



# San Antonio Outdoor Education Center

## Grades K-3:

### Course Locations

Our outdoor education programs are held at two unique Scouting properties in San Antonio. Each site offers hands-on learning environments designed to connect students with science in the natural world.

**Mays Family Scout Ranch**  
3445 Fest Rd  
San Antonio, TX 78264

**McGimsey Scout Park**  
10810 Wedgewood Dr.  
San Antonio, TX 78213

Both locations provide outdoor classroom space, lab-style learning areas, and access to diverse ecosystems that support TEKS-aligned instruction.



### PLANTS VS ANIMALS

Students will be introduced to the differences between plants and animals. In a lab setting, they will sort plants and animals, identify their basic parts, and learn about the life cycles of both.

Science TEKS: K.1(a, c, d, e); K.3(b), K.9(a), K.10(a, b, c); K.11; K.12 (a, b); K.13 (a-c); 1.1(a, b); 1.2(a, b, c, e); 1.9(a); 1.10(a, b, c, d); 1.12 (a, c); 1.13 (a)

### A WALK IN THE WILD

On this short hike, students will explore organisms in their natural habitat. They will learn about their basic needs, interdependence on each other, and energy transfer through food chains. Human impact through littering will also be discussed as an introduction to recycling.

Science TEKS: K.1(a, b, c); K.2(a, b, e); K.3(a, b); K.10(a-c); K.11; K.12 (a-b); 1.1(a, b); 1.10 (a-b); 1.11(a, b); 1.12 (c)

### EARTH AND WATER

This hands-on module introduces the various non-living materials that make up the natural world. Students will study and sort different rocks, identify soil, and learn about naturally occurring bodies of water.

Science TEKS: K.1(a, b, c); K.2(a,b); K.10(a, b); K.11; 1.1(a, b); 1.2(a, b); 1.10 (a, b, c)

### LET'S LOOK AT LIFE CYCLES

Students will study the different ways that organisms change throughout their lives and how that helps them survive in different environments. There will be an emphasis on a variety of life cycles including butterflies, ants, plants, and amphibians.

Science TEKS: 1.12 (a, b, c); 2.12 (a-c); 2.13 (a, b & d); 3.12 (b, c, d); 3.13 (a & b)

### OUR ROCKY WORLD

Recommended Grades: 2-3

Students will learn all about our rocky world in this module. They will be introduced the basic characteristics of rocks and how they are classified. They will also perform experiments showing how changes occur to the surface of the planet.

Science TEKS: 2.10 (a); 3.10(b)

## Grades 3-5:

### ECOSYSTEM COMPARISON

This module helps students understand that different ecosystems have their own set of nonliving parts, including light, water, temperature, and soil. These components directly impact what plants and animals live in those habitats. Students will learn the basics about the scientific method and make their own hypothesis. They will learn how to use a simple data collection chart, compare data collected at field sites, and make conclusions.

Science TEKS: 3.10(a); 4.12 (b); 5.12 (a, b, c); 5.13 (a)

### ADAPTATION HUNT

Students will learn about different adaptations developed by plants in our ecosystems. They will understand the unique adaptations of major plants in the Texas Blackland Prairie ecosystem and understand their importance to the food chain. They will also think critically about why plants have developed their respective adaptations, and why it helps them to survive.

Science TEKS: 3.12(b, c); 4.12(b); 4.13(a); 5.12(a, b, c); 5.13(a)



### DYNAMIC EARTH

The constantly changing surface of the Earth will be studied in this module. Students will learn how landforms form and change. Subject areas will include weathering and erosion; fossils; fossil fuel formation; and sedimentary rock formation. Students will perform experiments using a stream table (Mays Family Scout Ranch only) and perform field explorations by observing differing landforms.

Science TEKS: 3.10 (b); 4.10(a, b); 5.10(c), 5.11

### SCALE OF THE SOLAR SYSTEM

Students learn about the Sun, Earth, and Moon interactions. Students are introduced to other planets in the Solar System as well as interplanetary distances.

Science TEKS: 3.9(a, b); 4.9(a, b); 5.9



### PROPERTIES OF MATTER

This module teaches students the basic characteristics of matter as well as the difference between physical and chemical reactions. It introduces mixtures, solutions, and identifies the signs that a chemical reaction has taken place.

Science TEKS 3.5(b); 3.6(b, c); 4.6(a, b, c); 5.6(a, b, c, d)

### FORCE AND ENERGY

Students will learn about several types of energy in a lab and field setting. They will make electrical circuits, observe magnetic fields and field lines, perform experiments with potential and kinetic energy, while using a catapult.

Science TEKS: 3.7(a); 3.8(a); 4.8(a, b, c); 5.6(a); 5.7(a); 5.8(a, b)

### SUN AND WIND- LEARNING ABOUT RENEWABLE ENERGY

Students will explore how solar panels and windmills can be used to produce electricity. They will build and power a simple circuit with a solar panel and with the wind. This hands-on activity will help students better understand renewable energy sources.

Science TEKS: 5.11

### ONE ROCKIN' LAB!

This lab allows students to explore the wide range of rocks that make up the planet. Focus will be hands-on observation and identification of our rock collection. Topics include: the rock cycle along with plate tectonics.

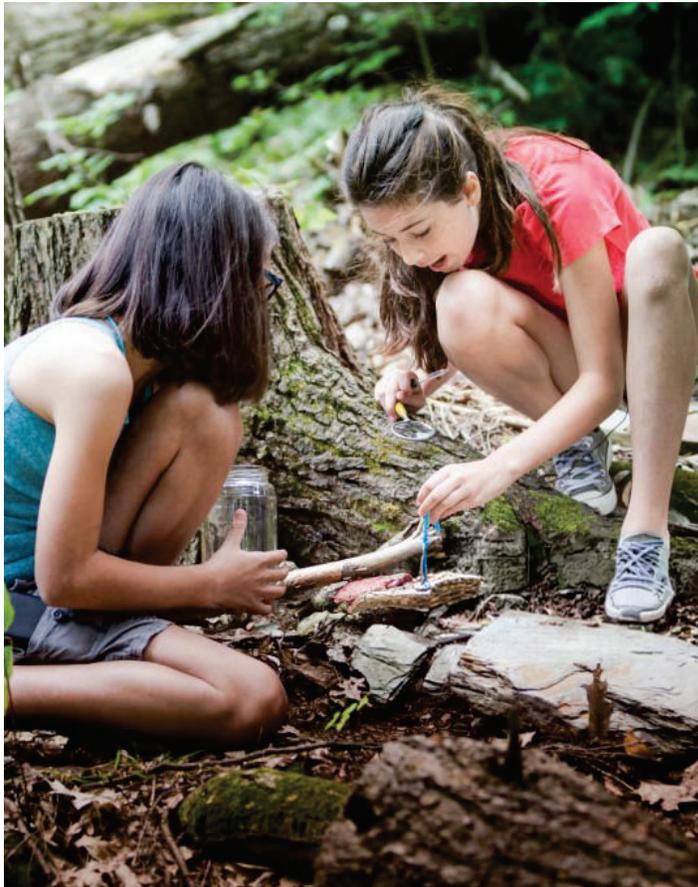
Science TEKS: 3.10(b); 4.11(c); 5.10 (b); 6.5(a,b,c); 6.6(b,c); 6.10(a,b,c,d)

## Grades 6-8:

### LET'S LOOK AT REACTIONS

Students will explore the difference between mixtures and chemical reactions while seeing chemistry in action through a variety of hands-on experiments. Models will help explain what is happening at the molecular level, and students will use their observation and reasoning skills to hypothesize what might happen next.

Science TEKS: 6.6 (a,b,e); 7.6(a,c), 8.6 (a,b,d,e)



### BIODIVERSITY: LIFE IN A SQUARE YARD

Students will learn about the importance of biodiversity by investigating a defined outdoor area. Using tools and a sampling frame, they will examine a square yard to identify both living and nonliving components. Students will make hypotheses about what they expect to find and share their observations and discoveries.

Science TEKS: 5.12(a,c); 5.13 (a); 6.12 (a,c); 7.12 (b); 8.12 (a,b,c)

### WHAT'S IN A DROP?

Students will learn about the importance of keeping our water free from pollution through hands-on investigation. Using samples from a local creek, they will test for common pollutants and explore what impacts our waterways. Students will also discover why reducing pollution matters and have the opportunity to observe the life hidden within a single drop of water.

Science TEKS: 6.12(a); 6.13 (b); 7.11 (a); 8.11(b); 8.12 (a, b)

### WHAT A WANDERFUL DAY!

Let's take a hike around camp and observe nature up close. Students will learn how plants and animals have adapted to life in South Texas and discover how scientists study the natural world through careful observation.

Science TEKS: 6.12 (a,b,c); 6.13(a); 7.12(a,b,c); 8.12(a,b)

### GRAVITY!

Using our gravity well table, students will explore how the Sun's gravity influences planetary orbits and why it plays a key role in defining what a planet is. They will also discuss how gravity affects the Moon's orbit around Earth.

Science TEKS: 7.9 (a, b)

### NEWTON'S THREE LAWS OF MOTION

This overview will demonstrate the importance of Newton's three laws of motion. Students will be introduced to each law before applying them in a hands-on lab setting. They will demonstrate the laws using a variety of objects, including a catapult.

Science TEKS: 6.7 (b, c); 6.8 (a, b); 7.7 (b, d); 8.7 (a, b)



Have another session idea for your field trip? Our team can work with you to customize sessions that fit your classroom needs. Contact us at [SAOEC@AlamoAreaScouting.org](mailto:SAOEC@AlamoAreaScouting.org) for more information.

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Outdoor  
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Center