



**PINK PALACE – 3050 CENTRAL AVE., 38111**

Labs and Classes - \$9 (rec. 35 students)	Grade Level	Description
Dinosaurs and Fossils	Pre-K – 6th	Become a young paleontologist. Learn about fossil formation and excavate dinosaur fossils. Compare eggs, teeth, skulls, claws, and sizes of various dinosaurs. Investigate their diets and handle dinosaur eggs and bones. Content adapts to grade level.
Dissection Lab (can also be done at LNC)	5 <sup>th</sup> – 8th	Dissect a real animal specimen to learn basic principles of anatomy. Specimen selection subject to availability, but options have included rats, frogs, and earthworms.
Dive into Sharks!	3 <sup>rd</sup> – 8th	Discover why sharks are the ocean’s “master predators.” Hold a shark jaw. Inspect a fossil shark tooth. Interact with preserved dogfish shark specimens to learn about specialized adaptations of shark skeletons, eyes, teeth, and senses.
DNA Lab	4 <sup>th</sup> – 8th	Learn about the building block of living things. Use basic biochemistry to extract real DNA from a specimen and make it visible to the unaided eye.
Fun with Physical Science	1 <sup>st</sup> – 5th	Explore principles of physical science with hands-on activities and demonstrations using household materials. Feel the power of air pressure, build a density column, manipulate water tension, test the strength of a magnet, and engage in other fun experiments.
Greening of Mars: Algae Lab –Processes	6 <sup>th</sup> – 12th	Explore cellular respiration and photosynthesis and how we can affect these processes to live and thrive in space! (Subject to specimen availability).



Greening of Mars – Soil Lab	3 <sup>rd</sup> – 8th	Have you ever wondered what was in James’ crocodile tongues that made the giant peach grow or why Mr. McGregor’s radishes were the best Peter Rabbit ever had? Students will explore the role of a soil scientist in this lab experience as they test media and use the data to create a recipe. They will then plan to continue their exploration at home or school. Each group will receive at least 100 grams of Martian Soil Simulant to experiment with after the lab is over!
Making Sense of My Senses	Pre-K – 3rd	This “please touch” class explores all five senses with activities to directly engage sight, smell, taste, touch, and hearing. Learn how our senses help humans and animals explore the world and avoid danger.
Microscopes: Cell Structure	3 <sup>rd</sup> – 8th	Take a closer look through the lens of a compound microscope. View slides of plant and animal cells. Develop microscope and scientific note-taking skills.
Microscopes: Mitosis	6 <sup>th</sup> – 8th	Learn to focus a compound light microscope while viewing slides of plant and animal cell mitosis. Draw and identify the phases of mitosis.
On the Mid-South Frontier	3 <sup>rd</sup> – 8th	Learn about the history of frontier settlement in the Mid-South (with particular details for Tennessee, Mississippi, or Arkansas, per request.) Recreate settler life through a variety of activities, including farming, cooking, washing, and children’s entertainment.
Owl Pellets Lab (can also be done at LNC)	4 <sup>th</sup> – 8th	Discover the “WHOOO” and why behind owl pellets. Students are introduced to the biology and life history of owls while learning how to use dissecting instruments in the laboratory. Students dissect owl pellets in the lab and



		interpret their findings to determine the habitat use of owls.
Rocks and Minerals	1 <sup>st</sup> - 8th	Conduct tests that give clues to a mineral's identity. Examine minerals that glow in the dark. Find out how rocks are formed and why they look the way they do. Discover some surprising uses for rocks and minerals.

Labs and Classes: Discovery Theater - \$9 (up to 48 students & adults)	Grade Level	Description
Light and Color	3 <sup>rd</sup> – 8th	It reflects, it refracts, it colors our world. Join us for an interactive program all about the science of light. Learn about the properties of light, how it travels, and how it helps us learn more about the universe.
Magic of Science: Physical Science	2 <sup>nd</sup> – 6th	Explore the states of matter with exciting demonstrations that seem to defy nature. Set something on fire without it burning. Watch water defy gravity. Interact with the mysterious fourth state of matter: plasma.
Magic of Science: Static Electricity	2 <sup>nd</sup> – 6th	Charge it up! Watch pie pans float. Create lightning and link hands to light up a light bulb. Test the properties of insulators and conductors. Learn how atoms gain positive and negative charges and how this produces electricity.
Magic of Science: Holiday Edition	2 <sup>nd</sup> – 6th	Enjoy the magic of the season with this special holiday-themed version of Magic of Science. Create artificial snow. Set snowflakes on fire. Discover the electrical properties of tinsel.



Sound Science	2 <sup>nd</sup> – 8th	Explore the three requirements needed to create sound. Use a spring to demonstrate different types of waves. Find out how sound waves move through air and water. Learn how our ears interpret sound.
Weather Whys	K – 8th	Observe clouds and learn how weather measurement tools can predict the weather. Investigate air pressure and watch a miniature tornado form. Learn what you can do to keep safe in floods, thunderstorms, and tornadoes.

**LICHTERMAN NATURE CENTER – 5992 QUINCE RD., 38119**

Labs and Classes - \$9 (rec. 35 students)	Grade Level	Description
Bees	K – 4th	Learn all about honeybees and how they have lived alongside human beings for thousands of years. Get hands on with an artificial beehive and beekeeping equipment. Learn about pollination and how bees make honey and wax.
Dissection Lab (can also be done at the Pink Palace)	5 <sup>th</sup> – 8th	Dissect a real animal specimen to learn basic principles of anatomy. Specimen selection subject to availability, but options have included rats, frogs, and earthworms.
Owl Pellets Lab (can also be done at the Pink Palace)	4 <sup>th</sup> – 8th	Discover the “WHOOO” and why behind owl pellets. Students are introduced to the biology and life history of owls while learning how to use dissecting instruments in the laboratory. Students dissect owl pellets in the lab and interpret their findings to determine the habitat use of owls.
Tree Science	2 <sup>nd</sup> – 8th	Tree Science Lab is focused on tree identification based on leaf, bark, and size differences. Students will get to conduct a tree



		plot study and interpret the data they collect to understand tree health and diversity. Content subject to seasonal availability.
Water Ecology Lab	4 <sup>th</sup> – 8th	Available March – October. Learn field collection techniques to gather water samples from our lake. Perform water quality tests to evaluate the health of the lake ecosystem and use compound light microscopes to discover the smallest organisms that make the lake their home.
Water Conservation Lab	4 <sup>th</sup> – 8th	Learn about the aquifer and Memphis’s water supply. Examine ways that natural processes and human activity affect and change the water around us. Perform tests for chemicals in the water and investigate how pollution can enter our water supplies.

Animal Programs - \$9 (up to 50 attendees)	Grade Level	Description
Habitats Live!	K-12th	This live animal program brings students up close to three different animals from our Backyard Wildlife Center to learn about the three major habitats at Lichterman: the lake, the meadow, and the forest. Additionally, students will get hands-on engagement with preserved specimens from each habitat.
Nature 2 U: Mammals	PreK – 8th	Learn more about some of the mammals of the Mid-South and meet some live examples.
Nature 2 U: Nocturnal Animals	PreK – 8th	Meet some live examples of nocturnal animals and learn about some of the critters that go bump in the night.



Nature 2 U: Reptiles	PreK – 8th	Learn about our cold-blooded neighbors in this reptile-focused live animal program, including lizards, turtles, and snakes.
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Outreach Programs (50 students per session, up to 4 sessions at 1 location)	Grade Level	Description
Bees	K - 4th	Learn all about honeybees and how they have lived alongside human beings for thousands of years. Get hands on with an artificial beehive and beekeeping equipment. Learn about pollination and how bees make honey and wax.
Nature 2 U: Mammals	PreK - 8th	Learn more about some of the mammals of the Mid-South and meet some live examples.
Nature 2 U: Nocturnal Animals	PreK – 8th	Meet some live examples of nocturnal animals and learn about some of the critters that go bump in the night.
Nature 2 U: Reptiles	PreK – 8th	Learn about our cold-blooded neighbors in this reptile-focused live animal program, including lizards, turtles, and snakes.