

EDUCATIONAL PROGRAMS FOR GROUP FIELD TRIPS

DISCOVER A MOSI FIELD TRIP

MOSI offers educators content-driven field trips that are fun, interactive learning opportunities for students in STEAM education. Let MOSI be an extension of your classroom to help meet your standards in a hands-on, inquiry-based and engaging way. Add a program to your field trip to enrich your students' learning experiences.

KINDERGARTEN – 2ND GRADE

Butterfly Boogie (Life Science)

Explore the life cycle of a butterfly from caterpillar to chrysalis to butterfly. Discover which plants attract butterflies and serve as food for caterpillars. See the butterflies up close and personal in our butterfly garden. SC.L.14, SC.N.1, SC.N.3

Up, Up, and Away (Space)

Explore the world of space travel through the eyes of an astronaut. Learn the parts of a rocket and then blast rockets up in the air. Finish your journey with a taste of astronaut ice cream. MA.A.1, SC.E.5, SC.K.N, SC.2.N

Kids' Chemistry (Chemistry)

Examine the states of matter – solids, liquids, and gases. Mix common household items to explore physical and chemical changes. Play with mysterious ooze that you create. MA.B.1, SC.N.1, SC.N.2, SC.P.8

Android Inventors (Robotics and Coding)

Be the problem solvers of tomorrow! Build and code a dynamic science rover that follows your command. Explore different ways scientists and engineers reach remote places using robots. Investigate how sensors work with hands-on and "minds-on" experimentation. SC.P.13.1, SC.P.12.1, SC.P.13.4, MAFS.MD.2.3

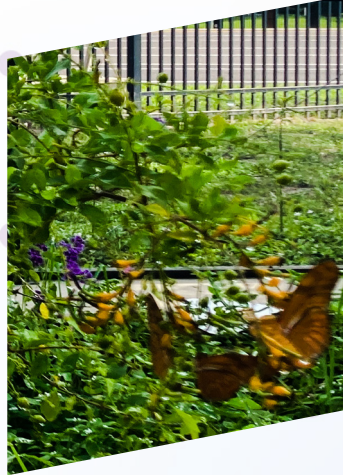
3RD – 5TH GRADE

Cycle of Life (Life Science)

Take your students' learning on an adventure! Journey through the life cycles of plants and animals to discover the amazing transformations they go through. Learn the difference between complete and incomplete metamorphosis. End the class with an immersive visit to the MOSI Butterfly Garden. SC.L.14, SC.N.1, SC.N.3

Mission: Moonbase (Space)

Prepare for liftoff as you journey to one of Earth's lunar colonies. Experience what it would be like to work and live in a lunar colony. Your students will work together in hands-on zones as they discover topics in multiple areas including lunar base operations, engineering, biosciences, and robotics. Journey out to the lunar surface to ensure that the solar flare shield is functioning properly. SC.N.1, SC.E.5



Totally Ooey Goey Science (Chemistry)

Take ordinary things and make slime that will ooze through your fingers. Experiment with physical and chemical properties of matter to create colorful acid/base reactions and reactions that heat up, cool down, or foam out of control. SC.P.8, SC.P.9, MA.A.5, MA.B.2

Scene of the Crime (Forensic Science)

A crime was committed and there's a mystery to solve! You and your team of detectives must analyze fingerprints, hair and other mysterious pieces of evidence in the lab to crack the case. Apply the tools and techniques of forensics to solve a simulated crime. SC.N.1, SC.N.2, SS.B.1, MA.A.4

Stormy Weather (Weather)

Be prepared for anything in this "low pressure" class that shows how and why weather patterns change. Learn about the tools used by meteorologists, see a cloud in a bottle and learn about the rain cycle. Find out about lightning safety, hurricane preparedness, and see how many drops your cloud can hold before it "rains" inside a plastic cup. SC.3.E.6.1, SC.4.E.6, SC.5.E.7.4

Kinetic Art (Engineering)

Experience the action of art in motion as students master the mechanics of movement by building a Rube Goldberg-style machine. Teams work together to build a complex machine using pulleys, gears, marbles, and other engineering contraptions. Combining fundamental forces with creative invention, students will experience the pride of building a wild, moving chain reaction. SC.E.5.4, SC.N.1.1, SC.P.10.2, SC.P.12.2, SC.P.13.1

Robot Engineers (Robotics and Coding)

Take on the role of a NASA engineer to build and design a Mars rover. Use your imagination and problem-solving skills to guide robots across various terrains to collect samples. Discover amazing places in our solar system while exploring the field of robotics. SC.N.1, SC.E.5, SC.P.10, SC.P.11, MA.G.5.2, SC.E.5.2, SC.N.2.1

GRADES 6 - 8

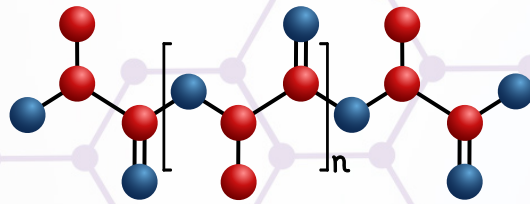
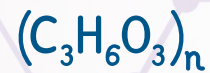
MOSI's Jr. Investigative Health Experience (Life Science)

Program Length – 1 hour

Expose students to important health topics concerning cardiovascular health. Dissect a sheep's pluck which is the trachea, lungs and heart of the animal. Students will be able to observe not only the above-mentioned organs, but also the tissues, valves and muscles that are vital to proper organ functions. Students will also relate methods of dissecting this specimen to a prerecorded segment of an actual open-heart surgery. At the end of the program, students may ask questions about the latest information regarding heart and lung health. SC.L.14, SC.L.15

*Additional lab fee applies





GRADES 6 AND UP

Ridiculous Reactions (Chemistry)

Become a chemist and experience what happens when the elements come into contact with each other. Create hot ice and learn how the reaction helps people that live in colder climates. Make colorful Elephant Toothpaste, then finish the class by creating a mini-firework and art sculpture from heating baking soda and powdered sugar. It promises to be a blast.

SC.P.8, SC.P.9, SC.

Materials Madness (Materials Science)

Use chemistry and physics to test the durability and structure of different substances. Stretch a garbage bag to see if it holds one gallon of water without breaking. Create PVA slime and learn about different polymers. Create a concoction that will disintegrate steel wool. This class will stretch your understanding of STEAM. SC.P.8, SC.P.9, SC., SC.N.1

CSI Tampa (Forensics Science)

Challenge your students to solve a simulated crime by performing a variety of techniques used by forensic scientists in the DEA and FBI labs. Students will analyze evidence such as hair and blood samples and use chemistry to identify unknown substances to solve a simulated crime. Go behind the scenes of this fascinating application of science and technology. SC.N.1, SC.L.16

The Code of Life (Life Science)

Explore why DNA is considered the "blueprint of life" in this introduction to its coded structure and the role that it plays in genetics. Extract DNA from human cheek cells and learn why each step of the procedure is important. Run gel electrophoresis to conduct a DNA fingerprint simulation in this exploration of biotechnology. SC.N.1, SC.L.16

Vital Signs (Life Science)

Dissect a sheep's heart, lungs and trachea to understand how they work. Learn to measure blood pressure in this exploration of respiratory and circulatory physiology. SC.L.14, SC.L.15, HE.C, HE.B, HE.P

*Additional lab fee applies

Investigative Health (Life Science)

Program Length – 1.5 hours

Through hands-on stations (such as suturing, tools of the trade, and engineering) expose students to important health topics. Examine the heart, trachea and lungs of a mammal through dissection. Investigate how the heart and lungs work together to oxygenate and circulate blood throughout the body. Learn why interpreting an EKG graph is important for good health.

SC.L.14, SC.L.15, HE.C, HE.B, HE.P

*Additional lab fee applies



PLANETARIUM PROGRAMS

Saunders Planetarium & Digital Dome Theater Experience (One show is included with group admission!)

Included with every field trip admission is a visit to MOSI's Saunders Planetarium and 8K Digital Dome Theatre. Students will enjoy a 15-minute live star show led by our expert staff, followed by a 30-minute immersive film. These experiences are designed to align with science standards while sparking excitement about space, Earth, and beyond. Film selections vary and are subject to change, but current offerings include:

Oasis in Space (Grades K and up)

Explore Earth's unique position as a life-sustaining world and compare it with other planets in our solar system in the search for water beyond Earth.

Astronaut (Grades K and up)

The exploration of space is the greatest endeavor that humankind has ever undertaken. What does it take to be part of this incredible journey? What does it take to become an astronaut? Learn by exploring the amazing worlds of inner and outer space, from floating around the International Space Station to maneuverings through microscopic regions of the human body.

Expedition Reef (Grades K and up)

Learn the secrets of the "rainforests of the sea" as you embark on an oceanic safari of the world's most vibrant—and endangered—marine ecosystems. Expedition Reef immerses you in the undersea adventure. Along the way, discover how corals grow, feed, reproduce, and support over 25% of all marine life on Earth—while facing unprecedented threats from climate change, habitat destruction, and overfishing.

Perfect Little Planet (Pre-K – 5th grade)

Take a tour of the solar system through the eyes of alien tourists in this fun and educational journey through space.

Forward! To the Moon (Grades 4 and up)

Follow NASA's Artemis program and future plans for lunar exploration, featuring astronaut narration and real mission footage.

Edge of Darkness (Middle – High School)

Discover the mysterious and violent forces at work in our universe, including supernovas, black holes, and dark matter.

Solar Superstorms (Grades 4 and up)

Witness the incredible power of solar activity and how it affects Earth, from the auroras to potential disruptions of our technology.

7 Wonders (Grades 3 and up)

Travel to some of the most extraordinary natural and manmade wonders of the world in a breathtaking visual journey around the globe.

Standards Met are SC.N.1, SC.E.5

