

Learning Expedition Guide July 2023 – June 2024

We are excited to help you plan your perfect school group experience at Adventure Science Center! See rates and details on current experience offerings below.

Ready to book your experience? Fill out <u>this form online</u> or email <u>reservations@adventuresci.org</u> for additional information.

ON-SITE FIELD TRIPS | RATES

| Onsite Field Trip Type | Students | Teachers | Additional Adults |
|--|----------|----------|--------------------------------------|
| General Exploration Admission: MNPS Schools | FREE | FREE | \$20 1 FREE adult per 10 students |
| General Exploration Admission: School Groups | \$7 | FREE | \$20 1 FREE adult per 10 students |
| Sudekum Planetarium Show | \$5 | \$5 | Chaperones \$7 |
| Demonstration* (25-minutes, up to 120 people) | \$3 | FREE | 1 FREE adult per 10 students |
| Hands-On STEM Lab, Little Lab (55-minutes up to 30 students) | \$5 | FREE | N/A |
| Hands-on STEM Labs: Dissections* (55-minutes up to 30 students) | \$8/\$10 | FREE | N/A |

*Some Labs/Demonstrations require additional material fees

RATE DETAILS

- School Group rates apply only to tax-exempt K-12 schools, preschools, year-round daycares, head start programs, and organized home schools.
- To qualify for the School Group rate, each school group must have 20 or more students and reserve tickets prior to their visit
- Additional Adult admission price applies to extra adult chaperones who are not included in the required 1:10 teacher/chaperone-to-student ratio. These extra adult chaperones *must pay within the school* group reservation to access the School Group rate.

FIELD TRIP DETAILS

PARKING

FREE, on-site parking for buses and chaperones.

LUNCHES

- 1. FREE of charge Bring your own lunches and utilize the outside covered picnic pavilion with tables or Galactic Gardens Amphitheater
- 2. Reserve indoor lunchroom space for \$75.00 per 30 minutes per room, bring your own lunches

3. Reserve indoor lunchroom space for \$75.00 per 30 minutes per room, pre-order box lunches from the Subway® restaurant located in the Skyline Café

PAYMENT

<u>One single</u> payment for the total balance is due upon arrival via **check** (no refunds on overwritten checks) **or credit card**. We can also invoice your organization upon request. Your organization is responsible for **collecting all payments in advance** including fees for additional chaperones not included in the chaperone/student ratio (1:10).

*Prices are subject to change without notice.

PROGRAM OPTIONS: LEARNING & OUTREACH

Demonstrations: 25 minutes long Hands-On STEM Labs: 55 minutes long

| | Grade | Торіс | Program Type | Standards |
|------------------------------|-------|---------------------|-------------------------------|---|
| Matter Matters * | K-7 | Physical Science | # Demonstration | K.PS1.2, K.ETS1.1, 3.PS1, 5.PS1.1, 7.PS1 |
| Get Energized! * | K-8 | Physical Science | Demonstration | K.LS1.3, K.ETS1.1, 2.PS3.2, 2.PS4, 3.PS2.1, 3.PS.3, 5.PS2.5, 6.PS3, 8.PS3 |
| Chemistry is a Blast* | 1-8 | Physical Science | Demonstration | 1.ETS1.1, 3.PS1.2, 4.PS3.3, 5.PS1.4 |
| Cooking up a Storm* | 2-6 | Earth & Space | # Demonstration | 1.ETS2.1, 2.ESS2.1, 3.ESS2.1, 3. ESS3.1, 5.EPS2.5, 6.ESS2.6 |
| Space Exploration* | K-5 | Earth & Space | # Demonstration | 2.PS2.3, 2.ETS2.2, 3.PS3.1, 3.ETS2.1, 4.PS3.3, 5.PS2 |
| Shocking, It's Science! * | 2-8 | Physical Science | Demonstration | 2.ETS2.2, 3.PS3.2, 4.PS3.3, 6.PS3.1, 7.PS1.1, PHYS.PS39 |
| Get Fired Up! * | 3-12 | Physical Science | Demonstration | 2.PS1.2, 3.PS1.2, 6.PS3.1, 6.PS3.4, CHEM1.PS3.4 |
| It's Electric! * | 2-6 | Physical Science | Hands-On STEM Lab | 2.ETS2.2, 3.PS3.2, 4.PS3.3, 5.ETS1.3, 6.ETS1.2 |
| Splitting Molecules* | K-8 | Physical Science | Hands-On STEM Lab | K,1,2,3,4,5.ETS2.1, 4.PS3.3, 5ETS1.2, 6.ETS1.2, 7.PS1.2 |
| Amusement Park Physics* | 2-8 | Physical Science | Hands-On STEM Lab | 2.PS3.2, 2.ETS1.4, 3.PS3.1, 4.PS3, 5.PS2.1, 6.PS3, 8.PS2.4 |
| Upload Your Code* | 3-5 | Physical Science | Hands-On STEM Lab | 3.ETS1.2, 3.ETS2.1, 4.ETS1.1, 5.ETS1, 5ETS2.3 |
| Primary Physical Forces | K-5 | Physical Science | Hands-On STEM Lab | 2.PS2.1, 2.PS2.2, 2.PS2.3, 3.PS2.1, 3.PS2.2, 3.PS2.3 |
| Diggin for Dinos* | Pre-K | Life Science | Hands-On STEM Lab: Little Lab | K.LS1.3 |
| Little Engineers* | Pre-K | Physical Science | Hands-On STEM Lab: Little Lab | K.PS1.3 |
| Squid Dissection* | 2-7 | Life Science | Hands-On STEM Lab | 2.LS1.1, 3.LS1.1, 3.LS4.2, 7.LS1.5 |
| Cow Eye Dissection* | 3-12 | Life Science | Hands-On STEM Lab | 3.LS1.1, 3.LS1.1, 3.LS4.2, 6.LS2.7, 7.LS1.5 |
| Shark Dissection* | 1-12 | Life Science | Hands-On STEM Lab | 2.LS1.1, 3.LS1.1, 3.LS1.1, 3.LS4.2, 6.LS2.7, 7.LS1.5 |
| Fetal Pig Dissection* | 7-12 | Life Science | Hands-On STEM Lab | 7.LS1.5, 7.LS1.6, BIO2.LS4 |

Programs also available for OUTREACH are marked in the chart with asterisk ().

Demonstrations have a \$30 Liquid Nitrogen fee per demonstration

PROGRAM DESCRIPTIONS

AMUSEMENT PARK PHYSICS - Get ready for a wild ride as we push Newton's laws to their limits with handson coaster challenges. Along the way, we'll demonstrate potential and kinetic energy, Newton's second law of motion, and more!

CHEMISTRY IS A BLAST – Grab your gloves and goggles, because we're exploring chemistry's explosive side! Learn about the signs of a chemical reaction with help from the fizziest, foamiest, "don't try this at homiest" experiments around!

COOKING UP A STORM – Learn the secret ingredients behind the wildest weather on Earth. Then, batten down the hatches as our giant Tesla coil cooks up a storm before your very eyes!

COW EYE DISSECTION – Do you see what I see? Students will visualize the wonders of their own eyes as they dissect a cow eye, and discover the path light travels from the cornea to the brain. (2 students per cow eye)

FETAL PIG DISSECTION – Did you know pig organs can be used in human surgery? In our most in-depth depth dissection, students will make comparisons between pig and human anatomy, and learn how an organ's structure relates to its function. (2 students per fetal pig)

GET ENERGIZED – Power up as we discover the different types of energy we use every day! Students will learn the real (ok, scientific) meaning of work as they explore how we use energy to complete different tasks.

GET FIRED UP – Experience one of our science educators light their own hand on fire as they show students how to beat the heat! We will also use heat to fly balloons, create sound with flames, and discover other hot secrets about thermal energy and the fire triangle.

IT'S ELECTRIC - Why do your lights turn on when you flip a switch, and how does your fridge know to turn on a light when you open it? Answer these questions and more as you tackle challenges that teach you the secrets of circuits.

MATTER MATTERS – Feel the burn as our educators use heat to travel to the four states of matter! Then, "hold your breath" the Science Center way as we use liquid nitrogen to travel back again!

PRIMARY PHYSICAL FORCES – Harness the forces of gravity, magnetism, spring tension, and more as you push and pull your way through this lab's challenges!

SHARK DISSECTION – Did you know sharks have teeth in their skin? Students will discover this fact and more as they dive inside a shark during this dissection of our ocean's most iconic predator. (3 students per shark)

SHOCKING, **IT'S SCIENCE** – Prepare to shock your senses as we observe how electricity can make objects fly, create plasma, and even light up a pickle! Students will learn about currents, explore circuits, and more.

SPACE EXPLORATION – Strap in, space cadets! Students will explore what we need to pack for a space flight, test rocket-launching techniques, and observe why the lack of oxygen and gravity are such large challenges to astronauts in space!

SPLITTING MOLECULES – Channel your inner mad scientist as you use the power of electricity to split water molecules! Students will test various liquids to discover the best way to harvest hydrogen for an explosive finale.

SQUID DISSECTION – Squids offer budding biologists a great introduction to the dissection process! Discover the adaptations of a squid and write your name in squid ink as we learn about these aquatic animals. (2 students per squid)

UPLOAD YOUR CODE – Team mission: Write block-based or JavaScript code to program a small robot through a series of basic to complex obstacles. Students will code, test, observe, assess, and repeat as they work through the scientific process with their robot challenges.

OUTREACH (OFFSITE) | RATES

If you are unable to come to Adventure Science Center for a program, we can come to you! Outreach program options are denoted with an asterisk* in the programs chart on the previous page.

| OUTREACH Activity | Rate |
|---|----------------------------|
| Demonstrations (25 minutes) | |
| - Up to 30 students | \$ 200.00 |
| - Between 31-75 students | \$ 250.00 |
| - Over 75 students | \$ 300.00 |
| - Liquid Nitrogen Fee (<i>if applicable</i>) | \$ 30.00 per demonstration |
| Hands-on STEM Labs (55 minutes) | |
| - Up to 30 students per lab | \$ 250.00 |
| - Dissection Labs*, additional per student fee | \$ 3.00/\$5.00 |
| STEM Events (90 minutes) | |
| - 4 Stations (station options listed separately) | \$ 600.00 |
| - Per additional station | \$ 50.00 |
| Mileage Fee (Roundtrip to and from Outreach location) | \$ 0.66 per mile |
| Travel Fee | |
| - Roundtrip mileage is equal to or less than 30 miles | \$ 0.00 |
| - Roundtrip mileage between 31-60 miles | \$ 50.00 |
| - Roundtrip mileage between 61-90 miles | \$ 100.00 |

*Some Labs/Demonstrations require additional material/specimen fees

OUTREACH PROGRAM DETAILS

STEM Events are only offered as outreach programs. Adventure Science Center provides hands-on STEM station materials (of your choice via STEM Event Menu), a STEM Event Passport including all the stations you have selected, and Adventure Science Center staff to facilitate the event. The event host provides a table for each station and volunteers to run each station (volunteers will be trained just before the event start time). STEM Events may have up to 10 stations per 1.5-hour time frame.