2019

The age ranges provided for each activity are based on Texas Essential Knowledge and Skills (TEKS) standards.

# **ANIMAL ARCHITECTS •** ALL AGES

Different types of animals build different types of homes using different materials and for various purposes. After exploring the what, where, and why of animal homes, learners are challenged to create an animal home of their own.

## **BIOLOGICAL SURVEY • 3RD GRADE & OLDER**

Students simulate a biological survey by capturing, sorting and counting, aquatic macroinvertebrate populations from different stream habitats. Data results are used to assess water quality and the relative health of each aquatic ecosystem.

# **BUILD-A-BIRD • 3RD GRADE & OLDER**

Learners explore beak, feet and coloration adaptations of different birds. Students are challenged to create their own bird and explain how its various adaptations help it survive in its environment.

## **ENVIROSCAPE • 2ND GRADE & OLDER**

Using the EnviroScape 3-D model, learners explore the concepts of watershed, sources of pollution, and water quality.

### FIELD JOURNALS · ALL AGES

Sudents learn what a field journal is and how it is a useful tool for learning about things they encounter in nature. As they create their own field journal, students learn how to make detailed observations, record, and use them for future reference. May be used in combination with a nature hike for learners to explore the trails of Coppell Nature Park to practice using their field journal.

# **GEOCACHING • 3RD GRADE & OLDER**

Geocaching is a technology-based treasure hunt! A 10-minute orientation introduces learners to the concepts of GPS and geocaching. Then students have the opportunity to practice using a GPS to locate "cache" throughout the trails of Coppell Nature Park. GPS units are provided. This 1-hour, stand-alone program is limited to 20 participants. At least one adult chaperone is required per every four students.

# **GEOLOGY •** AGE-SPECIFIC LESSONS FOR K-5TH GRADES

Select one of the following activities based on grade level and learning objectives: rock sorting/classification, soil sorting/classification, sedimentation, soil permeability, fluvial processes (outdoor activity)

# **INSECTS •** AGE-SPECIFIC LESSONS FOR K-3RD GRADES

Presented by Texas Master Naturalist volunteers. Learners explore the characteristics of insects, lifecycle/metamorphosis, adaptations, and interdependence with the environment. May be used in combination with a hike for students to encounter first-hand and apply what they learn about insects.

# **MAMMAL INVESTIGATIONS • 3RD GRADE & OLDER**

Students become investigative scientists, using indirect evidence, such as sounds, tracks, skulls and pelts, to discover which mammals live in Coppell Nature Park.

### OWL ADAPTATIONS • 1ST GRADE & OLDER

Learners explore the unique characteristics of owls and their role in the local ecosystem. As part of their investigation, students dissect owl pellets and identify owls' various food sources.

## **PLANTS •** AGE-SPECIFIC LESSONS FOR K-5TH GRADES

K-1st Grades: Basic needs of plants, plant parts and functions, plant life cycle, leaf shapes. 2nd-5th Grades: Photosynthesis, interdependence, adaptations, plant identification. May be used in combination with a hike for students to encounter and apply what they learn about plants.

## **SOLAR POWER • 3RD GRADE & OLDER**

Students learn how energy is transformed and the benefits of renewable energy. Learners explore how energy from the sun can be harnessed for electrical and mechanical use by investigating solar panels on the Biodiversity Education Center roof and building solar cars.

### **SPIDERS •** AGE-SPECIFIC LESSONS FOR K-3RD GRADES

Students learn about the characteristics of spiders, lifecycle, adaptations, and interdependence with the environment. Learners explore different types of webs & try to weave one of their own. May be used in combination with a hike for students to encounter first-hand and apply what they learn about spiders.

## **STREAM TESTING • 3RD GRADE & OLDER**

Using Cottonwood Creek as an outdoor laboratory, learners practice the scientific method to assess water quality using chemistry and biological survey.



# BIODIVERSITY EDUCATION CENTER 367 S. Freeport Pkwy. • Coppell, TX

All classes held at the Biodiversity Education Center

0

