right Whale and Manatee are in danger. Afterwards, your group is welcome to tour through the Atlantic Tails exhibit to meet Fermata, the life-sized right whale, along with other marine mammals.

SSS: Life Science

It All Makes Sense! (Grades K-6)

Students will come to their senses in this multi-disciplinary program that teaches the biology of the five senses through hands-on science experiments. See the color spectrum through prisms, hear sound waves in action, feel the chill of freezing cold liquid nitrogen, and more!

SSS: Life Science & Physical Science

No Bones about It (Grades 3-6)

Without bones, we humans would be a formless pile of mushy muscle. Come find out how awesome our bones are. We'll learn about their form and function and see what professional scientists have learned from them.

SSS: Life Science

Physical Science Programs

Science 101 (Grades K-12)

Become a scientist as you experiment in MOSH's extreme laboratory! Learn the nature of the scientific world as you make observations, test hypotheses, and analyze data. Learn that the processes of science can be fun in this exciting interactive program.

***Please Note: This program does not include static electricity or "sparky".**

SSS: Nature of Science & Physical Science

What's the Matter? (Grades 2-5)

From solids to liquids to gases—see matter change before your very eyes. Your students will become bouncing molecules, experience the chill of cold liquid nitrogen as it boils at room temperature, and help our scientist melt solids!

SSS: Physical Science & Nature of Science

Energize Me! (Grades 3-5)

What do your breakfast, a bicycle, and a light bulb all have in common? Find out in this program that takes an in-depth look at various forms of energy and how energy is transformed.

SSS: *Physical Science & Nature of Science*

Wild Weather (Grades 5-8)

Science will take your students by storm as we create clouds and explore lightning. Find out what makes a tornado spin, what causes thunder, and how hurricanes are formed. Learn how meteorologists study and attempt to predict the powerful forces of our weather.

SSS: *Earth & Space Science*

Volts and Jolts (Grades 5-12)

What is electricity? Where does it come from and how does it work? Have a shocking experience as you explore the electricity that runs your TV, creates lightning in the sky, and causes light bulbs to light up in mid-air.

SSS: *Physical Science & Nature of Science*

Planetarium Programs

All astronomy programs are presented in the Alexander Brest Planetarium. The Planetarium is a large, domed theater that can accommodate multiple school groups at a time. We suggest that you make reservations early if you would like to see a specific program, as scheduling is on a first-come, first-served basis. As with other programs, please have several dates in mind for your visit. For safety reasons, no one will be allowed into the Planetarium theater once the program has started, so please make sure that your group is ready and waiting at the Planetarium entrance 5 minutes before your scheduled program.

The Friendly Stars (Grade PK-K; program length ~25 minutes)

The planetarium theater can be a mysterious and scary place for the average kindergartener. In this program friendly Mr. Sun takes us on a tour of the night sky. Along the way your students will find out that the planetarium is a very fun and special place to visit.

SSS: Earth & Space Science

Day and Night (Grades 1-2)

This program focuses on what causes day and night. Students will explore the Earth's motions and find out why the sun seems to move across the sky. We will do a hands-on demonstration that will drive the concept home in a way the students will never forget. And finish by looking at the stars and planets of the current night sky.

SSS: Earth & Space Science

Follow the Drinking Gourd (Grades 2-4)

This planetarium show is a multi-disciplinary program that combines astronomy and history. The program explains the important role stars played in the escape of slaves to freedom through the Underground Railroad. "Follow the Drinking Gourd" was a folksong sung by slaves to help them remember the path to follow north.

SSS: Earth & Space Science, American History, Geography

The Sky Tonight (Grades 1-12)

Students will take a look at the current night sky, including the stars that make up many of the constellations. We will also identify any moons or planets that are visible in the night sky.

Program content varies by grade and season.

SSS: Earth & Space Science

A Trip through Space (Grade 3-4)

This program will take students on a trip through our galaxy and beyond as we look at everything from the Sun, Moon, and stars to black holes. After returning to our home planet, we will have plenty of time for a Q&A session about our voyage.

SSS: Earth & Space Science

Tour of the Solar System (Grade 1-12)

In this exciting program we'll take students on a whirlwind tour of the Solar System, visiting planets, moons, and of course, the Sun. There will be time during the program for answering any questions students may have.

SSS: Earth & Space Science

History Programs

Native American Cultures (Grades K-6)

The Timucuas lived right here in Jacksonville many years ago! Learn how they used their environment to survive and how they made different tools. Students will discuss the similarities and differences between the Timucuan culture and our own culture today.

SSS: *American History, Geography, Economics*

In the Attic (Grades K-8)

MOSH is cleaning out the attic and you're invited to come see what we've found! Students will be introduced to some of history's most practical and not so practical inventions. Exploring the evolution of technology will help students gain insight into the invention process as students learn fun facts about inventors, scientists, and adventurers. Besides, how many of your students have seen a butter churn?

SSS: *American History, Economics*

Hats Off to Jacksonville (Grades 3-5)

Journey through time and follow the development of Jacksonville from a cow crossing known as Cowford to a bustling tourist town and finally to the modern city it is today in this fun, interactive program. Students will wear many hats as they become a living timeline of Jacksonville's past. Afterwards, your group can tour through the Currents of Time exhibit to see Jacksonville's history for yourself.

SSS: *American History, Geography, Economics*

Flags Over Florida (Grades 3-6)

Come discover the triumphs and tragedies of settling Florida's First Coast. From Ponce DeLeon to Statehood, students will explore how "La Floride" became the "Sunshine State" in an interactive adventure through Florida's history.

SSS: *American History, Geography, Economics*

African Folktales (Grades K-4)

Lift Every Voice (Grades 4-8)

African Folktales is a fun interactive romp through the cultural folktales of Africa while *Lift Every Voice* is a Jeopardy-style game that challenges students' knowledge of local African-American History.

SSS: *American History*

2009/2010 Pre-K Program Descriptions

MOSH Preschool programs help children ages four and five discover the fun of learning. Preschool programs have a class size limit of 25 students and 6 adults maximum. Siblings and additional chaperones may not be admitted into the classroom, due to size constraints, but instead will be asked to tour the museum during the program. One adult will be admitted free for every five paid children. Pre-K programs are approximately 30 minutes in length.

Friendly Stars

See description under planetarium programs above.

SSS: Earth & Space Science

Dinos

Have fun with dinosaurs of all shapes and sizes. Learn about what dinosaurs ate and the different types of habitats in which they lived so long ago.

SSS: Life Science

Native American Folktales

Why did the grandmother spider steal the Sun? What happened when Coyote was the Moon? Children will enjoy these stories and activities from the world of the first Americans.

SSS: American History, Geography

Ready for Reptiles

Children will have the chance to learn about reptiles in our area. Some have strange habits, unusual colors and special “jobs”. Our creatures include turtles, snakes, lizards, and see – you – later alligators.

SSS: Life Science

Wings, Stings, and Crawly Things

What child doesn't like bugs? Children will learn about the life cycle of butterflies, the world of busy bees, the secrets of spiders, and other fascinating creatures.

SSS: Life Science

African Folktales

Why do mosquitoes buzz in people's ears? What tricks will Anansi, the spider, play on his friends? In this program, children will be exposed to different cultures through stories and folktales from Africa.

SSS: History, Geography

Under the Sea

Dive into the wet and wild world of ocean life! In this program we will study different types of marine life that inhabit the oceans of the world, from tiny little starfish to great big whales!

SSS: Life Science

Florida Wildlife

Explore the many animals that call Florida home. Children will learn about various habitats and different types of animals, as well as the basic needs of all living things.

SSS: Life Science

2009/2010 Outreach Program Descriptions

MOSH Can Come to You!

Museum Educators are available to visit your school to conduct fun and educational outreach programs. Programs last approximately 45 minutes unless otherwise noted. Program descriptions are listed below. Please call 904.396.6674 ext. 230 or email cturner@themosh.org for more information or to schedule an outreach.

Please have the following information ready in order to book a program:

- School's name, physical address, phone number, fax number, and contact email address
- Total number of participants and grade level(s)
- Preferred program, date, and time
- Type of event and program location (for example, cafeteria or media room)

Outreach Costs

\$400 for one program of up to 75 students

\$150 for each additional same program within the same day

Mileage additional (\$.50/mile)

*Special Pricing for Team-Up After School Programs**

\$100 per program

*Based upon availability

Outreach Programs

Science on the Go (Grades K-12)

Sit in on the zany experiments conducted in our mobile science laboratory. This interactive program includes experiments that cover physical science concepts such as matter, electricity, force and motion, and air pressure.

It All Makes Sense (Grades K-6)

Students will come to their senses in this multi-disciplinary program that teaches the biology of the five senses through hands-on science experiments. See the color spectrum through prisms, hear sound waves in action, feel the chill of freezing cold liquid nitrogen, and more!

Leaping Lizards (Grades PK-2)

Little paleontologists will love learning all about these leaping- or more appropriately, "terrible"-lizards. Fossils and replica dinosaur remains will be passed around for young scientists to observe and we'll even play a meat-eater versus plant-eater game! Living examples of the closest living reptile relatives will come along too to help demonstrate some of the characteristics of these extinct creatures.

Florida Wildlife (Grades K-12)

Florida is home to many splendid and amazing creatures- just look in your own backyard! In this program, the MOSH Educator will talk about fauna native to Florida, different classifications of animals (mammals, reptiles, etc), and habitats. Living, mounted, and stuffed animals will assist with the presentation of the program and students may have a chance to pet the live animals.

Reptiles on the Road (Grades K-12)

MOSH's resident reptiles will slither, stroll, and stride on over to your school to teach students about different kinds of reptiles and what they are all about! Possible visitors may include a live snake, gopher tortoise, bearded dragon, or alligator.

African Folktales (Grades K-5)

Why do mosquitoes buzz in people's ears? What tricks will Anansi the spider play on his friends? You will want to add these and many other stories to your black history resources.

Native American Folktales (Grades K-2)

Why did the grandmother spider steal the Sun? What happened when coyote was the Moon? Students will help tell these tales and more as they relive them before their classmates' eyes.

Native American Cultures (Grades 3-6)

The Timucuan Indians lived right here in Jacksonville many years ago! Learn how they used their environment to survive and about the different tools they made.

Hats Off to Jacksonville (Grades 3-6)

Journey through time and follow the development of Jacksonville from a cow crossing known as Cowford, to a bustling tourist town, and finally to the modern city it is today. Students will wear many hats as they create a timeline of Jacksonville's past.

2009/2010 Exhibit Schedule

Below you will find the 2009-2010 school-year exhibit schedule. Please note that this schedule is subject to change. Please contact the reservationist if you have questions or concerns regarding the exhibits. Exhibits are available for students to tour before and after their scheduled program(s).

- **Animal Grossology.** *October 10, 2009 through January 10, 2010.* Students will have a blast as they learn all about blood suckers, slime-makers, vomit munchers, and more in this sure-to-gross-you-out exhibit! But don't worry, this exhibit has snuck in all sorts of educational components, including virtual owl pellet dissection, a look inside the digestive system, and information on blood related diseases.
- **Amazing Sea.** *January 30 through May 2, 2010.* Journey through a sea of mazes and learn all about underwater life and environmental issues. As children answer questions correctly, they proceed through the maze; if their answer is wrong, it leads to a dead end. Students will learn as they go and enjoy the interactive displays along the way.
- **The Body Within.** *New.* Enter through MOSH's larger than life mouth, stroll down the digestive tract, and exit out the rear! Learn all about our bodies and how they work with hands-on interactive fun.
- **Water Worlds.** Explore the underwater world of the first coast in MOSH's permanent aquarium exhibit. Multiple aquariums will represent the many fascinating water habitats and live aquatic animals found throughout Florida and beyond.
- **Currents of Time.** Go back in time as you take a walk through the history of Jacksonville and Northeast Florida. From our earliest settlers over 10,000 years ago to modern day events, students will learn how this area of land we call Jacksonville became the city it is today!
- **Atlantic Tails.** Dive into this exhibit and meet Fermata, our life-sized right whale, along with her baby. Students will be greeted by other marine mammals as well and be able to see real life marine skeletons.
- **Aqua Expo.** Experience how water works without getting wet!
- **In the Attic.** This changing exhibit space houses artifacts from MOSH's very own history collection as well as objects on loan from other historical institutions. Call for a schedule of exhibits.
- **Prehistoric Park.** *Relocating to Lobby Fall 2009.* Our Allosaurus skeleton is an impressive sight. But don't worry- his bark is worse than his bite!
- **Florida Naturalist's Center.** Meet all of MOSH's resident live animals. Owls, snakes, turtles, tortoises, and alligators- just to name a few- are all native to Florida. *Capacity: 40 students (must be accompanied by a chaperone).*
- **Trains.** *November 21, 2009 through January 31, 2010.*