Field Trip Programs

See beyond.

Discovery Park of America offers education programs to visiting school groups. These programs have been designed to meet the latest Tennessee State and Federal Standards.

- All programs are free for field trip students.
- Pre-registration is required for all programs.
- A minimum of 10 students is required to register.
- A maximum number of students is listed for each program.
- Tag-along children will not be admitted into programs and must be chaperoned elsewhere.
- Teachers are invited to observe the programs, but parent chaperones may be asked to spend the program time exploring the park on their own.
- All programs are subject to availability.
- Activities may vary depending on age and time constraints

Discovery Park of America staff will work with you when scheduling a visit to plan the best possible field trip for your students!

For more information on specific state standards, contact
education@discoveryparkofamerica.com

Field Trip Programs

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Field Trip Programs

K

Learning the Five Senses

- Know that people interact with their environment through their sense.
- Observe the world of familiar objects using the senses and tools.
- Use a combination of drawing, dictating, and writing to narrow a single event or several related events.
- Ask and answer questions about the scientific world and gather information using the senses.

This program focuses on teaching students to refer to and distinguish between the five senses they use to explore the world. Topics covered include ways that taste, touch, smell, hearing, and sight are used to interact with objects presented by the Discovery Guide, and how these same senses allow them to enjoy their trip to Discovery Park. Activities include hearing a story that relates to different sensations and describing and comparing the sensations of a trip down the giant slide. Students will learn about the differences between their senses, the many things that the five senses can tell us, and how each sense is important.

Field Trip Programs

1

Dinosaur Teeth, Claws, and Bones!

- Identify the basic characteristics of living things.
- Sort and classify a variety of living and nonliving materials based on characteristics.
- Recognize differences between living organisms and nonliving materials and sort them into groups by observable physical attributes
- Use evidence and observations to explain that many animals use their body parts and senses in different ways to see, hear, grasp objects, protect themselves, move from place to place, and seek, find, and take in food, water, and air.

This program focuses on the lives and bodies of the ancient dinosaurs, the types of lives they led based upon their diets, and how to tell the differences between the animals. Topics covered include what makes an animal a herbivore or carnivore, and what weapons carnivores were born with that allowed them to attack other animals. Activities include reassembling a dinosaur model and a game of tag that puts carnivorous dinosaurs against their prey. Students will learn about the lives the ancient dinosaurs led, the detective work that scientists do after finding a fossilized bone, and how dinosaur bones and teeth were preserved as the fossils that allow us to understand their lives millions of years after their deaths.

Field Trip Programs

1

It's Not Just a Rock!

- Use senses and simple tools to make observations.
- Record information about living or nonliving objects in the local environment.
- Classify solids according to their size, shape, color, texture, hardness, ability to change shape, magnetic attraction, whether they sink or float, and use.
- Define natural resources and explain how people are dependent on them.
- Predict and explain how human life and the natural world would be different without current technologies.

This program focuses on the numerous and fascinating ways that ancient people utilized and relied upon rocks to ensure their survival. Topics covered include the creation and purposes of stone age tools and how they did the job of their modern analogues, such as drills and knives. Activities include following and building rock trail markers, as well as a bartering game to give students a chance to see different types of stones as resources. Students will learn about the numerous varieties of rocks that can be used by man, and the countless ways the Native American people, who came before them, were able to succeed because they were experts regarding stone.

Field Trip Programs

2

Corn: From Seed to Meal

- Recognize the structure of plants (roots, stems, leaves, flowers, fruits) and describe the function of the parts (taking in water and air, producing food, making new plants).
- Illustrate and summarize the life cycle of plants.
- Analyze the differences in natural resources in the three Grand Divisions of Tennessee and make connections to the major industries that are found in each.
- Create and interpret timelines.

This program focuses on corn, one of the most important grain crops in existence. Topics covered include the amazing varieties of corn, its countless uses, and how people long ago would gather, grow, and process it. Activities include an opportunity for students to winnow and separate corn product into different categories by hand, as well as a card game that allows students to follow the many steps required to make corn usable from its beginning in the field. Students will learn about the agricultural and cultural history of the corn plant and the incredible difference it has made in the world.

Field Trip Programs

2

Earthquakes and Reelfoot Lake

- Plan and conduct investigations to demonstrate the cause and effect relationship between vibrating materials (tuning forks, water, bells) and sound.
- Demonstrate how a stronger push or pull makes things go faster and how faster speeds during a collision can cause a bigger change in the shape of the colliding objects.
- Analyze the push or the pull that occurs when objects collide or are connected.
- Evaluate the effects of different strengths and directions of a push or pull on the motion of an object.
- Explain how local people and events have influenced local community history.

This program focuses on the earthquakes that occurred in this region 200 years ago, and how they made the formation of Reelfoot Lake possible. Topics include the seismic upheavals that caused Reelfoot Lake and the numerous things scientists try to learn about earthquakes in order to protect people from them. Activities include building small objects and testing their resilience against a shaking surface, as well as using various toys and games to model and reproduce earthquake waves. Students will learn about plate movement, how earthquakes happen, and how those earthquakes' occurrence brought about Reelfoot Lake.

Field Trip Programs

3

The Games and Legends of Native American Children

- Describe cultures of Native American Tribes.
- Recount stories, including fables, folktales, and myths from diverse cultures; determine the central message, lesson, or moral and explain how it is conveyed through key details in the text.
- Recognize that the world is made up of many people and their history may differ from their own by examining artifacts such as a cultural time capsule, museum, or cultural suitcase.
- Understand how natural resources influence human settlement.

This program focuses on the beliefs, culture, and recreational pastimes of Native American children. Topics covered include various Native American legends, how ancient people of this continent related both legends and other information to one another, and the traditions and worldviews of Native Americans.

Activities include playing the same games that were played by Native American children long ago and using artistic skills to practice how they would have decorated an animal hide. Students will learn what they would have likely believed, and how they would have had fun with their friends had they grown up as Native American children.

Field Trip Programs

3

Space Suits: The Smallest Manned Spacecraft

- Select a tool, technology, or invention that was used to solve a human problem.
- Recognize the connection between a scientific advance and the development of a new technology.
- Identify and demonstrate how technology can be used for different purposes.
- Recognize the effect of multiple pushes and pulls on an object's movement or non-movement.

This program focuses on the scientific marvel of the space suit and what a fascinating engineering achievement it represents. Topics covered include an inventory of the countless vital components that space suits carry, which includes everything from air to batteries to cameras to air conditioning. Activities include creating balloon rockets to learn how compressed gas allows spacesuits to move in a vacuum and replicating the collection of moon rock samples to experience how some space suits can limit mobility. Students will learn about the amazing feats space suits have made possible and the systems they use to keep people safe in the extreme environment of space.

Field Trip Programs

4

Firefighting

- Select a tool, technology, or invention that was used to solve a human problem.
- Recognize the connection between a scientific advance and the development of a new tool or technology.
- Identify and demonstrate how technology can be used for different purposes.
- Explain how natural hazards (fires, landslides, earthquakes, volcanic eruptions, floods) impact humans and the environment.
- Select from a list of visual representations of a service provided by the government.

This program focuses on the ways that people have fought fires throughout the history of America. Topics covered include the different tools and changing technology used to fight fires, as well as the origins of the first fire departments. Activities include taking part in a bucket brigade to put out a "fire," acting like a firefighter by quickly responding to a fire alarm, and stepping back in time to use firefighting tools of centuries past. Students will learn about the people who fight fires and the machines and animals that help them.

Field Trip Programs

4

Native American Culture, Technology, and Dwellings

- Identify pre-Colonial Native American groups (e.g., Cherokee, Creek, Chickasaw, Aztec, Mayans, Olmec, Mississippi Mound Builders).
- Identify various racial and ethnic groups in Tennessee at the founding of statehood (e.g., Cherokee, Creek, Shawnee, English, Scottish, French, American-born pioneers).
- Explain the cause and effect relationship between a naturally changing environment and an organism's ability to survive.
- Analyze and interpret data about changes (land characteristics, water distribution, temperature, food, and other organisms) in the environment and describe what mechanisms organisms can use to affect their ability to survive and reproduce.

This program focuses on the incredible diversity, ingenuity, and history of the Native American people. Topics covered include how Native Americans lived very different lives according to their environments and had different strategies for getting food, making tools, and building homes, depending on whether it was hot or cold and whether they lived near trees or near oceans. Activities include making and decorating a model shelter using techniques known by Native Americans and then utilizing those skills to erect a tipi with their class. Students will learn about the diverse and complex nations and lifestyles in which Native Americans lived and how students would have lived and viewed the world if they had been born a Native American long ago.

Field Trip Programs

4

We've Got Ag in the Bag

- Obtain and combine information to describe that energy and fuels are derived from natural resources and that some energy and fuel sources are renewable (sunlight, wind, water) and some are not (fossil fuels, minerals).
- Create an argument, using evidence from research, that human activity (farming, mining, building) can affect the land and ocean in positive and/or negative ways.
- Analyze how different earth materials are utilized to solve human problems or improve the quality of life.
- Describe how human beings have made tools and machines (X-ray cameras, microscopes, satellites, computers) to observe and do things that they could not otherwise sense or do at all, or as quickly or efficiently.

This program focuses on the fascinating diversity of agricultural products and the incredible history and prosperity they bring to this region. Topics covered include the history and breakthroughs made in farming and how one single crop, such as soybeans or cotton, can be responsible for an amazing diversity of benefits. Activities include planting tiny gardens to take home, using fractions to understand the value of arable land by witnessing its comparative rarity, and a game that teaches students the difficulties of succeeding in agriculture against various environmental challenges. Students will learn that they literally cannot live an hour of their lives without benefitting from or interacting with something produced using agriculture.

Field Trip Programs

4

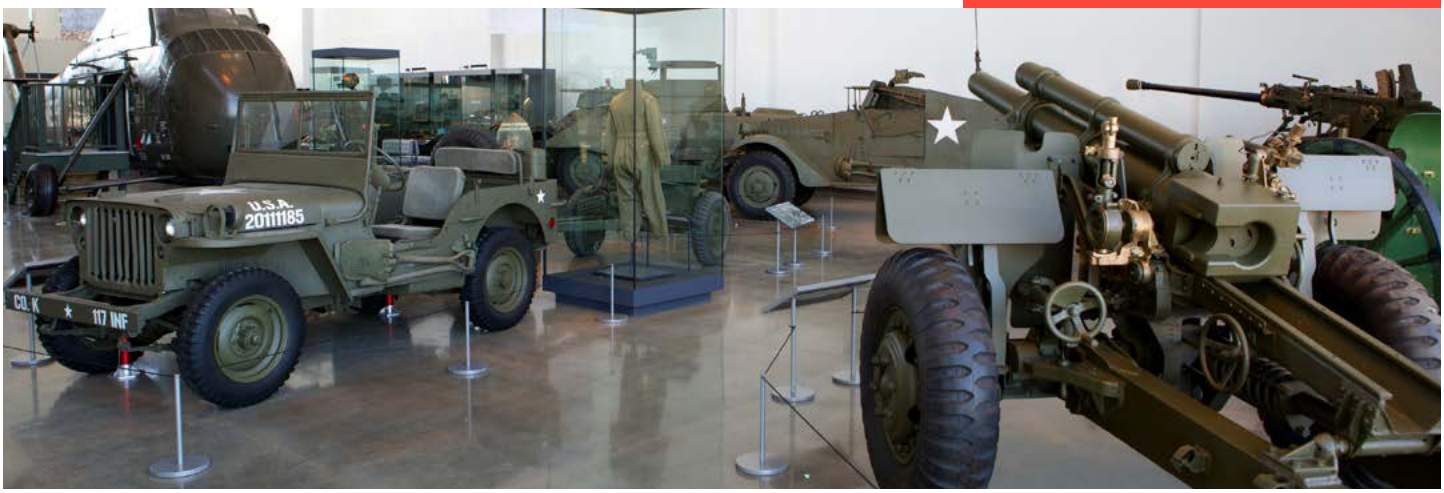
The Life of a Civil War Soldier

- Determine how the issue of slavery caused political and economic tensions between government policy and people's beliefs.
- Determine how various groups resolve conflict.
- Recognize the connection between a scientific advance and the development of a new tool or technology.
- Analyze and interpret data from observations and measurements of the physical properties of matter to explain phase changes between a solid, liquid, or gas.
- Evaluate the results of an experiment to determine whether the mixing of two or more substances result in a change of properties.

This program focuses on the day-to-day life of a Civil War soldier when not fighting in the conflict's historic battles. Topics covered include the difficulties and hardships that were actually far more likely to claim a soldier's life than the actions of the enemy. Activities include using a "housewife" sewing kit, which every soldier of the era would find indispensable, and experimenting with the famously unpleasant food on which the soldiers subsisted. Students will learn about the typical life of a soldier called upon to fight for four difficult years.

Field Trip Programs

5



Tennessee's Role in World War II

- Understand America's role during World War II.
- Describe how human beings have made tools and machines (X-ray cameras, microscopes, satellites, computers) to observe and do things that they could not otherwise sense or do at all, or as quickly or efficiently.
- Identify how scientific discoveries lead to new and improved technologies.
- Describe the impact of mass production, specialization, and division of labor on the economic growth of the United States and other regions of the world.
- Understand the rights, responsibilities, and privileges of citizens living in a democratic republic.

This program focuses on the important roles played by Tennessee citizens in various aspects of the war effort that allowed the United States to win World War II. Topics covered include the incredible geographic scale of the conflict, the sacrifices made by both combatants and noncombatants in order to fight it, and how the State of Tennessee embodied a cross section of the economic, military, domestic, and scientific changes brought about by the realities of fighting a devastating war that raged across the planet. Activities include experiencing firsthand the dramatic production power of labor specialization and the assembly line, as well as the improvisation of leisure activities using the few materials available on the home front. Students will learn the that the efforts by Tennesseans during the years of the Second World War were not only typical of the efforts and sacrifices made by others across the nation, but were also crucial in securing Allied victory.

Field Trip Programs

5

Animal Adaptations

- Distinguish between inherited characteristics and those characteristics that result from a direct interaction with the environment. Apply this concept by giving examples of characteristics of living organisms that are influenced by both inheritance and the environment.
- Analyze and interpret data from fossils to describe types of organisms and their environments that existed long ago. Compare similarities and differences of those to living organisms and their environments. Recognize that most kinds of animals (and plants) that once lived on Earth are now extinct.
- Use evidence to construct an explanation for how variations in characteristics among individuals within the same species may provide advantages to these individuals in their survival and reproduction.
- Classify animals according to their physical characteristics.

This program focuses on how adaptations help animals to survive in different environments, both in the past and in the present. Topics covered include the origins, usage, and mechanisms animals use to survive, and comparison of the survival needs of animals with those of human beings. Activities include mimicking several strategies animals use to survive, such as using fat-insulated gloves to experience ice water the way a walrus does, picking up objects via “bear paws,” and pretending to be frogs by catching distant insects with adhesives. Students will learn about the behavioral, social, and physical adaptations that allow animals to succeed in various habitats and how amazing and incredibly diverse these tools are.

Field Trip Programs

6

Native American Hunting and Food Chains

- Recognize reasons that cultural groups develop or settle in specific physical environments.
- Determine the impact of competitive, symbiotic, and predatory interactions in an ecosystem.
- Research the ways in which an ecosystem has changed over time in response to changes in physical conditions, population balances, human interactions, and natural catastrophes.
- Assess the impacts of human activities on the biosphere including conservation, habitat management, species endangerment, and extinction.

This program focuses on hunting and the incredible importance of this activity to ancient people, including the Native Americans. Topics covered include the biological role of producers and various levels of consumers, methods of hunting practiced by Native American tribes, and the mythological, ritualistic, and religious significance they ascribed to this activity. Activities include genuine Native American games that teach hunting skills such as observation and stealth, opportunities for students to act as hunters themselves, and participating in modeling the pathways of consumption. Students will learn about the biological underpinning of both human and animal predation, reasons to select and use prey efficiently, and the tools and techniques that were used to do so throughout most of human history.

Field Trip Programs

6

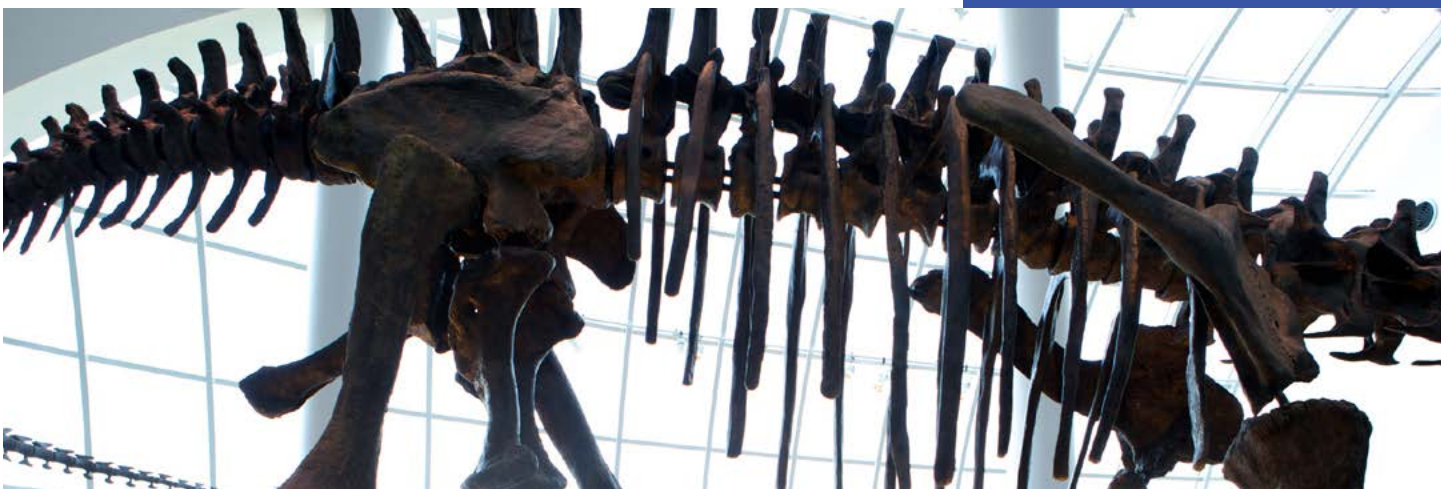
Phases of the Moon

- Use data to draw conclusion about the major components of the universe.
- Distinguish among a day, lunar cycle, and year, based on the movements of the Earth, moon, and sun.
- Explain the different phases of the moon using a model of the Earth, moon, and sun.
- Explain the cause and effect relationship between the positions of the sun, earth, and moon and resulting eclipses, positions of constellations, and appearance of the moon.
- Recognize the impact of individuals on world history.

This program focuses on Earth's moon, its scientific significance, and the changes it undergoes from night to night. Topics covered include the causes of the moon's phases, how the moon has influenced human myth, culture, and language, and how and why solar eclipses occur. Activities include painting a unique image of the moon and a card game in which students compete to match the image of the moon phase with its name. Students will learn how influential the moon and its phases were to the development of our calendar and dating system, how different it is from the Earth, and how the staggering amount of research and exploration of the moon in order to land on it turned into a worthy endeavor.

Field Trip Programs

7



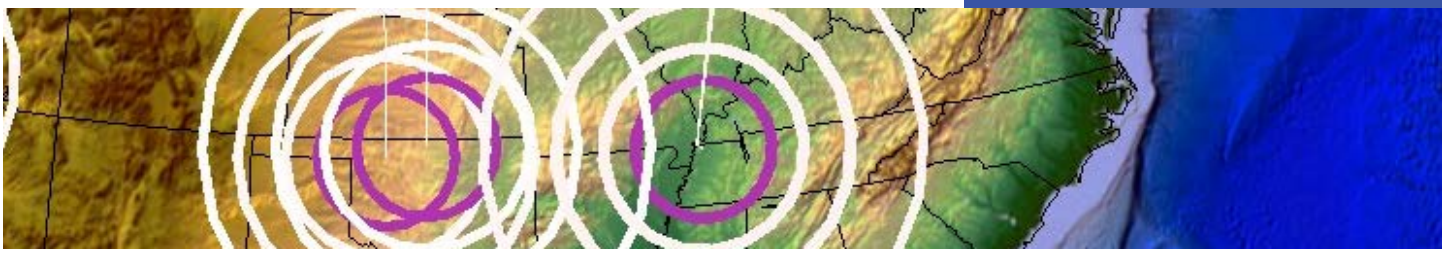
Dinosaur Bones, Evidence, and Misconceptions

- Make inferences and draw conclusions based on evidence.
- Identify a faulty interpretation of data that was due to bias or experimental error.
- Develop an argument based on empirical evidence and scientific reasoning to explain how behavioral and structural adaptations in animals and plants affect the probability of survival and reproductive success.
- Analyze and interpret data for patterns in the fossil record that document the existence, diversity, extinction, and change in life forms throughout Earth's history.

This program focuses on how paleontological knowledge and beliefs have changed over time and the increased understanding of dinosaurs that scientists have gained through experience. Topics covered include some of the more notable paleontological bloopers and mistakes made in the past, how those errors were overcome, and samples of the much-improved current understandings of dinosaurs. Activities include the demonstration of how to use trigonometry and triangles to measure the height of priceless dinosaur bones without needing to touch them and practicing fossil preservation techniques. Students will learn about the amazing progress that has been made in the study of ancient life and how many difficulties have been overcome by paleontology since its infancy.

Field Trip Programs

7



Earthquake Science: The New Madrid Seismic Zone

- Describe the relationship between plate movement and earthquakes, mountain building, volcanoes, and seafloor spreading.
- Recognize specific physical processes that operate on the Earth's surface (earthquakes, erosion, water/wind currents, plate tectonics, weathering, volcanism).
- Gather and evaluate evidence that energy from the earth's interior drives convection cycles within the asthenosphere which creates changes within the lithosphere including plate movements, plate boundaries, and sea floor spreading.
- Construct a scientific explanation using data that explains the gradual process of plate tectonics accounting for A) the distribution of fossils on different continents, B) the occurrence of earthquakes, and C) continental and ocean floor features (including mountains, volcanoes, faults, and trenches).
- Collect data, map, and describe patterns in the locations of volcanoes and earthquakes related to tectonic plate boundaries, interactions, and hotspots.

This program focuses on the phenomenon of earthquakes, as well as how, why, and when they are believed to occur in this region. Topics covered include the history of measuring earthquakes, the strength of the Great Earthquakes of 1811-12, and preparedness for a future event. Activities include using judgement to create an earthquake preparedness kit and observing liquefaction firsthand with sediments from Reelfoot Lake. Students will learn the geological mechanisms involved during earthquakes, how tremors are intrinsically tied to the history of this area, and how to prepare for future earthquakes.

Field Trip Programs

8

Trail of Tears

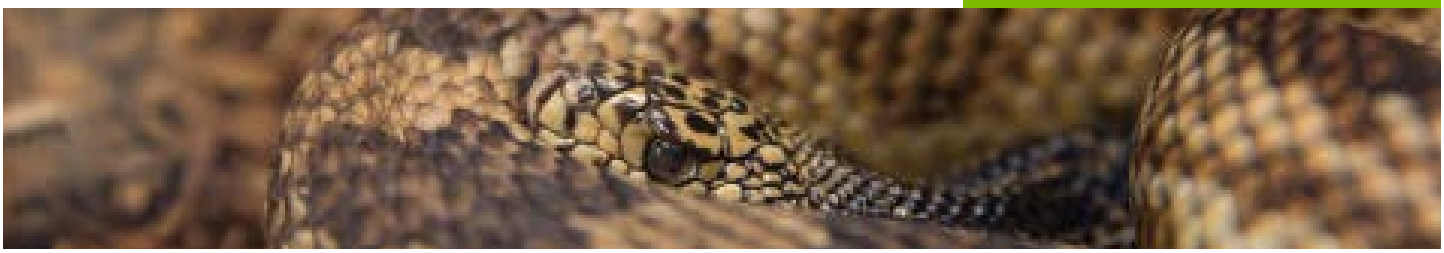
- Recognize how immigration and cultural diffusion have influenced the character of a place (i.e., religion within certain colonies, African songs in the American south, British vs. French influences).
- Interpret examples which illustrate how cultures adapt to or change the environment.
- Recognize causes and consequences of conflict.
- Recognize consequences of the westward expansion of the United States.
- Identify the impact of the individual and group decisions on historical events.
- Recognize examples of stereotyping, prejudice, conformity, and altruism in early American History.

This program focuses on the consequences of the passing and enforcement of the Indian Removal Act of 1830. Topics covered include a history of the treaties and land loss experienced by Native American tribes, as well as the cultural and political circumstances that led to their forced expulsion. Activities include a staged event that unexpectedly parallels the experiences of visiting students with that of 1800's Native Americans, as well as a card game and discussion that explores students' altruism in a demanding and difficult situation. Students will learn about the incredible hardships faced by the thousands of displaced Native American people and gain a greater understanding of the processes and attitudes that allowed such an event to take place.

Field Trip Programs

Multi Level

Elementary



Critter Camouflage

- Use evidence and observations to explain that many animals use their body parts and senses in different ways to see, hear, grasp objects, protect themselves, move from place to place, and seek, find, and take in food, water, and air.
- Develop and use models to compare how animals depend on their surroundings and other living things to meet their needs in the places they live.
- Explain the cause and effect relationship between a naturally changing environment and an organism's ability to survive.
- Infer that plant and animal adaptations help them survive in land and aquatic biomes.
- Analyze and interpret data about changes (land characteristics, water distribution, temperature, food, and other organisms) in the environment and describe what mechanisms organisms can use to affect their ability to survive and reproduce.
- Identify physical and behavioral adaptations that enable animals such as, amphibians, reptiles, birds, fish, and mammals to survive in a particular environment.

This program focuses on the critical ability of animals to blend into their environment. Topics covered include how to distinguish between the varying types of animal camouflage, as well as the different purposes it serves for predators and prey. Activities include creating and camouflaging their own fictional animals according to their environments, a game that tests students' ability to spot hidden creatures, and interacting with various Discovery Park animals to understand how their coloration helps them survive. Students will learn how vital an edge camouflage can be in the life of an animal in a dangerous environment and how species' markings and other adaptations can gain them a split-second that might be the difference between life and death.

Field Trip Programs

Multi Level

Elementary

What Was Life Like in the 1800s Settlement?

- Predict and explain how human life and the natural world would be different without current technologies.
- Trace the development of a product from a natural resource to a finished product.
- Demonstrate an understanding of how human interaction with the physical environment is reflected in the use of land, building of towns/cities and ecosystems.
- Use facts and concepts drawn from history.

This program focuses on the tenets of a rural upbringing in the 1800s and what responsibilities, relationships, and pastimes were typical of this period. Topics covered include the various staples of 19th century life as exemplified by The Settlement and the chores, clothes, medicine, and ways that our ancestors made what they needed with what they had. Activities include learning in a schoolhouse of the 1800s and an opportunity to play the same games as children from two centuries ago. Students will learn about the joys, problems, and realities of growing up on a farm over 100 years ago and realize how our lives resemble and differ from those of our ancestors.

Field Trip Programs

Multi Level

Middle

World War I – Diplomats and Doughboys

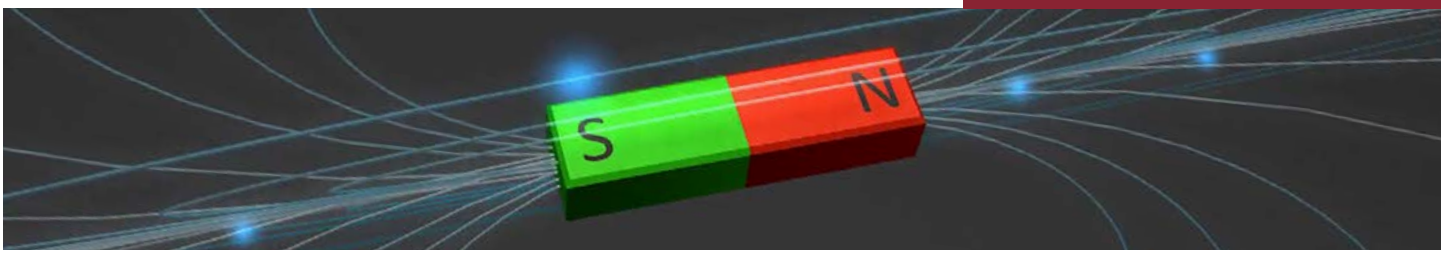
- Understand how to use maps, globes, and other geographic representations, tools, and technologies to acquire, process, and report information from a spatial perspective.
- Recognize different types of government exist in the world.
- Recognize the impact of individual and group decisions on citizens and communities.
- Determine how various groups resolve conflict (i.e., school, tribal councils, courts).
- Recognize how groups work cooperatively to accomplish goals and encourage change (i.e., American Revolution, founding of Tennessee, the failure of the Articles of Confederation, colonies).
- Understand the changing role of the United States in world affairs.
- Identify involvement of Native Tennesseans in World War I.
- Use tools of social science inquiry such as surveys, statistics, maps, and documents.

This program focuses on the challenges that faced people from all walks of life during World War I. Topics covered include the diplomatic entanglements and nationalist fervor that lead to the car, as well as the often-futile courage displayed by soldiers on both sides of the conflict. Activities include role-playing as diplomats forced to maneuver a tangle of alliances and a simulation of "going over the top." Students will learn about the futility of this often-forgotten war and the conditions which cost so many lives and prevented either side from achieving a real victory.

Field Trip Programs

Multi Level

Middle



Our Magnetic World

- Design and conduct investigations depicting the relationship between magnetism and electricity in electromagnets, generators, and electrical motors, emphasizing the factors that increase or diminish the electric current and the magnetic field strength.
- Conduct an investigation to provide evidence that fields exist between objects exerting forces on each other even though the objects are not in contact.
- Develop a model to generate data for ongoing testing and modification of an electromagnet, a generator, and a motor such that an optimal design can be achieved.
- Describe the basic principles of an electromagnet.
- Distinguish among the Earth's magnetic field, a magnet, and the fields that surround a magnet and an electromagnet.
- Design a simple experimental procedure with an identified control and appropriate variables.

This program focuses on the principles and properties pertaining to magnetism and how understanding this amazing force has been a key to human innovation and civilization. Topics covered include uses of magnets both modern and historic, how to create and destroy a magnet, and an explanation of why various minerals, as well as the Earth itself, display properties of magnetism. Activities include separating iron from cereal and fabricating a magnet. Students will learn what causes magnetism, the difference between temporary and permanent magnets, and how so many of the comforts and devices they enjoy, as well as the ability for life on Earth to exist at all, are only made possible by the presence of magnetism.

Field Trip Programs

Multi Level

Middle

Force and Motion

- Identify factors that influence the amount of gravitational force between objects.
- Investigate how Newton's laws of motion explain an object's movement. Recognize how a net force impacts an object's motion.
- Recognize that gravity is the force that controls the motion of objects in the solar system.
- Analyze the properties and compare sources of mechanical, electrical, chemical, radiant, and thermal energy.
- Construct a scientific explanation of the transformations between potential and kinetic energy.
- Conduct an investigation to provide evidence that fields exist between objects exerting forces on each other even though objects are not in contact.

This program focuses on the fundamental forces that act on objects both upon the Earth and in space. Topics covered include the laws of motion, numerous astounding facts about the properties of swiftly-moving objects, and how understanding force and motion relate to countless technological accomplishments and space exploration. Activities include experimenting with forces both balanced and unbalanced, observing friction from solids, as well as the air, and deducing weights on other planets. Students will learn about the physical forces and rules that govern the universe, and how our ever growing understanding of the forces of nature is fundamental to the safe and comfortable lives we are able to live today.

Field Trip Programs

Multi Level

High

Water Quality and Agricultural Uses

- Explain a model of the hydrologic cycle.
- Explore how the unintended consequences of new technologies can impact human and non-human communities.
- Research Earth's natural resources (renewable and nonrenewable resources). Construct an argument from evidence supporting the claim that a particular type of resource is important for humans.
- Plan and carry out an investigation examining best management practices in water usage, agriculture, forestry, urban/suburban development, mining, or fishing and communicate findings.
- Analyze and interpret data on the effects of land, water, and air pollution on the environment and on human health. Propose solutions for minimizing pollution from specific sources.
- Design, evaluate, or refine a technological solution that reduces impacts of human activities on natural systems.

This program focuses on the uses of water, its importance, and the laws and the ancient and modern technologies developed around water. Topics covered include how water is moved and measured, how it has united communities, and how it allows the people in them to be fed and kept healthy. Activities include making a real water filter out of recycled materials, as well as using water-testing equipment such as that used in the aquariums at Discovery Park. Students will learn how precious water is, the threats facing our ability to use it, and how the use and acquisition of water is critical to every civilization that has ever existed.

Field Trip Programs

Multi Level

High

Volcanoes and Igneous Rocks

- Distinguish between igneous, sedimentary, and metamorphic rocks.
- Identify properties of igneous rocks such as granite, rhyolite, basalt, gabbros, obsidian, and pumice.
- Analyze surface features of Earth and identify and explain the geologic processes responsible for their formation.
- Develop a visual model to illustrate the formation and reformation of rocks over time including processes such as weathering, sedimentation, and plate movement. The model should include a comparison of the physical properties of various rock types, common rock-forming minerals, and continental rocks versus the oceanic crust.
- Create a visual model describing the processes responsible for forming the three rock groups (sedimentary, igneous, and metamorphic) and explaining their characteristics.

This program focuses on the properties, origins, and formation of igneous rocks, which cover the majority of the Earth. Topics covered include the causes of different chemicals, different behaviors, different radiation levels, other properties in rocks, and the significance of these differences. Activities include making lava, determining where that type of lava analogue would be found on Earth, and learning how rocks were the oldest musical instruments. Students will learn how igneous and other types of rocks form, what they can teach us, how they are classified, and the reasons they behave the way they do.