

# Malama Wai Ola Program

## The Tales and Trails of Ocean Debris

- Lessons one and two are to be combined into one classroom visit
- Students will be given a pretest at the beginning of the classroom visit and a posttest will be given after the last visit. The posttest is to be completed in class or as homework and returned to us.
- No more than 50 students may participate in the lesson

### *Grades 2-5*

**Lesson One:** An introduction to the Malama Wai Ola Program and the instructors as well as a poster board presentation about ocean debris and how we can stop the debris from making it into the ocean.

**Lesson Two:** We will create visors using debris the instructors will provide. The students will wear the visors they create to become the life size game pieces in our very own board game. After the hats are completed we will set up a game board either outside in a cemented area (where sidewalk chalk maybe used) or in an open area in the classroom.

### **Hualalai Site Visit**

Do a short beach clean up along the shoreline. We will divide up into groups and see who can pick up the most trash. We will then take counts on the type of debris we find and how much (by weight).

**Homework:** The students will use the information we collect to make graphs. This will give them a visual to see the results of our work. The students may use a computer program to create the graph or they may create their own.

**Lesson Three:** A few of the students will present the information they found after doing the beach clean up and the post-tests will be pasted out and completed.

### *Grades 7-10*

**Lesson One:** An introduction to the Malama Wai Ola Program and the instructors. We will also have a poster board presentation about ocean debris and how we can stop debris from making it into the ocean.

**Lesson Two:** We will then complete a worksheet (from [http://seawifs.gsfc.nasa.gov/OCEAN\\_PLANET/](http://seawifs.gsfc.nasa.gov/OCEAN_PLANET/)) on the Nike shoe spill called “The Nike Shoe Investigation.” We will plot the path the shoes took while catching a ride on the ocean currents. After plotting the path of the shoes the students will answer the questions on the work sheet.

## **Hualalai Site Visit**

Do a short beach clean up along the shoreline. We will divide up into groups and see who can pick up the most debris. We will then take counts on the type of debris we find and how much (by weight).

**Homework:** The students will take home the information we collected to make graphs. This will give them a visual to see the results of our work. The students may use a computer program to create their graphs or they may create their own by hand. Based on what the students find they will hypothesize and record on a separate piece of paper where the debris came from and how it got on the beach.

## **Lesson Three:**

Students will be assigned to do a research project on their own. To get a better understanding of the ocean currents and ocean debris, students have a choice of investigating a specific place or phenomenon (i.e. the pacific garbage patch), a specific type of debris (plastics, glass, oil, etc.), or how debris travels in certain areas. These projects will be presented in class and presented to instructors as a posttest.

## **Hawaii Content & Performance Standards III**

The standards bellow are the benchmarks that this lesson will hit within HCPS III

### **Second Grade**

- SC.2.1.1

### **Third Grade**

- SC.3.1.1
- SC.3.1.2
- SC.3.8.2 (we may touch on this topic)

### **Fourth Grade**

- SC.4.2.1
- SC.4.5.2
- SC.4.5.3

### **Fifth Grade**

- SC.5.1.2
- SC.5.2.1

### **Seventh Grade**

- SC.7.1.1

### **Eighth Grade**

- SC.8.1.2
- SC.8.2.2
- SC.8.5.1

- SC.8.8.4
- SC.8.8.7