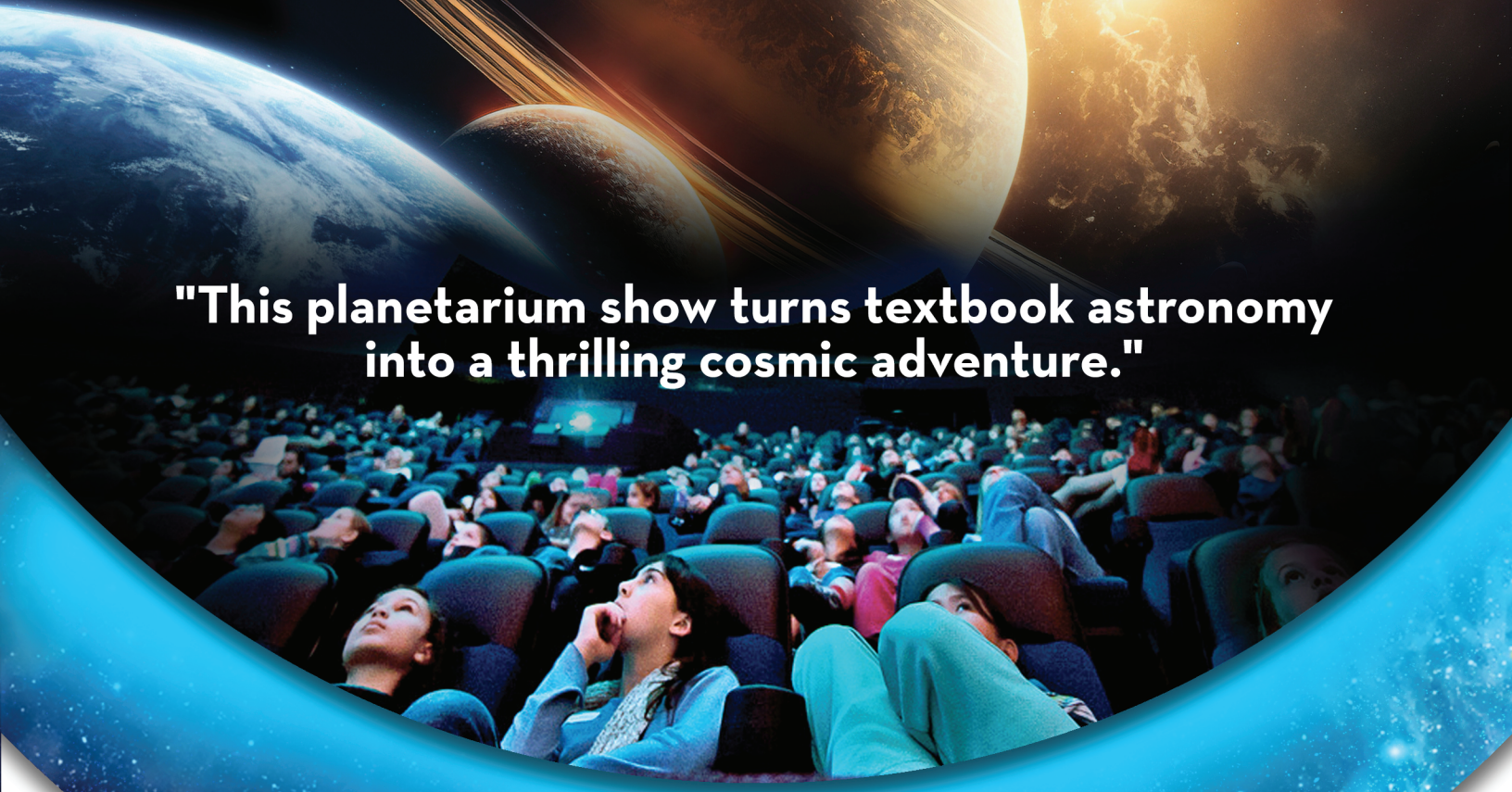
DISCOVERY PLACE

STEM

2025 - 2026 FIELD TRIP AND ASSEMBLY GUIDE



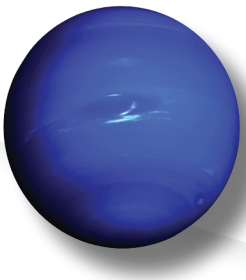
"This planetarium show turns textbook astronomy into a thrilling cosmic adventure."

THE SOLAR SYSTEM AND BEYOND

CHARLOTTE IMAX DOME THEATRE

THE LARGEST SCREEN IN THE CAROLINAS

Align your lesson plans with the wonders of the universe – book your class's interstellar journey today!



EDUCATORS, ELEVATE YOUR STUDENTS' UNDERSTANDING OF SPACE WITH OUR IMMERSIVE PLANETARIUM EXPERIENCE!

Crafted exclusively by Discovery Place Science's expert team, this awe-inspiring journey takes your class beyond textbook learning.

STUDENTS WILL:

1. **Traverse the solar system's vastness**
2. **Investigate peculiar phenomena on distant planets**

All this unfolds in our cutting-edge IMAX® Dome Theatre, bringing the cosmos to life in stunning detail.

This Planetarium Show isn't just a field trip – it's a launchpad for curiosity! Watch as it ignites passion for space science and leaves your students star-struck. Perfect for complementing your astronomy curriculum or inspiring future scientists, this cosmic adventure promises an unforgettable educational experience.

Learn more & plan your field trip here

UNLOCK THE ULTIMATE
ACTIVE LEARNING EXPERIENCE

OUR MISSION

We bring science, nature and design together to create transformative experiences that enable our community to understand, enjoy and apply science to their lives.

Discover a world where learning leaps off the page and screen and into the hearts and minds of your students. Schedule your field trip and class at a Discovery Place Museum. We can even bring an engaging and interactive experience to you through our outreach program.

Exhibits and programs are STEM-based, immersive, interactive, and aligned with state and NGSS standards. Demonstrations will spark curiosity and foster a lifelong interest in learning.

Let your students explore the fascinating realms of science, technology, engineering and mathematics, all within the safe, accessible and budget-friendly environment of our Museums.

Experience the difference of a field trip where each student is an active participant, exploring and discovering at their own pace. Our knowledgeable and passionate educators guide your class through various activities, ensuring an engaging experience for your students. You can be confident that your field trip to a Discovery Place Museum will be an unforgettable adventure and a powerful learning experience.

Don't let cost or logistics keep your class from experiencing the wonders of Discovery Place. We're committed to making our field trips and outreach programs affordable.

SO WHY WAIT?

BOOK YOUR FIELD TRIP AND CLASS OR OUTREACH PROGRAM WITH US TODAY!

Parents — The 15 Best Children's Museums in the U.S.

Charlotte Parent — Best Bets on Homeschool Field Trips

U.S.News — Ranked #3 Best Thing To Do in Charlotte

Travellers Worldwide — 11 Best Science Museums in America in 2023

National Geographic — Top 10 Science Museums in the United States

Fatherly — The Best Kids Museums In The Country For Building, Experimenting, And Blowing Stuff Up

JOIN US

AT THE DISCOVERY PLACE

EDUCATOR SUMMIT

Treat yourself to a Saturday morning of inspiration at the Educator Summit - an exciting open house event at Discovery Place Science.

This free event gives you a unique opportunity to connect with Discovery Place's learning team to explore how exhibitions, outreach classes, and workshops can be part of your students' journey this year. Experience the museum exhibits, labs, planetarium, and IMAX dome programs for the coming year and chat with the educators who are making it happen.

What makes this event special?

You'll connect with fellow teachers in a relaxed atmosphere, explore exciting ways to actively engage your students through hands-on learning and gain fresh teaching inspiration without the pressure of managing field trips. Enjoy being a learner again as you network with peers and sample programs that will energize you.

Register today at my.discoveryplace.org/educator-summit and celebrate the joy of teaching while collecting valuable resources for your students!

Infosys

FOUNDATION USA

Closing the Digital Skills Gap in the U.S. with Infosys Springboard Learning Platforms

Online Institute

PATHFINDERS

A free digital learning platform featuring computer science and maker education resources.

- PROFESSIONAL DEVELOPMENT
- FREE KITS AND LICENSES
- 'GRAB-AND-TEACH' LESSONS
- INCLUSIVE CONTENT

CLICK HERE TO LEARN MORE

CONTENTS

PRICING

FIELD TRIPS TO A DISCOVERY PLACE MUSEUM

Enrich your students' experience by visiting a Discovery Place Museum. Pricing applies to a minimum reservation of 15 paid participants. Chaperones receive the student group rate.

To ensure the safety of all students, chaperones must stay with their group at all times.

Chaperone-student ratios are:

- Discovery Place Science – 1:10
- Discovery Place Kids Museums – 1:5

DISCOVERY PLACE SCIENCE

Title I: (all year)	$10.95
Fall: (8/18/25 – 12/31/25)	$13.95
Spring/Summer: (1/1/26 – 8/12/26)	$15.95
CLASSES	$8.95
IMAX DOCUMENTARIES & PLANETARIUM	$8.95

DISCOVERY PLACE KIDS HUNTERSVILLE

Title I: (all year)	$8.95
Fall: (8/19/25 – 12/31/25)	$9.95
Spring/Summer (1/1/26 – 8/12/26)	$11.95
CLASSES	$8.95

DISCOVERY PLACE KIDS ROCKINGHAM

Admission: (all year)	$6
CLASSES	$8

OUTREACH OPTIONS AT YOUR SCHOOL

Bring Discovery Place Educators to visit your school. This is a wonderful opportunity for your students to engage in an exciting and interactive learning experience. Our educators are ready to provide your students with a unique learning experience. They'll bring complex concepts to life and inspire your students to think critically and creatively. Don't miss out on this amazing opportunity to enhance your students' learning and growth!

Make your event even more memorable with our Festival Booths or create a Family STEM Night to bring in the whole community!

CLASS	$250
ASSEMBLY	$500
MOBILE STARLAB PLANETARIUM (LARGE)	$325

FESTIVAL BOOTHS

Festival Booth programs display exciting STEM topics for visitors to explore at their leisure. Experiences include hands-on experiments and demonstrations as well as self-guided active-learning time. Festival Booths are a perfect addition to festivals, family nights, school functions and community events.

FESTIVAL BOOTH (FIRST HOUR)	$250
FESTIVAL BOOTH (EACH ADDITIONAL HOUR)	$200

FAMILY STEM NIGHTS

Want to get the entire community involved in STEM? Family Nights are a great way to engage and inspire learners of all ages. From explosive assemblies and out-of-this-world Starlab planetarium programs, to live animal encounters, we can design an experience for the whole family. Perfect for back-to-school nights, PTA events and community celebrations.

FAMILY STEM NIGHT	call for pricing
IN-COUNTY MILEAGE	$35

POLICIES & FAQs

BOOKING AND CONFIRMATION

Reservations can be made by scheduling an appointment at DPFieldTrips.org.

Payment Policy
Discovery Place requests full payment three weeks before your arrival date to secure your reservation.

Cancellation Policy
Cancellations must be made in writing by email and acknowledged by a Discovery Place team member to be authorized.

No-Show Policy Customer Support
In the event a group fails to arrive for a scheduled visit and has not provided prior notification by the expected time of the visit, the group will be considered a no-show and will be responsible for the full payment of the booking, regardless of the reason.

Finalizing Attendee Count
A final attendee count is needed 72 hours before your reservation to make any refunds for headcount changes.

Classes/Labs
The maximum classroom capacity is 25 students.

PARKING AND DEPARTURE

Discovery Place Science
Bus drop-off is on 6th Street in front of the Museum's main entrance at 168 W 6th Street. The Discovery Place Parking Deck is on the next block. Bus parking is off site at the Bojangles Coliseum.

Discovery Place Kids - Huntersville
Buses should enter via Old Statesville Rd and unload students by the Growing Garden. After your field trip, buses will pick up students at the rear of the Museum and exit via Gilead Rd. Bus parking is unavailable on-site in our parking deck. However, buses can park for free at North Mecklenburg Park.

Discovery Place Kids - Rockingham
Parking in the Museum's lot is free for cars and buses.

On-site Lunch Option
(Discovery Place Science Only)
Bean Sprouts Café is available for catering. Orders must be placed two weeks in advance and placed directly through the Bean Sprouts website.

Lunch Space
On-site lunch space is based on availability. Please speak with your Discovery Place trip coordinator to set this up. Lunch space is reserved for students, but chaperones may join if there is room. On-site lunch space is only available at Discovery Place Science.

CLASSES AT A GLANCE

DISCOVERY PLACE SCIENCE

PREK-K

GRADES 1-2

GRADES 3-5

GRADES 3-5

GRADES 6-8

CLASSES AT A GLANCE

DISCOVERY PLACE KIDS

HUNTERSVILLE

PRE-K/K

1ST/2ND

ROCKINGHAM

PREK-K

GRADES 1-2

GRADES 3-5

CLASSES AT A GLANCE

IN-PERSON OUTREACH CLASSES

PRE-K-1

PRE-K-K

GRADES 1-2

GRADES 1-2 & 3-5

GRADES 3-5

GRADES 6-8

STARLAB PLANETARIUM

ASSEMBLIES

CHOOSE YOUR LOCATION

DISCOVERY PLACE
KIDS - HUNTERSVILLE

DISCOVERY PLACE
SCIENCE

DISCOVERY PLACE
KIDS - ROCKINGHAM

As a nonprofit, Museum admission covers only a portion of what it takes to fulfill our mission to activate a community of lifelong learners through the power of science, nature and technology. We are grateful for your ongoing support which makes active learning possible for everyone.

CITIES OF THE FUTURE

IMAX DOCUMENTARIES

VIEW TRAILER

Imagine stepping 50 years into the future and finding smart cities to optimize sustainability and resilience.

The film's immersive IMAX experience allows audiences to "step into the future" of cities using renewable energy as the primary power source.

North Carolina Standards

ESS.4.3.2 Engage in argument from evidence to explain how humans can adapt their behavior to live in changing environments (e.g. recycling wastes, establishing rain gardens, planting native species to prevent flooding and erosion).

ESS.4.3.3 Obtain, evaluate and communicate information to compare solutions to environmental problems impacting plants and animals.

ESS.6.3.2 Obtain, evaluate, and communicate information to compare the implications of sustainable and unsustainable land use practices (including agriculture and deforestation) and the importance of stewardship.

ESS.8.4.4 Obtain, evaluate, and communicate information to compare the long-term implications of the use of renewable and nonrenewable energy resources and the importance of stewardship and conservation.

ESS.EES.5.6 Construct an argument to evaluate a range of solutions to mitigate impacts of human activities on Earth's systems.

Next Generation Science Standards

4-ESS3-2 Earth and Human Activity: Generate and compare multiple solutions to reduce the impacts of natural Earth processes on humans

3-5-ETS1.A Engineering Design: Defining and Delimiting Engineering Problems

MS-ESS3-3 Human Impacts: Apply scientific principles to design a method for monitoring and minimizing a human impact on the environment.

MS-ETS1-1 Engineering Design: Define the criteria and constraints of a design problem with sufficient precision to ensure a successful solution, taking into account relevant scientific principles and potential impacts on people and the natural environment that may limit possible solutions.

HS-ESS3-4 Human Sustainability: Evaluate or refine a technological solution that reduces impacts of human activities on natural systems.

HS-ETS1-1 Engineering Design: Analyze a major global challenge to specify qualitative and quantitative criteria and constraints for solutions that account for societal needs and wants.

South Carolina Standards

4-ESS3-1 Earth and Human Activity: Obtain and combine information to describe that energy and fuels are derived from natural resources and how their uses affect the environment.

6-ESS3-2 Earth and Human Activity: Analyze and interpret data on natural hazards to identify patterns, which help forecast future catastrophic events and inform the development of technologies to mitigate their effects.

7-ESS3-3 Earth and Human Activity: Apply scientific principles to design a method for monitoring and minimizing a human impact on the environment.

B-LS2-7: Design, evaluate, and refine a solution for reducing the impacts of human activities on biodiversity and ecosystem health.

E-ESS3-1: Construct an explanation based on evidence for how the availability of natural resources and occurrence of natural hazards have influenced human activity.

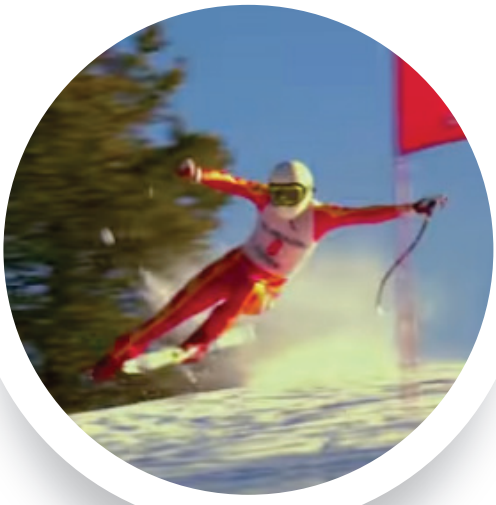
E-ESS3-4: Evaluate or refine a technological solution that reduces impacts of human activities on natural systems.

SUPERHUMAN BODY
IMAX DOCUMENTARIES

VIEW TRAILER

Discover the wonders of the human body and the groundbreaking medical innovations saving lives.

Combining state-of-the-art CGI with live-action cinematography, Superhuman Body inspires a new generation to engage in STEM careers as it celebrates medical technologies that save lives.



North Carolina Standards

LS.7.1 Understand the processes, structures and functions of living organisms that enable them to survive, reproduce and carry out the basic functions of life.

LS.8.1 Understand the hazards caused by agents of diseases that affect living organisms.

LS.Bio.1 Analyze how the relationship between structure and function supports life processes within organisms.

LS.Bio.2 Analyze the growth and development processes of organisms.

South Carolina Standards

6-LS1-3: Use argument supported by evidence for how the body is a system of interacting subsystems composed of groups of cells.

8-LS1-5: Construct a scientific explanation based on evidence for how environmental and genetic factors influence the growth of organisms.

B-LS1-2: Develop and use a model to illustrate the hierarchical organization of interacting systems that provide specific functions within multicellular organisms

Next Generation Science Standards

MS-LS1-3: Use argument supported by evidence for how the body is a system of interacting subsystems composed of groups of cells.

MS-LS1-5: Construct a scientific explanation based on evidence for how environmental and genetic factors influence the growth of organisms.

HS-LS1-2: Develop and use a model to illustrate the hierarchical organization of interacting systems that provide specific functions within multicellular organisms.

WINGS OVER WATER

IMAX DOCUMENTARIES

VIEW TRAILER

Narrated by Michael Keaton, this documentary takes viewers on a journey into the lives of millions of migratory birds. It reveals the critical role of the Upper Midwest wetlands and the threats facing the Prairie Pothole region—an ecosystem essential to the survival of countless species. The film follows three remarkable bird families—the Sandhill Crane, the Yellow Warbler, and the Mallard Duck—through breathtaking footage that captures their unique behaviors and the challenges they face across North America.

North Carolina Standards

ESS.1.3 Understand that natural resources are important to humans.

ESS.4.3 Understand changes caused by human impact on the environment.

LS.1.1 Understand the basic needs of a variety of plants and animals in different ecosystems.

LS.2.1 Understand animal life cycles.

LS.4.1 Understand the effects of environmental changes, adaptations, and behaviors that enable organisms to survive in changing habitats.

LS.5.2 Understand the interdependence of plants and animals within their ecosystem.

LS.6.2 Understand the flow of energy through ecosystems and the responses of populations to the biotic and abiotic factors in their environment.

LS.8.2 Understand how organisms interact with and respond to the biotic and abiotic factors in their environment.

South Carolina Standards

K-ESS3-3. Obtain and communicate information to define problems related to human impact on the local environment

2-LS2-2Develop a simple model that mimics the function of an animal in dispersing seeds or pollinating plants.

2-ESS2-2 Develop a model to represent the kinds of land and bodies of water in an area

5-LS2-1Develop a model to describe the movement of matter among plants, animals, decomposers, and the environment.

4-LS1-1Construct an argument that plants and animals have internal and external structures that function to support survival, growth, behavior, and reproduction

7-LS2-5. Evaluate competing design solutions for maintaining biodiversity and ecosystem services.

7-ESS3-3. Apply scientific principles to design a method for monitoring and minimizing a human impact on the environment.

DREAM BIG
IMAX DOCUMENTARIES

VIEW TRAILER

Dream Big: Engineering Our World takes audiences on a journey through remarkable feats of engineering, from record-breaking skyscrapers and deep-sea robots to solar-powered cars racing across Australia. Through inspiring stories and breathtaking giant-screen imagery, you'll see how engineering shapes our everyday lives and paves the way toward a more sustainable future. Narrated by Academy Award® winner Jeff Bridges, this film invites viewers of all ages to see engineering not just as technical problem-solving, but as a creative force that transforms the world for the better.

North Carolina Standards

ESS.4.3.2 Engage in argument from evidence to explain how humans can adapt their behavior to live in changing environments (e.g. recycling waste, establishing rain gardens, planting native species to prevent flooding and erosion).

ESS.6.3.2 Obtain, evaluate, and communicate information to compare the implications of sustainable and unsustainable land use practices (including agriculture and deforestation) and the importance of stewardship.

ESS.8.4 Understand the environmental implications associated with the various methods of obtaining, managing, and using energy resources.

South Carolina Standards

2-ESS3-1 Design solutions to address human impacts on natural resources in the local environment

3-ESS3-1 Make a claim about the effectiveness of a design solution that reduces the impacts of a weather-related hazard.

4-ESS3-2 Generate and compare multiple solutions to reduce the impacts of natural Earth processes on humans.

7-ESS3-3 Apply scientific principles to design a method for monitoring and minimizing human impact on the environment

BUTTERFLY JOURNEY

IMAX DOCUMENTARIES

VIEW TRAILER

In Butterfly Journey, discover the incredible migrations of the Monarchs that travel across North America to Mexico and the striking Blue Tigers of Australia. Delicate in appearance but remarkably strong, these creatures defy the odds as they undergo metamorphosis, travel thousands of miles, and soar to impressive heights while navigating the challenges of survival. Using breathtaking slow-motion, aerial, and close-up cinematography, the film reveals the hidden details of their world—vivid forests, lush rainforests, and the mountain sanctuaries where Monarchs gather in awe-inspiring numbers.

North Carolina Standards

ESS.1.3 Understand that natural resources are important to humans.

LS.2.1 Understand animal life cycles.

ESS.4.3 Understand changes caused by human impact on the environment.

LS.4.1 Understand the effects of environmental changes, adaptations, and behaviors that enable organisms to survive in changing habitats.

LS.5.2 Understand the interdependence of plants and animals within their ecosystem.

LS.8.2 Understand how organisms interact with and respond to the biotic and abiotic factors in their environment.

South Carolina Standards

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7-LS2-5. Evaluate competing design solutions for maintaining biodiversity and ecosystem services.

7-ESS3-3. Apply scientific principles to design a method for monitoring and minimizing a human impact on the environment.

PLANETARIUM SHOW
IMAX DOCUMENTARIES

CHARLOTTE IMAX® DOME THEATRE

MARS - THE ULTIMATE VOYAGE

VIEW TRAILER

Explore the challenges astronauts encounter during a two-year mission to Mars, emphasizing the research and training efforts designed to equip future explorers for this extraordinary journey.

On a two-year mission to Mars, astronauts face unique challenges—vast distances, isolation, altered gravity, and radiation. This Planeterium show highlights NASA's groundbreaking research and training, preparing astronauts for safe deep space travel. It showcases how creativity, collaboration, and expertise across diverse fields are crucial for success, inspiring the next generation of STEM innovators.

North Carolina Standards

LS.7.1 Understand the processes, structures and functions of living organisms that enable them to survive, reproduce and carry out the basic functions of life.

LS.8.1 Understand the hazards caused by agents of diseases that affect living organisms.

LS.Bio.1 Analyze how the relationship between structure and function supports life processes within organisms.

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Next Generation Science Standards

MS-LS1-3: Use argument supported by evidence for how the body is a system of interacting subsystems composed of groups of cells.

MS-LS1-5: Construct a scientific explanation based on evidence for how environmental and genetic factors influence the growth of organisms.

HS-LS1-2: Develop and use a model to illustrate the hierarchical organization of interacting systems that provide specific functions within multicellular organisms.

EARLY LEARNING
CLASSES

> **"Multiple, rotating stations gave seven different experiments for the children to work through."**
>
> – Kindergarten Teacher,
> I Like to Move It, Move It

50 Minutes | Minimum 15 Students | Dates & Times Customizable | 168 W 6th Street, Charlotte, NC 28202 | Learn More

Early Learning Classes are intentionally designed for our youngest learners. These inquiry-based classes will have children building their emergent STEM literacy skills through developmentally appropriate exploration of topics such as sound, weather, forces and the amazing world in which we live.

PREK-K

ACROSS THE ANIMAL KINGDOM
Life Science

A variety of Animal Ambassadors will guide children's exploration of the animal kingdom. These lively Museum residents will put a face to the distinct characteristics and the similarities and differences among different animals. Children will make observations, ask questions, and draw conclusions as they discover a wide range of creatures found in nature.

NC: LS.K.1
CD-14, CD-15
SC: K-LS1-1
NGSS: K-LS1-1

EARTH HEROES
Physical Science, Engineering

Children will use scientific tools to investigate, measure, and describe the properties and uses of materials that come from the earth, including clay, wood, cloth, and paper. Children will put their problem-solving skills to the test as they use these materials to build a model of a solution that protects the environment we all share.

NC: PS.K.1
CD-14, APL-6
SC: K-ESS3-3
NGSS: K-ESS3-3

I LIKE TO MOVE IT, MOVE IT
Physical Science

This high-energy class creates excitement around physics as children work together to experiment with the power of forces, including pushes, pulls, and gravity. Children will explore how they can control the movement and position of objects as they conduct investigations and attempt unique challenges.

NC: PS.K.2
APL-9, CD-15
SC: K-PS2-1, K-PS2-2
NGSS: K-PS2-1, K-PS2-2

MINI METEOROLOGISTS
Earth Science, Math

Children will find their inner meteorologist as they build critical science skills, including measuring, comparing, collecting data, and making predictions. They will explore the ingredients that create weather and use authentic weather tools to learn more about the world around them.

NC: ESS.K.1, NC.K.CC.3
CD-10, CD-15
SC: K-ESS2-1, K-ESS3-2, K.NR.1
NGSS: K-ESS2-1, K-ESS3-2

EARLY LEARNING CLASSES

> **" This class gave students a great introduction to vocabulary and allowed them to explore sound!"**
>
> – 2nd Grade Teacher, Seeing Sound

PREK-K

PLAYING WITH PROGRAMMING

Computer Science, Math

Wondering how to build children's computational thinking skills? This exciting introduction to technology and programming provides children with an opportunity to explore the fundamentals of computer science in a developmentally appropriate and playful way. Children will discover the parts and purposes of computing devices and code simple sequences using real programming tools and games.

NC: K2-CS-01, K2-DA-04, K2-AP-01, K2-AP-03, NC.K.MD.3 CD-11, CD-12, APL-6
SC: K.CS.1.2, K.DA.3.1, K.DA.4.1, K.DPSR.1, K.PAFR.2

GRADES 1-2

ENGINEERING SOLUTIONS

Physical Science, Engineering

Watch the engineering design process come alive as students become engineers. Interactive stations present unique challenges for students to solve that focus on different branches of engineering, including civil, mechanical, and electrical. Students will work together to brainstorm, test, and iterate on their solutions.

NC: PS1.1
SC: 2-PS1-2, 2-PS1-3
NGSS: 2-PS1-2, 2-PS1-3, K-2-ETS1-1

WEATHER WATCHERS

Earth Science, Math

Students will experience the thrill of meteorology by using authentic weather tools. Students will gather crucial data reflecting various weather components and conditions. They will then employ qualitative and quantitative data to analyze, describe, and forecast the weather.

NC: ESS2.1, NC.1.MD.4
SC: 1-ESS1-2, 1.DPSR.1.
NGSS: 1-ESS1-2

EVERYTHING MATTERS

Physical Science

Students will explore and experiment with the fascinating world of matter. Through chemical reactions and observations, they will discover the physical properties that make solids, liquids, and gases unique.

NC: PS.2.1
SC: 2-PS1-1
NGSS: 2-PS1-1

SEEING SOUND

Physical Science

Listen closely as you discover the science of sound. Students will conduct experiments to test vibrations, manipulate pitch and volume, and measure sound waves.

NC: PS.2.2
SC: 1-PS4-1
NGSS: 1-PS4-1

SECRETS OF THE RAINFOREST

NEW!

Life Science

Discover how different organisms survive and thrive in the rainforest by making firsthand observations in Discovery Place's World Alive Rainforest. Students will work together to complete challenges inspired by adaptations as they get an up-close look at how plants and animals meet their needs in one of the most biodiverse habitats.

NC: LS.1.1
SC: 2-LS4-1
NGSS: 2-LS4-1

ROBOTS TO THE RESCUE

Computer Science, Earth Science, Engineering

Robots to the rescue! Advances in science and technology have paved the way for robots to help humans protect and restore natural resources around the world. Students will join this effort as they solve real-world environmental problems while learning how to code.

NC: ESS.1.3, K2-AP-03
SC: 2-ESS3-1, 2.CS.2.2, 2.CS.2.3
NGSS: K-2-ETS1-1

ANIMAL LIFE CYCLES

Life Science

Discovery Place Animal Ambassadors will introduce students to different types of life cycles. Then using Museum specimens and interactive stations, students will compare different types of life cycles and use their observations to explain how offspring are similar to and different from their parents.

NC: LS.2.1, LS.2.2
SC: 1-LS3-1
NGSS: 1-LS3-1

LAB CLASSES

> **"This class was amazing for this group. Hands-on activities kept them engaged in learning about animals."**
>
> – 5th Grade Teacher,
> Animal Behavior & Adaptation

50 Minutes | **Minimum 15 Students** | **Dates & Times Customizable** | **168 W 6th Street, Charlotte, NC 28202** | **Learn More**

Discovery Place Science labs are dedicated to the exploration of an array of topics, including matter, energy, biotechnology, plants, animals and design. Explore the amazing world in which we live through active learning that cultivates science and engineering skills.

GRADES 3-5

MOVE IT OR LOSE IT

Life Science

The human body is a truly remarkable structure built for protection, movement, and support. Students will experiment with how the muscular and skeletal systems work together and discover the anatomical reasons behind survival.

NC: LS.3.1, LS.5.1
SC: 4-LS1-1
NGSS: 4-LS1-1

WHAT'S THE FORECAST?

Earth Science

Conduct experiments, analyze data, and discover the science behind the weather patterns and phenomena seen in our Carolina skies. Students will use data collection software and authentic weather tools to measure and analyze wind speed, precipitation, and temperature.

NC: ESS.5.1
SC: 3-ESS2-1
NGSS: 3-ESS2-1

> **"It allowed me to teach both science and social studies."**
>
> – 2nd Grade Teacher,
> What's the Forecast?

ANIMAL BEHAVIOR AND ADAPTATION

Life Science

Students will enter the captivating world of animal behaviors and adaptations as they test their skills using adaptations found in the natural world. Active exploration of specimens and interactive opportunities will build students' understanding and meeting Animal Ambassadors will strengthen students' connections to the natural world.

NC: LS.4.1
SC: 4-LS1-1
NGSS: 4-LS1-1

ECOSYSTEM EXPLORATION

Life Science

Prepare to travel the globe without leaving the lab by comparing the unique characteristics, species, and interconnected relationships found in biomes. Students will enhance their understanding by observing specimens and drawing conclusions. Students will then work together to identify adaptations of Animal Ambassadors and deduce which biome each animal calls home

NC: LS.5.2
SC: 3-LS3-2, 3-LS4-3, 4-LS1-1
NGSS: 3-LS3-2, 3-LS4-3, 4-LS1-1

LAB CLASSES

"It shows students the inner parts of robotics and allows them to do coding which is super relevant today. It sparks an interest in science-minded students."

– 5th Grade Teacher,
Intro to Robotics (Scratch Robotics)

GRADES 3-5

FORCE & MOTION
Physical Science

Students will see and feel the power of the invisible forces that shape our world through experiments exploring Newton's Laws of Motion. Then, they'll come together as a team to conquer a final challenge, putting their newfound knowledge to the test.

NC: PS.3.2, PS.5.2
SC: 3-PS2-1
NGSS: 3-PS2-1

WHAT'S THE MATTER?
Physical Science

Don't let the phase fool you—it's all matter! Through a series of experiments, students will conceptualize atomic movement across various phases and investigate how matter transforms and behaves under different conditions. It will be a fascinating exploration of matter and its properties!

NC: PS.3.1
SC: 5-PS1-2, 5-PS1-4
NGSS: 5-PS1-4

OHM MY CIRCUITS
Physical Science

No visit to the science museum is complete without experiencing a Van de Graaff generator! Students will explore electrifying experiments as they investigate static electricity and electric current, build and test circuits, and explore conductivity.

NC: PS.4.2
SC: 4-PS3-4
NGSS: 4-PS3-2

CODING FOR THE FUTURE
Computer Science

Students will work together to identify, program, test, and iterate solutions to real world situations. Using LEGO Spike kits students will write and debug code as they use computer science as a tool to design and create solutions.

NC: 35-CS-02, 35-AP-01, 35-AP-12
NGSS: 3-5-ETS1-3

SCRATCH ROBOTICS
Computer Science

Join the world's largest coding community and learn how to program LEGO robots using Scratch. The drag and drop block coding used in Scratch is the perfect entry into the world of coding and computational thinking. Students will learn about "if-then" statements, loops, and strategies for troubleshooting as they program their robot to navigate a series of challenges.

NC: 35-CS-03, 35-AP-04, 35-AP-05
NGSS: 3-5-ETS1-3

MOON'S MOTION
Earth Science

Discover the powerful forces behind day, night, and the Moon's phases through interactive models and experiments. See how Earth's rotation and its relationship with the Sun and Moon create the patterns we observe in the sky!

NC: ESS.3.1, ESS.4.1
SC: 5-ESS1-2

DYNAMIC ROCKS
Earth Science

Dig into the Earth's surface and discover the dynamic cycles in motion there. Conduct investigations to classify rocks based on their composition, discover how rocks are formed, and identify minerals using their physical properties. Students will also explore the Earth's land features using models to visualize changes over time.

NC: ESS.3.2, ESS.4.2
SC: 6-ESS2-2
NGSS: MS-ESS2-2

ENVIRONMENTAL ENGINEERING
Earth Science, Engineering

Through engineering and collaboration, students will gain an understanding of ways humans can make a positive impact on the environment. Real world challenges will be presented to students, as they use the engineering design process to imagine, plan, build, test, and iterate on solutions to create a sustainable future.

NC: EES.4.3
SC: ETS1.A, ETS1.B
NGSS: 3-5-ETS1

LAB CLASSES

"It helps students peak interest in engineering and allows them to go through the process of inventing and creating."

– 5th Grade Teacher, Motors, Circuits, & Art

GRADES 3-5

MOTORS, CIRCUITS, & ART

Physical Science, Engineering

Go beyond conventional art and engineer a bot that can draw autonomously! Students will tinker with circuits as they immerse themselves in the design process. Teams of students will work together to create unique artwork using engineering and electricity.

NC: 3-5.V.3, PS.4.2
SC: ETS1.A, ETS1.B
NGSS: 3-5ETS1, 4-PS3-4

ENERGETIC CONTRAPTIONS

Physical Science, Engineering

Brace yourself for physics in action! Students will uncover the science behind the catapult and its fascinating application of energy transfer. Working in teams, students will immerse themselves in the design process and launch their engineering skills to new heights as they construct and test their catapults.

NC: PS.3.2, PS.5.2
SC: 4-PS3-4
NGSS: 3-PS2-1, 4-PS3-1, 4-PS3-3, 3-5-ETS1-1

GRADES 6-8

MAKE: WIND ENERGY

Engineering, Earth Science

Students will tap into the power of renewable energy sources by exploring the world of wind energy! Teams will compete to design and build the most successful wind turbine and harness the wind to sustain a glowing lightbulb.

NC: ESS.8.4
SC: ETS1.A, ETS1.B, ETS2.B
NGSS: MS-ETS-1

PROGRAMMING WITH PYTHON

NEW! Infosys FOUNDATION USA

Computer Science

Students will be introduced to the coding language Python as they practice syntax and programming structures, bringing their code to life through real-world scenarios. This widely used coding language powers countless applications and websites, making it an essential skill in today's digital world.

NC: 68-CS-03, 68-AP-03, 68-AP-04
NGSS: MS-ETS1-2

CONCEPTS OF CHEMISTRY

Physical Science

Start students on the path to chemistry and embark on an exhilarating journey through molecules and solutions. Students will manipulate chemical reactions, identify physical and chemical changes, and concentrate on concentrations, all while getting well-versed in lab safety skills.

NC: PS.6.1, PS.8.1
SC: 7-PS1-2
NGSS: MS-PS1-2

DNA DETECTIVES

Life Science

Untangle the secrets stored in DNA's double helix and enter the captivating world of genetics. Students will explore genotypes, phenotypes, alleles, and traits through guided inquiry experiments and investigations.

NC: LS.7.2
SC: 8-LS3-1
NGSS: MS-LS3-1

"Extremely valuable as all students were engaged while dissecting."

– 8th Grade Teacher, Fetal Pig Dissection

FETAL PIG DISSECTION

Life Science

Students will get up close and personal with the body's inner workings as they conduct a dissection. They will explore the complex organ systems and compare them to their own. Take advantage of this tangible connection between science and life!

An additional $20 material fee is charged for each participant. Contact Guest Sales for information on other specimens available for dissection.

NC: LS.7.1
SC: 6-LS1-3
NGSS: MS-LS1-3

LAB CLASSES

GRADES 6-8

TAKE A CELL-FIE!
Life Science

Students will set off on an exploration into the microscopic world of cells and organelles, by creating and analyzing microscope slides – some containing their own cells! Learning essential biotechnology skills along the way, students will build an understanding of how cells contribute to life and identify the defining characteristics of plant and animal cells.

NC: LS.7.1
SC: 6-LS1-1, 6-LS1-2, 6-LS1-3
NGSS: MS-LS1-1, MS-LS1-2, MS-LS1-3

ENERGIZING NATURE
Life Science

Follow energy through an ecosystem and discover the intricate connections between food, water, and nutrients. With the aid of the Museum's Animal Ambassadors and engaging interactive stations, students will understand the interconnected relationships and factors that govern the balance of life within an ecosystem.

NC: LS.6.2, LS.8.2
SC: 7-LS2-1, 7-LS2-2, 7-LS2-3
NGSS: MS-LS2.A

GEOMETRY AND DESIGN
NEW!
Computer Science, Math

Students will be put to the test when they are given a real-world object that they must turn into a 3D, digital, scale drawing. Students will collaborate with their team to use computer-aided design (CAD) software to create and manipulate a scale drawing to create a computational artifact of their object.

NC: NC.7.G.1, 68-IC-05
SC: ETS1.A, ETS1.B, ETS2.A
NGSS: MS-ETS1-2

MEDucation
Life Science

Students will review the structures and functions of the major organ systems through the use of medical equipment to obtain vital signs, interpret common indicators of health, and practice how to respond to various medical emergencies.

NC: LS.7.1
SC: 6-LS1-3
NGSS: MS-LS1-3

PHYSICS IN THE MAKING
Physical Science, Engineering

Using the engineering design process and real tools, students will learn about the physics of simple machines and identify them in everyday objects. Then teams will work together to build a collaborative Rube Goldberg Machine.

NC: PS.7.2
SC: 8-PS2-2
NGSS: MS-ETS1-3

HUMANS AND THE ENVIRONMENT
NEW!
Earth Science

Students will collect and analyze data relating to the lithosphere, atmosphere, and hydrosphere. As students interpret their data, they will construct arguments around the impacts of environmental factors on humans and debate solutions and stewardship.

NC: ESS.6.3, ESS.7.2, ESS.8.3
SC: 7-ESS3-3
NGSS: MS-ESS3-3

INSIDE THE SOLAR SYSTEM
NEW!
Earth Science

Explore the inner workings of our cosmic neighborhood and build understanding of the Earth/Moon/Sun system. Students will use interactive models and authentic data from past space missions to illustrate and explain concepts such as gravitational forces, size and scale throughout the solar system, and the driving forces of motion in space.

NC: ESS.6.1
SC: 8-ESS1-3
NGSS: MS-ESS1-2

HUNTERSVILLE
CLASSES

50 Minutes | Minimum 15 Students | Dates & Times Customizable | 105 Gilead Road Huntersville, NC 28078 | Class Plans | Learn More

Discovery Place Kids - Huntersville offers a childhood learning experience like no other. Students explore their world, test new ideas, develop fine and large motor skills and gain self-confidence.

GRADES PRE-K/K

CODING, CODING EVERYWHERE
Early Learning, Computer Science, Math, Reading

Immerse students in the world of coding. Play interactive games and solve puzzles to unlock coding basics like sequencing, loops, and decomposition. Through fun hands-on activities that blend reading and math skills, students will embark on a journey of problem-solving and won't even realize they're building essential coding foundations.

Pre-K: APL-6, CD-15
NC: K2-AP-01, K2-AP-03
SC: K.CS.1, K.IC.1
NGSS: K-2-ETS1-1

FORECASTING THE WEATHER
Early Learning, Physical Science

Watch them transform into pint-sized meteorologists as they dive into the captivating world of weather. Unleashing their inner scientists, children will use tools to examine weather patterns, scrutinize data and hone their skills to forecast upcoming weather changes.

Pre-K: CD-15
NC: ESS.K.1
SC: K-ESS2-1
NGSS: K-ESS2-1

PASSPORT TO PLAY
Early Learning, Social Science

How do kids around the world play? Children will use their imaginations to travel the globe and play games from other countries while collecting stamps on their passport. They will then compare and contrast those games with games common in the United States.

Pre-K: LDC-5, CD-6
NC: K.B.1, K.ICR.1.2
SC: K.CG.1, APL-1
NGSS: K-ESS3-1

SCIENCE OF THE SENSES
Early Learning , Physical Science

Our young scientists will use the scientific method, real tools, and their own observations to better understand how the senses work together and how assistive technology helps people without one of their senses. Students will make hypotheses, test their predictions, and come to conclusions as the five senses guide them in scientific learning.

Pre-K: CD-1, CD-14
NC: LS.K.2
SC: CD-1
NGSS: K-ESS2-2

HUNTERSVILLE
CLASSES

GRADES PRE-K

COMMUNITY HELPERS
Early Learning, Social Science

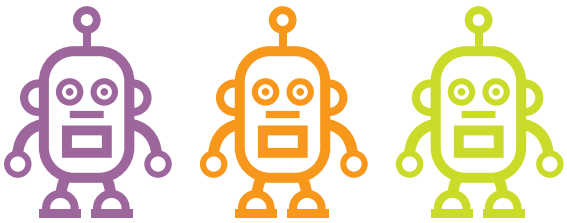
Discover the community helpers who help our community be a better place. Explore different jobs to better understand the important role these helpers have in our community. Children will engage in imaginative play and hands-on projects to bring these roles to life.

PreK: CD-15
NC: PS.K.2
SC: K-PS2-2, APL-6
NGSS: K-PS2-1

PUSH, PULL, GO!
Physical Science

Children will go on an exciting adventure into physics through interactive play and discovery. Witness their curiosity fueled as they manipulate objects in motion, examine their positions and unravel the mysteries of the forces that govern them.

PreK: CD-15
NC: PS.K.2
SC: K-PS2-2, APL-6
NGSS: K-PS2-1



GRADES 1-2

BOT BUILDERS
Early Learning Computer Science

Examine the exciting domain of computer programming, where students will hone their computational thinking and problem-solving skills to bring robots to life. Dive into the world of cause-and-effect through thrilling chain-reaction challenges and ignite creativity by collaborating in teams to craft scribble bots that blend art and technology in innovative ways!

NC: K2-CS-02, K2-SP-03, K2-AP-04
SC: 1.CS.1, 2.CS1.2, 2.CS.2.2
NGSS: K-2-ETS1-3

EVERYTHING MATTERS
Physical Science

Students will explore and experiment with the fascinating world of matter. Through chemical reactions and observations, they will discover the physical properties that make solids, liquids, and gases unique.

NC: PS.2.1
SC: 2-PS1-1
NGSS: 2-PS1-1

ROCKINGHAM
CLASSES

50 Minutes | Minimum 15 Students | Dates & Times Customizable | 233 E. Washington St. Rockingham, NC 28379 | Class Plans | Learn More

Discovery Place Kids - Rockingham provides a unique and engaging childhood learning experience. Recently renovated with brand new exhibits, the museum celebrates the area's industries and culture. Students explore their world, test new ideas, develop fine and large motor skills and gain self-confidence through interactive displays and hands-on activities.

PREK-K

COMMUNITY HELPERS
Social-Emotional Dev Physical Dev

Have they ever dreamt of becoming a crucial part of society - like a veterinarian, police officer, builder or doctor? Dive deep into the fascinating world of community helpers and discover the skills, passion, and tools required to excel in these professions. Join us as we reveal the pathways that await those who dedicate their lives to making a difference in their community.

NC ESD-5, HPD-5
SC ESD-5, HPD-5

PUSH, PULL, GO!
Physical Science

Children will go on an exciting adventure into physics through interactive play and discovery. Witness their curiosity fueled as they manipulate objects in motion, examine their positions and unravel the mysteries of the forces that govern them.

PreK: CD-15
NC: PS.K.2
SC: K-PS2-2, APL-6
NGSS: K-PS2-1

GRADES 1-2

NAME THAT FORCE
Physical Science

Forces are all around us. Students will delve into the intriguing effects of air, magnetism and gravity on object motion, unraveling the secrets behind their daily impact on us.

NC PS.1.
SC 3-PS-2

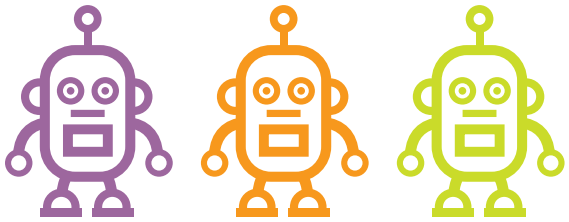
SOUND IS VIBRATION
Physical Science

Students will delve into the fascinating world of sound and unravel its mysteries. Watch them discover the connection between frequency, pitch, amplitude, and volume. They'll experiment with diverse vibrating materials, push speaker design limits for maximum amplification, and manipulate visual sound waves.

NC PS.2.2
SC 1-PS4-1
NGSS 1-PS4-1

ROCKINGHAM
CLASSES

> **"It taught force and motion laws in a hands-on way. The kids were able to experience the laws."**
>
> – 5th Grade Teacher, Force & Motion



GRADES 1-2

BOT BUILDERS
Early Learning, Computer Science

NEW!

Examine the exciting domain of computer programming, where students will hone their computational thinking and problem-solving skills to bring robots to life. Dive into the world of cause-and-effect through thrilling chain-reaction challenges and ignite creativity by collaborating in teams to craft scribble bots that blend art and technology in innovative ways!

NC: K2-CS-02, K2-SP-03, K2-AP-04
SC: 1.CS.1, 2.CS1.2, 2.CS.2.2
NGSS: K-2-ETS1-3

GRADES 3-5

FORCES AND MOTION
Physical Science

Newton's Laws of Motion come alive in this class packed with hands-on activities. Students will perfrom experiements for each of Newton's Laws using tools such as hover pucks and rocket cars.

NC PS.3.1, PS.4.1, PS.5.2
SC 5.P.5
NGSS 3-PS2-1

ROCKS AND MINERALS
Physical Science

NEW!

Explore the origins and formation of rocks and minerals. Students will use various tools to investigate rock and mineral characteristics. Strength, magnetism, and buoyancy - all will be revealed in this geological discovery!

NC: 4.P.2
SC: 3.E.4
NGSS: ESS.4.2, ESS.4.3

IN-PERSON OUTREACH
CLASSES

50 Minutes | Maximum 25 Students | Dates & Times Customizable | Class Plans | Learn More

Bring Discovery Place experiences to your school or community! Outreach programs are designed to meet the interests and educational requirements of your group by aligning curriculum with both North and South Carolina state standards and Next Generation Science Standards. These programs complement both in-school and out-of-school learning for Pre K through Grade 8.

PRE-K-1

PUSH, PULL, GO!
Early Childhood, Physical Science

Children will go on an exciting adventure into physics through interactive play and discovery. Witness their curiosity fueled as they manipulate objects in motion, examine their positions and unravel the mysteries of the forces that govern them.

NC PS.K.1, PS.K.2
SC K-PS2-1, K-PS2-2
CD-15, LD-7"

PRE-K-K

SENSORY SCIENCE
Early Childhood

Children will experience the wonder of science as they tap into their senses and discover a whole new world of descriptive vocabulary, unlocking the secrets of the world around them like never before.

NC PS.K.1
CD-15, LDC-3, LDC-7

LITTLE BUILDERS
Early Childhood, Engineering, Design

Get ready for an exhilarating adventure where young minds will tackle a series of intriguing challenges. With diverse building materials at their disposal, these future innovators will push their problem-solving skills to the limit, refining and optimizing their groundbreaking solutions.

NC PS.K.1, PS.K.2
APL-6, APL-9, ESD-5, LDC-7, CD-11, CD-15
NGSS K-2- ETS1-2, K-PS2-1

ANIMAL ADVENTURES
Early Childhood, Life Science

Children will take an exciting journey into the animal kingdom by exploring a wide range of creatures and discovering their distinct features. Children will gain an appreciation for nature's many diverse forms by comparing the characteristics of animals that make them different from other animals and nonliving things. Live animal encounters provide additional insight as they observe these fantastic species in person.

NC LS.K.1, LS.K.2
SC K-LS1-1, K-ESS2-2, K-ESS3-1
LDC-3, LDC-7, CD-15

WHAT'S THE WEATHER?
Early Childhood, Natural Science

Children will observe and describe weather conditions throughout the seasons, engage in critical thinking to choose weather-appropriate clothing and use real meteorological tools to explore how scientists utilize them to collect data.

NC ESS.K.1
SC K-PS3-1, K-ESS2-1, K-ESS3-2

DINOSAUR DAYS
Early Childhood, Natural Science, Life Science
Your class will be transformed into paleontologists as they explore the thrilling world of dinosaurs. Children will unearth authentic fossilized treasures, create models of imprint fossils, and explore real dinosaur fossils.

NC LS.K.1, LS.K.2
HPD-4, HPD-5, APL-1, APL-2

GRADES 1-2

MATTER MATTERS
Early Childhood, Physical Science

Students investigate the properties of solids, liquids and gases through hands-on experiments and observe instantaneous phase changes featuring liquid nitrogen. They will collect data to compare different states of matter and test for special properties in a variety of materials.

NC PS.2.1
SC 2-PS1-1, 2-PS1-2, 2-PS1-4
NGSS 2-PS1

IN-PERSON OUTREACH
CLASSES

GRADES 1-2

TODAY'S FORECAST
Early Childhood, Natural Science

Students will become amateur meteorologists by using authentic weather instruments to gather crucial temperature, precipitation and wind data. They'll investigate seasonal patterns through data comparison and analysis and showcase their meteorological prowess by delivering weather forecast presentations.
NC ESS.2.1
SC 1-ESS1-2

ALL ABOUT ANIMALS
Early Chilhood, Life Science

Students will get up close and personal with the animal kingdom in this tactile exploration of seven major classes of animals. Students will examine authentic specimens, discovering the unique traits that make them truly remarkable. They will experience astonishing encounters with living creatures from Discovery Place while learning the science of animal classification like a biologist.
NC LS.1.1, LS.2.1, LS.2.2
SC 1-LS1-2, 1-LS3-1, 2-LS4-1
NGSS 2-LS4-1

I'M AN ENGINEER
Early Childhood, Engineering, Design

Discover what it's like to be an Electrical, Mechanical and Civil Engineer. Using the Engineering Design Process, students will analyze engineering challenges, design and construct solutions, and test and improve their designs.
NC PS.1.1
SC 2-PS1-3
NGSS K-2-ETS1

YOU CAN BUILD IT
Early Childhood, Engineering, Design

Prepare to unlock your class's inner engineering talents. Students will explore the fascinating world of balanced forces as they focus their problem-solving prowess. Together, they'll create, experiment and enhance model structures like towering skyscrapers, magnificent bridges and enigmatic pyramids.
NC PS.1.1
SC 2-PS1-3
NGSS K-2 ETS1, 2-PS1-1

SOUND IS VIBRATION
Early Childhood, Physical Science

Students will delve into the fascinating world of sound and unravel its mysteries. Watch them discover the connection between frequency and pitch and amplitude and volume. They'll experiment with diverse vibrating materials, push speaker design limits for maximum amplification, and manipulate visual sound waves.
NC PS.2.2
SC 1-PS4-1
NGSS 1-PS4-1

CATAPULT CREATORS
Early Childhood, Engineering, Design

Dive into the world of catapults and engineering marvels! Watch students unlock their creativity and expand their potential and kinetic energy knowledge as they use the Engineering Design Process to design, build, test and improve their catapult masterpieces.
NC PS.1.1
SC 2-PS1-3
NGSS K-2 ETS 1-1, K-2 ETS 1-3

BUDDY 'BOTS
Early Childhood, Computer Science

Students will become computer programmers and apply computational thinking, problem-solving, and teamwork to code robots through thought-provoking challenges. Budding engineers will have a blast collaborating with their peers and bringing their robots to life.
NC K2-AP-03, K2-AP-04, K2-AP-05, K2-AP-07

GRADES 1-2 & 3-5

DINO TIME
Early Childhood, Natural Science, Life Science

Unearth the fascinating world of paleontology and unravel the secrets of the past. Students will explore genuine fossils, create unique imprint fossils and participate in an exciting fossil excavation to discover their own treasured keepsakes.
NC LS.4.2
SC 2-ESS1-1
NGSS 2-LS4-1

IN-PERSON OUTREACH
CLASSES

GRADES 3-5

THE NEED FOR SEEDS
Life Science, Engineering, Design

Students will delve into the fascinating world of plants. They'll investigate the stages of a plant's life cycle, explore actual plant specimens to discover various seed dispersal methods and apply their understanding in a captivating botanical design challenge.

NC LS.3.2, LS.3.3, LS.5.2
SC 2-LS2-2, 4-LS1-1, 5-LS1-1, 5-LS2-1
NGSS 3-5 ETS1-1, 3-5 ETS1-2, 3-5 ETS1-3

ENGINEERING ARTMENIS
Engineering, Design

Get ready to witness the transformation of students into aerospace engineers, overcoming the complexities of space exploration. With an in-depth understanding of cosmic conditions, these young minds will design innovative solutions to genuine challenges inspired by the thrilling Artemis missions. Join them on this journey into the future of Artemis missions to the Moon and beyond.

NC PS.3.1.3, PS.5.1.3
SC 4-PS3-1, 4-PS3-2, 4-PS3-4, 5-PS1-3
NGSS 3-5 ETS1-1, 3-5 ETS1-2, 3-5 ETS1-3

MUSCULOSKELETAL MARVELS
Biomedical Science

Discover the fascinating world of human anatomy as students delve into the complex workings of the muscular and skeletal systems. Through hands-on exploration of actual bones, tissues and artificial joints, they'll gain a deeper understanding of how these systems function together to support, protect and move the human body.

NC LS.3.1, LS.5.1

WIND ENERGY ENGINEER
Engineering, Design, Physical Science

Students will harness the power of green energy as they engage their analytical and inventive skills to transform wind power into electricity. With the Engineering Design Process as their guide, they will design, build and test turbine blades for optimal energy conversion.

NC PS.3.2, PS.4.2, ESS.4.3
SC 4-PS3-2, 4-PS3-4
NGSS 4-PS3-4

ROBOT CODE QUEST
Computer Science

Prepare for a class adventure as students harness their critical thinking prowess to navigate robots through real-world challenges. They'll dive deep into code-writing, master the art of troubleshooting and employ the powerful tool of computational thinking to conquer each task.

NC PS.3.2.2, 35-CS-03, 35-DA-07, 35-AP-08, 35-AP-10, 35-AP-11, 35-AP-15

ALL THAT MATTERS
Physical Science

Discover the captivating world of matter as students compare the properties of solids, liquids and gases. Unleash students' scientific curiosity as they analyze materials, unveiling distinctive properties such as conductivity, magnetism and opacity. Witness the transformation during rapid phase changes through enthralling liquid Nitrogen demonstrations.

NC PS.3.1, PS.6.1
SC 5-PS1-1. 5-PS1-2. 5-PS1-3.
NGSS 5-PS1-3

ANIMAL EXPLORATIONS
Life Science, Natural Science

Students will explore the adaptations that help animals from six different biomes meet their basic needs and survive. By observing and collecting data from numerous real specimens, learners seek to understand how animals adapt differently to various environments.

NC LS.4.1, ESS.4.3, LS.5.2
SC 3-LS1-1, 3-LS2-1, 3-LS3-1, 3-LS3-2, 3-LS4-2, 3-LS4-3
NGSS 3-LS4-3, 4-LS1-1

CHEMICAL CHANGES
Physical Science

Engage in action-packed chemical reactions, including exploding hydrogen balloons, while learning about the properties of materials, the difference between physical and chemical changes and how to recognize when a chemical change has occurred.

NC PS.5.1, PS.8.1
SC 5-PS1-4
NGSS 5-PS1-4

IN-PERSON OUTREACH
CLASSES

GRADES 3-5

CATAPULT ENGINEER
Engineering, Design, Physical Science

Students will explore the physics of projectiles and potential and kinetic energy as they use the Engineering Design Process to design, build, test and improve their catapults to achieve the ultimate launch.

NC PS.3.2, PS.5.2
SC 3-PS2-3, 3-PS2-3, 4-PS3-4
NGSS 3-PS2-1, 4-PS3-1, 4-PS3-3, 3-5 ETS1

FORCES AND MOTION
Physical Science

Newton's Laws of Motion come alive in this action-packed class where students dive into hands-on experiments. Using innovative tools like hover pucks and fan cars, participants will bring each of Newton's Laws to bear and experience the excitement of physics in action.

NC PS.3.2, PS.5.2
SC 3-PS2-1, 3-PS2-2, 4-PS3-1, 4-PS3-3, 5-PS2-1
NGSS 3-PS2-1

OWLS, ECOSYSTEMS, AND ADAPTATIONS
Life Science, Natural Science

Learn owl about it! Students will dissect owl pellets and collect, analyze and interpret the data to make connections to broader environmental themes such as ecosystems, adaptations and biodiversity.
An additional $100 material fee is charged for each class.

NC LS.4.1, ESS.4.3, LS.5.2, LS.5.3
SC 3-LS4-3,
NGSS 3-LS4- 3, 4-LS1-1, 4-LS1-A

GRADES 6-8

ROBOTICS ENGINEER
Computer Science, Engineering

Get ready for a thrilling adventure where students tackle a real-life challenge with the assistance of a trusty robot. Through the Engineering Design Process and the power of computational thinking, students will develop vital skills in troubleshooting, coding and programming, propelling them toward success.

NC 68-CS-03, 68-AP-13, 68-AP-15, 68-AP-17

CATAPULT ENGINEER
Engineering, Design, Physical Science

Students will explore the physics of projectiles and potential and kinetic energy as they use the Engineering Design Process to design, build, test and improve their catapults to achieve the ultimate launch.

NC PS.7.1, PS.7.2
NGSS MS-ETS1

OUR CHANGING CLIMATE
Natural Science, Life Science

Students will delve into this urgent global crisis, investigating the broad topic of climate change and how it affects our state. Through active learning, they will explore central themes such as carbon emissions, biodiversity and plastic usage.

NC ESS.6.3, ESS.7.1, ESS.7.2, ESS.8.3, ESS.8.4
SC 6-ESS2-6, 7-ESS3-1, 7-ESS3-3, 7-ESS3-4, 7-ESS3-5

DIVE INTO DISSECTION
Natural Science, Life Science

Students will explore the human body and its systems. They'll unlock the secrets of human anatomy while exploring the captivating similarities and differences between species! Hands-on dissections will guide them in uncovering the mysteries of our inner workings and comparing them with the animal kingdom's equivalents.
An additonal $250 material fee is charged for each class.

NC LS.7.1,
SC 6.L.4.B.1, 7.L.3A.1, 7.L.3A.3, 7.L.3B.1, 7.L.3B.2

ENGINEERING DESIGN THINKING
Engineering, Design

Embark with us on a journey of creativity and discovery. Students will use Design Thinking to unlock their full potential, turning challenges into opportunities. With this methodology, they'll practice empathy-driven problem-solving, foster innovative ideas, build prototypes and test solutions until the perfect one is found.

SC 6.S.1A, 6.S.1B, 7.S.1A, 7.S.1B, 8.S.1A, 8.S.1B
NGSS MS-ETS1-1, MS-ETS1-2, MS-ETS1-3, MS-ETS1-4

OUTREACH
ASSEMBLIES

> **"Having an astronomer guide the class adds a huge value to the children."**
>
> – 5th Grade Teacher,
> Earth, Moon, Great Beyond

50 Minutes | Minimum 25/Maxium 300 Students | Dates & Times Customizable

Energize your students with a high-octane science experience. Assemblies can accommodate up to 300 students at a time and cover a wide range of topics. The dynamic action includes audience participation, demonstrations and live experiments.

K-8TH

MATTER OF SCIENCE
Physical Science

Chemistry and physics take center stage in this action-packed presentation! Ignite your students' curiosity and unleash their inner scientists with captivating demonstrations of combustion, mesmerizing matter transformations, enthralling experiments with electricity and the chilling wonders of liquid nitrogen. Don't miss your chance to spark their imagination and fuel a lifelong love for learning.

NC PS.K.1, PS.2.1, PS.3.1, PS.4.2, PS.5.1, PS.6.1, PS.6.2

BEYOND THE BACKYARD
Life Science, Natural Science

Travel across the globe to visit a variety of ecosystems and their animal inhabitants. Meet live Animal Ambassadors and explore preserved specimens from Dicovery Place's collections to discover how animals use their physical and behavioral adaptations to meet their needs in diverse environments in this animal extravaganza.

NC LS.K.1, LS.1.1, LS.2.1, LS.2.2, LS.4.1, LS.4.3, LS.5.2, LS.6.2, LS.8.2
SC K-LS1-1, K-ESS3-1, 1-LS1-1, 2-LS4-1, 3-LS4-3, 4-LS1-1,

OUTREACH STARLAB PLANETARIUM

50 Minutes | Maxium 30 Students | Dates & Times Customizable

Starlab Planetarium requires access to electricity and a minimum set-up space of 16 feet in height and clear floor area of 28 x 28 feet. **Maximum capacity is 30.**

PRE K-K

DAY AND NIGHT
Ealry Childhood, Astronomy

In this exploration of our ever-changing sky, students will learn to recognize the differences between day and night skies while observing the intriguing shifts in the Moon's appearance.

APL-1, APL-2, APL-8, LDC-1, LDC-7

GRADES 1-2

DAY AND NIGHT
Early Childhood, Astronomy

In this exploration of our ever-changing sky, students will learn to recognize the differences between day and night skies while observing the intriguing shifts in the Moon's appearance.

NC ESS.1.1
NGSS 1-ESS-1.1, 1-ESS-1.2

GRADES 3-5

SOLAR SYSTEM SPECTACULAR
Astronomy

Experience the mysteries of the cosmos as students unravel the wonders of our celestial neighborhood, studying the awe-inspiring sun, diverse planets, enigmatic asteroids and hidden moons that populate the solar system.

NC ESS.3.1, ESS.4.1
SC 5-ESS-1, 5-ESS-2

STARRY, STARRY NIGHT
Astronomy

Witness the mysteries of the universe as we explore the intricate connection between our planet and its celestial neighbors. Unravel the secrets behind the phenomena of day and night and unveil the cosmic forces that trigger the ever-changing appearance of the Moon. Join this thrilling adventure as we uncover the marvels awaiting us just beyond our atmosphere.

NC ESS.3.1, ESS.4.1
NGSS 5-ESS-1-1, 5-ESS-1-2

GRADES 6-8

SOLAR SYSTEM SPECTACULAR
Astronomy

Experience the mysteries of the cosmos as students unravel the wonders of our celestial neighborhood, studying the awe-inspiring sun, diverse planets, enigmatic asteroids and hidden moons that populate the solar system.

NC ESS.6.1
SC 8-ESS1
NGSS MS-ESS1-3

7 WAYS TO MAKE
YOUR FIELD TRIP UNFORGETTABLE

Get ready for an amazing field trip to a Discovery Place Museum, where students will be immersed in a world of active learning, teamwork and unforgettable memories. By following these tips, you'll make this adventure not only enjoyable but also educational and safe for your entire group!

1. Plan a Pre-Visit
Be the ultimate prepared educator by visiting the Museum ahead of time. You'll get the lay of the land, preview exhibits and activities and be ready to maximize your students' experience.

2. Set Clear Objectives
Make this field trip more than just a day off from school! Outline learning goals aligned with your curriculum, share them with students and chaperones and plan activities that bring those objectives to life.

3. Assign Responsibilities
Keep things running smoothly by designating roles for teachers, chaperones, and students. Set behavior expectations and establish a buddy system for an organized and well-managed trip.

4. Consider the Itinerary
Resist the urge to overstuff your agenda. Prioritize the most engaging and relevant experiences and schedule breaks and free exploration time to keep students excited and energized.

5. Remember Special Needs and Accommodations
Make this field trip fantastic for every student by inquiring about and planning for any necessary accommodations. Discovery Place is dedicated to inclusivity, so our staff is here to help!

6. Prioritize Safety Protocols
Partner with us in ensuring student safety by familiarizing yourself with Discovery Place's safety measures and communicating clear instructions to students and chaperones.

7. Debrief and Reflect
Extend the educational impact by scheduling a post-trip debriefing. Invite students to share their experiences and connect what they learned to the classroom curriculum, solidifying their newfound knowledge.

By embracing these best practices, your Discovery Place field trip will be a thrilling, secure and enlightening experience. Embark on your memorable adventure today and uncover the wonders our Museums have in store!