

miSci Field Trip Information

Field trips run from 10:00 – 1:00.

Pricing is \$15.50 per student/\$21 per adult (chaperones/parents/grandparents/school employees other than the teacher and teacher assistants are <u>all</u> considered adults for pricing). Teachers with a certified school teacher ID are free of charge.

There is an additional material fee for some of the classes.

An invoice will be created based on the headcount provided and payment is due upon booking. Memberships and libraries passes are NOT allowed to be used as payment.

Classrooms support up to 25 students and 4 adults, any extra guests will have to remain on the museum floor and welcome to explore the exhibits.

You receive an activity, a planetarium show, and some time to explore in the museum.

Your agenda will be prepared by our staff.

A break for lunch will be included in the agenda, students must bring a cold bag lunch only.

Teachers <u>must</u> remain with their students at all times.

Chaperones must remain with the group they are assigned to

Students will conduct themselves in a respectful and orderly manner at all times.

No food or drink in the exhibit area, classroom, or planetarium.

**Please note, Due to the security of the children during your field trip, chaperones will not be allowed to enter the museum unless they enter with the field trip. We cannot allow drop-in adults or late shows.

**Chaperone payment will be collected by the school before the field trip and paid as one lump sum.

Activity Choices for Field Trips

Rosie Revere: Engineer

Learn about the science of engineering through an engaging story and hands-on engineering project. Students build their own take-home flying machine and get to test and improve its performance.

Program length: 35 – 45 minutes

Best for learners: kindergarten – 2nd grade

Engineering Mission

Following the engineering process, students design, build, test, evaluate, and redesign a shockabsorbing system that protects either two marshmallow "astronauts" or a ROVER while they land on the Moon.

Program length: 35 – 45 Minutes

Best for learners: 3rd – 8th grade

Erie Canal Ticket to Ride

Discover the Erie Canal through hands-on, inquiry-based learning experience that explores the science, technology and history of innovation in Upstate New York. Students will understand the physics behind the workings of the Canal, including friction, buoyancy, and Pascal's Law. Using the engineering process, participants build a lock model based on the Erie Canal's lock system.

Program length: 45 minutes

Best for learners: 3rd - 7th grade

Insect Invasion

What makes a butterfly an insect? Discover the amazing world of the butterfly, learn the basics of butterfly anatomy, understand its lifecycle, and see its fascinating metamorphosis. Students attending will use their artistic skills to create a model of the four stages in the metamorphosis of butterflies.

Program length: 35 – 45 Minutes

Best for learners: Pre-kindergarten – 3rd grade

Dino Discovery

Why are dinosaurs different from other animals? What happened to the dinosaurs? What did dinosaurs eat? What is a fossil? Explore the prehistoric world as you learn how to identify dinosaurs while holding real fossils and creating your very own Dino-fossil.

Program length: 35 – 45 Minutes

Best for learners: Kindergarten– 3rd grade

Optical Illusions (There is an additional \$15 material fee)

Trick your eyes and brain with optical illusions and discover how artists have used techniques to trick us for hundreds of years. Learners observe a real cow's eye dissection and learn about how the parts of the eye work together to create our sense of sight.

Program length: 35 – 45 minutes

Best for learners: 3rd – 8th grade

Crime Lab Science*

Learn about forensic science and how evolving technology helps scientists and detectives discover the truth about mysterious criminal cases. "Detectives in training" participate in a mock investigation where they identify the main types of fingerprints, explore the science of chromatography, learn about DNA and how to extract it, and use all the evidence to identify the culprit.

Program length: 35 – 45 minutes

Best for learners: 3rd – 8th grade

Fun with Physics

Physics is everywhere, even when we play! Students observe and identify different forces by observing Bernoulli's principle, falling objects, gyroscopes, and more. In the second half of the program, participants create a helicopter toy to illustrate the principles that they have investigated.

Program length: 35 – 45 minutes

Best for learners: 3rd – 8th grade

Magic of Electricity

What is electricity, what are the types and where does it come from? Explore the different types of electricity and see how it is generated and used in this shocking program!

Program length: 35 – 45 Minutes

Best for learners: 2nd – 8th Grade

Dry Ice* - This is a demo and not a hands-on class. (There is an additional \$55 material fee)

Explore the states of matter with some super cold chemical ice! Participants watch as objects are frozen before their eyes, bubbles float on an invisible bed, and clouds of gas erupt from the lab table. Learners also get to observe firsthand the process of sublimation, where a solid becomes a gas without first becoming a liquid.

Program length: 35 – 45 minutes

Best for learners: 1st - 8th grade

Liquid Nitrogen - This is a demo and not a hands-on class. (There is an additional \$55 material fee)

Nitrogen is a gas that can become a liquid! Participants observe such uncommon states of matter as liquid boiling at room temperature. Through fascinating demonstrations, learners discover how liquid nitrogen is made and used in science, and the curious effects this extreme cold has on a variety of materials.

Program length: 35 – 45 Minutes

Best for learners: 2nd – 8th Grade

Shadows: Everybody Has One!

Why are shadows longer during wintertime? Particpants will partake in Moonbear's Shadow Storytime and watch as he tries to escape it but can't. Then we'll break out the flashlights and look at our own shadows. What makes them shorter? Longer? We'll act out Moonbear's story with our own storyboards and take home a tracing of the shadow of our hand.

Program length: 35 – 40 Minutes

Best for learners: pre-kindergarten – Kindergarten

Spinning in Space

Why is it light during the day and dark at night? Learn about Earth and its relation to other bodies in the solar system. Students discover, through kinesthetic activities, the movement of the Earth, Moon, and Sun system and how this causes common phenomenon such as day and night.

Program length: 35 – 45 minutes

Best for learners: Pre-kindergarten – 5th Grade

Just a Phase*

Just a Phase investigates Earth's closest neighbor, the Moon. Students explore lunar phases by creating and observing a scale model of the Earth-Sun-Moon system, identifying the phases of the moon, and discussing how and why they occur.

Program length: 35 – 45 minutes

Best for learners: 2nd – 5th grade

Let's Talk Space – LECTURE – No hands-on component

Learn about the newest discoveries and most exciting science missions beyond our planet with an interactive lecture from miSci's experienced program designers. Topics range from the most recent footage of other planets to the design and launch of brand-new research missions, to the search for life beyond Earth.

Program length: 45 – 60 Minutes

Best for learners: 6th – 12th grade

Shadows from Space; The Science of Eclipses

In this workshop students will learn about the patterns of movement that the sun, moon and stars make and make a model to show how an eclipse works. Students will understand what is happening during an eclipse in the sky above them.

Program length: 35 – 45 minutes

Best for learners: 1st - 8th grade

Science Solutions

Did you know that the famous Silly Putty[®] was accidentally developed by an engineer for General Electric, James Wright? Bounce into the world of Chemistry by mixing different ratios of ingredients to make the best bouncy ball.

Program length: 35 – 45 Minutes

Best for learners: 2nd – 5th Grade

*An advanced version of this program is available for students up to 12th grade.

All onsite programs follow CDC and state and local health guidelines. Hand sanitizer will be available throughout the Museum and classrooms. If a child/adult is presenting COVID related symptoms, please refrain from coming to miSci. We would be happy to reschedule your visit.

Financial aid may be available for those who qualify. For bookings, please contact <u>reservations@misci.org</u>.