

Homeschool



SCIENCE SERIES

2023 SEMESTER: AUGUST 30 TO DECEMBER 6

August 30: Kalo Week: Polynesian Arrival to Hawai'i

September 6: Koa Week: The Science of Forests

September 13: Hawaiian Moorhen: The Science of Wetlands

September 20: Kaua'i Cave Wolf Spider: The Science of Caves

September 27: Honu Week: The Science of Oceans

October 4: Pholiota peleae Week: A Closer Look at Decomposers

October 18: 'Io Week: A Closer Look at Predators

October 25: Kamehameha Butterfly Week: A Closer Look at Pollinators

November 1: Happy Face Spider Week: A Closer Look at Patterns

November 8: 'Elepaio Week: A Closer Look at Songs

November 15: 'I'iwi Week: The Story of a Disease

November 22: Hawaiian Crow Week: The Story of a Group

November 29: Haleakalā Silverswords: The Story of Climate Change

December 6: 'Ama'ama Week: Your Story of Sustainability



August 30: Kalo Week: Polynesian Arrival to Hawai'i

Our first week of the semester kicks off by focusing on kalo (or taro). This plant will act as our introduction to Makiki Valley and the Hawaiians who used to farm here. We'll learn about the Polynesian arrival to the islands, how they survived off the land, the stories they told and the sustainability values that formed such an important part of their culture.

September 6: Koa Week: The Science of Forests

The mighty koa tree is one of only several native trees in Hawaii. We will learn all about this immensely significant plant before jumping into the adaptations it and other species use to survive in forest ecosystems. We'll learn about the structure of forests; how Hawaiian forests have changed with the arrival of people; and how scientists collect data on trees from measurements to biodiversity assessments.

September 13: Hawaiian Moorhen: The Science of Wetlands

Field Trip to Honouliuli - What's a wetland and why is it one of the most important ecosystems on Earth? We're sure the 'alae'ula, or Hawaiian moorhen, knows the answers to these questions! Our lesson this week takes place at Honouliuli wetland, near Pearl Harbor, where we will explore a wetland, learn about the adaptations different organisms use to survive there and listen to Hawaiian legends about the native wetland birds.

September 20: Kaua'i Cave Wolf Spider: The Science of Caves

Caves are some of the most mysterious and fascinating habitats out there. Home to specially adapted animals and plants like the endemic Kaua'i cave wolf spider, they can be challenging places to live, indeed. This week, we take a hike to our very own hidden cave in Makiki Valley, learn how caves are formed, talk story about lava tubes and think about how organisms navigate the darkness of their rocky homes.

September 27: Honu Week: The Science of Oceans

Field Trip to Kuli'ou'ou Beach Park - The least explored ecosystem on Earth, oceans amaze, inspire and fascinate us. Not only are they home to incredible biodiversity--like our species of the week, the honu--but they are necessary for our survival, too! This week, we meet over at Kuli'ou'ou Beach Park for a day spent learning about the oceans and some of the threats facing them. We will fish for critters in the shallow waters, go on a coastal hike to look for native algae and listen to Hawaiian legends about marine life.

October 4: Pholiota peleae Week: A Closer Look at Decomposers

The unsung heroes of Earth's ecosystems, decomposers like Pholiota peleae (an endemic mushroom) keep the cycles in nature going strong. This week, we'll celebrate nature's recyclers by learning about different kinds of decomposers, going on a decomposer scavenger hunt and lending them a hand by working in our garden and composting areas!

October 18: 'Io Week: A Closer Look at Predators

The 'io, or Hawaiian Hawk, is a perfect example of an apex predator with its sharp talons and hooked beak. But why exactly do we need predators in an ecosystem? What do they do? And how do they come into conflict with people? This week we study the role of predators, their adaptations and possible ways that we can learn to live with nature's top hunters.

October 25: Kamehameha Butterfly Week: A Closer Look at Pollinators

Pollinators keep some of our favorite foods on the table and ensure that plants can continue to survive and thrive. This week, we're celebrating pollinators by learning about one of our native butterflies: the Kamehameha Butterfly. We'll study what pollination is, the different methods of pollination, observe pollinators in action and play some pollinator games!

November 1: Happy Face Spider Week: A Closer Look at Patterns

If you've ever seen a Happy Face Spider before, you have to wonder: why is it wearing a big grin on its back? Is it just permanently happy? Is it a spider fashion statement? Scientists think it's actually a way to fool and confuse predators--much like the fake eyes on a moth! This week we learn all about the crazy patterns animals use to hide, send warnings, fool predators, scare off competition and impress mates!

November 8: 'Elepaio Week: A Closer Look at Songs

Our flagship species for this week is the humble 'elepaio: a brown and white forest bird that trills away in native koa patches. There are numerous reasons why birds sing and this week, we'll explore them all and the messages they carry. We'll learn why some birds are such good mimics, how birds learn their songs in the first place, hike to listen for serenading shama thrushes and play a bird version of karaoke!

November 15: 'Iiwi Week: The Story of a Disease

The bright red 'iwi was one of the species to suffer with the introduction of mosquitos. These winged pests carried a type of disease (avian malaria) from domestic birds like chickens, to our native birds. This week we learn how mosquitos got to Hawaii, all about their life cycle and their impact on our honeycreepers. We finish up by exploring ways that we can help our feathered friends and some of the awesome strategies scientists are using to combat mosquitos!

November 22: Hawaiian Crow Week: The Story of a Group

Animals may form social groups for many reasons - whether it's to successfully raise young or better their chances at hunting. The 'alalā, or Hawaiian Crow, is a very social species that participates in some awesome group behaviors. Our students will band together this week as we tackle several group challenges and learn about social bonds, hierarchies, predator mobbing and animal babysitters.

November 29: Haleakalā Silverswords: The Story of Climate Change

The majestic silversword plant is just one of innumerable species that is threatened by climate change. It serves as our introduction to this important topic as we learn what climate change is, what causes it, what's changed in recent times and how we can help.

December 6: 'Ama'ama Week: Your Story of Sustainability

The 'ama'ama, or striped mullet, was one of the most important food fishes for Hawaiians and was sustainably harvested from fishponds. What does sustainability mean? What does it look like? How can you be more sustainable and why should you try? We conclude our semester by thinking about changes we can make and things we can do, to write our own story of sustainability now and into the future.

