

Pele's Journey

Next Generation Science Standards:

- 4-ESS2-2 Analyze and interpret data from maps to describe patterns of Earth's features.

Hawai'i Content and Performance Standards III:

- SC.5.2.1 Use models and/or simulations to represent and investigate features of objects, events, and processes in the real world.

Description:

This lesson begins with the video (or graphic novel) "Pele Searches for a Home". Students will compare Pele's journey through the islands depicted in this Hawaiian legend with the scientific geologic theory of the creation of the Hawaiian Islands.

Duration: 60 minutes

Objective: At the end of this lesson, the students will be able to:

- Compare and contrast the lines of evidence supporting the geological formation of the Hawaiian Islands with the cultural perspective as told in ancient Hawaiian legends.

Background:

The goddess Pele, with heat and lava at her disposal, is the primary force of Earth building in traditional Hawaiian culture. On each island, Pele uses her digging stick to create fissures and craters. Millions of years of volcanic activity in the middle of the Pacific Ocean has shaped and continues to reshape the landforms of the Hawaiian Islands. This lesson begins with the video (or graphic novel) "Pele Searches for a Home". It describes the legend of Pele the Hawaiian goddess of fire and her search for a home in these islands. Her journey is a result of the ongoing feud with her sister Nāmaka, forcing her to journey throughout the islands trying to find a safe home. Her route closely mimics the path of the islands geologic formation atop the hot spot in the middle of the Pacific Plate. Like the mountains of lava on which our islands are formed, Pele is continually battling the power of the forces of wind and wave trying to destroy her.

Vocabulary:

Kahiki: Tahiti (may refer to general ancestral lands).

Materials Needed:

Internet access for showing Video or Graphic Novel Download

Video: <http://ehoomau.prel.org/pele-searches-for-a-home/>

Graphic Novel Download: <http://ehoomau.prel.org/pele-the-graphic-novel/>

Ages of the Islands Worksheet (included)

Ages of the Islands Teacher Answer Key (included)

Procedure:

Step 1: Introduction

Have you ever followed a path, without knowing where it might lead? Have you ever followed in someone's footsteps down the beach- keeping to exactly the same course they travelled? Today we will follow in the path of lava and volcanic eruption that built the Hawaiian Islands and see what surprise is in store for us on our journey. It is a journey that is still going on! Review with students the movement and direction of the Pacific Plate and the subsequent age of the islands as you look to the northwest in the chain of Hawaiian Islands.

Step 2: Hand out Ages of the Islands Worksheet

Explain Step 1: Instruct students to label each island with its age.

- Which Hawaiian Island is the youngest? = Hawai'i
- Which island is the oldest? = 'Ni'ihau
- Go over as a class.

Step 3: Watch the video "Pele Searches for a Home" (or Read the graphic novel)

Explain Step 2 on the Ages of the Islands Worksheet. While the students watch the movie, have them number the islands from 1 to 7 in the order of Pele's journey. Where is her first stop? Use the number 1 for the first island Pele visits to number 7 for the last. Students will need to pay special attention to Pele's journey throughout the movie.

Watch the video "Pele Searches for a Home" which depicts Pele's travels from Kahiki to Hawai'i.

<http://ehoomau.prel.org/pele-searches-for-a-home/>

Or Read the graphic novel "Pele Searches for a Home"

<http://ehoomau.prel.org/pele-the-graphic-novel/>

Step 4: Discussion

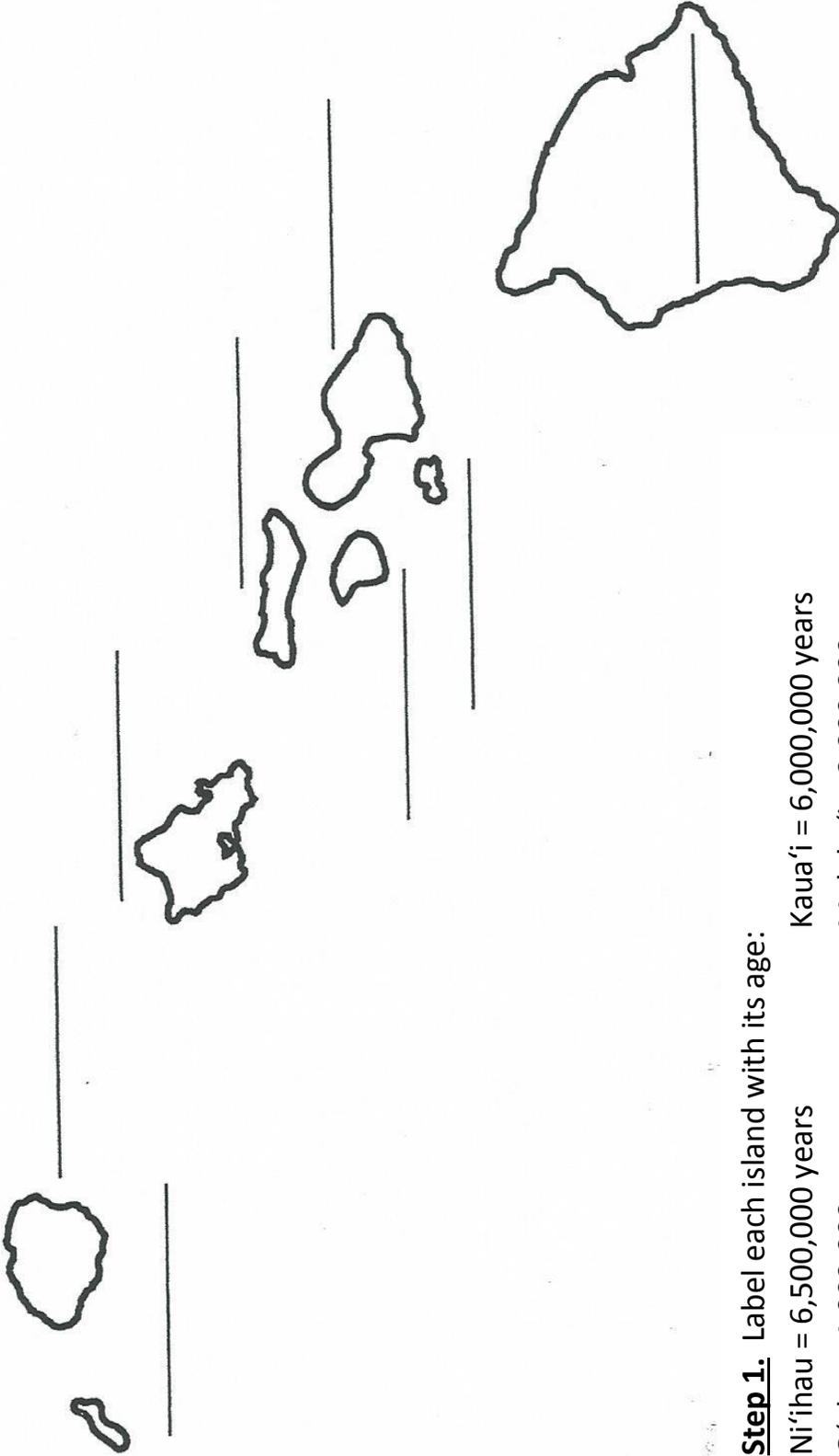
- Summarize how Hawaiians explain the formation of the islands (from the video).
- Think about the 2 different ways the Hawaiian Islands are formed.
- Compare and contrast the journey of Pele to the scientific theory of the islands formation.
 - How are they similar?
 - How are they different?

References:

Adapted from Mattox, S. (1994). *A Teacher's Guide to the Geology of Hawaii Volcanoes National Park*. (Activity 3.3). Honolulu, HI: Hawai'i Natural History Association.

Adapted from 'Ōhi'a Project. (1989). Hot spot! *An environmental education guidebook for Hawai'i*. (pp. 4.5-4.12). Honolulu, HI: Bernice Pauahi Bishop Museum and Moanalua Gardens Foundation.

Ages of the Islands



Step 1. Label each island with its age:

Ni'ihau = 6,500,000 years

O'ahu = 4,000,000 years

Lana'i = 1,500,000 years

Maui = 1,000,000 years

Kaua'i = 6,000,000 years

Moloka'i = 2,000,000 years

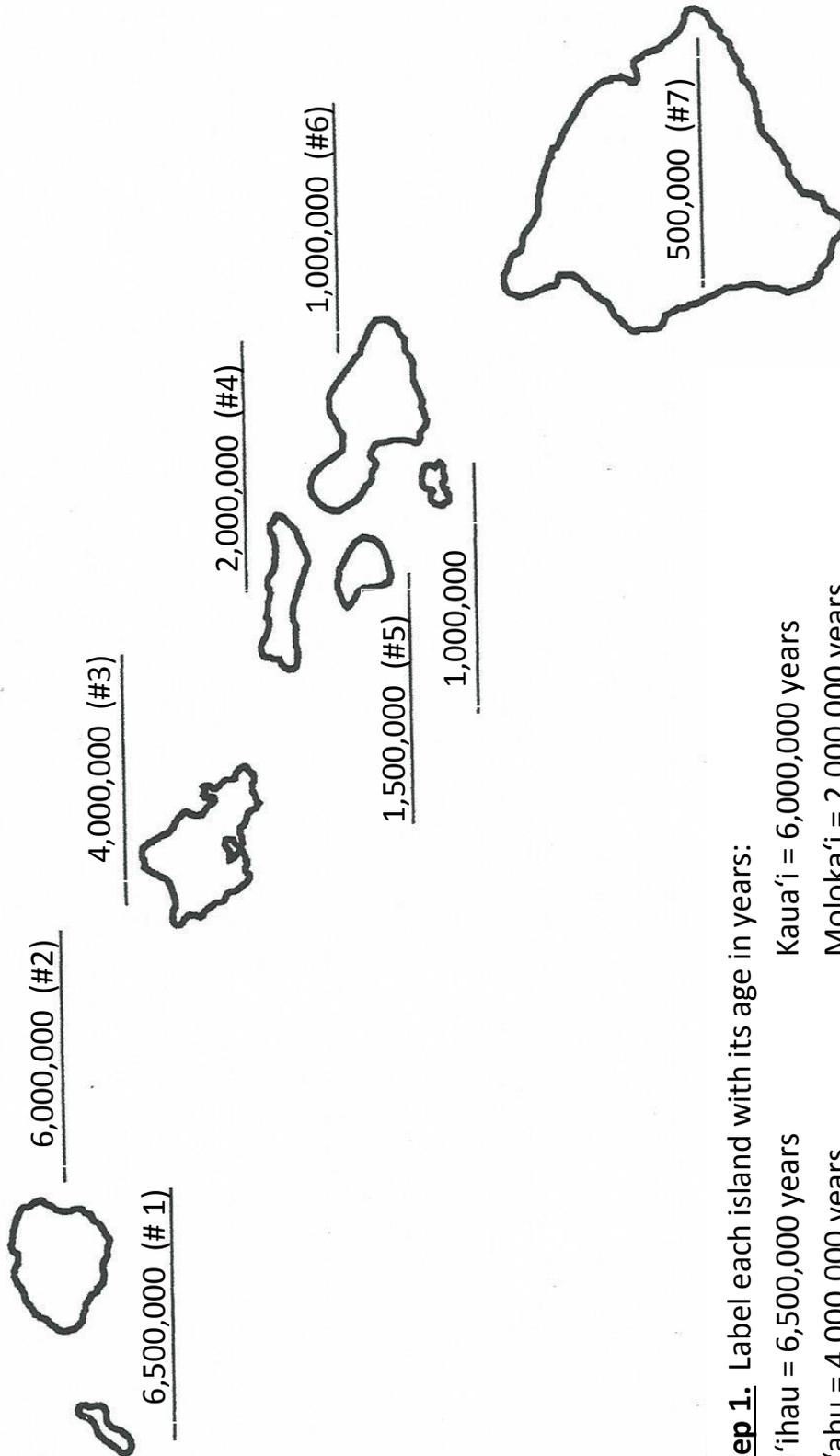
Kaho'olawe = 1,000,000 years

Hawai'i = 500,000 years

Bonus Question: How old is the Earth? _____

Step 2. Number the islands from 1 to 7 in the order of Pele's travels in the legend *Pele Searches for a Home*

Ages of the Islands Teacher Answer Key



Step 1. Label each island with its age in years:

- Ni'ihau = 6,500,000 years
- O'ahu = 4,000,000 years
- Lana'i = 1,500,000 years
- Maui = 1,000,000 years
- Kaua'i = 6,000,000 years
- Moloka'i = 2,000,000 years
- Kaho'olawe = 1,000,000 years
- Hawai'i = 500,000 years

Bonus Question: How old is the Earth? About 4.6 billion years

Step 2. Number the islands from 1 to 7 in the order of Pele's travels in the legend *Pele Searches for a Home*