

plan your field trip today!

We make booking a reservation as easy as 1, 2, 3!

Reserve your field trip today by following these steps:

- 1** Review this booklet, and the website, to decide what you would like to see and do during your visit. Write down any questions you might have for our staff before you call.
- 2** Collect the following information before calling. Our Reservations staff will need this information before we can schedule your visit.
 - Date of visit
 - Arrival and departure time
 - Estimated number of adults *(include teachers and parents)*
 - Estimated number of students
 - Lunch plans *(Times are assigned on the day of the visit)*
 - Special needs
 - Let us know if you have visited in the past.
- 3** Call us at 412.237.3400, then press 7, or start the process by going online to submit a visit inquiry request.
Our team will help you book your visit and talk with you about educational anchors and standards as they relate to our offerings. We'll schedule your show(s) and will provide you with information for the day of your visit.

How to reach us:

Call 412.237.3400, then press 7, to reserve your visit.

Call Center hours: Monday–Friday from 9 am–5 pm (year round)
Our office is closed on Thanksgiving, Christmas, and New Year's Day.
Please be advised: Our call volume is very high from January to May.

Check out CarnegieScienceCenter.org/fieldtrips for up-to-date info!

← A grade-by-grade guide to our shows is located under this flap.

field trips!

2012-2013



Free Visit for Teachers!

Get ready for your field trip by visiting the Science Center! We offer FREE general admission once a year to PreK–12th grade teachers from schools in Pennsylvania, Maryland, Ohio, New York, and West Virginia.

Complete the online registration form, then bring your confirmation email and educator ID on the day of your visit.

Find the form and more details at:
CarnegieScienceCenter.org/TeacherVisit



CARNEGIE SCIENCE CENTER
One of the four Carnegie Museums of Pittsburgh
One Allegheny Avenue | Pittsburgh, PA 15212

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CARNEGIE SCIENCE CENTER

experience everything!

For students to really get science,
they have to actually **do science.**

FIELD TRIP PRICING:

Exhibits + Omnimax	\$12
Exhibits + Laser show	\$12
Exhibits <i>only</i>	\$8
Omnimax <i>only</i>	\$7
Laser show <i>only</i>	\$7

Add a planetarium or live theater show—just \$2 per person!

**In January & September, get four floors
of exhibits AND Highmark SportsWorks®
for just **\$5 per person!****

Add an Omnimax movie for just \$4 per person.



Special Offers for Groups!

We can schedule any group of 15 or more (including students, parents, and teachers) for a trip to Carnegie Science Center. Plus, book a tour of Heinz Field or take a cruise on the Gateway Clipper Fleet—ask about select dates. Please call to schedule programs well in advance of your trip.

For more info, visit CarnegieScienceCenter.org or call 412.237.3400, then press 7, today.

Membership cards are not valid for group admission.

Science Sleepovers

Turn your field trip into an overnight adventure! Call 412.237.1637 for details.

GRADE-BY-GRADE GUIDE TO SHOWS

Learn about complete offerings when you call to book, or visit our website.

Pre-K & Kindergarten

- One World, One Sky: Big Bird's Adventure
- Sky Above Mr. Rogers' Neighborhood
- Zeke's Dazzling Sky
- Earth and Friends
- Taste the Rainbow
- What's That Sound
- Born to Be Wild

Grade 1

- One World, One Sky: Big Bird's Adventure
- Sky Above Mr. Rogers' Neighborhood
- Zeke's Dazzling Sky
- Freeze
- Fruit Flambé
- Say Cheese!
- Wheel of Science
- Born to Be Wild

Grade 2

- One World, One Sky: Big Bird's Adventure
- Sky Above Mr. Rogers' Neighborhood
- Zeke's Dazzling Sky
- Freeze
- Fruit Flambé
- Say Cheese!
- UnderSea Alive
- Wheel of Science
- Born to Be Wild
- To the Arctic

Grade 3

- Beginners' Guide to the Universe
- Circus in the Stars
- Zeke's Dazzling Sky
- Freeze
- Fruit Flambé
- Illumination Sensation
- Say Cheese!
- Severe Weather Adventure
- UnderSea Alive
- Wheel of Science
- Born to Be Wild
- To the Arctic

Grade 4

- Circus in the Stars
- Far Out Space Places
- Stars Over Pittsburgh
- Traveler's Guide to Mars
- Astronaut
- Freeze
- Fruit Flambé
- Illumination Sensation
- It Came From Outer Space
- Say Cheese!
- Science in a Scoop
- Severe Weather Adventure
- UnderSea Alive
- Wheel of Science
- Born to Be Wild
- Rocky Mountain Express
- To the Arctic
- Tornado Alley
- Infinity Express

Grade 5 & 6

- Circus in the Stars
- Far Out Space Places
- Stars Over Pittsburgh
- Traveler's Guide to Mars
- Astronaut
- Freeze
- Fruit Flambé
- High Voltage
- Illumination Sensation
- It Came From Outer Space
- Physics Smash Lab
- Say Cheese!
- Science in a Scoop
- Severe Weather Adventure
- Wheel of Science
- Born to Be Wild
- Rocky Mountain Express
- To the Arctic
- Tornado Alley
- A Brief Mystery of Time
- Infinity Express

Grade 7 & Up

- Traveler's Guide to Mars
- Astronaut
- High Voltage
- It Came From Outer Space
- Physics Smash Lab
- Severe Weather Adventure
- Science in a Scoop
- Born to Be Wild
- Rocky Mountain Express
- To the Arctic
- Tornado Alley
- A Brief Mystery of Time
- Infinity Express



KEY: ■ Planetarium show ■ Live demonstration show ■ Omnimax film ■ Laser show



Need Financial Assistance? Your school may be eligible for funding to cover field trip and transportation costs to the Science Center through grants from donors like Target. Call 412.237.3400, then press 7, to see if your school qualifies.



Join the thousands of teachers who make the Science Center their first choice for field trip experiences!

Learning outside the classroom helps students relate in-school studies to potential careers in STEM—science, technology, engineering, and math.

That's why we established the **Chevron Center for STEM Education and Career Development**, backed by strong financial support from **Chevron** and founding partners **Duquesne Light, Eaton Corporation, NOVA Chemicals, PPG Industries Foundation, LANXESS Corporation, and California University of Pennsylvania.**

The Science Center is an essential part of the STEM education ecosystem, **supporting classroom learning with hands-on, inquiry-based exploration.** We provide engaging, one-of-a-kind **experiences that speak to the natural curiosity in young people and that address state standards** for science education at all grade levels.

Field trips to the Science Center provide the type of inspiration that carries students back to the classroom primed and ready to learn. Talk to us about **gearing your Science Center field trip to match your curriculum.**

hands-on exhibits

Highmark SportsWorks®

Content themes: Physical Science, Biology, Human Endeavor, Health & Nutrition, Science & Technology, Engineering & Technology

Here's the perfect opportunity to use kids' love of sports as a gateway to talk about foundational science concepts related to sports, physical activity, and health. As your students roam the gallery, they will explore and discover the physics of sports, nutrition and health, and try our exciting sports challenges. Your students won't just learn the science—they'll experience it!

Opens daily at 10 am.

Body Tech

Content themes: Biology, Engineering & Technology, Health & Nutrition, Human Endeavors

Get your hands on gamma rays, lasers, and X-rays! Simulate real procedures used by doctors. Learn about cutting-edge advances in medical technology that help save lives around the world. Reopens October 2012.

roboworld™

Content themes: Human Endeavors, Mathematics, Engineering & Technology

Gear up for a bot-tastic time with more than two dozen exhibits all about how robots think, sense, and act. Challenge a binary being to a game of air hockey or basketball, and learn about the roboticists who bring robots to life. Challenge your idea on what it means to be a robot.



Miniature Railroad & Village®

Content themes: History, Human Endeavors, Engineering & Technology, Environmental Science, Mathematics, Early Learners

See western Pennsylvania's landmarks like you've never seen them before! Let speeding locomotives guide your eyes through this wee world. The season-changing landscape is packed with more than 2,000 miniature replicas and more than 100 animated characters and scenes.

The Miniature Railroad & Village® will close on Monday, Oct. 8, and will reopen Friday, Nov. 16.

SeaScape

Content themes: Plants, Animals, Ecosystems, Microorganisms, Environmental Stewardship, Early Learners

Discover the ecosystem of a coral reef, learn about symbiosis, observe feedings, zoom in on microscopic sea life, and watch seahorses and clownfish. Plus, travel the globe with the touch of a finger with our new Google Earth installation.



Exploration Station

Content themes: Engineering & Technology, Physical Science

Students observe, experience, and quantify the scientific concepts behind directing an animated video, designing an electric circuit, harnessing the power of water, and more! Immerse your students in exploration that encourages open-ended inquiry and problem solving.

Exploration Station, Jr.

Content themes: Physical Science, Early Learners

Students in preschool and kindergarten will enjoy using machines in the ball factory, watching animals, building structures in the construction zone, and manipulating water in Exploration Station, Jr. Play is serious research for young scientists—it's how they learn the laws that govern our physical world.

When booking, ask about reserving this exhibit space.

USS Requim

Content themes: Engineering & Technology, History, Mathematics, Physical Science, Human Endeavors

Dive into science aboard a real Cold War-era submarine! Interactive kiosks and recreated living quarters give visitors an authentic sense of how our country's Navy veterans lived and the technology they relied on.

Opens daily at 10 am.

The submarine will be closed weekdays December through February; it will reopen March 1, 2013.

GUITAR: The Instrument That Rocked The World Runs through Sept. 30.

Students can experience the science of sound and strum on the world's largest guitar!

Presented locally by Dollar Bank

NEW!

SpacePlace Astronomy Gallery

Opens November 16, 2012

Content themes: Physical Science, Technology, Astronomy, Engineering, Environmental Sciences

What would it be like to be an astronaut? Here's your chance to find out!

Zero-G Climbers

How does weightlessness feel? Strap into climbing gear and experience this 21-foot 'zero' gravity climbing wall! 'Astronauts-in-training' will ascend the module to complete a simple task without gravity to provide leverage. *(Minimum weight 50 pounds)*

Micro-G Simulator

Complete tasks similar to those used in real-life astronaut training!

International Space Station Modules

Explore sections of a two-story, walk-in replica of the International Space Station. Students will conduct simulated hands-on experiments and learn about life in space.

Living & Working in Space Wall

Discover artifacts, space images, mission patches, and even a flight suit! Learn about the future of space exploration and potential careers.

Rocket Launch and Parachute Drop

Design a rocket and let it launch! Drop payload parachutes safely to the ground.



omnimax movies

Join nearly 100,000 students who have enhanced their field trip with a truly immersive experience!

The Rangos Omnimax Theater, a four-story, state-of-the-art IMAX® dome theater, is one of only 50 theaters of its kind in North America. It's the biggest screen, and the only dome screen, in the Pittsburgh region.

NEW!

Journey into the lives of a mother polar bear and her twin seven-month-old cubs as they navigate the changing Arctic wilderness they call home in...



OPENS OCT. 5, 2012

IMAX
TO THE ARCTIC

Sponsored locally by:  21st CENTURY CYBER CHARTER SCHOOL

Photos © 2012 Fernan Schulz

also showing...


Born to be Wild

Witness the remarkable bond between humans and animals through the touching stories of orphaned elephants and orangutans and the people who rescued them.

Sponsored locally by:  CLEARVIEW  STREAM ACADEMY


Rocky Mountain Express Closes October 4, 2012

Chug along on a magnificent ride along the railroads that cross the Rocky Mountains, and discover the history behind their construction.

Sponsored locally by:  BAIERL

Tornado Alley

Join Sean Casey of *Storm Chasers* on a heart-pounding mission to experience a tornado's destructive power with its gale-force winds, torrential rains, and unrelenting hail.

Sponsored locally by:  Dollar Bank

Educational resources may be available to supplement each film. Call for film schedule availability.

Interested in a different science topic? Call to inquire about our extensive library of films that satisfy a variety of anchors and standards.

laser shows

A Brief Mystery of Time Laser Show

Content Themes: Time, Space, Gravity, Light, Black Holes

Have you ever asked yourself, "What is time?" Learn about the science, history, and cultural perceptions of time in this awesome LASER light show. Explore black holes, worm holes, the speed of light, and the possibilities of time travel. Story sections are broken up by entertaining songs. Time is sure to fly when you're having this much fun!

Grades: 5-8



planetarium shows

Shows are available for group bookings Monday through Friday.
Add a show for just \$2 per person!



The Sky Above Mister Rogers' Neighborhood

Content themes: Solar System

Explore familiar objects in the sky with Mister Rogers and your favorite characters from the Neighborhood of Make-Believe.


Grades: PreK-1

One World, One Sky: Big Bird's Adventure

Content themes: Astronomy, Space Exploration

Based on the popular children's show *Sesame Street*®, this cross-cultural planetarium show provides an introduction to astronomy as Elmo and his friend, Hu Hu Zhu, from the Chinese production of *Sesame Street*, go on an exciting adventure to discover the Sun, Moon, and stars.

Grades: PreK-2

Made possible by:  PNC FOUNDATION

Zeke's Dazzling Sky

Content themes: Solar System

Join Zeke, the friendly alien, as you look closely at the daytime and nighttime skies and sing songs about the weather, stars, and rainbows.

Grades: PreK-2

Beginners' Guide to the Universe

Content themes: Solar System, Stars & Galaxies

Go on a guided tour of the night sky without leaving Pittsburgh! You'll travel beyond our solar system and beyond our own Milky Way Galaxy to the farthest reaches of our cosmos.

Grades: 3-6

Circus in the Stars

Content themes: Solar System, Stars & Galaxies

Using the Big Top as the backdrop, tour the constellations. Watch as major seasonal star patterns are transformed into their circus counterparts, while learning to identify constellations.

Grades: 3-6

NEW! Astronaut

Opens in December

Content themes: Space, Gravity, Human Body Systems, Technological Designs

Discover what it takes to be an astronaut! Learn about astronaut training, experience a rocket launch from inside the body, and discover the perils that lurk in space.

Grades: 4-6

A Traveler's Guide to Mars

Content themes: Solar System, Earth, Space Exploration

Journey to the once-mysterious surface of Mars and get a sneak peek at research that will pave the way for a human expedition to the Red Planet. Compare and contrast the geological and watery histories of Earth and Mars in a search for evidence that microbiotic life may have evolved on Mars in the past.

Grades: 4-12, tailored to specific grades

NEW! Infinity Express

Content themes: Space, Gravity, Stars & Galaxies, Solar System, Technological Designs

Take your students on an exciting journey of discovery through space and time. The show touches on recent exploratory missions and the future of space exploration, the search for life—both in the present and past—in our solar system, exoplanets, and stellar evolution. Audiences will get a taste of mapping and understanding galaxy clusters, witness galactic interactions (collisions), and the search for the nature of dark matter.

Grades: 4-12

Far Out Space Places

Content themes: Solar System, Space Exploration

Students will go on a virtual vacation as they witness extreme destinations like the Mariner Valley on Mars, experience the winds of Neptune, and visit the original lunar landing site of the Apollo astronauts.

Grades: 4-12, tailored to specific grades

Stars Over Pittsburgh

Content themes: Celestial Patterns, Solar System, Stars & Galaxies, Regional Science

Take a guided tour through the current night sky. Students will learn how to locate the planets and constellations in their own back yard, as well as the phases of the Moon. It's a dazzling, up-to-the-minute display of the cosmos.

Grades: 4-12, tailored to specific grades

Planetarium shows sponsored by:  PACYBER
The Pennsylvania Cyber Charter School



Talk with us about which shows are available on your selected date.
Register early for best selection!

Peirce SkyWatch Scholarship

Peirce SkyWatch Scholarships are available only to qualifying schools for field trip experiences that include a planetarium show.

Call 412.237.3400, the press 7, for more information.

live demonstrations

Shows are available for group bookings Monday through Friday.
Add a show for just \$2 per person!

Talk with us about which shows are available on your selected date. Register early for best selection!



NEW! Taste the Rainbow

Content Themes: Early Learners, Health & Nutrition, Botany, Environment

Join us in an adventure full of colorful fruits and vegetables as we explore how families can make healthy food options a part of their daily routine. Early learners will participate in cleaning, classifying by color, and identifying edible parts of fruits and vegetables.

Grades: Pre-K–K

What's That Sound?

Content Themes: Early Learners, Physical Science, Biology

Early learners will explore the science of sound through rhythm and song! Make music with animals, steel drums, hand bells, songs, and an orchestra of boom whackers played by the students!

Grades: Pre-K–K

Earth & Friends

Content themes: Early Learners, Physical Science, Astronomy

Soar through the Solar System in our Works Theater while going around the Sun on our Magic Planet video sphere. Early learners will explore space chemistry as they visit Earth and its “pals” (the other major planets) and learn why Earth has the right stuff for life!

Grades: PreK–K

Sponsored by:

**Society for Analytical Chemists of Pittsburgh;
Spectroscopy Society of Pittsburgh**

NEW! Say Cheese!

Opens February 2013

Content Themes: Chemistry, Health & Nutrition, Botany

Learn the history of cheese from the cow to our table. Cheese is a wonderful teaching tool for children, combining chemical reaction and practical results! At the end of our show, visitors will be able to taste our stretched mozzarella cheese. It's *whhey* cool!

Grades: 1–6

Freeze

Content Themes: Physical Science

Learn about the states of matter and see the effects of super-cold liquid nitrogen. This ever-popular set of experiments demonstrates what happens when things get really cold.

Grades: 1–6

Fruit Flambé

Content Themes: Physical Science, Health & Nutrition

We serve up the chemistry of caramel, super-saturated solutions, and combustion in this tasty New Orleans dessert. Shows end in a delicious fiery finish!

Grades: 1–6

Sponsored by: UPMC HEALTH PLAN

Wheel of Science

Content Themes: Physical Science

Come on down! You're the next contestant on Wheel of Science, our fabulous science game show. Students will spin our life-sized wheel to see amazing chemistry and physics experiments.

Grades: 1–6

UnderSea Alive

Content Themes: Environment, Biology

Students will take the plunge into our sea-sational fashion show about the unique adaptations of underwater organisms. They'll become seahorses or deadly jellyfish to learn how these animals protect themselves from predators.

Grades: 2–4

NEW! Illumination Sensation

Content Themes: Light, Optics, Chemistry

Discover the dazzling science of light! This illuminating show features optics, lasers, and things that glow.

Grades: 3–6


Severe Weather Adventure

Fridays at noon, beginning Oct. 5, 2012

Content Themes: Physical Science, Weather

Learn about the science of weather with WTAE Weather Watch 4 Chief Meteorologist Mike Harvey! See “lightning” shoot from the Tesla coil, experience the Tornado Cannon, and more!

Grades: 3–12

Special thanks to 



NEW! Science in a Scoop

Content Themes: Chemistry, Health & Nutrition

Explore the chemistry of ice cream as our science chefs make tasty custard and cool it down with liquid nitrogen.

Grades: 4–8

Sponsored by: Cold Cow Ice Cream

It Came From Outer Space

Content Themes: Physical Science, Astronomy, Engineering & Technology

Join our mission with astronaut and Pittsburgh native Captain Mike Fincke, as we explore space and new technologies that benefit us.

Grades: 4–8

High Voltage

Content Themes: Engineering & Technology, Physical Science

This electrifying show features our Tesla Coil and its one-million volt display of light and sound. Presentation includes static charging equipment, magnets, and other concepts of electrical charge.

Grades: 6–12

NEW! Physics Smash Lab

Opens April 2013

Content Themes: Physical Science

Take physics to the limit! Investigate forces and motion as we smash it, bash it, and crash it.

Grades: 6–12

special field trips & competitions

Check out these themed field trip opportunities!


ChemFest

Oct. 26–27, 2012

To celebrate National Chemistry Week, the Science Center invites students to explore a future in the field of chemistry. Explore the reasons why chemistry “matters” through hands-on activities, interactive demonstrations, and exciting presentations.

On Friday, high school students are invited to ChemFest Career Café, a fast-paced introduction to chemistry careers in an informal setting. They can check out dazzling demos, enjoy café-style beverages, and chat with industry professionals. *Limited capacity, pre-registration required.*

Grades: 5–12

Sponsored by: 

StormFest

Feb. 15–16, 2013

Immerse your students in the science of weather. Explore fun activity tables as you learn about geography, geology, meteorology, and more. Plus, meet special guests from the community! The forecast is 100% chance of fun and learning!

Grades: 5–8

Presented in partnership with: 

Engineer the Future

Feb. 22–23, 2013

Inspire your students to explore a career in engineering as they engage in hands-on activities, interact with professionals in the field, and check out presentations at more than 50 event tables.

Grades: 5–12

Space Out! Astronomy Weekend

March 23–24, 2013

Discover how to navigate the stars, get a close-up look at meteorites and Moon rocks, zoom in on the latest and greatest info about telescopes, and more. 3...2...1...Blast off!

Grades: K–12



SciTech Days

Nov. 6–7, 2012; March 5–6, 2013

Grades: 5–8

Nov. 8–9, 2012; March 7–8, 2013

Grades: 9–12

Pittsburgh is a hub for high-tech industry, creative technology, and ground-breaking advances in all fields of science. Your students will meet dozens of regional innovators from local companies and universities. Many special workshops and demonstrations are offered during SciTech Days, including sessions for gifted and advanced students.

- **NEW!** Advanced Nanotechnology
- **NEW!** eTextiles Workshop
- **NEW!** Career Café—Fast-paced chats with STEM pros (high school only)
- Exploring Marcellus Shale
- **ROBOTS!**
- **CSI Workshops**
- **Tissue Engineering**
- **Real Food Rocks!**

...and so much more!

Visit SciTechFestival.org for a complete list.

Show off your best science skills, and compete for cool prizes...and major bragging rights!

Future City Competition

Orientation: Sept. 28, 2012; 10 am–noon

Registration deadline: October 15, 2012

Competition: Jan. 19, 2013, Carnegie Music Hall

Carnegie Science Center is your host for the National Engineers Week Future City Competition, an innovative, nationally recognized engineering program for students in grades 6–8. Students work in teams of three, with a teacher and an engineering mentor, to design a city of the future using SimCity™ Deluxe software. They build a scale model of their city, write an essay on an engineering-related topic, and present their creation during the local competition. Winners go on to compete in the national finals in Washington, D.C.

Visit FutureCityPittsburgh.org or contact Carol Schoemer at 412.237.1640 or SchoemerC@CarnegieScienceCenter.org for more info and eligibility requirements.

Pittsburgh Regional Science & Engineering Fair

School registration deadline: Nov. 15, 2012

Competition: April 5–6, 2013, Heinz Field

Students show off their science abilities during the Pittsburgh Regional Science & Engineering Fair as they compete for more than \$1 million in cash prizes and scholarships from local companies and universities. Each year, hundreds of students take on the challenge of designing, implementing, and communicating an original experiment. Middle school students may be eligible to compete at the Broadcom MASTERS competition. High school students may be eligible to compete at the Intel International Science & Engineering Fair, May 12–17, 2013 in Phoenix, Ariz.

Visit PittsburghScienceFair.org or contact Lisa Kosick at 412.237.1534 or KosickL@CarnegieScienceCenter.org for more info and eligibility requirements.



i5 Digital Video Competition

Deadline for entries: March 31, 2013
Awards ceremony: April 25, 2013

A digital video competition for middle and high school students on the impact of STEM (science, technology, engineering, and math) in their lives – namely:

- **innovations**
- **inspiring careers**
- **issues**
- **incredible income potential**
- **individuals**

Resources are available to help students get started. Videos must be five minutes or less. All participants will be invited to an awards ceremony in the Science Center on April 25, at which all films will be showcased at the Rangos Omnimax Theater. Call 412.237.1552 or visit SciTechFestival.org/film.asp for details.

Grades: 5–12

more offerings



math + science = success™

Off-site programs, groups, and more!

Can't come to us? Then we'll come to you!

Our dynamic **Science on the Road** program brings high-energy educational programming to your location for kids in grades PreK–8. Every program is carefully tailored to the appropriate grade level and is aligned with national and Pennsylvania academic standards.

Call 412.237.3400, then press 7, or visit our website for details.

Math + Science = Success Public Day

Carnegie Science Center partnered with the Math & Science Collaborative and WTAE 4 to launch the community awareness campaign: **Math + Science = Success**. Sponsored by Pittsburgh-based FedEx Ground, the campaign aims to encourage students to enroll in higher level math and science courses.

Join us March 9, 2013 for a chance to interact with local companies and universities to learn about STEM careers, and much more!

Visit **MathScienceSuccess.org** for online resources for parents, caregivers, teachers, and kids.

