

Hawaiian Canoe Parts

O - 'Ohana goal (Why do the activity?) Family goal

Purpose:

As a family you will learn to:

- Identify the different parts of a canoe in 'Ōlelo Hawai'i and English.
- Identify the names and functions of the various parts of a canoe.
- Identify the types of materials used to construct a canoe.

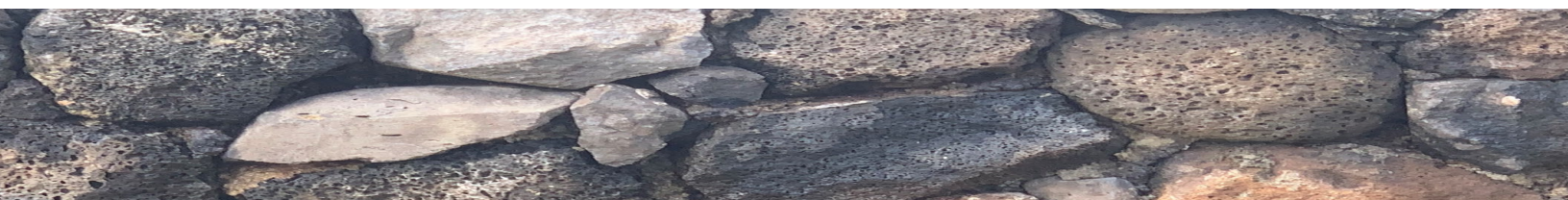
'Ōlelo No'eau:

'A'ohe 'ulu e loa'a I ka pōkole o ka lou
There is no success without preparation

H - Ha'awina (Let's do the activity) Lesson, Assignment, Task

Process:

1. Introduce the canoe by showing pictures and/or videos of canoes.
2. Discuss the following questions:
 - a. Did you see a canoe before? If so, where?
 - b. What did our kupuna use the canoe for? What do we use the canoe for?
 - c. Have anyone been on a canoe? If so, what did you do on the canoe?
3. Introduce and read *Parts of a Canoe* handout
 - a. Discuss the different parts of a canoe and it's purpose.
4. Hand out the *WA'A KAULUA* and/or *WA'A KAUKAHI* worksheet(s)
 - a. Work together to identify as many different parts of the canoe that they can in 'Ōlelo Hawaii and English.
 - b. Review the answers together.
5. Hand out the "What am I? Riddles" worksheet
 - a. Write down the answers
 - b. Review the answers together to see how many you got correct



A-Alaka'i (What did you learn? What can you teach?) To lead, Guide, Direct

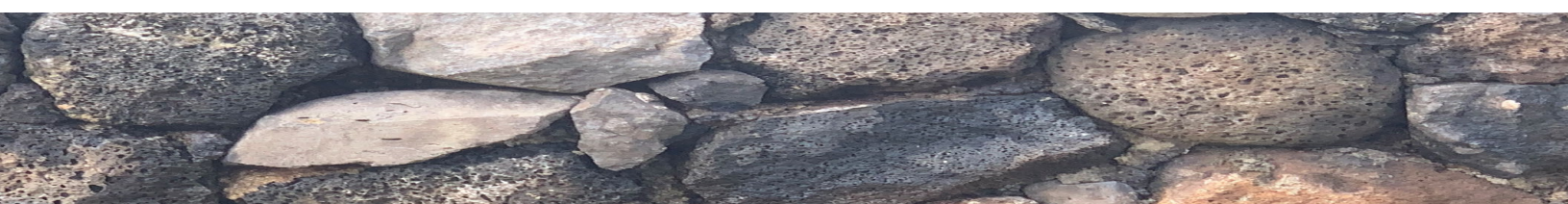
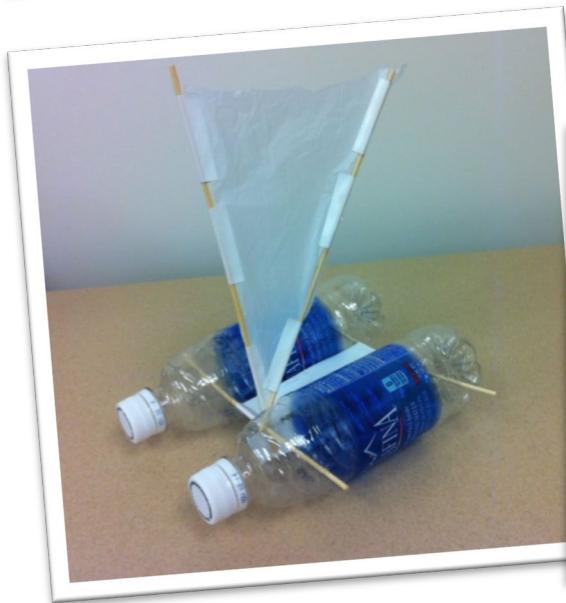
Extension activities:

1. Design and build your own canoe using items located in your community.
 - a. Canoe ideas
 - i. Natural materials
 1. African tulip pods or coconut husk for hulls, leaves for sails, etc.
 - ii. Recycled materials
 1. Water bottles for hulls, plastic bags for sails, etc.
 - b. Name the parts of their canoe.

Observe:

Test canoes to see:

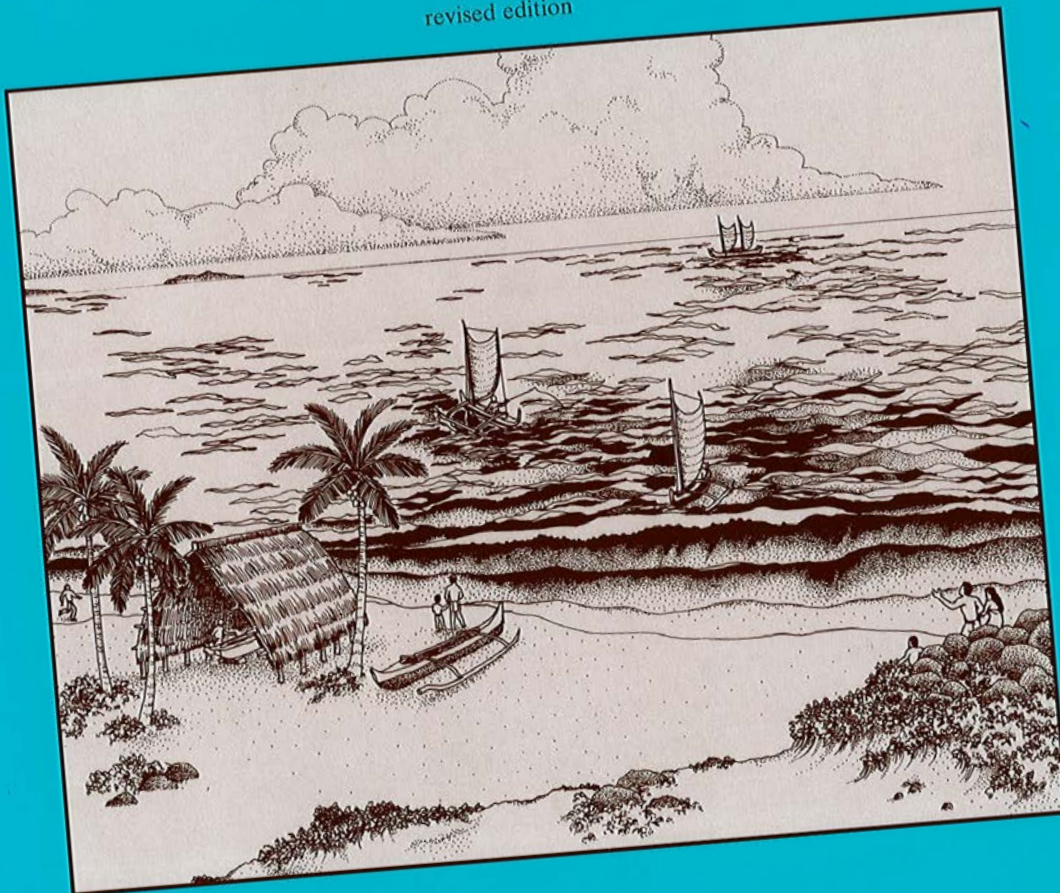
- Does the canoe float?
- How much weight does your canoe support?
- How straight do they sail?



The following handout was taken from ***Hawaiian Canoe-Building Traditions (revised edition)*** by Naomi N. Y. Chun, Honolulu: Kamehameha Schools Press, 1995

Hawaiian Canoe-Building Traditions

revised edition



developed by Naomi N.Y. Chun
illustrated by Robin Y. Burningham

Parts of a Canoe

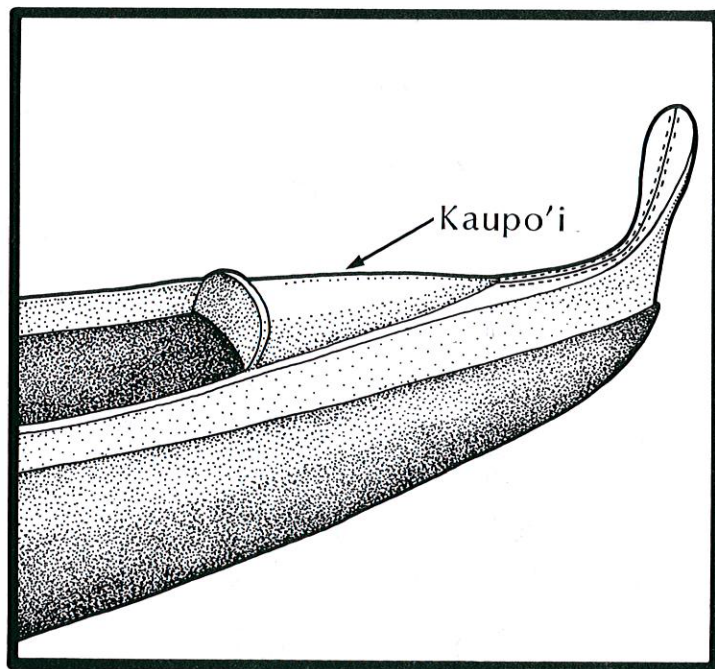
1. The hull (*kuamo'o* or *kino*) is the main feature of a canoe. It is the foundation of the canoe, and provides storage space and shelter for the paddlers. Koa is the primary wood used for the hull. Other woods utilized are kukui, 'ulu, wiliwili, 'ohi'a hā, and on occasion, niu.

2 and 3. *Kupe* is the proper term for the upright pieces. Today, however, the *kupe* are more commonly known as *manu*. The forward upright piece is called the *manu ihu*. The aft upright piece is called the *manu hope*. The term *ihu* refers to the front, or the bow, of the canoe. The term *hope* refers to the back, or the stern, of the canoe.

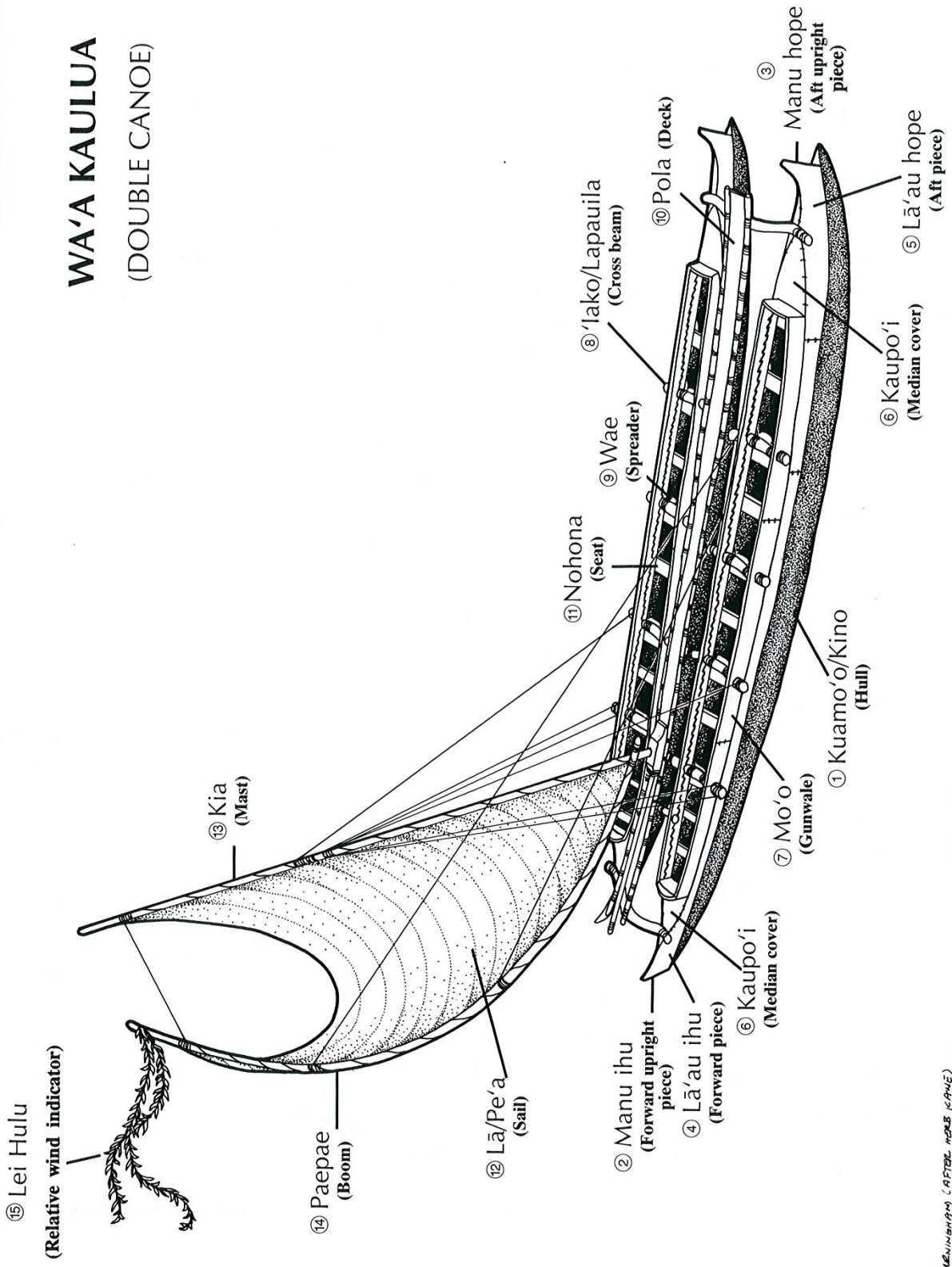
4 and 5. The forward piece is called the *lā'au ihu* and the aft piece is called the *lā'au hope*. The fore and aft pieces (2, 3, 4, and 5) help to break, shed, and keep seawater out of the hull. They also provide buoyancy for the canoe. That is, they enable the bow to be lifted up during rough seas. Wood from the 'ahakea and 'ulu trees are used for the fore and aft pieces.

6. The median covers are called *kaupo'i* (also known as *kuapo'i*). They provide extra protection against incoming waves that may enter from the bow or the stern. The *kaupo'i* are detachable, as well as optional, parts of the canoe.

The woods used to make the *kaupo'i* are the koa, kukui, 'ulu, and 'ahakea.



WA'A KAULUA (DOUBLE CANOE)



*REPRODUCED FROM "AFTER HOURS KANE"

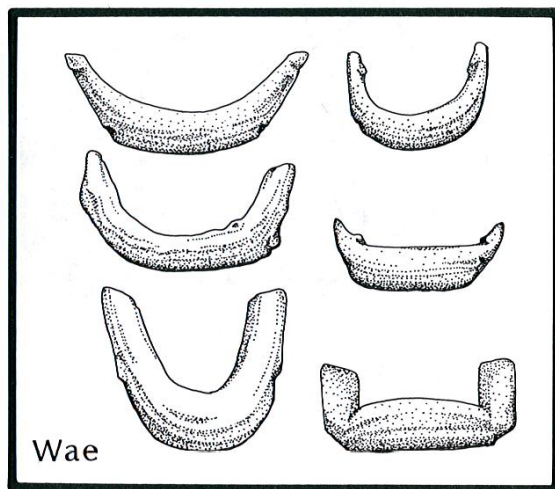
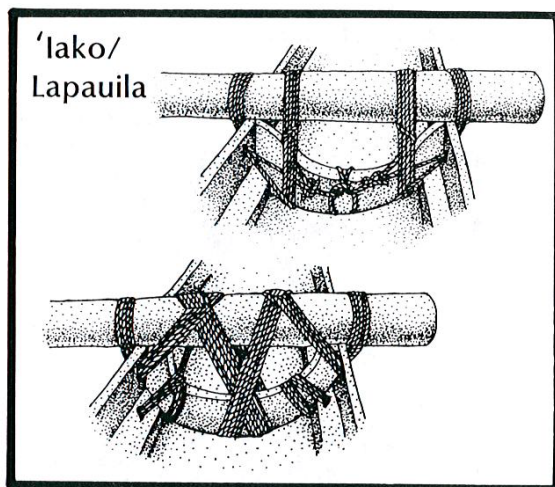
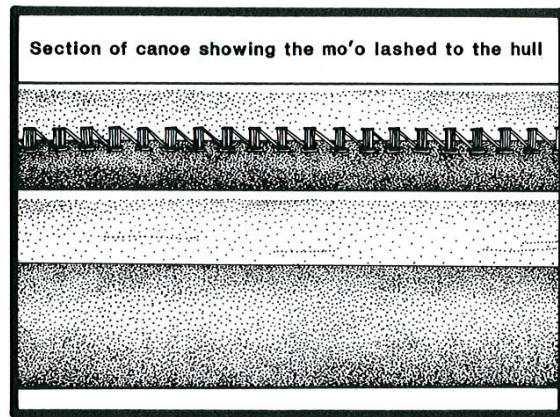
7. The gunnels (*mo'o*) are "extra," rim-like pieces which add height to the hull. They prevent water from entering the hull, which may lead to the canoe being swamped.

Many types of woods are used for the *mo'o*, namely: 'ahakea, 'ulu, koa, kawa'u, 'ohi'a hā, manono, naio, kolea, holei, kukui, ho'awa, and 'ala'a.

8. The cross beams, or cross booms, that join the hulls of a double canoe are called *'iako* or *lapauila*. A large double canoe will usually require four to five cross beams. The *'iako* also help to raise the deck above the water, which eliminates wave resistance.

'Ōhi'a lehua, a strong wood with a natural arch, is the preferred wood for the cross beams.

9. Canoe "spreaders" (*wae*) serve as points of attachment for the cross beams and the hull. The *wae* also act as braces so that the hull does not twist. The *wae* are essential to the canoe because they absorb and distribute heavy weight

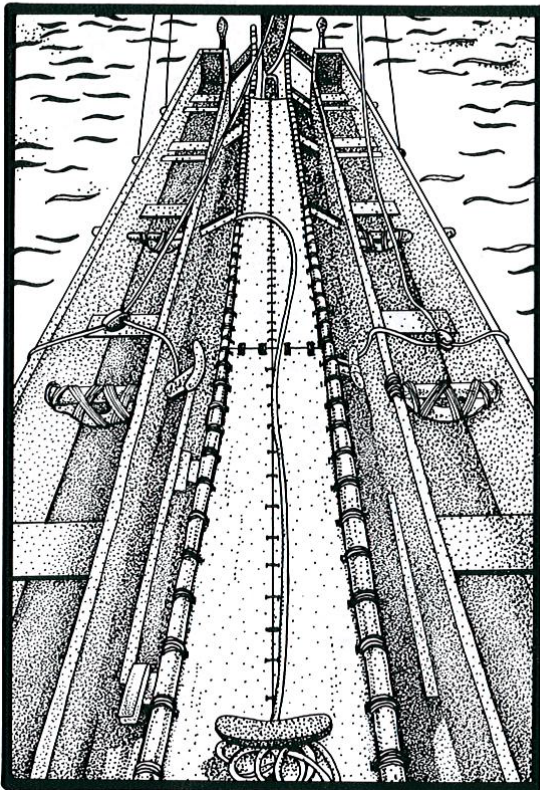


loads that the gunnels and the immediate hull area cannot withstand.

The wae are generally U-shaped or V-shaped. They are usually made with the root of the 'ōhi'a lehua tree because the root is strong and has a natural curve.

10. The deck (*pola*) is a platform that lies between the two hulls. It provides space for passengers, their gear, and the *hale lanalana* (a house that is sometimes built for a double canoe).

The four primary woods used to fashion the pola are 'iliahi, 'ōhi'a lehua, lama, and 'ahakea.



Pola

Section of canoe showing the pola lying between the two hulls.

The nohona are located within the hulls.

11. The general term for the canoe seats is *noho 'ana wa'a*, or simply, *nohona*. The seats have different names according to where they are located within the hull(s). For example, *pāpaki'i* is the name of the steersman's seat. The seat directly in front of it is called *pani*, which means steersman's substitute.

Canoe seats also function as cross braces. They help keep the structure of the hull rigid, thus preventing possible warping damage to the canoe.

The nohona are usually made with koa, kukui, or 'ulu woods.

12. In early Hawai'i, canoe sails (*lā* or *pe'a*) were made of finely-woven, pandanus leaf (*lau hala*) matting. A distinctive feature of Hawaiian sails is that they resemble the shape of a crab's claw.

13. The mast (*kia* or *pou*) is a long, straight pole to which the sail, the boom, and rigging lines are attached. Young koa trees or 'ōhi'a lehua wood were used to fashion the mast.

14. The boom (*paepae*) is a long, curved pole. Tied to it are the sail and rigging lines. The boom helps to support the sail. Physically, it has to be flexible enough to adjust to the movements of the sail. Hau, a soft and pliable wood, is often used to make the boom.

15. The relative wind and speed indicator (*lei hulu*) is usually made with feathers (*hulu*) from a chicken (*moa*). It is attached to the top of the boom or the mast. The lei hulu indicates to the crew which direction the wind is blowing and how fast the canoe is traveling.

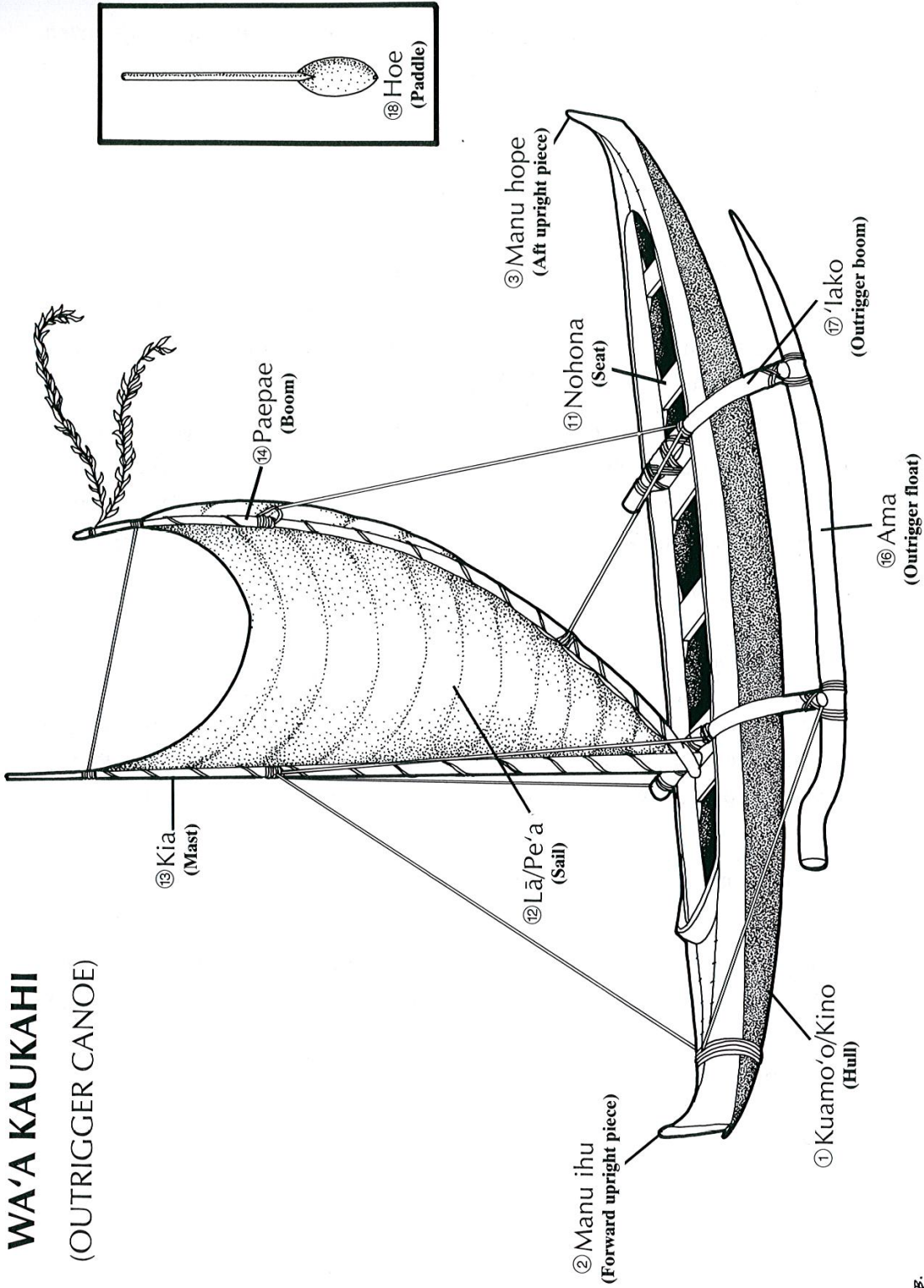
Single-hulled canoes (*wa'a kaukahi*) differ from double-hulled canoes in that they feature an outrigger float and an outrigger boom.

16. The outrigger float (*ama*) is connected to the hull by the boom(s). The ama is needed to provide "balance" for the hull. It prevents the canoe from continually tipping over. Because the ama should be light in weight, it is usually made from wiliwili, a light wood.

Double-hulled canoes do not need an ama because the second hull acts as the "float."

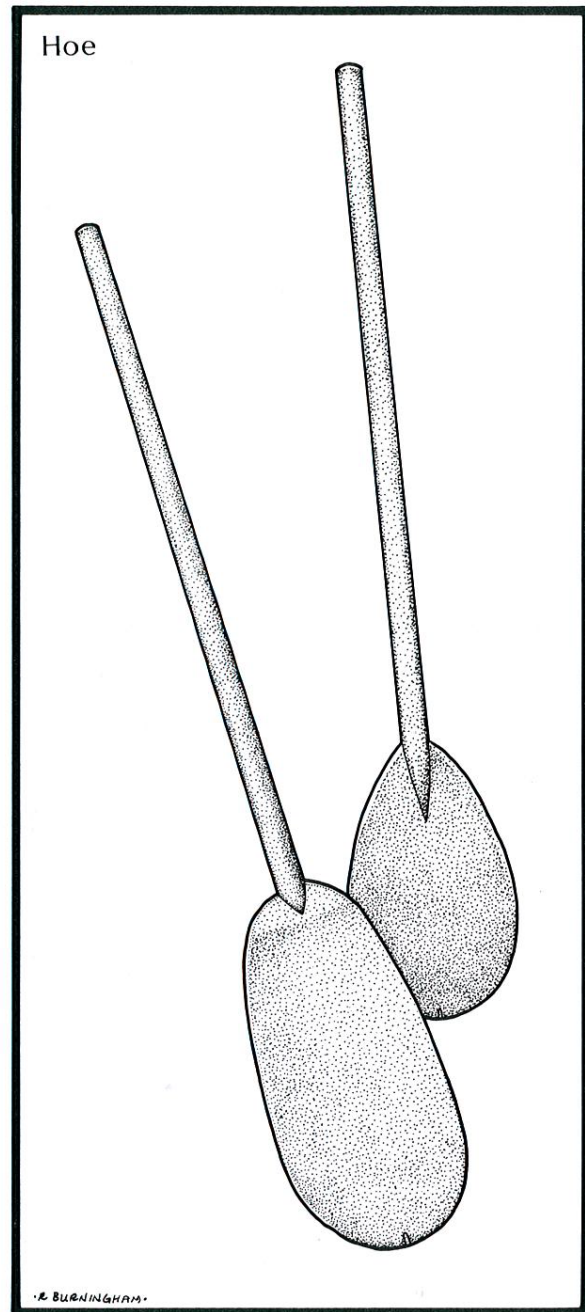
17. The 'iako is the outrigger boom for a single-hulled canoe. Its main function is to support the float. By doing so, the 'iako provides stability for the canoe. Hau is the primary tree used for the 'iako. Sometimes the boom is made from the 'ahakea tree.

WA'A KAUKAHI (OUTRIGGER CANOE)



18. An important accessory for the canoe is the paddle (hoe). The Hawaiian paddle is characterized by its long, thick shaft and short, wide blade. It is designed to propel a light or heavy canoe through rough water. Hawaiian paddles show distinct and wide variations.

The favorite wood for making a paddle is koa, particularly the yellow-colored koa *lā'au mai'a*. The curly koa, or *koai'e*, is also highly valued. Other woods, such as *'ahakea*, *hau*, *kāwa'u*, *naio*, and *'ulu*, are occasionally used for making paddles. But they are not as popular a wood as koa.



"WHAT AM I?" RIDDLES

Read the section on "Parts of the Canoe." Then, identify the eight different canoe parts that are described in the paragraphs below. Answer each "What am I?" riddle with the correct term from the **Word Bank**.

WORD BANK

lā/pe'a

ama

kia/pou

pola

kino/kuamo'o

'iako

lei hulu

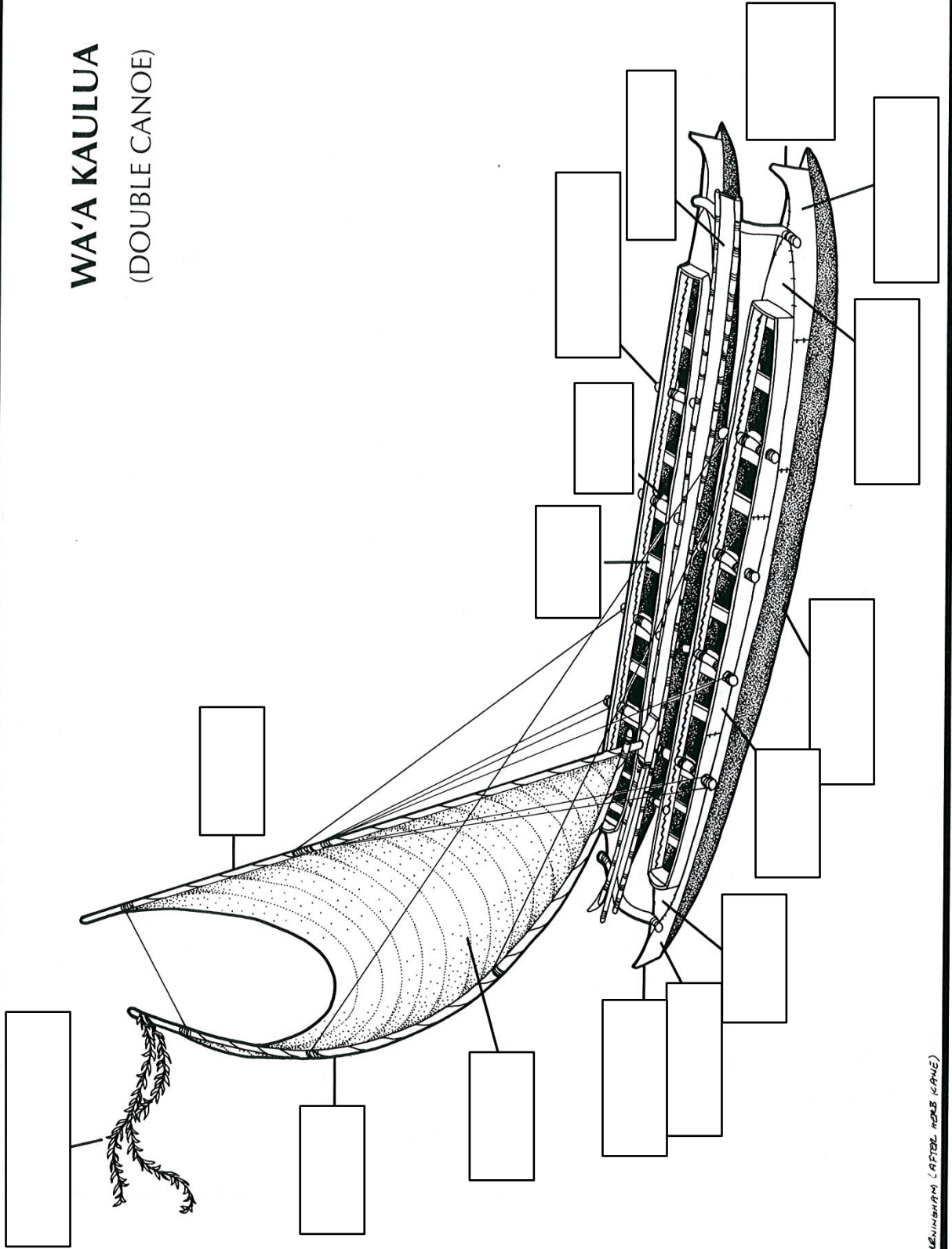
mo'o

1. I am the major part of the canoe. I prefer to be made with *koa* wood. What am I? _____
2. I give extra height to the hull. By adding me onto the hull, I prevent water from entering the canoe. Among the many woods used in my construction are *'ahakea*, *'ulu*, and *koa*. What am I? _____
3. I am located near the highest point of the canoe. I indicate to the crew the direction of the wind and how fast the canoe is traveling. What am I?

4. I am usually made of finely-plaited *lau hala* matting. I am especially helpful to the canoe when it is sailing downwind. What am I? _____
5. I am built for a double canoe. I provide space and shelter for passengers and their gear. I am usually made from *'iliahi* wood. What am I?

Choose a term from the **Word Bank** that you have not already used. Make up a riddle for that particular canoe part. Write your riddle below.

WA'A KAULUA
(DOUBLE CANOE)



WA'A KAUKAHI
(OUTRIGGER CANOE)

