

PENCIL HOLDERS

HI-MOES

By:) Star, Melissa, Savannah, Akoni,
Kamakani,&& Joseph

Introduction

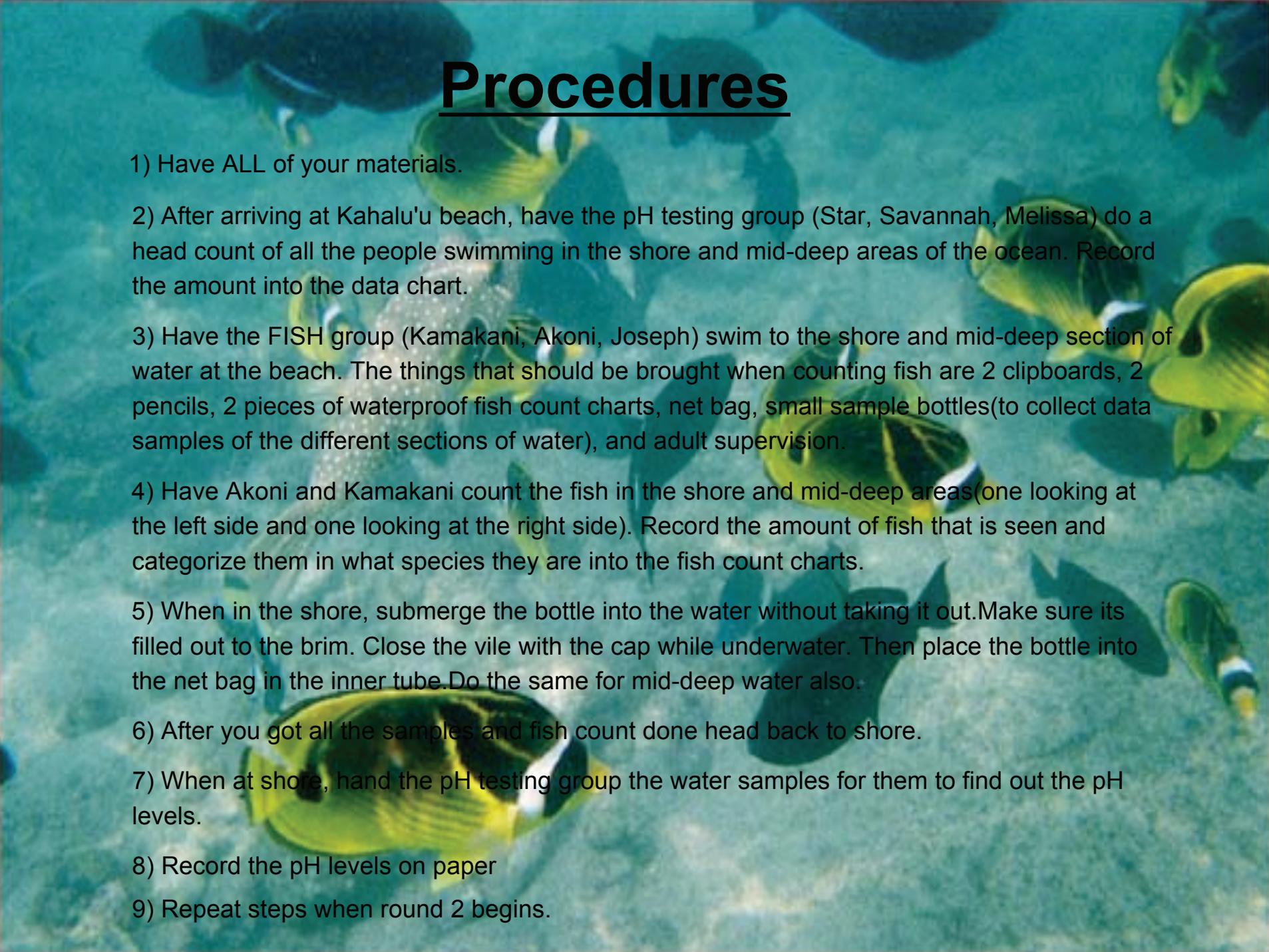
What is pH? Does pH effect the water temperature? How does the number of people effect the pH levels in the ocean? To test these questions we will be going to Kahalu'u bay, we will be measuring the pH levels. pH is a measurement of how acidic or how basic (alkaline) a solution is. pH is measured on a scale from 0-14. Yes pH effects the water temperature. But it's a very small effect to the water temperature. In fact sea water has a score of 8 on the pH scale and majority of the ocean water has a temperature between 32-37.5°F. But even a slight temperature change in the pH levels in the water it can drastically change all the life that adapted in it. When we do our experiment and study the life of the ocean we will consider all of these possibilities so it won't interfere with our experiment.

Question and Hypothesis

Question: How do People and Fish affect the pH levels in the ocean?

Hypothesis: People and Fish do affect the pH levels but people would affect it more because its not their natural habitat.

We chose this question since it was deemed the best question out of all the other suggestions we made for this project.



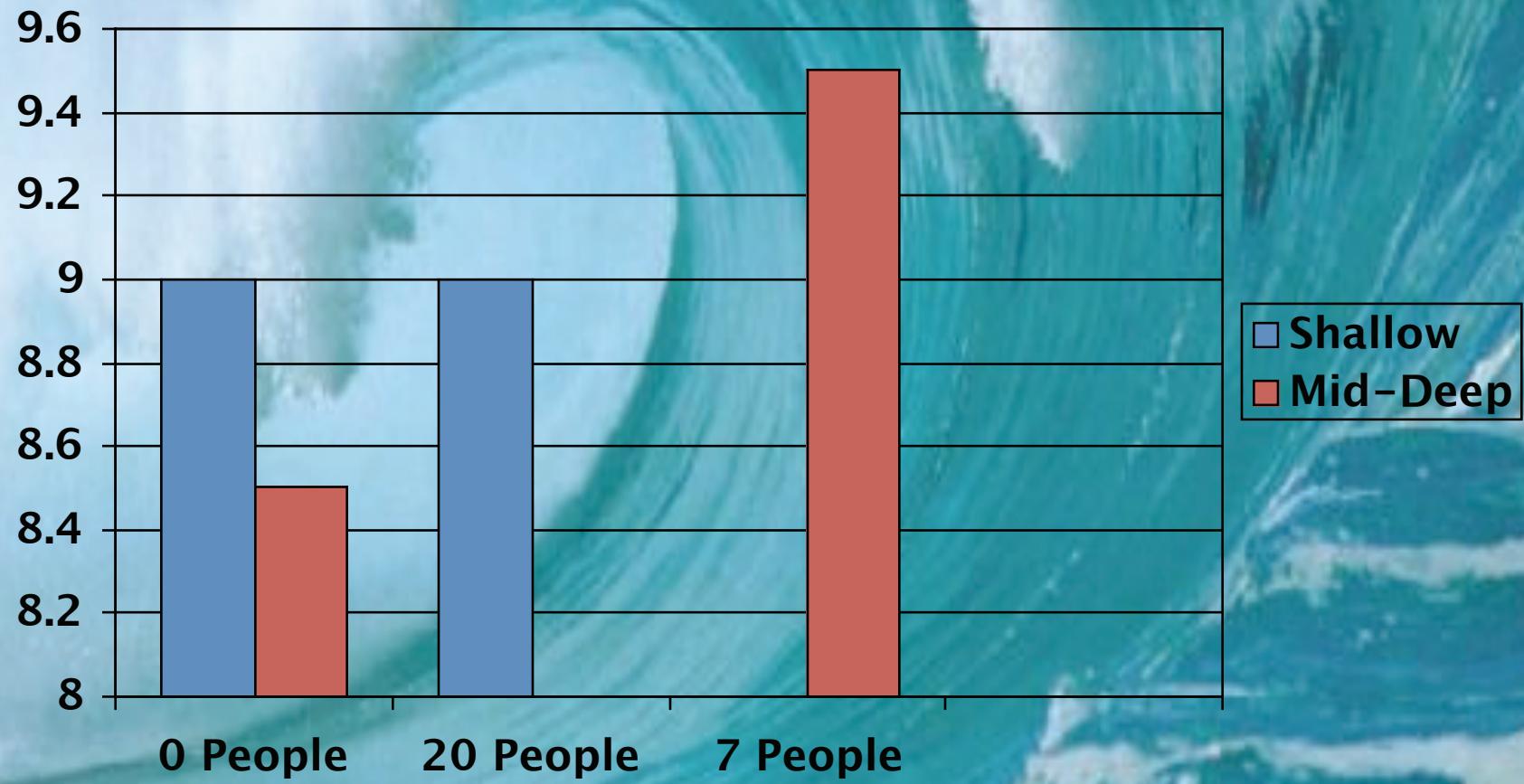
Procedures

- 1) Have ALL of your materials.
- 2) After arriving at Kahalu'u beach, have the pH testing group (Star, Savannah, Melissa) do a head count of all the people swimming in the shore and mid-deep areas of the ocean. Record the amount into the data chart.
- 3) Have the FISH group (Kamakani, Akoni, Joseph) swim to the shore and mid-deep section of water at the beach. The things that should be brought when counting fish are 2 clipboards, 2 pencils, 2 pieces of waterproof fish count charts, net bag, small sample bottles(to collect data samples of the different sections of water), and adult supervision.
- 4) Have Akoni and Kamakani count the fish in the shore and mid-deep areas(one looking at the left side and one looking at the right side). Record the amount of fish that is seen and categorize them in what species they are into the fish count charts.
- 5) When in the shore, submerge the bottle into the water without taking it out. Make sure its filled out to the brim. Close the vial with the cap while underwater. Then place the bottle into the net bag in the inner tube. Do the same for mid-deep water also.
- 6) After you got all the samples and fish count done head back to shore.
- 7) When at shore, hand the pH testing group the water samples for them to find out the pH levels.
- 8) Record the pH levels on paper
- 9) Repeat steps when round 2 begins.

Measuring the pH levels and writing the data down.



pH Levels

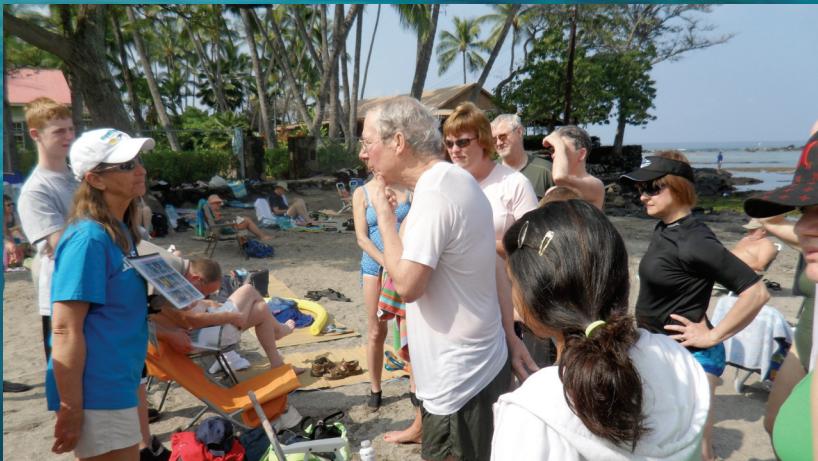


Reef Teach



- :) Learned how to protect the living creatures in the ocean
- :) Took what we learned and taught the tourist who were at the beach about why keeping the beaches clean are important.
- :) What to do and what NOT to do

Our group teaching a group of people about ReefTeach



Outcome

Our group really enjoyed the ReefTeach. While we were waiting for our turn to go in the water and get water samples we were on land teaching people about the ocean.

In the end we came to find out that our hypothesis was incorrect. It turns out that people and fish do not affect the pH levels. But if we were to do this project again I would stick to same question but take out the fish part because fishes naturally live in the ocean and humans don't.

Thanks for your Time(:

