

## PROTECTING OCEAN CITIES (6-8):

Common Core Standards - Mathematics - Geometry: [6.G.2](#), [7.G.6](#), [8.G.9](#); Hawai'i Content & Performance Standards – Life & Environmental Sciences – [SC.6.3.1](#), [SC.7.3.3](#), [SC.8.3](#)

## DIRECTIONS:

Read [Coral Bleaching Threatens One of Hawai'i's Most Popular Coral Reefs](#) on the Weather Channel website.

What percentage of Hanauma Bay's coral reef was bleached between October 2015 and January 2016? What percentage of the coral reef was killed during this same time period? Based on these numbers, what percentage of the coral reef was healthy?

Using construction paper, glue, markers, reusable materials, and scissors, create a coral reef diorama in a shoe box.

Measure the length, width, and height of the shoebox. Calculate its area. The percentages of bleached and dead coral cited in the Weather Channel article (and the percentage of healthy coral that you calculated) should be reflected in your diorama.

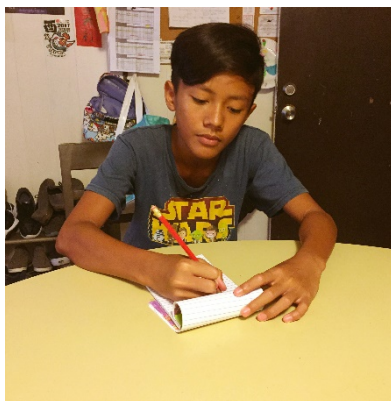
View [Can Coral Reefs Survive Climate Change?](#) on the PBS LearningMedia website.

If coral is bleached, does that mean that it will die? If not, how long (and under what conditions) will it take to recover?

Make a list of three actions you can take to aid in the recovery of Hanauma Bay's coral reef.

## MATERIALS:

construction paper, glue, markers, reusable materials (e.g. corks, pipe cleaners, yarn) scissors, shoe boxes



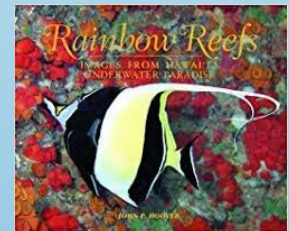
## BOOKS:



[Coral Reefs](#), Precious McKenzie



[Coral Reefs: Cities of the Ocean](#), Maris Wicks



[Rainbow Reefs: Images from Hawai'i's Underwater Paradise](#), John P. Hoover

## VIDEO:

[Corals in a Changing World](#), Voice of the Sea TV

## WEBSITES:

[Coral Bleaching Infographic](#), National Oceanic and Atmospheric Association

[Coral Health Atlas](#), University of Hawai'i at Hilo

