

A Hands-On Adventure in Microbial Science

Roxanne Yamashiro, Ahuimanu Elementary School

Through a generous grant from the C-MORE GEMS grant program, forty-eight students from Ahuimanu Elementary School experienced a unique hands-on adventure in microbial science. This grant provided ground and sea transportation to Coconut Island. During our boat ride to Coconut Island, students learned about boat safety and captured plankton. On Coconut Island, students used the high-powered microscopes in the science lab to identify and examine plankton and other living organisms found in Kāneʻohe Bay. This experience was extended back in the classroom through follow-up lessons in our school's science lab. In addition to our microscope observations, students were able to observe through touch, sight, hearing and smell, several different living organisms in the "touch tanks." The "touch tank" experience gave students a close-up view of how distinct structures on these animals help them survive in a coral environment. This hands-on experience gave students a fun and exciting way to address core science standards such as:

3.1.1 Pose a question and develop a hypothesis based on observations

3.1.2 Safely collect and analyze data to answer a question

3.4.1 Compare distinct structures of living things that help them to survive

Not only was this opportunity fun and exciting for our students, it also gave them a better understanding of how our marine ecosystem works and inspired a few to pursue a career in oceanography. On the next page, please see the article written by two students which appeared in our class newsletter.

Thank you for the generous grant. It provided our students a truly unique experience, one that they will always remember.

Field Trip to Coconut Island

On April 8, 2013, C-5 went to Coconut Island! We learned about different marine animals, plants, and how to take care of their natural habitat.

When we were on our field trip, we were led by 5 chaperones: Ms. Yamashiro, Ms. Grinell, Uncle Joe (Dylyn's dad), Auntie Cindy (Mason's mom) and Auntie Erika (Dayton's mom).

To get to Coconut Island, we had to ride a bus, then a boat. The bus driver's name was Auntie Maria. The captain of the boat was Uncle Fritz. On our ride on the boat, we got to catch plankton! We caught them because we were going to identify them on Coconut Island with a microscope.

When we got to Coconut Island, we met Mr. Don, Mr. Mike, Ms. Vivian, Mr. Leon and Mr. Ryan.

When we did get to identify the plankton, we found different plankton like, Copepods, Holoplankton, Arrow worms and Meroplankton. We learned that plankton are "Drifters of the Sea." That means that plankton go wherever the ocean currents take them. We also learned that plankton produce 50% of our oxygen! At Coconut Island, there were Coral Tanks, Research Water Tables and a Pelagic Fish Tank.

Fun Facts

1. The Black Tip Shark never stops swimming.
2. The White Tip Shark can rest often because it can push water through its gills.
3. The Copepod stays the way it looks for its whole life.
4. A Megalodon's teeth are 10 times as big as a Great White's Teeth.
5. Meroplankton grow up to be fish, crabs, or other invertebrates.

- Cassidy & Mason