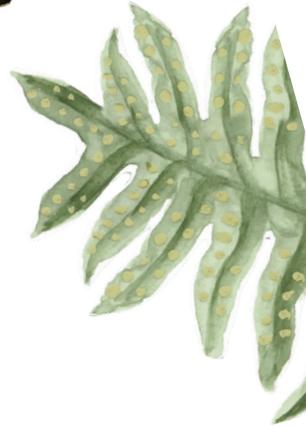


Homeschool

SCIENCE SERIES

FALL SEMESTER THEMES: MAUKA TO MAKAI



September 1: Watersheds

September 8: Flora and Fauna

September 15: Pollination

September 22: Forestry

September 29: Fresh Water

October 6: Climate Change

October 20: Biomimicry

October 27: Ecosystems

November 3: Citizen Science

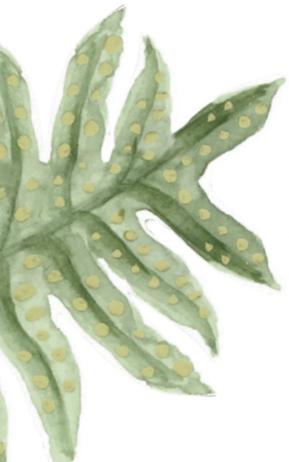
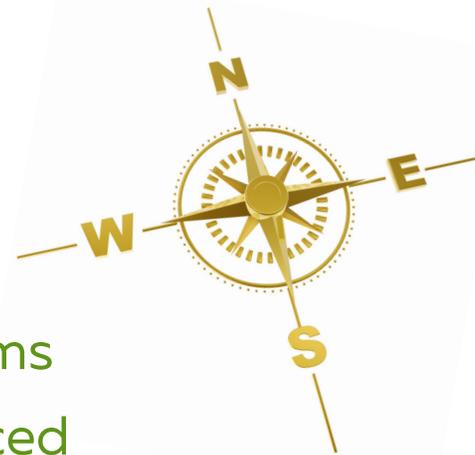
November 10: Stream Ecosystems

November 17: Native vs. Introduced

November 24: Coastal Waters

December 1: Sustainability

December 8: Celebrating Life



On October 13 there will be no program due to Nature Adventure Camp.



September 1: Watersheds - Students will learn the basic concepts of watersheds and Ahupua`a. We will examine the natural flow of water and how watersheds are essential for cleaning drinking water and stabilizing our soils.

September 8: Flora and Fauna - Hawai`i is known for its endemic species in both its native animals and plants, with over 10,000 species that are found nowhere else on earth. Students will learn about Hawai`i's biodiversity and study Makiki's flora and fauna.

September 15: Pollination - Pollination is fascinating and vital to human survival. We'll search for pollinators in meadows, waterways, and gardens near and far to learn about the different pollinators, while examining parts of a flower.

September 22: Forestry - Take a deep dive into the importance of forests and how they give us so much, including our valuable drinking water. Using scientific methods, students will predict why forest floor conditions vary, and consider some of the ways in which ground cover and land use can affect soil health and runoff.

September 29: Fresh Water - Water is one of the planet's most important resources. Students will learn about the concepts and terms associated with the water cycle. We will investigate the stream's health from the water's edge and learn about the diversity of life that depends on it.

October 6: Climate Change - From rising air temperature and sea level to fluctuations in weather patterns, we will gain knowledge in global warming and greenhouse gases. This week we'll learn about renewable energy and ways each one of us can mitigate the impacts of global warming.

October 20: Biomimicry - We look to nature to help solve problems. Biomimicry is a fascinating way to observing what works in nature and mimicking it to solve problems, create and innovate. We will look at old and new biomimicry ideas to help inspire our own creative projects.

October 27: Ecosystems - Our islands are home to a plethora of different ecosystems. Students will explore the ecosystems and habitats of Makiki and learn how species meet different needs. We will take part in a biodiversity count to help determine the health of our ecosystem.

November 3: Citizen Science - Citizen Science is a way people can contribute to scientific knowledge by collecting and submitting data. With the challenge of global climate change, Citizen Science is more important than ever. We can all take part and help scientists collect data as part of the scientific process.

November 10: Stream Ecosystems - Time to examine life in Makiki stream. By catching animals with nets and traps, students can determine if the species found are having positive or negative impacts on the stream ecosystem. Class includes a service learning project in which kids will be able to give back to the valley.

November 17: Native vs. Introduced - What is the difference between native and introduced, endemic or indigenous? We will learn about the 3 W's and the arrival of Polynesian-introduced plants and animals. Exploring the valley, the students will determine if Makiki is home to more endemic or invasive species.

November 24: Coastal Waters - Our attention will turn to the ocean as we learn about the organisms that occupy our Hawaiian coastlines. We will also look at the impacts humans are making to shorelines and how to care and be a part of the solution.

December 1: Sustainability - This week we'll learn about ways each one of us can make positive change and be part of the sustainable solution in our everyday lives. Hiking through our forests will teach us the value of trees as 'carbon sinks' and exploring our wonderful and beautiful natural landscapes and discussing ways we can help mitigate climate change and protect our `āina.

December 8: Celebrating Life - After a semester of study and extensive exploration it's time to celebrate the outdoors and all the treasures it holds. As we observe the unfolding of life around us we will take time to honor the bounty and beauty that sustains us all.

