



Nature Explorers Science Adventure Syllabus Spring 2021

Date Start: 9th and 10th February

Number of classes: 10

Number of Participants: 10

Unit 1: The Sky: Atmosphere

February 9th and 10th: Las Nubes, The Clouds (GLOBE)

- Explorers will learn about clouds and monitor them each day they come to class
- Data collected will be submitted to GLOBE, a database designed by NASA
- Explorers will create their own weather station as a group and will learn to monitor the weather
- The weather station will stay up through the remainder of the 10-week course and will be monitored each time they come to class
 - This will happen while waiting for all paperwork and temperature checks to be completed at the beginning of each class

February 15th and 16th: Parachute Atmosphere

- Explorers will learn about gas exchange
- Necessity of Carbon Dioxide and Oxygen will be discussed regarding humans and plants
- Large parachute will be used to explain how Carbon Dioxide gets trapped in the atmosphere

Unit 2: The Ground: Geologic Column

February 23rd and 24th: Dinosaurs Rock!

- Explore the past while learning about dinosaur tracks
- Rocks and minerals will be observed, and explorers will learn to ID each of them
- Fossil exploration will take place at the rock walls that line the creek

March 2nd and 3rd: Bad to the Bone

- Explorers will continue to explore the past through bones

- A scavenger hunt will take explorers into various ecosystems to find bones in different habitats leading them to clues about what animals they once were

Unit 3: The Water: Hydrosphere

March 9th and 10th: NO CLASS SPRING BREAK

March 16th and 17th: Life in the Water

- Water testing will give explorers a better understanding of why it is important to protect our water sources
- While wading in the creek explorers will be able to search for various forms of life from small dragonfly larva to larger fish and turtles

March 23rd and 24th: Ssssnaky Business

- Explorers will hike through the creek and or walk along the sides of the creek in search of water snakes
- The biology of snakes as well as the differences between snake species and what snakes can be found in “your own backyard” will be discussed along the way

Unit 4: The Plants and Animals: Biosphere

March 30th and 31st: Los Arboles, The Trees

Tree Circumference

- Explorers will measure the circumference of various cypress trees and collect the data as they go along the creek measuring
- All data will be uploaded to GLOBE a program designed by NASA

April 6th and 7th: Going Nuts!

Squirrel Obstacle Course/ Lizard Enrichment Build

- Physics and engineering will be brought out in this lesson as explorers build an obstacle course and enrichment
- The obstacle course will be created for squirrels with the idea in mind of testing how far they can jump
- The enrichment build will test explorers engineering skills as they build a tower for a medium sized lizard to climb
- Once both builds are completed explorers will conduct ethograms while watching what the animals do with the obstacle and enrichment, they build

Unit 5: The People: Nature, Culture, and Art

April 13th and 14th: Imagination Station

- Explorers will learn about stories and poetry inspired by nature and culture and how storytelling and poetry first began

- The beauty of nature will be the inspiration to create stories that will then be told

April 20th and 21st: The Hunter Games

- Learn who the first farmers were and how they did things
- Learn how to identify some native plants and learn about some of their uses
- Explorers will also be able to try their hand at creating a hand-woven basket