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# EDUCATION PROGRAM GUIDE 2025- 2026

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Science Enrichment | Field Trips | Family Science Night  
Planetarium | Science Matters | Flower Dissections



**Plan an educational experience that leaves your students inspired with one of our many in-house or outreach programs.**





# Science Enrichment Program



The Science Enrichment Program is designed for elementary and middle school grades with customized schedules upon request. This program consists of a range of hands-on lessons specifically designed to help students grasp difficult science standards while fostering a love across STEM disciplines. Lessons may be booked at any interval to meet the needs of your class and curriculum. Multiple lessons are recommended to provide the most beneficial programming for your students. Standards available upon request.

## Standards-Based Lessons

### Bone Zone

Explore how an animal's eye placement influences their survival strategies, and dive into the diversity of mouth adaptations, from herbivores to carnivores. Join us to uncover the fascinating world of nature's design!

### Ecosystem Explorers

Delve into tundra, ocean, forest, desert, and mountain ecosystems, collecting data, observing interactions, and exploring biodiversity and ecosystem balance. Determine the plants and animals inhabiting each ecosystem and gain a deeper appreciation for biodiversity, food chains, ecosystem balance and the importance of environmental preservation.

### Cosmic Connections

Using our special materials, students work together to discover how the movements of the Sun and Moon affect different phenomena on Earth. They'll explore topics like day and night cycles, phases of the Moon, and how these celestial bodies influence tides and seasons.

### Invent an Insect

Students will explore the unique body parts of insects and discover how these features help them adapt to their environments while designing their own insect to thrive a habitat they create while learning how different features contribute to survival.

### Reactions Unleashed\*

Students will explore the differences between chemical and physical reactions through a series of hands-on experiments, gaining a deeper understanding of these fundamental principles in chemistry.

*\*One teaching location for this lesson preferred.*

### Forces of Motion

Through engaging stations like catapult experiments and the coin tower challenge, explore scientific concepts of Newton's Laws of Motion firsthand to provide an understanding of fundamental physics principles.

### Seed Cycle Sculptors

Join us for an innovative journey through the Seed Life Cycle with 3D Pen creations! Students will use their creativity and engineering skills to design and build models depicting the stages of seed growth.

### Sports Biomechanics

Uncover the scientific principles behind sports dynamics! Explore the Magnus effect in soccer and delve into the shotput's lever system while experimenting with different fulcrums to discover how these concepts shape athletic performance and gain insights into their applications in biomechanics and human movement.

### Genetics Lab

Embark on a journey into the fascinating world of genetics and discover how genes define traits! Through Punnett squares, alien genetics simulations, and hands-on activities, students will unravel the intricate connection between genes and traits.

### Motion Mechanics

Explore how electrical energy is transformed into motion using simple machines like wheels and axles with the Sphero Indi. This robot helps students understand these scientific principles by navigating paths and obstacles through interactive play.





# Field Trips at the Center



We provide exceptional interdisciplinary learning opportunities for students of all grade levels. Standard field trips provide students with an animal presentation, immersive lesson, sciPad experience, and museum exploration. Custom lessons are available for any grade level upon request for an additional \$25 and must be planned in advance. Standards available upon request.



## 🌀 Lessons for Grades K-2

### **Super Body Senses**

Students will explore the fascinating world of sensory perception, discovering how our bodies interpret and respond to various stimuli such as touch, taste, smell, sight, and hearing. Through interactive activities and discussions, they will gain a deeper understanding of the intricate mechanisms that allow us to experience and navigate the world around us.

### **Go Go Motion Lab**

Ready, set, go! In our “Move It, Move It!” stations, little scientists become motion explorers as they test how different objects move: fast, slow, roll, slide, wiggle, or zoom. From racing ramps to magnetic magic and toy-powered wiggles, kids will observe, test, and discover the science behind motion in everyday objects. Get ready to roll, zoom, slide, and explore the many ways things can move!

### **Stellar Explorations: The Sun, Earth and Beyond**

Experience the wonders of our universe in an interactive planetarium show where students will journey through the cosmos to explore the Sun, Earth, and moons. Uncover the secrets of stars and constellations in our night sky, bringing the marvels of space closer than ever before.



## 🌀 Lessons for Grades 3-5

### **Armor up**

Uncover the secrets of animal skeletons in this exciting hands-on lesson. Students will investigate the differences between endoskeletons and exoskeletons through engaging activities like tackling an exoskeleton armor challenge. They'll also classify animals into major groups based on their unique traits and behaviors. Join us for a journey into the fascinating world of animal structures and survival!

### **Energy is Everywhere**

Students will discover the various forms of energy and how to distinguish them from one another as well as where they can be found in the environment. They will also learn how to create different types of energy using scientific and household tools.

### **Planetary Adventure: Discovering Our Solar System**

Join us for a thrilling journey through our incredible solar system, where you'll learn about the eight planets and the fascinating dwarf planet, Pluto! Discover the unique characteristics, atmospheres, and orbits of these celestial bodies as we explore the vastness of space together.



# Family Science Night



## Hands-on science brought into your school

We provide 15 hands-on science experiments, and you provide the adult volunteers to man them! Our two facilitators will show up an hour before the event to teach your volunteers how their experiment works and how to teach it to kids and parents.



## 2025-26: Nocturnal Nature

What happens when the sun goes down? Science wakes up! Step into a world of glowing creatures, starlit skies, and dreaming minds. Explore the mysteries of moonlight, the secrets of nocturnal animals, and how our bodies and brains behave after dark. From building constellations to discovering bioluminescence, each activity reveals something magical that only happens at night. Perfect for curious night owls of all ages—come uncover the science that comes alive when the lights go out!



### Kits Include:

- Whooo Ate What?
- Glow Getters
- Sea Turtle Patrol
- Raccoon Recyclers
- Moon Makers
- Brains at Bedtime
- Nightlight Flight
- Star Spotter
- Scorpion Seekers
- Nighttime Noise Detective
- Scent Seekers
- Sugar Glider Soar
- Shadow Stompers
- Deep Sea Duel
- Twilight Blooms

**Full kit descriptions with standards available upon request. Book your Family Science Night now! Email [lisa@ecscience.org](mailto:lisa@ecscience.org) or call 850-664-1261.**



# Mobile Planetarium



Our planetarium is an excellent resource for all grades and ages to discover just what makes up the night sky. Shows typically run either 25 minutes or 45-50 minutes in length depending on your needs and class schedules. The planetarium is an inflatable mobile dome that can house 20-25 students at a time depending on the grade level.

## Custom Lessons (K-12)

Available for any grade level upon request for an additional fee and must be planned at least 4 weeks in advance.



## Standards-Based Lessons

### Mobile Planetarium Lesson Grades K-5

*DISCIPLINE: Space*

Students have the opportunity to travel through space and learn all about our solar system. They will discover the planets, moons, dwarf planets, and constellations that call the Milky Way Galaxy home.

Meets NGSSS:

SC.K.E.5.2, SC.K.E.5.3, SC.K.E.5.4, SC.K.E.5.6, SC.1.E.5.1, SC.1.E.5.3, SC.2.E.6.1, SC.2.E.7.2, SC.3.E.5.1, SC.3.E.5.2, SC.3.E.5.3, SC.3.E.5.5, SC.3.E.6.1, SC.4.E.5.1, SC.4.E.5.2, SC.4.E.5.3, SC.4.E.5.4, SC.5.E.5.1, SC.5.E.5.2, & SC.5.E.5.3

Our Planetarium is Powered by



**To book your Mobile Planetarium:  
Email [lisa@ecscience.org](mailto:lisa@ecscience.org) or call 850-664-1261 with your preferred date and two alternate dates.**



# Science Matters



The Science Matters program provides hands on, engaging, and inspiring lessons that are in line with the Okaloosa County School District curriculum and pacing guides. The program enhances the current science instruction taught in the classroom, allowing for a clearer understanding of science themes and an overall increase in retention. All lessons align with the Next Generation Sunshine State Standards (available upon request) and follow your bell schedule or can be scheduled for a full hour. **Custom lessons available, or you can select from our prebuilt lessons below.**

## **Measuring Mass Lab (3rd grade)**

Compare and classify materials and objects into various groups, then using the scientific method, determine weight, texture, mass, size, shape, temperature, hardness, and buoyancy.

## **The Great Erosion Experiment (4th grade)**

Gain a greater understanding of physical weathering and erosion (using wind, water, and ice). Using special materials to mimic the breakdown of rock and the movement of rock, observe, test for differences, and discover the impact both have on all forms of Life.

## **Forces of Attraction (4th grade)**

Develop hypotheses about the magnetism of various objects (will it attract or repel) then test hypotheses by running a scientific experiment using our special equipment, and finally write a conclusion to support experimental data.

## **Cosmic Connections (4th grade)**

Using our special materials, students work together to discover how the movements of the Sun and Moon affect different phenomena on Earth.

## **Weather Station Exploration (5th grade)**

Complete different precipitation experiments to distinguish among the various forms, make connections to cloud types, and how clouds relate to weather. Then by making a simple wind turbine, recognize how wind speed and direction, along with precipitation can affect weather.

## **Changes That Matter (5th grade)**

Students will compare and contrast the properties of solids, liquids, and gases. They will discover that solids can be separated based on observable properties and conduct simple tests to determine what the “mystery matter” is. They will finish up with a trivia game to test their knowledge!

## **Energy is Everywhere (5<sup>th</sup> grade)**

In this interactive lesson, students will become energy detectives, exploring different stations to uncover how light, heat, sound, electrical, mechanical, and chemical energy show up in the world around them. Through exciting experiments and challenges at each station, they'll discover how energy makes things move, glow, heat up, and more! Then, to bring it all together, they'll create their own light-up LED card to take home, transforming electrical energy into light in a fun and creative way.

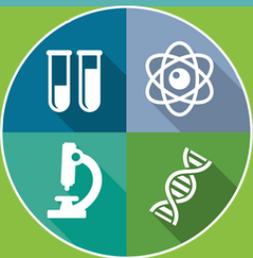
## **Geology Journey (5<sup>th</sup> grade)**

Students will embark on a thrilling journey to uncover the secrets of minerals and rocks! They will identify and classify common earth-forming minerals as they conquer a mineral mission, make a 3D Rock Life Cycle to take home, and rock out in an engaging trivia buzzer game to test their knowledge.

## **Organs Uncovered**

In this dynamic lesson, students will embark on an exciting journey through human anatomy. They'll explore the fascinating functions of vital organs like the brain, heart, and lungs, stomach, liver, intestines, pancreas, kidneys, bladder, and the function of our skeleton while transforming their understanding into vibrant models. As they form and arrange these organs, students will discover how each one works in harmony within the body. The grand finale will showcase the brain's incredible power in coordinating bodily functions, sparking curiosity and enthusiasm to bring their body to life through the wonders of human biology!

**Book your program now! Email [lisa@ecscience.org](mailto:lisa@ecscience.org) or call 850-664-1261.**



# Science Matters *Continued*



## **Skeleton Safari (5<sup>th</sup> grade)**

Uncover the secrets of animal skeletons in this exciting hands-on lesson! Students will investigate the differences between endoskeletons and exoskeletons through engaging activities like creating a take-home X-ray of a snake's internal skeleton and tackling an exoskeleton armor challenge. They'll also classify animals into major groups based on their unique traits and behaviors and test their knowledge with a fun animal traits bingo game. Join us for a journey into the fascinating world of animal structures and survival!

## **Astronomical Expeditions (8th grade)**

Students will actively collect data on various astronomical phenomena, fostering a deeper understanding of concepts such as relative distances between planetary orbits, star formation processes, gravitational variations across celestial bodies, and key characteristics of objects within the solar system. Following data collection, students will participate in a space themed jeopardy game to collaboratively review their findings, encouraging critical thinking and the integration of learned concepts into their broader understanding of the universe.



# Flower Dissections

We'll deliver hands-on plant dissection lessons to support Florida State Academic Standard SC.3.L.14.1 (Describe structures in plants and their roles in food production, support, water and nutrient transport, and reproduction.) by introducing your students to fantastic florals, helping them identify each part of the plant while also determining it's purpose. Now that's what we call flower power! Lessons follow your bell schedule or can be scheduled for a full hour.



**Book your program now! Email [lisa@escience.org](mailto:lisa@escience.org) or call 850-664-1261.**