



DISCOVERY PLACE

**2020-2021
EDUCATION GUIDE**

COVID-19 Safe Programs



2020-21 COVID Safe

Let our Museum-on-wheels bring COVID-safe educational experiences to your school or community! We have modified our most popular Outreach programs to address the health and safety of all of our students and partners. These updated programs allow for students to engage in hands-on, high-energy learning experiences in science, technology and nature while maintaining a safe environment for everyone.

All programs meet NC Health and Human Services (NCDHHS) Standards for Schools.

Program Essentials

OUTREACH INFORMATION

- One designated location is preferred for visits with multiple programs on a single day. Location changes (such as moving between individual classrooms) will cause additional delays between classes.
- Large venues such as gymnasiums, media centers, cafeterias and outdoor pavilions are ideal spaces to allow for social distancing and to maximize safety.
- Schedule must include access to the space one hour prior for set-up and one hour post for break-down
- If we are teaching the same topic, we need 45 minutes in between scheduled classes to reset and sanitize. If we are switching topics, we will need one hour between classes to reset.
- Class sizes cannot exceed 20 children.
- A mileage fee is applied to all Discovery Place Outreach programs. Mileage is charged at \$25 per Mecklenburg County visit (or \$25 per Richmond County visit for programs originating from Discovery Place Kids Rockingham) and \$.75 per mile for all out-of-county visits.
- All participants over the age of 2 are required to wear a face mask or cloth face covering that covers the nose and mouth while during the workshop. This also include outdoor programs. No exceptions.
- Discovery Place educators will be prepared with their own personal protective equipment, including sanitizing solutions to set up and clean up spaces appropriately.

VIRTUAL INFORMATION

- Programs will be delivered via Zoom.
- Information for connecting to the Zoom program will be delivered to the client once payment is processed for the reservation order.
- Client is responsible for distributing connection information to the participants prior to the program start time.

In-Person Outreach

Let one of our expert educators come to your location. Our team wears masks, practices social distancing as possible and will follow rigorous cleaning protocols throughout the program.

 50 Minutes

 Dates & Times Customizable

 Maximum 20 Students

PRE K - K

ALL ABOUT ANIMALS

Students will meet Discovery Place ambassador animals, explore real specimens from the Museum's collections and discover how animals are alike and different. Students will develop science skills such as making observations, asking questions and creating connections with the natural world.

DINOSAUR DAYS

Students will become paleontologists as they excavate fossils, explore fossilized specimens and create models of imprint fossils.

MINI-METEOROLOGY

Snow, rain, sunshine or clouds? What will the weather be like today? Use tools to develop skills including measuring, comparing, collecting data and making weather predictions.

YOU CAN BUILD IT

Students will use building materials to complete a series of problem-solving challenges to test and improve their solutions.

GRADES 1 - 2

ANIMAL HABITATS

Students will explore Earth's habitats and discover the adaptations and characteristics that plants and animals use to survive in their environment. Students will utilize specimens from the Museum's collection to discover ways their actions impact Earth.

CATAPULT CREATORS

Throw yourself into the Engineering Design Process with catapults. Students learn about potential and kinetic energy as they design, build and improve upon their own catapults.

DINO TIME

Dig into paleontology! Students will explore real fossils, create their own imprint fossil and use tools to uncover the past.

MATTER OF SCIENCE

Chemistry and physics come alive during this exciting class. Wow your students with demonstrations involving combustion, changing states of matter, electricity and liquid nitrogen.

SOUND IS VIBRATION

Students explore what sound is, how it is created and how we perceive it. Students will experiment with a variety of vibrating materials, as well as software applications to understand the relationship between frequency and pitch, along with amplitude and volume.

TODAY'S FORECAST

Students become amateur meteorologists by using tools to collect weather data including temperature, precipitation and wind. Students will compare and analyze the data the data to determine seasonal patterns and communicate their meteorological findings through forecast presentations.

YOU CAN BUILD IT

Students will use problem-solving skills to construct, test and improve model structures such as high-rise towers, bridges, pyramids and more.

GRADES 3 - 5

ANIMAL EXPLORATIONS

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

CATAPULT ENGINEER

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

CHEMICAL CHANGES

Students will learn signs of a chemical change through exciting demonstrations. Then they will perform a series of action-packed experiments and make a claim for each about the type of change occurring, giving evidence to support their claim.

DINO TIME

Students become paleontologists as they excavate fossils, explore real fossilized specimens and create models of imprint fossils.

ESCAPE ROOM ROBOTS

Students will use critical thinking skills to analyze a given problem: their robot is trapped in a room. To escape, students must write code, troubleshoot and use computational thinking. Do your students have what it takes to crack the code and help their robot escape the room?

FORCES & MOTION

Newton's Laws of Motion come alive in this class packed with guided-inquiry activities. Students make predictions and investigate how changes in mass, force, gravity and friction affect the motion of an object. Then they will perform experiments for each of Newton's Laws and be presented with a final challenge to synthesize student learning.

MATTER OF SCIENCE

Chemistry and physics come alive during this presentation. Wow your students with demonstrations involving combustion, changing states of matter, electricity and liquid nitrogen.

MUSCULOSKELETAL MARVELS

Students explore the structures and functions of the skeletal and muscular systems of the human body through a variety of guided-inquiry activities and the examination of human specimens.

WHAT'S THE FORECAST

Dive into the atmosphere as weather phenomena are investigated. Students use data collection software to analyze wind speed and sling psychrometers to measure relative humidity. Get temperature readings from thermometers and study clouds to improve your weather forecasting skills.

YOU CAN BUILD IT

Students use building materials to complete a series of problem-solving challenges and test and improve their solutions.

GRADES 6 - 8

CATAPULT ENGINEER

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

CHEMICAL CHANGES

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. Learn about products and reactants and chemical equations.

MATTER OF SCIENCE

Chemistry and physics come alive during this presentation. Wow your students with demonstrations involving combustion, changing states of matter, electricity and liquid nitrogen.

ROBOTICS ENGINEER

Students will be presented with a real-world challenge that can be solved with the help of a robot. They will use the Engineering Design Process, employ computational thinking, troubleshooting, coding and programming to achieve success.

TAKE A CELL-FIE!

Students learn basic biotechnology skills as they delve into cells and organelles. Understand how they all contribute to the basic functions of life. Take a cell-fie of cells you prepared yourself!

Virtual Classes

Bring exciting demonstrations and at-home experiments right to your virtual classroom. These engaging and interactive classes are tailored to your class's grade level and curriculum standards.

All programs originate in our Digital Studio Sponsored by T-Mobile



 45 Minutes

 Dates & Times Customizable

 Maximum 15 Students

ALL THAT MATTERS

GRADES 3 - 8

Through demonstrations featuring liquid nitrogen and at-home experiments, students will gain a greater understanding of the properties of matter in its various phases and how heat affects particle motion and density.

ANIMAL ECOLOGY

GRADES 6 - 8

In this interactive class, students will encounter some of our ambassador animals. They will learn about the relationships between producers, consumers and decomposers, while working with an educator to demonstrate how abiotic and biotic factors affect animal populations in an ecosystem.

ANIMAL LIFE CYCLES

GRADES 1 - 2

In this interactive class, students will meet live animals from the Discovery Place Living Collection. They will become familiar with the needs of all animals, and work with an educator to describe the life cycles of different animals.

ANIMALS IN THEIR ENVIRONMENT

GRADES 1 - 5

In this interactive class, students will encounter some of our ambassador animals. They will become familiar with animal habitats and work with an educator to describe the needs of different animals in their environment.

BODY SYSTEMS

GRADE 3 - 8

Students explore the human body and discover the tissues, organs and systems that keep us functioning. We will observe real human specimens and participate in at-home activities to analyze several body systems.

EARTH EXPLORERS

GRADES 1 - 2

Dig into earth science and discover what is hiding under the soil. Students test soils to determine their uses and follow the rock cycle to see change over time. We will also discover amazing uses for these organic materials.

FORCES AND MOTION

GRADES 3 - 8

Newton's Laws of Motion come alive in this class with exciting demonstrations coupled with at-home experiments. Students make predictions and investigate how changes in mass, force, gravity and friction affect the motion of an object.

GEOLOGY ROCKS

GRADES 6 - 8

Students explore and model the Earth's layers while investigating rocks, minerals and fossils to decipher what they tell us about the history of the Earth and its changing life forms.

I'M AN ENGINEER

PRE K - GRADE 2

Students discover what it's like to be an engineer. Using the Engineering Design Process, we will analyze engineering challenges, design and construct solutions and test and improve our designs.

MATTER MATTERS

PRE K - GRADE 2

Students observe instantaneous phase changes featuring liquid nitrogen! We will investigate the properties of matter and its different phases through at-home experiments.

MOVING WITH ANIMALS

PRE K - K

In this interactive class, students will meet live animals from the Discovery Place Living Collection. They will become familiar with the differences between living and nonliving things and work with an educator to demonstrate how animals move.

MUSCULOSKELETAL MARVELS

GRADES 3 - 5

Students investigate real human bones, tissues and artificial joints to learn how the muscular and skeletal systems function together to support, protect and move the human body.

PUSH, PULL

PRE K - GRADE 2

Explore how forces such as pushes, pulls, gravity and magnets can affect the motion of an object. Students will make predictions and conduct at-home experiments.

ROCKS, MINERALS AND FOSSILS

GRADES 3 - 5

Uncover the differences between rocks and minerals and investigate the rock cycle. Students will classify rocks based on their composition and delve into the processes that create them. They'll then test different mineral properties, uncover how they are formed, and learn about mold, cast and trace fossils.

SOLAR SYSTEM SPECTACULAR

GRADES 3 - 8

Travel through the solar system with our virtual planetarium to learn about the sun, planets, asteroids and moons that make up Earth's neighborhood. Investigate space exploration as you join Apollo astronauts on a trip to the Moon and visit the red planet with the Mars rovers.

STARRY, STARRY NIGHT

PRE K - GRADE 5

Witness the wonders of the universe in this in-depth look at the Earth, Moon and Sun system. Learn about what causes day and night and changes in the appearance of the Moon. Students will observe and recognize patterns in the night sky.

STORYBOOK SCIENCE

PRE K - K

Can your house stand up to the Big Bad Wolf? Can you build a bridge over the river? Students will use engineering skills to test the science behind some of your favorite stories

Virtual Assemblies

Bring science and nature to your students through a virtual connection. Our educators will create an educational experience that draws students in and keeps them engaged.



Presentation is 30 Minutes



Dates & Times Customizable



Unlimited Students

BACKYARD BIOLOGY

GENERAL AUDIENCES

Live from Discovery Place Nature, students will have the opportunity to experience science and nature firsthand through live animals, exciting demonstrations and engaging conversations. Join our curators and resident animals as they share some tips on how to explore and discover the richness of your backyard. Plus, learn some techniques to see and to hear what is hiding in plain sight all around you.

A MATTER OF SCIENCE

GENERAL AUDIENCES

Chemistry and physics come alive during this action-packed presentation. Wow your students with wonder-filled demonstrations featuring combustion, changing states of matter, electricity and liquid nitrogen.