



Artists and Poets

based on The Kāhuna -Versatile Masters of Old Hawai'i by Likeke R. McBride
(Revised & published with permission from Petroglyph Press – Hilo, Hawaii)

There were many specialized masters devoted to Hawaiian art. They made musical instruments, gourds, ivory carvings, jewelry, and danced the hula. Many other art forms were also taught and practiced.

Hawaii shined in the arts because of the training given to the master. Many years were spent developing skills to become an expert. These masters gained much knowledge about the materials and tools they used for their artwork. They improved their abilities through observation and trial.

Although other cultures used feathers, none equaled the beauty of Hawaii's feather work. Tiny feathers of red and yellow, hardly larger than a fingernail, were tied to a very fine mesh net (*nae*). They were used to cover combs, fans, helmets, images, and robes of different designs and colors.



The Kāhuna -Versatile Masters of Old Hawai'i continued

The *kapa*, or fabric of Hawaii is outstanding for its quality and colors. Most of Polynesia used blacks and browns for their *kapa*. The Hawaiians created colorful dyes from various sources. Because of their strong connection with nature and observation skills, these masters knew which trees would provide the best bark and which plants would make the best dyes. Some Hawaiian *kapa* was so strong that it could be used to go swimming and surfing without it falling to pieces!

The kāhuna also did very well in language arts. Specialists like the poet (*haku mele*) or storyteller (*kā kā'ōlelo*) had a vast knowledge of vocabulary. They also had excellent memory skills used to recall stories or poetry, line by line. Some of these men were able to recite poems like the Kumulipo, a genealogy chant with over 2000 lines.

Some masters had extra special memory abilities. They could listen to hours of reading and repeat it without mistake... days, months, or even years later! One of the missionaries tested such a person by reading the Bible to him for over an hour. At the end, the old man recited all that had been read without a single error.

Because of vivid images, graceful rhythms, and deep meaning, Hawaiian poetry might be the finest in the world. Often a poem would have many different meanings. It might include a literal meaning that shares facts, and a figurative meaning, which symbolizes or represents an associated idea. The story or poem can also have a historical reference and a hidden meaning (*kauna*).

The language art most overlooked is that of selecting names for places, things, and people. In olden times, the importance of names was fully recognized. In order to achieve the greatest power capable, a name was never just given. It was carefully and painstakingly selected, sometimes by a group of kahuna who were experts in the meanings of words.

These Hawaiian experts of old were dedicated to the concept of *makakū*, the creative imagination of the artist. Because of their extended training and desire to create great beauty, the artwork and poetry of the ancient Hawaiians was exceptional.



The Kāhuna – Versatile Masters of Old Hawai'i: Artists and Poets



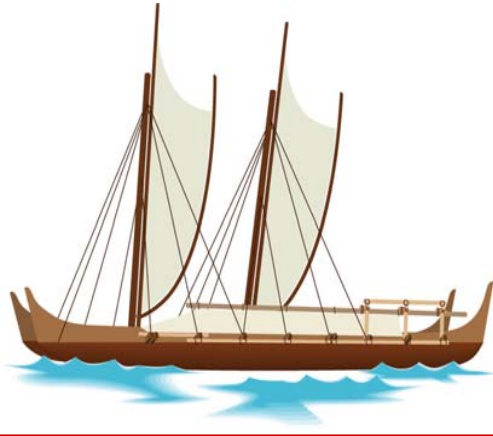
Questions:

1. How do you think children in old Hawaii became interested in learning different artwork?

2. How might an artist learn which materials and tools were the best to use?

3. Ancient Hawaiians used their memories for many real purposes. What are some things that people of today do that requires a strong memory?

4. How might an artist practice *makakū* (the creative imagination)? (You can use one art form as an example.)



Astronomers and Navigators

based on The Kāhuna -Versatile Masters of Old Hawai'i by Likeke R. McBride
(Revised & published with permission from Petroglyph Press – Hilo, Hawaii)

*Innumerable are the stars
The large stars
The small stars
The red stars of Kane, O infinite space
The great moon of Kane
The great sun of Kane
Moving, floating
Set moving about in the great space of Kane
The great earth of Kane
The rain encircled earth of Kane
The earth that Kane set in motion
Moving are the stars, moving is the moon
Moving is the great earth of Kane.
-Ancient chant-*

Of the many stars seen from the islands, just a few can be called by Hawaiian names today. Early European visitors recorded only the names of stars used for navigation. They did not write down the several thousand stars seen from Hawaii. Only the names of about 120 have been retained.

Some of the star groups of the Hawaiians match with western culture. The big dipper was called *Na-hiku* (The Seven), Gemini was known as *Ka-mahana* (The Twins), and the Hawaiians recognized the Pleiades as *Makali'i* (Little Eyes).

More than twenty-five constellation names are recognized, and there must have been more known by the kāhuna. The Milky Way was *Kau* and its detached portions, the Magellanic Clouds, were *Pulelehua Kea* (White Butterfly) for the larger and *Pulelehua Uli* (Dark Butterfly) for the smaller.

Astronomy in Hawaii was at about the same stage as in Europe in the early seventeenth century, before the telescope. Europeans then developed the timepiece (clock), which helped them calculate the equinox in order to adjust their calendar.

The Hawaiian astronomer, or *kilo hoku*, also adjusted their lunar calendar by watching the changes in where the sun rose throughout the year. Once the northernmost and southernmost points

(solstices) were fixed, the equinox could be measured halfway between them. This was done at the observatory at Ha'eha'e, where great stones caught the sun's rays as it rose above the ocean from the West. By understanding lunar cycles, the Hawaiians of old were able to predict eclipses.

From long experience, the kahuna had learned that the phases of the moon influenced crops, weather, fishing and the behavior of men. The other travelers of the night, such as planets, meteors, and comets, were thought to have a special importance in determining future events.

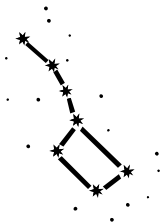
Perhaps the most skilled of all the professional astronomers were the navigators. They were able to guide a canoe across more than two thousand miles of ocean, and then return home, without the aid of a compass.

To do this, students had to memorize a fantastic amount of information. Only stars near the horizon were used as guides, so knowing the other stars in the same circle was important. By the time the student navigator finished many years of study, he could clearly recall the rising and setting points of over 120 stars.

These masters were taught in schools of navigation like the one near the easternmost point of Hawaii. They learned the direction of certain foreign lands from the position of special stones. They also were taught about the seas, the winds, and the weather found along the way.

Name _____ Period ____ Date _____

The Kāhuna – Versatile Masters of Old Hawai'i: Astronomers and Navigators



Questions:

1. Why would studying the stars be important to the Hawaiians of old?

2. How might the phases of the moon influence crops, weather, fishing and the behavior of men?

3. How do you think the ancient navigators might have learned how to memorize so much information?

4. What do you think the ancient navigators did when the skies were cloudy and stormy?

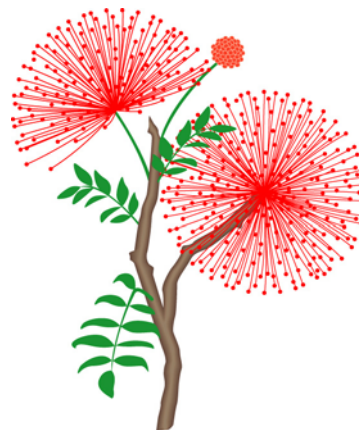


Botanists and Agriculturalists

based on The Kāhuna -Versatile Masters of Old Hawai'i by Likeke R. McBride
(Revised & published with permission from Petroglyph Press – Hilo, Hawaii)

Long before the western way to name plants was made, the Hawaiian agricultural experts had already evolved a classification system of plant groups and sub-groups. A general name linked plants with similar characteristics. The plant was then given an additional name to describe a trait, like the type of bloom. For example, *ohia* was the general name and *lehua* was added to describe the feathery nature of the bloom. *(There were many kinds of ohia, too!)*

The names of plants were not always the same on all the islands. Sometimes they even varied from one island district to another. Also, many herbs used in medicine were known to the kāhuna by special names, perhaps to keep their use a secret.



In some cases, a garden of plants used for medicine was a part of a *heiau*, or temple. Under carefully controlled conditions, plants from all over an island were grown there.

The Hawaiians were hard-working farmers with a love of growing things. They followed age old traditions which included planting in season, during certain phases of the moon. A special ceremony, usually including prayers or chants, was performed. Plants were believed to respond to love and care, and the farmer often encouraged or scolded his leafy plants so that they might do their best. A similar system of farming has been used in Europe and Asia for thousands of years and is still used in parts of America today.

The agricultural expert, or kāhuna *ho'oulu'ai*, advised when a crop should be rotated, when the field should remain the same, and when the land was *ahulu* (overcultivated) and should be sweetened by adding rotten *hau* leaves. When new land was cleared, the brush was burned on the field and the ashes scattered. In farming, the weeds were left to decay so that their strength might be added to the soil.

Little is known of the farming tricks of the experts in old Hawaii, but we do know some of the results. By the time Captain Cook came to the islands in 1779, the Hawaiians had developed several sorts of yams, 24 kinds of sweet potatoes, 70 types of bananas, and 350 varieties of taro. Taro was the most important crop to the Hawaiians.

Different plants were grown in different areas. Wetland taro was farmed in the valleys and streams were used to water the crops. In the uplands, dry land taro and sweet potatoes were the main crops. When the plants were young, the rows were covered with fern fronds to help save the moisture. On the mountains, the fields were laid out in plots that were made by the shape of the land. These fields were lined by sugar cane and bananas. Some of these early Hawaiian gardens can still be found today.

Farming in old Hawaii was very advanced. In fact, John Sutter of California was so impressed with the Hawaiian farmers, that he talked several experts and farmers into returning with him to the Sacramento River country in 1839. It was there, nearly ten years later, that their work was ended by the California gold rush. Even so, it was food imported to California from Hawaii that helped feed the many people seeking riches by looking for gold during this time in history.



The Kāhuna – Versatile Masters of Old Hawai’i: **Botanists and Agriculturalists**



Questions:

1. A name for the same plant sometimes changed in a different place. What might be problems caused because of this?

2. Why do you think kāhuna grew plants from all over an island at their temple or heiau?

3. How do you think the Hawaiians learned where to grow different plants?

4. Do you think that plants respond to people speaking to them? Explain why you think this way.



Healers

based on The Kāhuna -Versatile Masters of Old Hawaii by Likeke R. McBride
(Revised & published with permission from Petroglyph Press – Hilo, Hawaii)

At the time most European doctors were bleeding patients with dirty hands, the Native Hawaiian medical specialists (*kāhuna lapa'au*) were dealing with ulcers, heart trouble, epilepsy, and cancer. In fact, some of the practices done by Hawaiian healers 200 years ago are similar to what is done now.

Like doctors of today, the *Kāhuna lapa'au* examined the patient and either identified the illness or sent him to an expert. If the *kāhuna* could treat the illness, he gave medicine for a certain number of days, ordered the amount and kind of rest or activity, and limited the diet to certain foods or fluids to get rid of the wastes in the body's system.

Internal problems were usually treated with herb mixtures, parts of sea animals, and a few non-living substances, rather than having an operation. Yet Hawaiians did operate. Their most delicate surgery was the removal of cataracts from the eye, using the razor sharp edge of a certain kind of grass.



The Hawaiian medical experts followed the same standard of hygiene taught to medical students today. The seriously ill were often separated from others and kept in a small house. When the sick person got better, the house was destroyed. When possible, the injured were treated on the spot. If they were bleeding, a compress was used. The wound was left open to air dry. This method was used to speed healing and reduce infection. Smelling the bed or breath identified certain disorders. The kāhuna would also look at the patient's stool or watch what kinds of insects the urine attracted.

Medical practices in Hawaii were so advanced, there were recognized specialists, including:

- ❖ Kāhuna la'au lapa'au – general practitioners and pharmacologists (*studied herbs & drugs*)
- ❖ Kāhuna lomilomi -massage therapists
- ❖ Kāhuna hāhā -diagnosticians (*identified illness*)
- ❖ Kāhuna kaholua -surgeons (*minor surgery*)
- ❖ Kāhuna ha'i'wi -bone specialists
- ❖ Kāhuna ho'ohānau -obstetricians (*child birthing*)

Hawaiian medical specialists had many abilities. One example was the kāhuna ho'ohānau, or child-birthing expert. This master dealt with all of the problems of childbirth and helped the mother have a painless birth. At times, the kāhuna would take the labor pains from the mother and transfer them to the father, who would be in agony for a lengthy period

while his wife barely felt anything. Often this expert was also in charge of the care before and after birth, watching the diet, condition, and activity of the mother and child.

Ideally, the birthing expert might also know about childhood diseases. When the child was born, it was cleaned and examined all over. Special attention was given to the hands and feet. The kāhuna would study the fingers and toes as well and then be able to tell if the child would have a disease in later years.

These doctors of old did not rely on medicinal plants alone. They recognized that the mind and body work together. They knew that sickness of the body can disturb the mind. They also knew that fears and frustrations could affect the body. The entire person was treated. Many miracles took place if the ill person held strong beliefs that the gods guided the diagnosis and treatment. They also needed to have solid faith in their doctor, the medication, and the spirits involved.

Too little knowledge remains from the trained medical kāhuna of the past. Some of the information handed down has been altered by the use of new plants, and some of the learning remains as family secrets. There are some treatments that continue to be used today. The benefits of herbs used in the past are also being re-discovered. Some professionals are realizing that the medical practices of the Native Hawaiians offers valuable information.

The Kāhuna – Versatile Masters of Old Hawai’i:

Healers



Questions:

1. What skills might the medical kāhuna have needed to treat patients?
2. What might be similar between doctors of today and the medical kāhuna of the past?
3. What might be different between the doctors of today and the medical kāhuna of the past?
4. Answer either A or B:
 - A. Do you know anyone who practices medicine or uses traditional remedies?
If yes, share who they are and what do they do.
 - B. What questions come to mind after reading this story?



Geologists

based on The Kāhuna -Versatile Masters of Old Hawai'i by Likeke R. McBride
(Revised & published with permission from Petroglyph Press – Hilo, Hawaii)

The ancient Hawaiians' natural observation skills helped them understand their volcanic land. Different kinds of experts focused on the earth for their life work. *Kāhuna Kilohonua* specialized in earth study and *Kāhuna Huli Honua* were experts who knew the patterns in the landscape. Surveyors who marked land divisions were called *hi'ohi'ona*. Those who found secret caves for burial also needed to understand geology, or the study of the structure of the earth. It is claimed that an expert of the highest order could be shown a rock from any district on the island of Hawaii and name the kind of rock and the place it came from.

Rocks or stones were classified by density, use, and color. The various islands sometimes had different names for similar stones. Because of this, it was hard to know how many different kinds of stones were identified. There were most likely three categories of rock with each group containing over two dozen kinds of rock.

The stories of Pele, the volcano goddess, tell much about the geology of Hawaii. According to legends, Pele landed at unnamed islands. Next she came to Kauai, and went down the island chain searching for an ideal home.

At the places she stopped, she tested the ground, but none were suitable. At last, she came to the island of Hawaii. Pele climbed to the top of Kilauea, where she found the perfect conditions. Pele's stops along the Hawaiian island chain match the order in which geologists today believe the islands were created. The legends of the volcano goddess show that a great deal was known about how the volcanoes worked. An old chant says:

*She comes first to the top of the mountain
Young and beautiful, dancing in all her glory
Then she sleeps, becomes old and ugly
Moves through the hidden ways of the mountain
To come out near the seashore
Angry and capable of great destruction.*

This chant describes what geologists often observe. The melted rock rises and fills an enormous pool beneath the volcano summit. When there is enough pressure, the top of the mountain splits. Melted rock then spurts into the air in beautiful fiery fountains. Following the eruption, the volcano is quiet and then seals itself off. As the pressure increases, the magma begins to flow though the cracks. Twenty five miles south of

Kilauea is Lo'ihi, another active volcano whose summit is still below the surface of the ocean. One of the remarkable predictions was given to Kamapua'a by Pele:

*Someday I will build for you a new island
Another land in Hawai'i
And there we will live together
Forever in harmony*

The Hawaiians are perhaps the only people of old who connected earthquakes, volcano eruptions, and tidal waves. One wonders how they learned that the tsunami or tidal wave started in distant lands and traveled across the ocean to strike Hawai'i. An old chant shares about this:

*In far Kahiki
Pele stamps the long wave
The high wave
The broad wave
The wave that dashes the shores
Of Hamakua
And of Hilo
And overturns the land.*

The Kāhuna – Versatile Masters of Old Hawai’i: **Geologists**



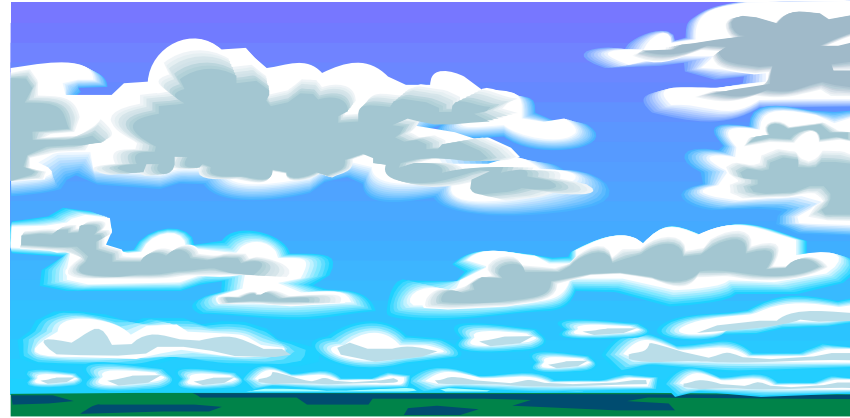
Questions:

1. How might skilled experts have learned to identify rocks from different parts of the island?

2. What might be different ways Hawaiians used rocks?

3. How do you think Hawaiians of yesterday knew there was a new Island (Hoi’hi) being formed?

4. How do you think ancient Hawaiians knew that earthquakes, volcano eruptions, and tsunamis, or tidal waves, were connected?



Meterologists

based on The Kāhuna -Versatile Masters of Old Hawai'i by Likeke R. McBride
(Revised & published with permission from Petroglyph Press – Hilo, Hawaii)

It's possible that the longest used weather station in the world is near the eastern tip of the Big Island of Hawai'i. For over seven hundred years, a hill named *Halekamahina*, House of the Moon, was the home of the *kāhuna* called *nānā uli*, weather forecasters. Those who observed the winds for the purpose of navigation were called *kilo makani*, and the *nānā ao*, who studied clouds, also worked there.

Where the sun first rises in Hawaii was the site of this school which taught the science of prediction. Besides learning from the masters, one job of the students was to carry the words of the weather prophet to those who used the information.

According to old Hawaiians, each change of the wind had a name based on its direction, strength, and temperature. Every kind of rain also had a name, taking into account its direction, how long it rained, and amount of rain.

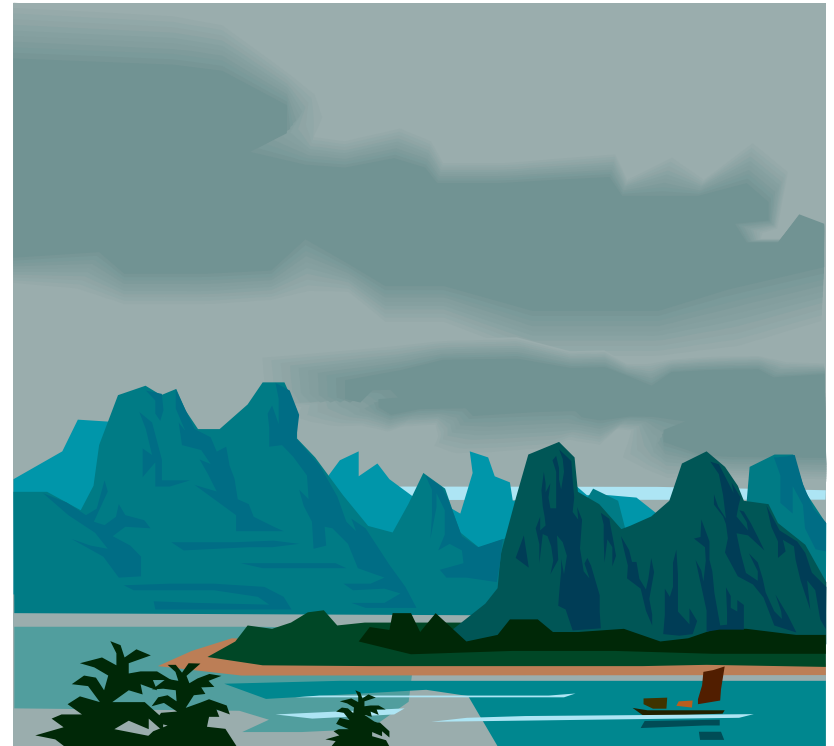


The Kāhuna -Versatile Masters of Old Hawai'i continued

These weathermen knew that during large storms the winds changed direction. They understood the clouds, sky, and behavior of the birds and animals before changes of the weather. On a stormy night if the stars did not twinkle, the kahuna knew the weather was about to change. He knew in a day or so good weather would return. Also, a red sunset or the tops of towering cumulus clouds leaning a different direction to the wind indicated a weather change.

Some kahuna relied upon observing natural or man-made whirlpools to forecast approaching storms. They believed that the water turned in one direction for “dirty weather”, and circled the opposite way when the weather was going to be fair.

In short, the weather forecasters of old Hawaii had the ability to describe any kind of condition in the sky, and they were quite accurate in weather predictions during their time.





The Kāhuna – Versatile Masters of Old Hawai’i: **Meterologists**

Questions:

1. Why do you think this site was selected for this school?
2. What kinds of people might need the information of the weather forecaster?
3. Why do you think the Hawaiians of old had so many different names for winds and rain?
4. What might you need to learn when training to do weather forecasting?