

Mālama Wai Ola Program

Wetlands and Watersheds Grades 4-6

- Students will be given a pretest at the beginning of the classroom visit and a posttest will be given after the last visit to be completed in class or as homework and returned to us.
- These lessons may be performed all at once or separated into multiple visits depending on how much in-class time is available.
- The students will be given a set of vocabulary words to look over and define before lesson one.

Lesson One: Power Point Presentation introducing students to the instructors, the *Mālama Wai Ola Program*, watersheds, wetlands and anchialine pools. Students will understand why it is important to take care of a watershed and all the places that depend on clean water and a balanced ecosystem. They will be asked to explain what they can do or do presently that helps keep the watershed from contamination.

Lesson Two: Hands-on project using a shower curtain, spray bottles, sponges, food coloring and labels (for the parts of the watershed), to create their very own watershed. Students will be asked to make predictions about what will happen to the watershed in multiple scenarios as well as label the different parts of the watershed. After building and labeling the watershed the students get a chance to test their predictions by adding rain (with the spray bottles) to the watershed to see where it goes and where possible contamination could occur.

Lesson Three: The students will look at pictures (on power point) and will be asked to answer a few questions to test their knowledge on watersheds.

Hualālai Site Visit

Hualālai Resort is located in a watershed and is the last stop before the rainwater reaches the ocean. We will take a half hour to forty-five minute tour of a few of our anchialine pools and wetland. While on the tour the students will complete an observation worksheet that will be handed out before we start the tour. The students will use this worksheet to take notice of the different plant and animal life. We will go over their worksheets together and name the plants and animals that they have drawn. At the end of the tour the students will build their very own food web using yarn and labeled picture cards of the animals and plants that they have observed. Once the web is formed a few scenarios will be read and will change the dynamics of the food web that was formed. This will give them a visual on how everything is connected within these ecosystems and how water running mauka to makai (from the mountains to the ocean) helps to create this special ecosystem.

- After the site visit, have the students take the post-test with them to complete in class or as homework. We will pick the post-tests up when all the tests are completed.