



ADVENTURE BOOK

**UA HANAU KA MOKU
A KUPU, A LAU, A LOA, A 'AO, A MU'O
KA MOKU I LUNA 'O HAWAI'I.**

BORN WAS THE ISLAND.
IT BUDDED, IT LEAFED, IT GREW, IT WAS GREEN.
THE ISLAND BLOSSOMED ON THE TIP.
IT WAS HAWAI'I.



Hawai'i Island National Parks JUNIOR RANGER ADVENTURE BOOK



MAHALO (THANK YOU) . . .

to the children who shared their artful visions and aloha for this Adventure Book.

Hailey Rosario, Anthony Rosario,
Rajleen Carlos, Skyla Lee, Chevis Marques,
Alison Reese, Gina McGuire,
Ka'ula Tringali, and Ashlyn Reese.
(not pictured: Regan Stradtmann-Carvalho
and Hannah Worley.)



Denise Kauahi-Higa, Destiny Kauahi-Higa,
Aimee Shiraki, and Julia Enuton.

**HAVE FUN BECOMING A JUNIOR RANGER WHILE YOU
EXPLORE, LEARN, AND PROTECT ALL NATIONAL PARKS.**

We look forward to saying “aloha” when you visit:

- Pu'ukoholā Heiau National Historic Site
- Kaloko-Honokōhau National Historical Park
- Pu'uuhonua o Hōnaunau National Historical Park
- Hawai'i Volcanoes National Park
- Ala Kahakai National Historic Trail



WELCOME TO YOUR Hawai'i Island National Parks JUNIOR RANGER ADVENTURE BOOK!

The *Hawai'i Island Junior Ranger Adventure Book* is your guide to earning up to five Junior Ranger badges and great Junior Ranger awards as you explore, learn and protect these magnificent Hawai'i Island parks!

HERE'S HOW IT WORKS

Complete **ALL** of the activity pages **for any given park** and you will receive a badge for that park and special Junior Ranger awards. The more park badges you earn, the higher the level of awards you will receive. It doesn't matter which park you visit first!

Use the logos below to help you identify which activity matches which park. The logo will appear at the top of each page.

When you have completed all of the activities for a park, go to that park's visitor center and present your *Hawai'i Island Junior Ranger Adventure Book* to a park ranger.

**BOOKS MUST BE PRESENTED
NO LATER THAN 4:00 P.M.**



**Ala Kahakai
National Historic Trail**
73-4786 Kanalani Street, #14
Kailua-Kona, HI 96740
www.nps.gov/alka



**Pu'ukoholā Heiau
National Historic Site**
62-3601 Kawaihae Road
Kawaihae, HI 96743
www.nps.gov/puhe



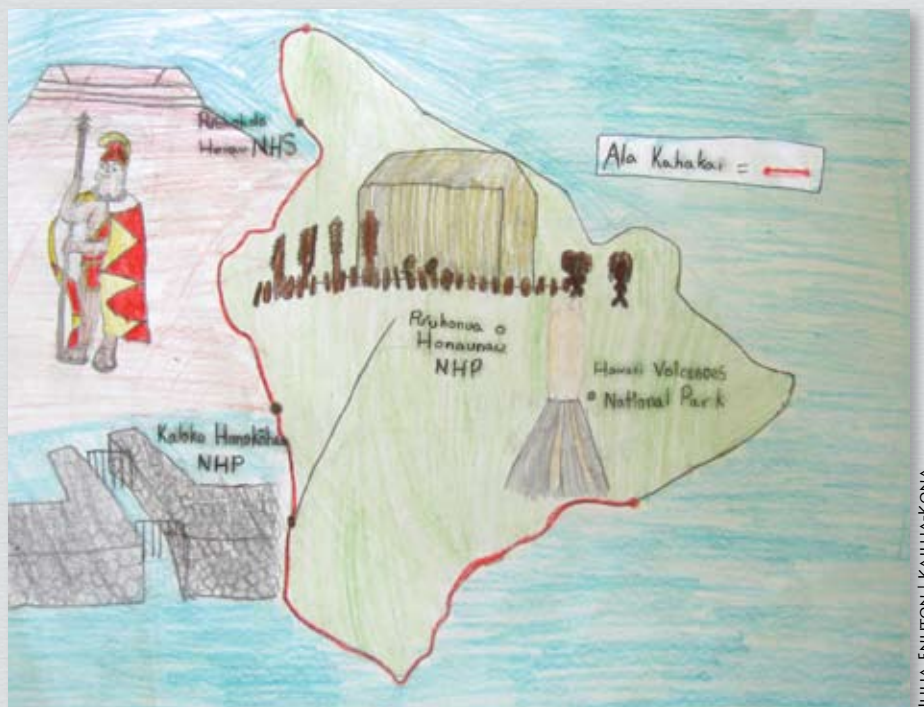
**Pu'uhonua o Hōnaunau
National Historical Park**
P.O.Box 129
Honaunau, HI 96726
www.nps.gov/puho



**Kaloko-Honokōhau
National Historical Park**
73-4786 Kanalani Street, #14
Kailua-Kona, HI 96740
www.nps.gov/kaho



**Hawai'i Volcanoes
National Park**
P.O. Box 52, 1 Crater Rim Drive
Hawaii National Park, HI 96718
www.nps.gov/havo





PU'UKOHOLĀ HEIAU CROSSWORD

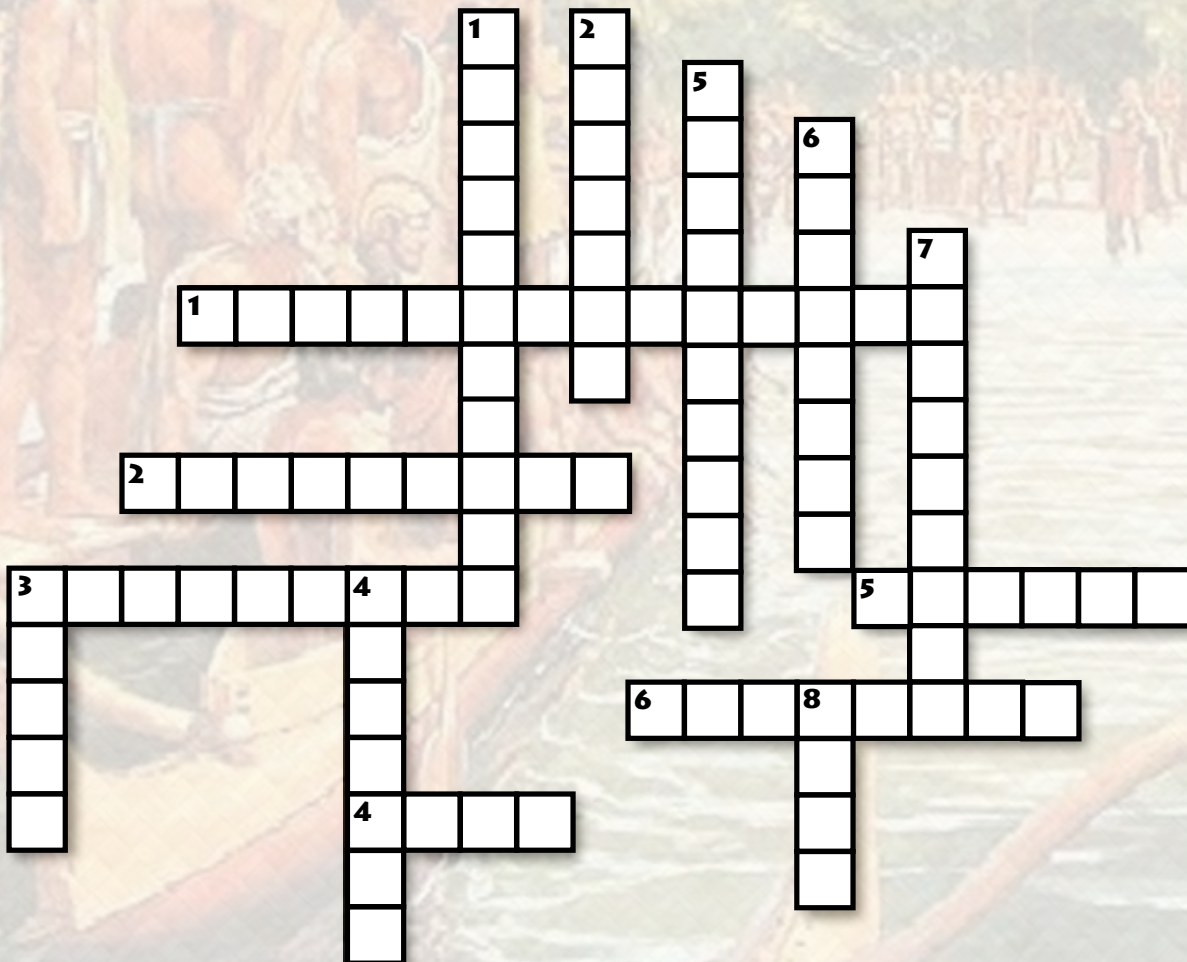
CLUE: Look for the answers on the park brochure and on the wayside exhibits located along the park's trails.

ACROSS

- 1** Heiau converted into fort by Kamehameha.
- 2** Trusted military advisor to Kamehameha.
- 3** Who prophesied the future of Kamehameha?
- 4** Kamehameha II (Liholiho) abolished the _____ system.
- 5** No _____ was used to hold the heiau rocks together.
- 6** Site of Royal Courtyard.

DOWN

- 1** Heiau dedicated to the shark gods.
- 2** European weapons placed at Mailekini Heiau.
- 3** Sacrificed chief and cousin of Kamehameha.
- 4** Family guardian spirits or ancestral deities.
- 5** Unified all the Hawaiian Islands.
- 6** Hawaiian name for the Leaning Post.
- 7** Hawaiian word for "Hill of the Whale."
- 8** Queen born at Pelekane.





SCAVENGER HUNT

PELEKANE was the royal courtyard of Kamehameha I. Many significant events occurred here. For example, when Kamehameha I died in 1819, his son Liholiho came to Pelekane to prepare for his role as king.

As you explore this fascinating park, find these items and then tell one fact about their importance or uses. Use the displays at the visitor center or wayside exhibits in the park to discover the answers.



niu (coconut)



'alā (water worn rocks)



pūlo'ulo'u (kapu sticks)



ko'a (coral)



lele (offering tower)



milo (hardwood tree)





KAMEHAMEHA WORD SEARCH

W
O
R
D
S
E
A
R
C
H

K A E P U U K O H O L A I O U K G
 E A L L N P E L E K A N E K U P F
 O H M W E Y H C I A L E I K A I A
 U N A E O A I P A W A G I O Y N I
 A A I L H S N K U I W I O H U U R
 K N L E O A W O N O L U H A G P A
 U O E O U C M H R I M J O L U A M
 A N K O Y R K E M A N O L A A K E
 H N I R O E M O H N O P A E W O R
 U A N A G D K H C A W L H K E E I
 U C I G N U O Y N H O J O W N L C
 L A I U L O L O P U L P A I E A A
 A Z S S I V A D C A A S I A P H N
 A K U A I A U M A K U A K G P H N

HAILEY ROSARIO | HILO

Read the descriptions below and write the word it describes in the spaces provided. Then, find all of these words in the Word Search above and circle them.

- ◆ He unified the Hawaiian Islands _____
- ◆ British sailors that became advisors to Kamehameha I:
_____ and _____
- ◆ Heiau built by Kamehameha _____
- ◆ Converted into a fort by Kamehameha _____
- ◆ Heiau dedicated to sharks _____
- ◆ Royal Courtyard of Kamehameha _____
- ◆ Family ancestral spirits, often animals _____



SAILING THROUGH TIME



BATTLE OF NU'UANU PALI



1758 Birth of Kamehameha

_____ John Young Arrives in Hawai'i

_____ Pu'ukoholā Heiau Completed

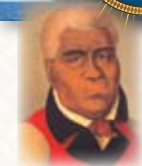


_____ Battle of "The Red-Mouthed Gun"

_____ Battle of Nu'uaniu Pali on O'ahu



KAUA'I



_____ Kaua'i and Ni'ihau join Kamehameha, thus unifying the Hawaiian Islands

_____ Death of Kamehameha I



_____ Pu'ukoholā Heiau National Historic Site Established



_____ Your Visit to Pu'ukoholā Heiau National Historic Site.



BATTLE OF "THE RED-MOUTHED GUN"

On the left is a timeline listing important events in Hawaiian history. Use the Park's Visitor Center exhibits, trail signs, and brochure to find the years that these events took place. **The first date has been filled in for you!**

John Young and Issac Davis were British sailors who arrived in Hawai'i on the ships Eleanora and Fair American. Kamehameha came to know and trust them as his foreign advisors. Young was later elevated to the position of *ali'i nui* (high chief and governor) of Hawai'i Island.

John Young and Isaac Davis taught Kamehameha how to sail the Fair American and use its cannon and muskets. Traders and dignitaries from Russia, France, the United States, Great Britain, and other nations were required to obtain official approval from Young at Kawaihae before they could conduct business or meet with Kamehameha.

John Young's home was one of the first European-style houses in all of Hawai'i. The white plaster-covered stone house was visible from far out at sea. The mortar was made from crushed coral, poi, and hair.



WANT TO DISCOVER MORE? . . . BY TALKING TO A RANGER, WATCHING A MOVIE, AND VISITING THE BOOKSTORE, YOU CAN LEARN MORE ABOUT THE EXCITING EVENTS AND PEOPLE OF PU'UKOHOĀ HEIAU.





KALOKO-HONOKŌHAU NATIONAL HISTORICAL PARK

ART BY ROBIN YOKO RACOMA USED WITH PERMISSION FROM KAMEHAMEHA SCHOOLS



THIS PARK was established by the Congress of the United States in 1978. The Hawaiians who once lived in this area left behind much to tell us about themselves. Fishponds, fishtraps, hōlua (a sledding platform), heiau (temple), trails, stone planters, shelters, salt pans and ki'i pōhaku, petroglyphs, are some of the features found here. The mission of the park is to preserve these resources and perpetuate Hawaiian culture as it once flourished.

Land Divisions—The largest unit of land is a *mokupuni*, island. Each island is further divided into *nā moku* (districts), which were in turn divided into *ahupua'a* (a wedge of land that included the *kai*, coastland; *kula*, midlands; and *uka*, uplands). The *'ohana* (families) who lived within the *ahupua'a* had the resources needed for survival such as fish, fresh water, and croplands. Families shared and traded these resources with each other within the *ahupua'a*.

Kai provided major living areas, fishpond aquaculture, salt, seaweed and shellfish gathering, as well as access to shore and ocean fishing. *Kula* offered valleys and farmlands to grow taro for making *poi*, sweet potato, breadfruit, bananas, *ti* leaf for cooking and wrapping food, and much more. *Uka* provided trees for canoes, bowls, spears and house posts. Hunting for food and other products were also collected from the upland forests.

Today, as a way to distinguish and describe geographical areas, we still recognize *nā moku* of Ka'ū, Puna, Hilo, Hāmākua, Kohala, and Kona.

UA MAU KE EA O KA 'ĀINA I KA PONO

THE LIFE OF THE LAND IS PRESERVED IN RIGHTEOUSNESS

—ŌLELO NO'EAU, 2829

1. What *moku* do you live in or are you staying in while you visit? _____
2. What elevation zone is your *moku* in? (*kai*, coastland; *kula*, midlands; or *uka*, uplands) _____
3. What products are shared or traded where you live? (banana, sweet potatoes, coffee, wood, etc.)

4. Look at Robin Yoko Racoma's rendering of a traditional *ahupua'a* system (see above). List ways that you see to describe how people used the land in an *ahupua'a*.



MĀLAMA ‘ĀINA



MĀLAMA ‘ĀINA (CARING FOR THE LAND) is the most important concept in the way Hawaiians lived. All things in nature were considered to be the embodiment of the gods. Hawaiians respected and lived in harmony with the land; they cared for the land by taking only what they needed. This concept was not only important then, but is critical today as native habitats are lost to development and the environmental challenges of **climate change**.

The *Kapu* system of laws directed their daily existence, including *mālama ‘āina*. Protocols of asking permission and giving thanks before using anything of nature was required to minimize their ecological footprint and insure sustainability of water, food, shelter and other materials for their livelihood. *Kapu* stressed conservation by regulating the use of the natural resources for fishing, hunting and harvesting trees. Hawaiians cared for the land by taking only what they needed on a daily basis.

Describe one small thing you can do to help the environment in a BIG way. Some ideas are using less energy, creating less garbage or making less pollution. _____

In your household, how does your ‘ohana, family, practice being “green?”

Traditionally, living in an ahupua‘a meant that everyone had to be “green,” for example, using every part of a coconut tree. Nothing was wasted and they produced very little trash. Study an actual coconut tree while doing this activity:

Draw a line to match the part of the coconut tree to a use. Some may have more than one use.



COCONUT TREE



COCONUT WITHOUT THE HUSK



COCONUT FRONDS



COCONUT HUSK FIBERS AND WHITE FRUIT

Uses

THATCHED ROOF

BASKET

HAUPIA

BOWL

ROPE

DRUM

BROOM

SECRET OF THE MĀKĀHĀ



PACIFIC AMERICAN FOUNDATION, KAHEA LOKO PROJECT

KALOKO is an 11 acre *loko i'a*, fishpond, where fish were GROWN to maturity in man-made-enclosures. The impressive fishpond walls were built by hundreds of workers passing stones from hand to hand. It could take up to a year to build one.

‘Āimakapā is a 15 acre fishpond like Kaloko, but is called a *loko pu'uone*, natural sand enclosed pond. Fishtraps were built within the ponds as holding pens to separate the fish by kind, size or maturity to manage them prior to eating them.

Wooden *mākāhā* (gates) are unique to Hawai'i and were built in the openings of an *'auwai*, (water canal) of a fishpond. A *mākāhā* would control what

goes in and out of the pond with the changing tide, allows for easy collection of fish and control temperature and circulation of water which is critical for the health and sustainability of the fishpond.

Kaloko, 'Āimakapā and fishtraps like 'Ai'ōpio at the south end of the park were built to help manage food production, especially during seasons when the ocean was rough. It was a natural fish market.



“... A LAND WITH MANY FISHPONDS IS CALLED A 'FAT' LAND.”

—SAMUEL KAMAKAU, HAWAIIAN SCHOLAR, 1869

1.

Observe what happens in the **'auwai** at Kaloko. Record your observations here:

2.

Use the yellow letters above to form two words that uncover the secret of the **mākāhā**.

3.

Express Yourself. Sit on the beach in the park and observe the sights and sounds around you. Write a poem or draw a picture that describes what you see, hear or how you feel about this special place.



KŌKUA NĀ HONU | HELP THE TURTLES



THE PROTECTED BAY of Honokōhau is home to almost 200 honu, Hawaiian green sea turtle. One kuleana, responsibility of the park requires careful and diligent monitoring of this critically endangered coastal zone. Turtles love to bask in the warm Kona sun along this stretch of white sand beach.

Because they are listed as an endangered species, the honu is protected making it illegal to kill, capture, harass or handle them in any way. Disturbing the honu affects their natural behavior and threatens their resting, feeding and nesting habitat.

HOW CAN YOU HELP?

You can help protect these endangered sea turtles by keeping a distance of at least 15 feet between you and the honu and telling others about how they can help also.

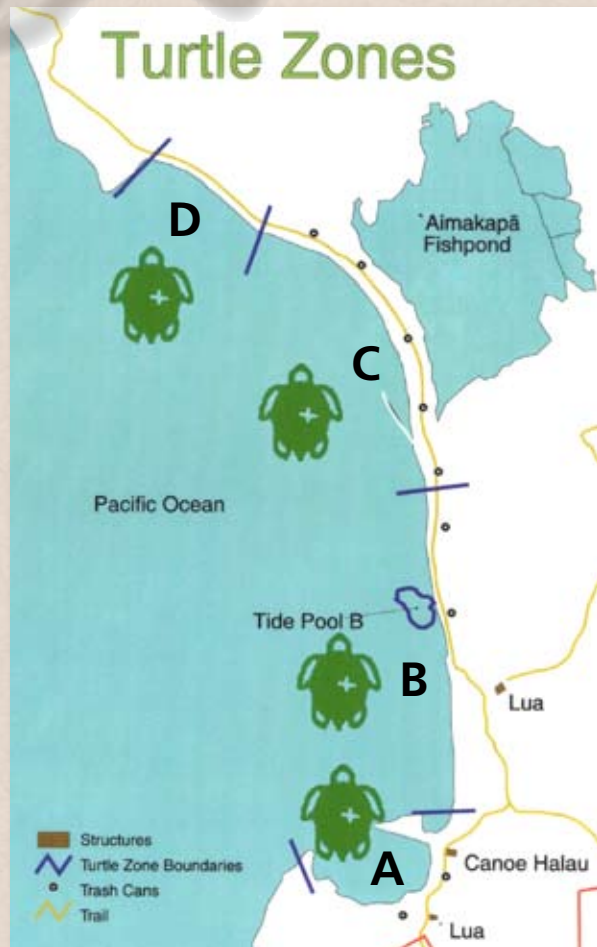
The Turtle Zones map below identifies four areas where park researchers commonly observe honu activity. Using the map, record your observations in the boxes below. After completing this activity, you can report your findings to a ranger when you return to the visitor center. Mahalo nui loa, thank you very much. Your contribution to help monitor and protect the honu is greatly appreciated.

JUNIOR RANGER RESEARCHER'S NAME _____

Date _____

Age _____

City _____ State _____



Turtle Activity Observed	Time Seen	Number observed on back of turtle shell. If none, write unknown	Zone turtle was spotted in: A, B, C, or D
BASKING			
FEEDING			
SWIMMING			



WANT TO DISCOVER MORE? . . . FIND MORE INFORMATION ABOUT TURTLES AND OTHER SEA LIFE AT THE PARK'S BOOKSTORE.



PU'UHONUA O HŌNAUNAU NATIONAL HISTORICAL PARK



THIS PARK was established by the Congress of the United States in 1961. The Royal Grounds were home to generations of *ali'i* (chiefs). The grounds include thatched *hale* (houses), a royal fishpond, Keone'ele Cove, the *heiau* (place of worship) Hale o Keawe. The Great Wall encloses the *pu'uhonua* (a place of refuge) where those who had broken *kapu* (laws) could be forgiven. Explore this place that is revered by Hawaiian people, past, present, and future.

Hawaiians lived in *ahupua'a* (land sections from the mountains to the sea) which provided all of the products needed for their survival. *Nā 'ohana* (families) lived at the seashore, plains and inland areas and were dependent on each other. Hawaiians lived in harmony with the land by using only what they needed each day. This park lies in three *ahupua'a*: Hōnaunau, Keokea, and Ki'īlae. The *ali'i* lived in the Royal Grounds in Hōnaunau, the part you will walk through. The *maka'āinana* (common people) served the *ali'i*, but lived further down the coast in a village at Ki'īlae.

The *maka'āinana* made up the largest portion of the population in an *ahupua'a*. Daily *kuleana* (responsibility) of fishermen, farmers, hunters, canoe builders and many others was to provide food, shelter, medicine, clothing and more to make the *ahupua'a* sustainable. The *ali'i* (royalty) and *maka'āinana* were dependent on each other. Without the favor of the ruling chief, the people had no land, and therefore no food. Without the hands of the people to work the land, the *ali'i* had no food and could easily lose control of his land to another *ali'i*.

Imagine you are a young *maka'āinana* learning about a traditional craft or skill. Ask the park ranger which activity is available today.



LAUHALA
(PANDANUS LEAF)



LAU NIU
(COCONUT LEAF)



KAHILI
(FEATHER)
STANDARD



IPU
(GOURD) FOR
HULA

Name of activity _____ Materials Used _____

Describe what you learned from this activity:



LIFE AT THE ROYAL GROUNDS



ALI'I LIVED in the Royal Grounds and ruled over the land for hundreds of years. Guided by the gods and their *mana* (spiritual power), the *ali'i* bloodline continued from one generation to the next one. From birth the *ali'i* were revered and prepared for their future roles as leaders and spent many hours each day perfecting warrior and leadership skills.

Some of the activities for the young *ali'i* were playing games like *moa pahe'e*, wooden darts; *'ula maika*, bowling to build eye and hand coordination. *Kōnane*, similar to checkers, would develop mental skills needed for war strategies. They also practiced *'ō'ō ihe* (spear throwing) and *uma* (hand wrestling) for strength in preparation for war.

HE LIKO ALI'I, A ROYAL LEAF BUD (REFERS TO A CHILD OF A CHIEF)

—'ŌLELO NO'EAU, 764

MOA PAHE'E



KŌNANE



'ULU MAIKA



Ask the park ranger which activity is available today.

1.

Name of the game you participated in: _____

2.

Name a game you may already know that is similar to this one: _____

How is it similar? _____

3.

Describe a mental or physical skill you learned from today's game that could help you become a strong *ali'i*.



PU'UHONUA AND THE KAPU SYSTEM

PU'UHONUA IS A PLACE OF REFUGE that was set aside by the *ali'i* as a sanctuary for people who broke the laws of a system called kapu. At one time, there were as many as ten *pu'uhonua* on Hawai'i Island. *Pu'uhonua* were also places where women, children, the elderly and defeated warriors could seek safety during times of war.

Kapu directed every aspect of life in Hawai'i. These rules were important to maintain order in a community and be in good favor with the gods and *ali'i*. It was kapu for commoners to have contact with the *ali'i*. Men and women could not eat meals together. Some foods, like pork and bananas, were *kapu* to women. Stealing and murder were of course *kapu*. There were even conservation kapu that would protect a fish species during its spawning season when it lays eggs.

Breaking a *kapu* (rule) could mean certain death or severe punishment, but if a *kapu* breaker could seek refuge at a *pu'uhonua*, rituals would be performed by the *kahuna* (priest) to pardon their wrong doings. *Kapu* breakers, traveling on foot or by sea, faced many dangers before safely reaching the *pu'uhonua*. They would have to run over miles of rough lava and then swim across the waters of Hōnaunau Bay, all without being caught or killed by their accuser.



1.

If you are in danger and your parents are not around, where could you seek refuge?

2.

Think of "safe places" today that may be thought of as a *pu'uhonua*? List as many as possible:

3.

Name three things that are kapu at your school.



HALE O KEAWE



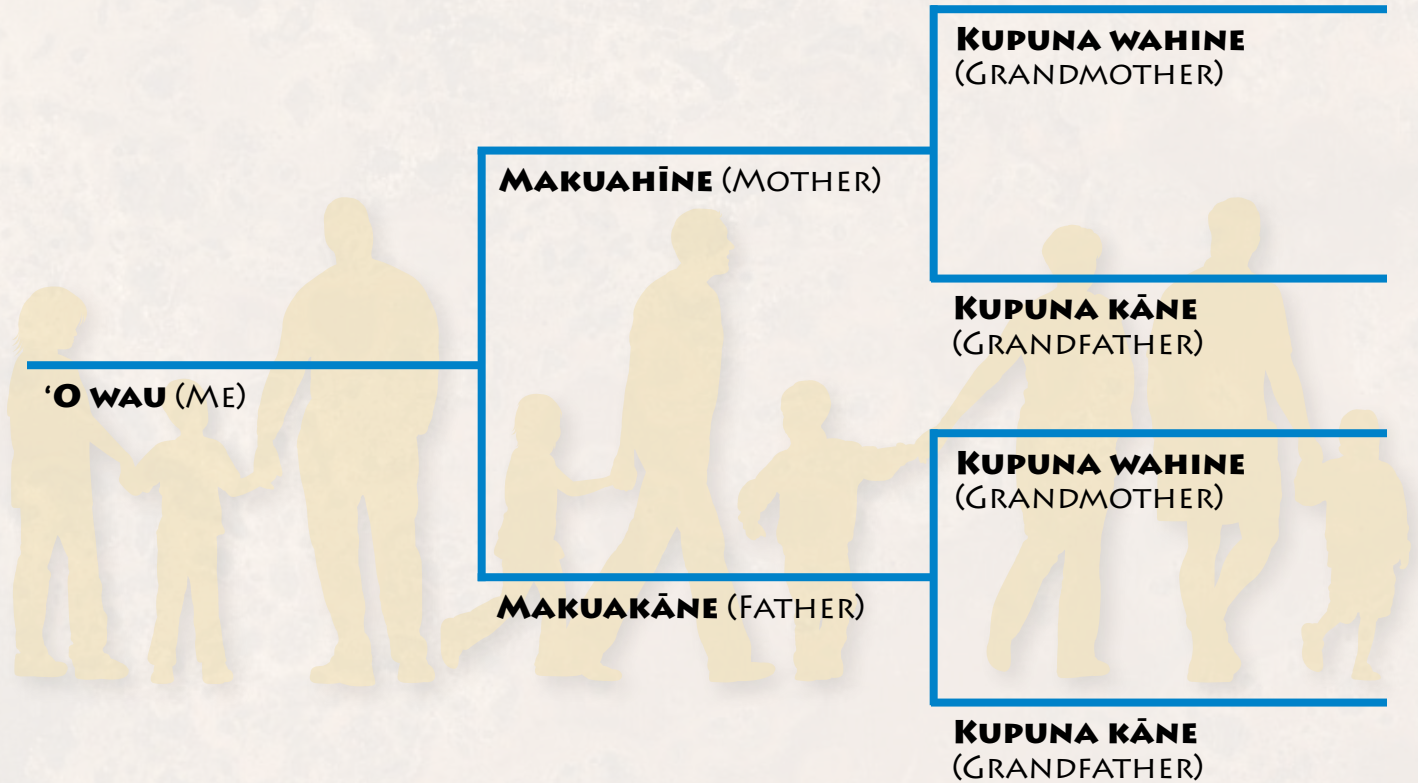
WATCHFUL KI'I (WOODEN IMAGES OF THE GODS) stand guard over this *heiau*, or temple. *Hale o Keawe* once held the bones of 23 chiefs of the Keawe family, which goes back hundreds of years. The *mana* (spiritual power) of the remains made this place sacred.

Today, *Hale o Keawe* is still an important place where some Hawaiians honor their ancestors. Without a written language, they passed down their *mo'okū'auhau* (genealogy - the family line they came from) by reciting generation after generation of family names through chant and song.

Many cultures, including Hawaiians, believe it is important to remember and honor their ancestors to preserve and perpetuate their heritage.

Mo'okū'auhau: How many generations of your ancestors can you recite? To help you get started, fill in this three generation chart.

DENISE KAUAHI-HIGA | WAIKOLOA



Who is the earliest ancestor in your family tree that you know of? Tell what you know about this person's life?



TREASURE TROVE

EXPLORING the Hawai'i Volcanoes National Park official brochure is like a real treasure hunt! Use it to find vast riches of helpful and interesting facts about the world's most active volcanoes and the incredible landscapes surrounding them. It's fun, it's easy, and it's a great way to start your visit as you hunt for Junior Ranger treasures.

Start with the side of the brochure titled Visiting Hawai'i Volcanoes.

1 ■ Look at the top map and the map key at the bottom to answer these questions:
Draw the symbols for: hiking trails _____ picnic area _____ drinking water _____

2 ■ What is the traditional Hawaiian name for Thurston Lava Tube? _____

3 ■ Exploring the Park: One important safety tip is _____

Is it OK to feed the Nēnē (Hawaiian Goose)? Circle **YES** or **NO**

Why or why not? _____

4 ■ Look at the bottom map to answer these questions:

What road would you take to see the Holei Sea Arch? _____

How long is the trail to the Pu'uloa Petroglyphs? _____ Miles

Now, flip over to the reverse side of the brochure!

5 ■ Volcanoes Are Monuments to Earth's Origins: Mauna Loa, if measured from its base on the seafloor, is _____ ft. tall which makes it _____ feet taller than Mount Everest!

6 ■ Trouble in Paradise: Using the chart below the artist's picture, name 3 alien species that could harm the park's native species.



WANT TO DISCOVER MORE? VISIT THE KILAUEA VISITOR CENTER FOR GREAT INTER-ACTIVE DISPLAYS—A TREASURE TROVE OF INFORMATION! DON'T FORGET TO CHECK OUT THE PARK'S BOOKSTORES OR VISIT THEM ONLINE AT HAWAIIINATURALHISTORY.ORG



TAKE A HIKE



THIS ACTIVITY is all about getting out there! Choose a ranger-led hike or program listed on the **bulletin board** just outside the Kilauea Visitor Center OR take a hike on one of Hawai'i Volcanoes' many trails and explore with your family. Need help deciding which trail to hike? Look in the park brochure to find trail information.



- What hike or program did you choose? _____
- Circle which one applies: **This hike was ranger-led** OR **This hike was family-led**
- Describe two new things you learned about Hawai'i Volcanoes National Park during your hike or program:
 1. _____
 2. _____

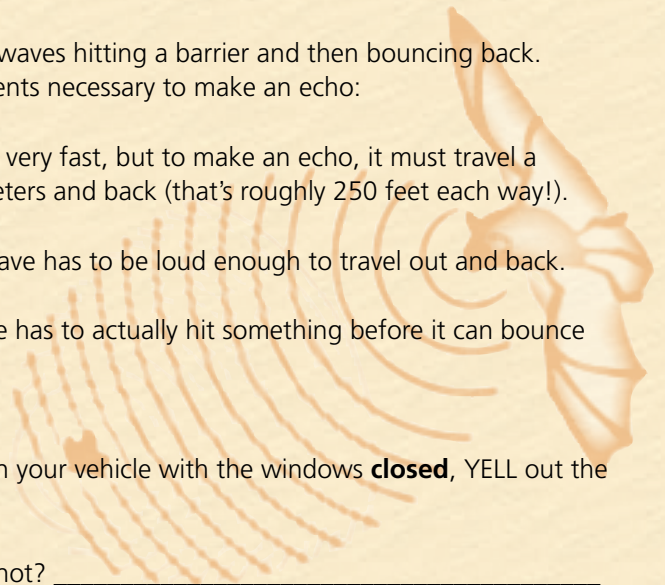
ECHO CRATER



IN THIS ADVENTURE, you'll get to yell as loud as you want into a pit crater! But first, let's learn what causes echoes and then find out what **echoes** and **bats** have in common.

Echoes are caused by sound waves hitting a barrier and then bouncing back. There are three basic ingredients necessary to make an echo:

1. **Distance**—Sound travels very fast, but to make an echo, it must travel a distance of at least 75 meters and back (that's roughly 250 feet each way!).
2. **Loudness**—the sound wave has to be loud enough to travel out and back.
3. **Barrier**—The sound wave has to actually hit something before it can bounce back to you.



ACTIVITY 1

Travel to Puhimau Crater Overlook on the Chain of Craters Road. While in your vehicle with the windows **closed**, YELL out the word **echo** (*warn your family first!*), then listen carefully.

Did you hear your voice echo back to you? _____ Why or why not? _____

ACTIVITY 2

Now, walk to the overlook and YELL out a few words out across the crater (words to try: your name, aloha, lava). Which words worked best?

Explain why echoes work so well here: _____



THE ENDANGERED 'ŌPE'A PE'A (Hawaiian Hoary bats) use echoes to navigate their way through the night sky making high-pitched squeaks. This process, known as echo-location, helps bats locate food and avoid obstacles.



CAMERA CAPER



REGAN STRADTMANN-CARVALHO | VOLCANO, PUNA

TRAVEL TO Jaggar Museum to create a digital diary that shows how legends and stories help connect Hawaiian culture to science. Share your photos with the ranger at the Kīlauea Visitor Center when you are ready to receive your Junior Ranger badge!



MICHAEL LARSON

NOW, GET YOUR CAMERA READY, GET SET, AND GO!

- 1.** Mo'olelo are traditional stories of Hawai'i. Some of them explain historic events that link geological evidence at Kīlauea, the sacred home of Pele, the goddess of the volcano. Locate the large mural called "Pantheon of Volcano Spirits." Search for the older brother of Pele who helped guide her to Hawai'i. Take a picture of this favorite brother, then write his name and what he represents below.

- 2.** Find the display that tells how "Pele searches for a home." When Pele attempted to build a home for her family, her sister Na Maka o Kaha'i kept putting out her fires. Her sister was able to do this because she is the goddess of the _____. Locate and photograph the display that shows the geological explanation of how the islands of Hawai'i were formed. (Hint: hot spot)
- 3.** This museum is named after _____ who is notable because he _____. Find a photo of him and add the image to your digital diary!
- 4.** Go to the glass wall displaying a row of seismographs. What do they measure? _____

To your right is a seismograph you can use to record your own seismic activity. Have a family member take a photo of you making your own earthquake! Seismographs are very sensitive, so be gentle when jumping up and down!
- 5.** Walk outside to the overlook and view Palikapuokamohoali'i, the sacred cliff of Kamohoali'i. Click a picture of Kīlauea Caldera and Halema'uma'u Crater, the home of Pele. What story is your photo telling?

DID YOU KNOW ?

TAKING PICTURES IN A NATIONAL PARK is great fun, but taking things like rocks, leaves, flowers, is not allowed.





WEAVING SCIENCE AND CULTURE



DESTINY KAUAHI-HIGA | WAIKOLOA, KONA

Some *mo'olelo* speak of the relationships between Pele, other gods and humans. Some show us how the early Hawaiians may have viewed living on an active volcano. According to these stories as well as *oli*, chants and *hula*, dances, the entire volcanic landscape is the handiwork of Pele.

**“SHE STAMPS HER FEET AND THE LAND TREMBLES;
THE SKY IS AFIRE WITH A CRIMSON GLOW AS HER MOLTEN
BODY MOVES ACROSS THE LAND. THOSE PRESENT WHISPER IN
AWE, ‘AE, ‘AIA LA O PELE, THERE IS PELE.’”**

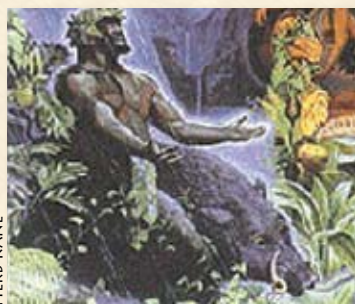
The hula chant above describes Pele and her home at Kīlauea. It paints an artistic picture of eruption activity. According to Hawaiian Volcanoes Observatory scientist, Don Swanson, “the geological evidence that we see today, links to the stories told by the Hawaiian people about historical eruptions.” Write which scientific occurrence you think the *oli* describes:

She stamps her feet and the earth trembles. _____

Her molten body moves across the land. _____

HOW THE ‘ŌHI‘A LEHUA TREE CAME TO BE

One story tells about ‘Ōhi‘a, a handsome man who rejected a marriage proposal from Pele because he was in love with Lehua. In her jealous wrath, Pele turned him into a gnarly old tree. Lehua searched everywhere for ‘Ōhi‘a and wept when she could not find him. Out of compassion, the gods changed Lehua into a red blossom and placed her on the tree where they remain together. Look for them in the rainforest as you travel through the park!



HERB KANE

PELE AND KAMAPUA‘A

One translation for Halema‘uma‘u is “house of the ‘ama‘u fern.” Kamapua‘a, the pig god, who could also be a man, came to Kīlauea to propose marriage to Pele. She rejected his love and cried out at him, “‘A‘ohe ‘oe kanaka, he pua‘a ‘oe” (you are not a man, you are a pig!). In their anger, a battle started—Pele hurled fire and molten lava at him while he brought down torrential rains to douse her fires. Finally, Kamapua‘a turned himself into the ‘ama‘u fern and surrounded Kīlauea. As he did, her fires scorched him. Even today, some of the new fronds appear red on the ‘ama‘u fern, reminding us of the battle between Pele and Kamapua‘a.

Many cultures have traditional stories like *mo'olelo* that describe natural occurrences. Can you and your family think of one you have heard about? Write a sentence to tell about your story.



MANY SPECIES OF PLANTS AND BIRDS in Hawai'i are rare and endangered. To learn more about them, visit the park's bookstores.



BE A SAFETY SLEUTH



VOLCANIC HAZARDS can present life-threatening problems in many ways. Dangerous situations can occur here in the park if you don't know what to be aware of. Rough terrain and volcanic gases can be hazardous to your health!

Circle all of the items you need for a safe visit hiking in the park or going to the eruption viewing area.



BINGO BLITZ

COMPLETE one down row, one across row or one diagonal row by filling in appropriate information.

While exploring in Hawai'i Volcanoes National Park, my family and I:

Picked up trash at:	Saw a movie at the visitor center called:	Saw a native bird called a/an:	Hiked a trail named:
Protected the landscape by:	Used an environmentally safe water bottle to refill at:	Recycled a can or bottle in marked bins at:	Visited Nāhuku lava tube and noticed:
Used sunscreen for protection while hiking: YES or NO	Picked up more trash at:	Visited Jaggar Museum where I discovered:	Discovered a safety sign that said:
Drank lots of water to keep healthy and hydrated. YES or NO	Discovered a safety sign that said:	Were careful when crossing the road at:	Recycled a can or bottle in marked bins at:





JOIN THE GREEN TEAM: MĀLAMA 'ĀINA



SKYLA LEE | VOLCANO

HAWAI'I VOLCANOES NATIONAL PARK is home to some of the rarest plants and animals, as well as unique volcanic landscapes. Your *kuleana* (responsibility), as a Junior Ranger is to *kōkua mālama 'āina* (help take care of the land). Our actions today affect the consequences we will face tomorrow. **Climate change** could heighten these consequences. So you can *kōkua* by leaving Hawaiian plants, animals, and landscapes alone. About 2 million people visit Hawai'i Volcanoes each year. Even little changes made by each visitor can make a big impact all together.

Draw or describe the impacts these changes would make at a special place like this.

JUST IMAGINE WHAT WOULD HAPPEN?

If each park visitor **picked an 'ōhi'a lehua blossom . . .**

x 2 million visitors



RAJLEEN CARLOS | KEA'AU

Solution

If each park visitor **didn't recycle cans and bottles . . .**

x 2 million visitors



Solution

If each park visitor **fed the Nēnē geese along the roadside . . .**

x 2 million visitors



GINA MCGUIRE | MOUNTAIN VIEW

Solution

If each park visitor **arrived in the park using a petroleum fueled vehicle . . .**

x 2 million visitors



Solution



ALA KAHAKAI NATIONAL HISTORIC TRAIL

This national historic trail is a 175-mile long trail system connecting much of the coastal areas around Hawai'i Island. It traverses through hundreds of ancient Hawaiian settlement sites and magnificent natural resources. Ala Kahakai means "path by the sea." When these historic trails were created, they were the only means of overland travel and connected people who otherwise might have been very isolated.

Segments of the old trail can be easily accessed at **Pu'uhonua o Hōnaunau National Historical Park**, **Kaloko-Honokōhau National Historical Park**, and **Pu'ukoholā Heiau National Historic Site**.



To earn a badge for this park unit, ask for trail information at one of the parks listed above, hike an Ala Kahakai Trail section and then answer these questions.

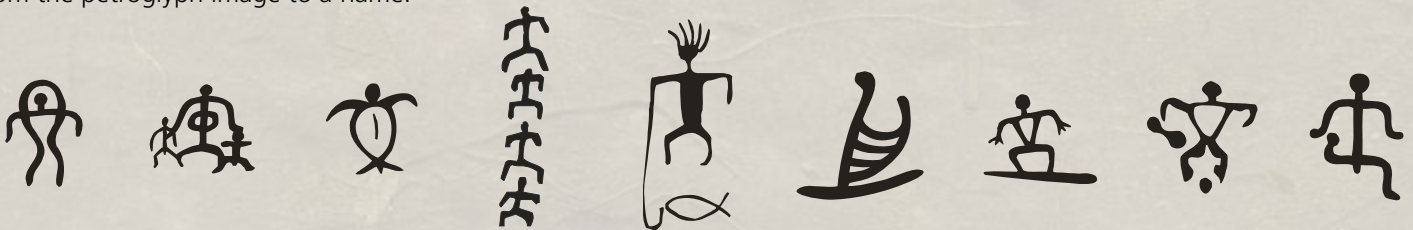
1. Which park's trail system did you choose to hike?

2. Imagine yourself traveling on this trail hundreds of years ago. What do you think would make the trip difficult?

WRITTEN IN STONE: STORIES OF THE PAST

Ki'i pōhaku or petroglyphs are images carved into the rock and are found throughout Hawai'i. They are also found in many other places around the world and tell us stories about the cultures and people who created them. They recorded in stone what the people valued and how they lived.

Here are some examples of some ki'i pōhaku seen on Hawai'i island. Match each to a possible meaning by drawing a line from the petroglyph image to a name.



HULA DANCER RUNNING MAN RAINBOW MAN SURFER FISHERMAN FAMILY MARCHERS CANOE TURTLE



WANT TO DISCOVER MORE? . . . GO SEE THE PETROGLYPHS AT HAWAI'I VOLCANOES NATIONAL PARK, PU'UHONUA O HŌNAUNAU NATIONAL HISTORICAL PARK, AND KALOKO-HONOKŌHAU NATIONAL HISTORICAL PARK.



Hawai'i Island JUNIOR RANGER PROGRAM

THIS CERTIFIES THAT

IS A JUNIOR RANGER AT:

**Ala Kahakai
National Historic Trail**

Official Stamp

Ranger Initials | Date

**Hawai'i Volcanoes
National Park**

Official Stamp

Ranger Initials | Date

**Kaloko-Honokōhau
National Historical Park**

Official Stamp

Ranger Initials | Date

**Pu'uhonua o Hōnaunau
National Historical Park**

Official Stamp

Ranger Initials | Date

**Pu'ukoholā Heiau
National Historic Site**

Official Stamp

Ranger Initials | Date

JUNIOR RANGER _____

DATE _____





GRAND PRIZE | **CHEVIS MARQUES**
KEA'AU, PUNA



DENISE KAUAHI-HIGA
WAIKOLOA, KONA



GINA MCGUIRE
MOUNTAIN VIEW, PUNA



HAILEY ROSARIO
HILO



KA'ULA TRINGALI
HILO



JULIA ENUTON
KAILUA-KONA



REGAN STRADTMANN-CARVALHO
VOLCANO, PUNA



RAJLEEN CARLOS
KEA'AU, PUNA



SKYLA LEE
VOLCANO, PUNA



ANTHONY ROSARIO
HILO



ASHLYN REESE
KEA'AU, PUNA



ADDISON REESE
KEA'AU, PUNA



HANNAH WORLEY
ALABAMA



DESTINY KAUAHI-HIGA
WAIKOLOA, KONA



AIMEE SHIRAKI
KEALAKEKUA, KONA