

## DOCUMENT RESUME

ED 238 795

SO 015 333

AUTHOR Pescaia, Mahealani; Kinoshita, Jane, Ed.  
 TITLE Early Hawaiian Life: Instructional Materials/Resources for Social Studies (Elementary).  
 INSTITUTION Hawaii State Dept. of Education, Honolulu. Office of Instructional Services.  
 REPORT NO RS-81-1647  
 PUB DATE Aug 81  
 NOTE 450p.  
 PUB TYPE Guides - Classroom Use - Guides (For Teachers) (052)

EDRS PRICE MF01/PC18 Plus Postage.  
 DESCRIPTORS Agriculture; Concept Teaching; Cross Cultural Studies; Cultural Awareness; \*Cultural Background; Cultural Education; Ethnicity; \*Ethnic Studies; Folk Culture; Geography; Government (Administrative Body); Grade 4; Handicrafts; Housing; Instructional Materials; Intermediate Grades; Land Use; Learning Activities; Migration; \*Social History; Social Structure; Social Studies; \*State History; Units of Study

IDENTIFIERS Fishing; \*Hawaii

## ABSTRACT

Materials in this curriculum guide for a fourth grade course on Hawaii prior to Western contact use a cross-cultural approach to teach about that state's multicultural heritage. Following an introduction, which provides a course outline and objectives, nine study units cover geography, migration, canoe building, land division, society and government, agriculture, fishing, shelter, and traditional cloth-making. Each unit is organized according to the following format: overview, rationale, teacher background information, generalizations, concepts, objectives, reference index, resource bibliography, and extensive development of lessons and activities to supplement the unit. Drawings also supplement curriculum materials. Appendices provide additional background material, including readings on folklore, the traditional extended family, traditional social mores and responsibilities, religion, social classes, and symbols of royalty. An index to references concludes the guide. (LP)

\*\*\*\*\*  
 \* Reproductions supplied by EDRS are the best that can be made \*  
 \* from the original document. \*  
 \*\*\*\*\*

ED238795

PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

P. T. ZUNIG

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

U.S. DEPARTMENT OF EDUCATION  
NATIONAL INSTITUTE OF EDUCATION  
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

This document has been reproduced as received from the person or organization originating it.

- Minor changes have been made to improve readability.
- Points of view or opinions stated in this document do not necessarily represent those of the ERIC project.

Instructional Materials/Resources for Social Studies (Elementary)

# EARLY HAWAIIAN LIFE

Developed and written by: Māhealani Pescaia  
 Edited by: Jane Kinoshita

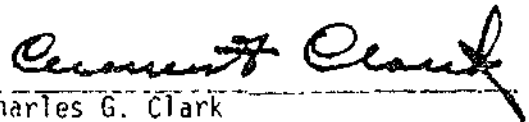
54 015 333

## FOREWORD

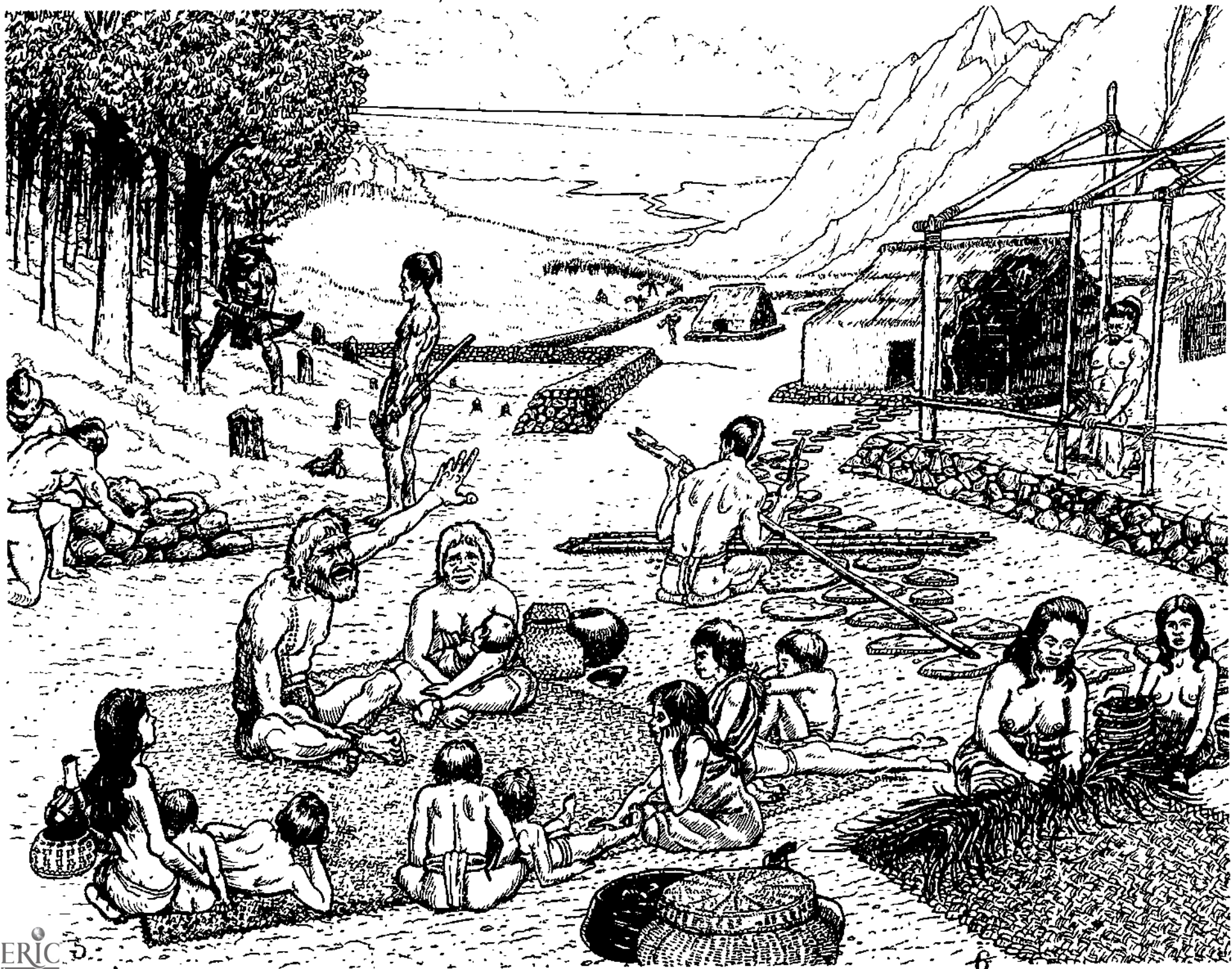
This publication is designed to aid teachers who will be teaching a one-year social studies program of studies in the fourth grade at the elementary level. The curriculum focuses on life in early Hawaii and provides the background knowledge and develops understanding of the culture that evolved in Hawaii prior to the influences of Western civilizations and cultures. The curriculum is designed to capture the essence of the Hawaiian cultural heritage upon which the multicultural Hawaiian society of today was built.

This curriculum resource guide is presented in nine units of study. Each unit follows the following format: (1) an overview and rationale for subject of the unit; (2) teacher background information; (3) generalizations; (4) concepts; (5) objectives; (6) index to references; (7) bibliography of resources; and (8) an extensive development of suggested lessons and activities to implement the unit of study. The guide also includes drawings created specifically for use with this curriculum and extensive appendices which provide additional background material for students and teachers.

This guide was developed and written by Māhealani Pescaia, a resource teacher for the Hawaiian Studies Program, and edited and prepared for publication by Jane Kinoshita, a resource teacher for the Social Studies program in the Office of Instructional Services. Valuable consultative assistance was provided by Robert Lokomaika'iokalani Snakenberg, educational specialist for Hawaiian Studies and Dorothy Hazama, associate professor of education at the University of Hawaii.



Charles G. Clark  
Superintendent of Education



## TABLE OF CONTENTS

Foreword . . . . .	i
Introduction . . . . .	1
Course Generalizations . . . . .	3
Interrelationship of Major Hawaiian Culture Concepts (diagram) . . . . .	8
Course Outline . . . . .	9
Skill and Affective Objectives . . . . .	10
Culture Study Through Dramatic Inquiry . . . . .	11
Unit I: Geography . . . . .	14
Unit II: Migration . . . . .	33
Unit III: Canoe Building . . . . .	56
Unit IV: Land Division . . . . .	71
Unit V: Society and Government . . . . .	89
Unit VI: Food-Agriculture . . . . .	130
Unit VII: Food-Fishing . . . . .	148
Unit VIII: Shelter . . . . .	167
Unit IX: Kapa . . . . .	187
Appendix I: 'Ohana . . . . .	202
Appendix II: Story of Hāloa . . . . .	204
Appendix III: Children of the 'Ohana . . . . .	205
Appendix IV: Concepts of Self and 'Ohana . . . . .	208
Appendix V: Ho'oponopono . . . . .	225
Appendix VI: Class System . . . . .	228
Appendix VII: Hawaiian Religion . . . . .	231
Appendix VIII: Kāhuna . . . . .	236
Appendix IX: Kapu System . . . . .	241
Appendix X: Symbols of Royalty . . . . .	224
Appendix XI: Index to References - Miscellaneous . . . . .	248

## INTRODUCTION

Early Hawaiian Life focuses on the traditional culture of the Hawaiians. As with the study of any culture, Hawaiian culture should be studied from the viewpoints of members of that culture. In this study it is important that teachers use the cross-cultural approach and continually move back and forth from the traditional Hawaiian culture to the students' own cultural experiences and from the historical to the contemporary. Through this process, students will understand that there are many reasons for the different ways of solving the problems of living or coping with life situations.

Culture is the sum total of what people believe, feel, do, and have. Each characteristic of culture is interrelated with all other characteristics. However, for the purpose of studying Hawaiian culture, various aspects of the culture have been singled out as units of study. These units include:

UNIT I: GEOGRAPHY. This unit develops map and globe skills, explores the formation of the islands, and examines the effects of geography on Hawaiian culture.

UNIT II: MIGRATION. This unit inquires into the reasons for the migration of the early Hawaiians and later ethnic groups to Hawai'i. It examines the Polynesian migration theories and the impact of the various groups to Hawai'i.

UNIT III: CANOE BUILDING. This unit examines the process of canoe building, the tools and resources used, the role of the 'ohana (family) and the importance of religion.

UNIT IV: LAND DIVISION. This unit examines the method and units of land division, utilization of the land and the roles played by various members of the 'ohana within the ahupua'a, a unit of land division.

UNIT V: SOCIETY AND GOVERNMENT. This unit examines the basis of Hawaiian society which is the 'ohana. It inquires into its characteristics, role of religion in determining the rules of living and the inter-relationship of the rules and roles of the class system and the governmental system.

UNIT VI: FOOD-AGRICULTURE. This unit examines how the Hawaiians met part of their basic need for food through the cultivation of food plants. This unit also explores the methods of food preparation, the influence of the kapu system, system of rules, and the roles played by various members of the 'ohana, or family, in the cultivation of food plants.

UNIT VII: FOOD-FISHING. This unit explores the sea animals used as food by the Hawaiians, the methods used to procure fish and other foods from the sea, the conservation practices and the importance of the Hawaiian fishpond.

UNIT VIII: SHELTER. This unit examines the process of building a Hawaiian hale or house, the tools and resources used, the roles played by members of the 'ohana and the importance of religion.

UNIT IX: KAPA. This unit examines the process of making kapa cloth, the tools and resources used, the many uses of kapa and the role of religion.

Each unit includes an overview, background information, index to references, generalizations, concepts, objectives, learning activities, related activities and student and teacher references. Teachers are encouraged to use their imaginations and creativity to bring to life the story of the Hawaiian people.

Course generalizations and a course outline are provided for teachers in this introductory section, to get a quick overview of the main ideas and topics of this study. Skill and affective objectives which should be included in the teachers' instructional plans are also provided. Teachers should incorporate these objectives into their plans as much as possible. Specific social studies content objectives are included with each unit. The skill and affective objectives are followed by guidelines for using the process of dramatic inquiry, which is an integral part of the lessons in this guide. This process uses dramatization and encourages inquiry into the life processes of a culture to get an inside view of the culture.

The appendix section includes readings for teachers and other information which may be helpful to the teachers.

Unless otherwise specified, films listed are available from the Department of Education's Film Library.

The ideas and suggestions in this guide can also serve as springboards to other relevant and creative lessons.

## COURSE GENERALIZATIONS

### Social Studies Generalizations

- Every society has developed its own beliefs, ideas, skills and technology which can be called its culture.
- The physical and social environment influences people's ways of living; people in turn influence the environment.
- People's lives are influenced by their physical location on the earth and the availability of natural resources.
- Geographic factors influence where and how people live and what they do; people adapt, shape, utilize, and exploit the earth to meet their needs.
- People need to learn to adapt to change since change is continuous and universal.
- Changes within cultures may be brought about through contact with other cultures and societies.
- Not all change is progress; change may or may not be beneficial.
- All cultures or communities experience change in some form although their response and adaptation to change varies.

### Hawaiian Culture Generalizations

- The culture of the Hawaiians consists of the knowledge, beliefs, and values which their society has developed to establish rules for living and methods of adapting and utilizing the resources.
- The lives of the early Hawaiians were influenced by their culture and availability of natural resources.
- Geographic features and natural resources of the islands influenced the way the early Hawaiians divided their land, which in turn affected the way the Hawaiians met their need for food.
- Changes within the Hawaiian culture have been brought about through contact with western and eastern cultures.
- Some changes have benefited the Hawaiians; others have brought about the decline of the Hawaiian population, the deterioration of the culture, or other problems and misery.



## Social Studies Generalizations

- The historical past influences the present; the development of social, political, and economic institutions has been influenced by what has gone on before.
- Customs, holidays, and ways of thinking are the result of past history.
- People are influenced by and must adjust to the social institutions created by their society; failure to adjust can lead to adverse consequences.
- All social groups and societies require a system of behavior for humanity to survive.
- An individual's cultural surrounding exerts a powerful influence throughout life. People think, feel, and act according to the dictates of their culture in order to be an acceptable part of it.
- All groups, communities, and societies establish customs, rules, and laws through social control.
- Social control includes making laws, changing laws, interpreting laws, and enforcing laws.
- As members of a family, a community, a nation, and the world, people are interdependent for the satisfaction of needs.
- The culture of a community determines how resources will be allocated and used.
- Decisions made on how resources will be used affect economic organization.

## Hawaiian Culture Generalizations

- Hawai'i's present social, political, and economic institutions are the direct result of Hawai'i's past history.
- The immigrants to Hawai'i, the early Hawaiians as well as the later ethnic groups, came to Hawai'i for economic, political, or social reasons and brought with them their traditions, customs, beliefs and values which influence Hawai'i today.
- Life in early Hawai'i was dominated by the kapu system which was a social, political, economic, and religious system. It was the most powerful influence on the Hawaiians and was intertwined with every aspect of life. Failure to conform led to dire consequences.
- The early Hawaiians were group oriented and the important concepts of everyday life included:
  - laulima - cooperation, many hands working together
  - kōkua - help
  - alu like - work or act together
  - aloha - love
  - lōkahi - harmony
  - ho'omanawanui - patience
  - kuleana - responsibility
- The early Hawaiians were interdependent within the ahupua'a, a unit of land division, for the satisfaction of needs.
- Hawai'i today is dependent on other states and countries to fulfill basic needs and wants.
- The 'āina, or land, was entrusted by the gods into the care of the ali'i nui, or highest chief. The land was meant to be used carefully to meet people's needs.

### Social Studies Generalizations

- The wise use of economic resources is essential for the growth of our state; this involves understanding of related concepts such as scarcity, interdependence, specialization, market economy and public policy.
- The satisfaction of people's needs depends on proper planning and the conservation of both natural and human resources.
- Individuals, families, and groups are organized in a society by social classes.
- Societies develop specific institutions (family, education, religion, government, economic institutions) to carry out the basic functions or meet the needs of society.
- Patterns of family life differ among various cultural groups, but the basic functions are the same.
- People from many different social, economic, ethnic and national groups have settled in the United States.

### Hawaiian Culture Generalizations

- The kapu system of early Hawai'i regulated the production, gathering, and allocation of resources.
- Men, women, children, and kāhuna, or experts, all had definite roles to play in the economic system of early Hawai'i.
- The laws of early Hawai'i included conservation of natural resources. These laws helped to ensure fulfillment of the needs of the future.
- Early Hawaiian society was hierarchical. The ali'i, chiefly class, was the highest class of people followed by the maka'āinana, the commoners, and then by the kauwā, outcasts.
- The basic functions of early Hawaiian society were regulated by the kapu system.
- The Hawaiian 'ohana was an extended family system in which members shared goods and services to meet their needs.
- Various groups of people from different parts of the world have settled in Hawai'i and contributed to life in Hawai'i.

### Social Studies Generalizations

- Knowledge of location can help in understanding the natural and physical environment people live in.
- Earth is a planet in space made up of land, water, and atmosphere.
- Records, printed documents and artifacts provide information on civilizations' accomplishments.
- In the contemporary world, events have a significance which reaches far beyond the limits of a nation or place of origin; in such circumstances, the world-wide relationship of events must be understood.
- People are part of a world-community; thus their attitude and values should reflect this orientation.
- Governing bodies are structured according to the purposes of the group, community or nation and may change as values and interests of the group change.
- Political organization (government) resolves conflicts and makes interaction easier among people within their environment.
- A democratic society is dependent upon citizens who exercise civic responsibility.

### Hawaiian Culture Generalizations

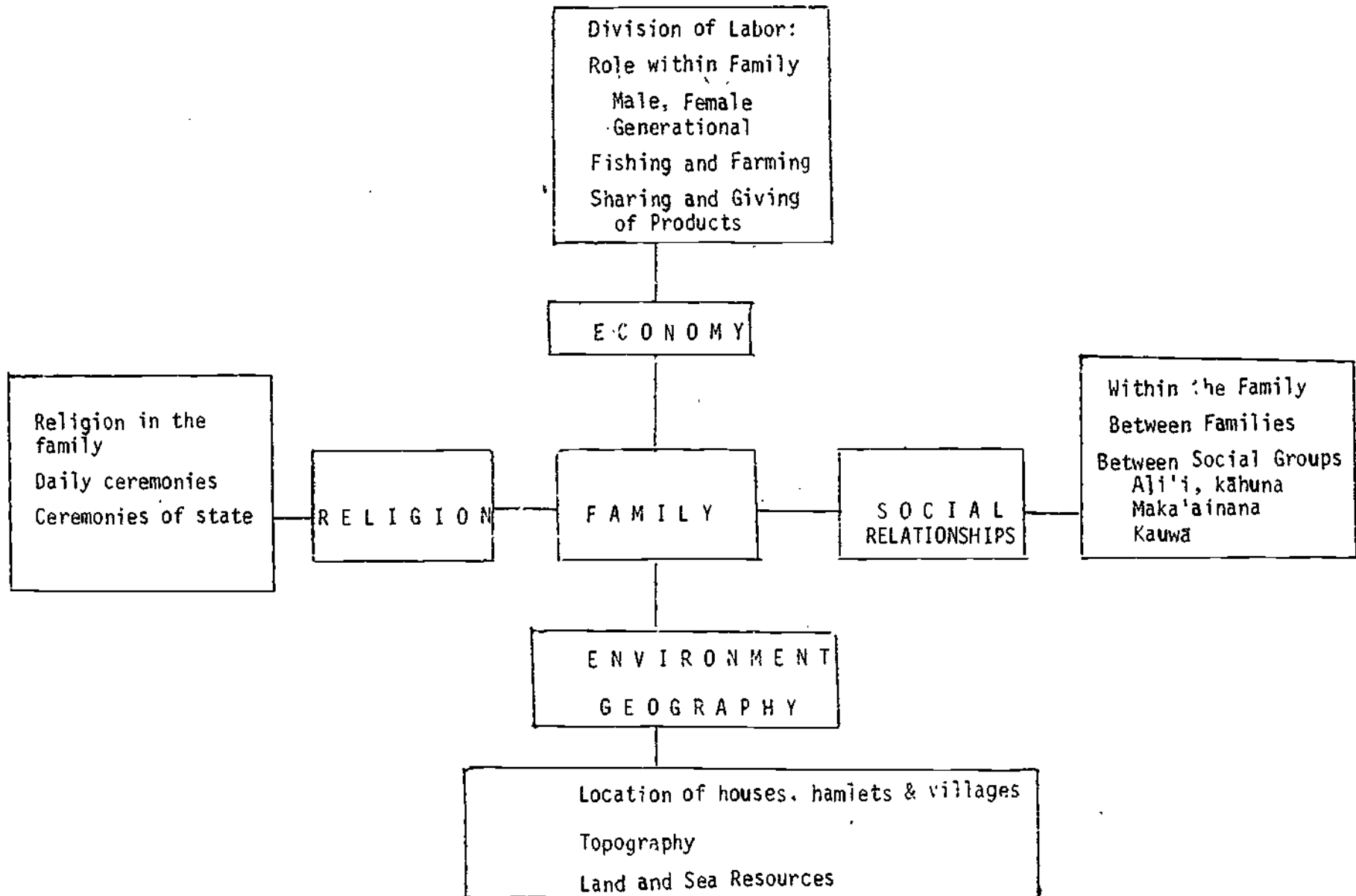
- The physical environment of Hawai'i is partly the result of Hawai'i's location in the tropics.
- The climate of Hawai'i is the result of the interplay of the following factors: its altitude, location in the tropics in the Pacific Ocean, the terrain, and Hawai'i's location in the zone of the northeast tradewinds.
- Our knowledge of traditional Hawaiian life comes from oral histories, Hawaiian chants, legends, and journals.
- Since Hawai'i is part of a world community, it is essential that its citizens understand the worldwide relationship of events and reflect a global perspective in attitudes and values.
- The ali'i, or chiefs, exercised power and leadership which were sanctioned by the gods and supported by the maka'āinana, or commoners.

### Social Studies Generalizations

- The basic tenets of a democratic government should be understood by all American citizens, which include the functions and services of the government and an understanding of the Constitution.
- The understanding of the workings of local and state governments is a civic responsibility of all Americans.

### Hawaiian Culture Generalizations

INTERRELATIONSHIP OF MAJOR HAWAIIAN CULTURE CONCEPTS



## COURSE OUTLINE

### UNIT I: GEOGRAPHY

- A. Map Skills
  - 1. Direction
  - 2. Latitude, Longitude
  - 3. Distance
  - 4. Landforms
  - 5. Waterforms
- B. Geology
- C. Climate
- D. Population

### UNIT IV: SOCIETY AND GOVERNMENT

- A. 'Ohana
  - 1. Characteristics
  - 2. Functions
- B. Role of Religion
- C. Social Structure
- D. Relationship of Religion and Government

### UNIT VII: FOOD - FISHING

- A. Methods of Fishing
- B. Areas of Fishing
- C. Fishponds
- D. Role of Religion

### UNIT II: MIGRATION

- A. Polynesian Migration
  - 1. Reasons for migration
  - 2. Migration theories
  - 3. Impact on Hawai'i
- B. Ethnic Groups
  - 1. Reasons for migration
  - 2. Impact on Hawai'i

### UNIT V: LAND DIVISION

- A. Method and Units of Division
- B. Utilization of Land
  - 1. Early Hawai'i
  - 2. Contemporary Hawai'i
- C. Roles of 'Ohana Members

### UNIT VIII: SHELTER

- A. Process of Building Shelter
- B. Materials and Tools
- C. Role of Religion
- D. Roles of 'Ohana Members

### UNIT III: CANOE BUILDING

- A. Process of Canoe Building
- B. Tools and Resources
- C. Role of the 'Ohana
- D. Role of Religion

### UNIT VI: FOOD-AGRICULTURE

- A. Food Plants
- B. Cultivation of Taro
- C. Methods of Cooking
- D. Role of Religion
- E. Roles of 'Ohana Members

### UNIT IX: KAPA

- A. Process of Producing Kapa
- B. Tools and Resources
- C. Uses of Kapa
- D. Role of Religion

## SKILL AND AFFECTIVE OBJECTIVES

- Read news articles from a local newspaper and relate the important details.
- Initiate task and seek help when needed.
- Ask appropriate questions to identify and clarify a problem and determine the information needed to solve the problem.
- Ask questions to gather information.
- Use a variety of sources to assure information, including retrieval of alphabetically-stored and numerically-stored information.
- Gather information from various sources and organize the data.
- Raise questions based on data gathered from many sources.
- Distinguish statements of fact from opinion when reviewing information for solving a problem.
- Distinguish between relevant and irrelevant data when reviewing information.
- Interpret organized information and draw simple generalizations.
- Apply study skills in the classroom and library.
- Listen and accept opinions of others and engage constructively in social studies discussions.
- Contribute an opinion or viewpoint in a discussion.
- Articulate and explain a viewpoint other than their own in a group discussion.
- Contribute to the completion of a group task.
- Demonstrate increasing social skills in peer relationships.
- Demonstrate the following 'ohana concepts in relationships and group tasks:

laulima  
kōkua  
alu like  
lōkahi

cooperation  
help  
work together  
harmony

ho'omanawanui  
aloha  
kuleana

patience  
love  
responsibility

## CULTURE STUDY THROUGH DRAMATIC INQUIRY\*

What is the best way to study another culture? Anthropologists say that one must take oneself out of one's culture and into another culture in order to get an inside view. One way of experiencing another culture is through the process of dramatic inquiry. This is a systematic approach to learning about another culture through dramatization. In this process, the students are encouraged to dramatize possible uses of cultural artifacts within an arranged environment and to explore ideas and inquire about the life processes of a culture.

The following outline suggests the possible sequence of activities:

### 1. An Arranged Environment -

An array of familiar as well as unfamiliar Hawaiian artifacts and equipment is displayed.

Examples:

'umeke (bowls), ko'i (adzes), 'upena (nets), lūne'e (octopus lure), 'ō'ō (digging stick), mea kaula (weapons) and mea hana (tools).

The children are invited to explore and handle the objects, to discuss and to hypothesize how the articles were used.

### 2. Dramatization -

A. The children select one object each and think about how that object might have been used in ancient Hawai'i.

B. The classroom is divided into 3 areas:

- 1) Uka - the mountains
- 2) Kula - the midlands
- 3) Kai - the sea

C. The children decide in which area they would have used their object if they were living in ancient Hawai'i.

D. They dramatize how the objects were used in their areas. A recording of a chant may be played to create an atmosphere that suggests ancient Hawaiian living.

E. The groups share their dramatizations with the entire class.

\* Adapted from Department of Education, A Framework for Culture Study (March 1979)



3. Expression of Needs -

- A. The students discuss their experiences and questions are raised and recorded on charts. Record all of their questions without giving away the names of the objects.

Example: What is this?



- B. The questions then become the basis for the year's program.  
C. The questions can be grouped into workable research groups by the children.

Example: Which questions seem to go together?

4. Series of Learning Activities -

The teacher and students plan activities for gathering information. They also plan which area of Hawaiian culture to study first based on the students' interests and the dramatization. The activities may include:

- resource speakers
- research - individual and group
- field trips
- audio visual research
- experimentation

5. Further Inquiry -

The children share the information learned through participation in learning activities. This leads to further dramatization on a higher level of thinking and the entire process repeats itself. (See diagram of this sequence on the next page.)

A

An arranged environment leads to

Dramatization and Experimentation leads to

B

F

Repeating the cycle on more complex and accurate levels because of increases in knowledge and skills leads to

the children exploring the exhibits and artifacts.

the children involved in role playing the incident or dramatizing the use of the artifacts, expressing what they know, raising their own questions.

more questions. The cycle continues.

Further use in more elaborate dramatizations and experiments, expression through music and the other arts leads to

further inquiry on higher levels of thinking.

the planning of learning activities to answer the need for more information.

the children expressing the questions they have as a result of the dramatization.

An expression of needs for information, planning, creating, leads to

E

C

A series of learning activities lead to

D

31

## UNIT I: GEOGRAPHY

### Overview

Geography is concerned with the natural and human environment. It influences the kinds of natural resources that are found in Hawai'i, the climate, the economy, the way the people live, and the potential for growth. Understanding geography leads to understanding why certain things happen where they do.

The Hawaiian Islands are the tops of a chain of volcanic mountains in the Pacific Ocean nearly 1,800 miles long. There are eight major islands, of which seven are inhabited.

The subtropical climate of Hawai'i is the result of the interplay of its altitude, location in the tropics in the Pacific Ocean, the terrain, and Hawai'i's location in the zone of the Northeast trades.

The physical beauty of Hawai'i serves as a tourist attraction for many visitors worldwide, which has contributed much to Hawai'i's economy.

The geographic features of the islands have influenced the way the early Hawaiians lived and continue to affect life in Hawai'i today.

This unit develops map and globe skills, examines the formation of the islands and the effects of geography on the people of Hawai'i.

### Teacher Information

1. The Hawaiian Islands are the tops of a chain of volcanic mountains in the Pacific Ocean nearly 1,800 miles long.
2. The oldest island is Kure on the Northwest and the youngest is Hawai'i to the Southeast.
3. The islands are about 5-10 million years old.
4. The volcanic rock, through the process of erosion and soil building, eventually eroded sufficiently to support the growth of plants.
5. Much of the islands is volcanic. However, corals, shells and algae build skeletons which eventually turn into sand or rocks called sandstone.
6. The volcanos of Kīlauea and Mauna Loa on Hawai'i are still actively producing more land.
7. The rough lava is called 'a'ā and cools quickly when exposed to the air.
8. The smooth lava is called pahoehoe.
9. The ancient Hawaiians explained geological phenomena through the exploits of Maui, the demigod who fished up the islands from the sea and Pele, goddess of the volcano with her unpredictable volcanic eruptions.
10. The location of the Hawaiian Islands in the Pacific Ocean far away from other land masses made it difficult for plants and animals to get here.
11. The seabirds and wind carried the seeds to Hawai'i.
12. In the winter, big storms occur, bringing heavy rains from the south. This type of weather is called Kona weather.
13. Temperatures in Hawai'i are mild because the northeast tradewinds blow off a cool ocean.
14. The amount of rainfall is related to the presence of mountains and the exposure of land to winds off the ocean.

15. The subtropical climate in Hawai'i is influenced by the latitude of the islands, their altitude, the passing low pressure areas, and the northeast tradewinds.
16. Hawai'i's location in the Pacific Ocean has made it a welcomed stopping place for hundreds of travelers and explorers.
17. The mild climate, beautiful beaches, mountains and valleys serve as tourist attractions for millions of visitors.
18. Distances to the following cities:

	San Francisco	- 2,100 NM
Honolulu to:	Panama	- 4,700 NM
	Sydney	- 4,400 NM
	Manila	- 4,800 NM
	Yokohama	- 3,400 NM

19. People live on seven of the eight major islands.
20. There are eight main islands:
  - A. Hawai'i - The Orchid Island
    - 1) It is the largest island in the chain.
    - 2) Its total area is 4,038 square miles.
    - 3) It was formed by five volcanic domes: Kohala, Mauna Kea (13,796'), Mauna Loa (13,680'), Kīlauea, Hualalai (8,251').
    - 4) Mauna Kea and Mauna Loa are the two highest mountains on Hawai'i.
    - 5) Mauna Loa and Kīlauea are still active. Tourists go to see Kīlauea (Halema'uma'u Crater) continuously.
    - 6) Hawai'i is geologically still being formed.
    - 7) The land areas include snow on the top of the two highest mountains, as well as desert land and lush green forest land.

- 8) It is the state's largest producer of sugar, papaya, avocado, macadamia nuts, anthuriums, vegetables, beef and Christmas trees.
- 9) It has the only coffee industry in the United States.
- 10) It is linked to Hawai'i's most famous personalities:
  - a. Pele, the fire goddess, lives in Kīlauea.
  - b. Kamehameha the Great was born in Kohala in 1753.
  - c. Captain James Cook was killed on the beach of Kealahou in 1779.
  - d. The first missionaries landed in Kailua, Kona in 1820.

#### B. Maui - The Valley Isle

- 1) Maui is the second largest island.
- 2) Its total area is 728 square miles.
- 3) It was formed by two volcanoes: Haleakala (10,025'), last eruption in 1750 and Pu'u Kukui (5,788').
- 4) These two volcanoes eventually formed an isthmus which evolved into ideal farmland for sugar cane and pineapple.
- 5) Luxurious hotels, resorts, condominiums, golf courses and shopping complexes cater to an expanding tourist trade.

#### C. O'ahu - The Gathering Place

- 1) O'ahu is the third largest island.
- 2) Its total area is 589 square miles.
- 3) It is made up of two mountain ranges: Wai'anae Range whose highest peak is Mt. Ka'ala and Ko'olau Range noted for its beautiful cliffs, especially Nu'uanu Pali.
- 4) Honolulu is the largest city, the state capital, and the main commercial harbor.

- 5) Waikiki, famous for its beaches, is the home of many surfers. The tourist business thrives in this famous locality.
- 6) The population of Oahu (1980) is 886,000. It is the most populated island. It is the center of politics, education, military installations, economics and culture.
- 7) Its most important industries are tourism, manufacturing, construction and agriculture.

D. Kaua'i - The Garden Isle

- 1) Kaua'i is the fourth largest island.
- 2) It has an area of 555 square miles.
- 3) It was formed mainly from a single dome, Mt. Wai'ale'ale (5,243) which is the highest point on the land.
- 4) Mt. Wai'ale'ale on Kaua'i receives the most rainfall in the world.
- 5) Kaua'i, being the oldest island, has the most volcanic erosion. Therefore, there are more soil deposits, valleys, streams, and deep canyons, such as Waimea Canyon, also known as the "Grand Canyon of Hawaii", than other islands.
- 6) Beautiful Hanalei Valley with its kalo patches lie on the northern coast.
- 7) Sugar and tourism are its leading income producers. Papayas, kalo, bananas and cattle are also income for the island.
- 8) Resorts are being built to accommodate the expanding tourist business in select areas.

E. Moloka'i - The Friendly Isle

- 1) Moloka'i is the fifth largest island.
- 2) Its total area is 260 square miles.
- 3) It was formed by two volcanos:
  - a. Mauna Loa - 1,381' above sea level - is hardly high enough to take moisture from the trade winds, therefore the land area is dry.

b. Kamakou - 4,970' above sea level - is jagged and boasts of high cliffs.

- 4) There is a famous leper settlement called Kalaupapa on the Mokolua Peninsula. Father Damien devoted his life to helping the lepers who lived there.
- 5) Moloka'i has the largest percentage of Hawaiians aside from Ni'ihau where the population is totally Hawaiian.
- 6) Many of the people there still live off the land, raising taro and pounding poi, fishing with nets and observing some of the kapu of old Hawai'i.
- 7) The slow development of Moloka'i is due to the presence of the leper colony and its psychological effect on people, and the use of most of the land for raising pineapple.
- 8) A tourist boom is expected soon as hotel complexes are now on the drawing boards.

#### F. Lāna'i - The Pineapple Island

- 1) Lāna'i is the sixth largest island in size.
- 2) Its total area is 141 square miles.
- 3) Almost the entire island belongs to Dole Pineapple Company.
- 4) It was formed by a single volcano. Its summit, Lāna'ihale is 3,370' above sea level.
- 5) Most of Lāna'i's population live in Lāna'i City (3,000 people) and work for Dole Pineapple Company.
- 6) There is only one hotel (10 rooms) for tourists.
- 7) There are many well preserved historical sites partly because the roads are narrow and many are dirt roads.
- 8) Castle and Cooke has designed a master plan for the future development of homes and improvement of the island's natural resources. More than eighty percent of the island will remain agricultural and open space.



#### G. Ni'ihau - Island of Yesteryear

- 1) Ni'ihau is the seventh largest island in size.
- 2) Its total area is 72 square miles.
- 3) It is a private island owned by the Robinson Family.
- 4) The people of Ni'ihau are mostly pure-blooded Hawaiians who follow many of the old Hawaiian ways.
- 5) No alcohol is allowed there and it is closed to visitors. There is no plane service.
- 6) The chief occupation of the island is ranching - sheep, cattle, and horses.
- 7) Water is limited.
- 8) The island is known for its beautiful shell lei.

#### H. Kaho'olawe

- 1) This island is the smallest island.
- 2) Its total area is 45 square miles.
- 3) It has very little rain because it is blocked by the island of Maui and it is a low island.
- 4) It once supported a small population.
- 5) The vegetation is almost all gone because the sheep, cattle and goats that were transported there ate the plants.
- 6) Kaho'olawe is presently being used by the military for bombing practices. Today efforts are being made to stop the bombing and to proclaim the island as a historical site. It was once the site of an adz quarry and evidences of several heiau have been found.

### Generalizations

1. Maps and globes are reference tools. They are representations of the earth's surface.
2. The Hawaiian Islands are the tops of a chain of volcanic mountains in the Pacific Ocean. There are eight major islands which are: Hawai'i, Maui, O'ahu, Kaua'i, Moloka'i, Lāna'i, Ni'ihau and Kaho'olawe.
3. The volcanic rock, through the process of erosion and soil building, eventually eroded sufficiently to support the growth of plants.
4. The physical environment of Hawai'i is partly the result of Hawai'i's location in the tropics in the Pacific Ocean far away from other land masses.
5. The subtropical climate of Hawai'i is the result of the interplay of the following factors: its altitude, location in the tropics in the Pacific Ocean, the terrain, and Hawai'i's location in the zone of the northeast tradewinds.
6. The geographic features of the islands have affected the way the Hawaiians live.
7. The good harbors of Honolulu influenced its development into a major city and the center of business, government, and culture.

### Concepts

1. Physical environment: Natural conditions or surroundings
2. Geology: Features and history of the earth's crust in a region
3. Population: The number of people
4. Grid: Latitude, Longitude; a system of intersecting lines which make it possible to locate places on the earth and to determine the direction of places in relation to other places

### Objectives

1. Explain how the volcanic islands were formed. Identify Pele's and Maui's roles in formation of the islands.

2. Explain the effect of erosion on the islands.
3. Identify and explain the influences on Hawai'i's climate and physical environment.
4. Name some of the important mountains on the main islands.
5. Identify some significant facts about each island and tell why population explosions have taken place on some of the islands.
6. Distinguish between a globe and a map.
7. Read maps for information and make interpretations.
8. Use maps and globes to locate places and the major oceans and continents.
9. Distinguish land and water forms by their sizes and shapes.
10. Relate current happenings to areas on maps and globes.
11. Locate Hawai'i in relation to the continental United States and other parts of the world.
12. Locate the major islands of Hawai'i.

INDEX TO REFERENCES - GEOGRAPHY

	Geography	Map Skills	Geology	Climate	Population		
BAUER		16-20, 110-161 (main islands)	12-15	18-20	73,105,188		
BUCK							
CURTIS							
DAY							
DUNFORD		6-12	1-6	15			
FEHER			15-17		220, 270		
HANDY (A.H.C.)			295-305				
HANDY (N.P.O.H.)	389-615						
HAZAMA							
LINDO		23-28, 80-90					
MALD	3-4						
MITCHELL		9-12	23-30				
POTTER	17-31	10-16	18-22	27-29	19		
PRATT		7-13	18-26	27-34			
TITCOMB							

A.H.C. - Ancient Hawaiian Civilization

N.P.O.H. - Native Planters Of Hawaii

## LEARNING ACTIVITIES AND RESOURCES

### Arranged Environment

#### Table Display

- Arrange a globe on a centrally located table with a sign: "Where Is Hawai'i?"

#### Wall Maps

- Display a wall map of the world: "Can You Find Hawai'i?"  
 Display a map of the Hawaiian Islands: "Can You Find (Home Island)?"  
 Display a map of students' home island: "Can You Find (Place of school)?"

#### Bulletin Board

- Place cut-outs of the continents on the bulletin board in arbitrary order with a pocket envelope containing the names of the continents. Title of the display: "Can You Name the Continents?"

### Inquiry

#### Exploration

- Allow the children to browse with one another and encourage them to use the maps and globe to locate the places, or make guesses.

#### Discussion

- Ask the children the following questions to assess their knowledge and thinking. Encourage them to use the maps and globe.

1. Who knows what a map is? a globe?
2. What kind of information can we find on a map and globe?
3. What is the difference between a map and a globe?
4. Who can find Hawai'i on the globe?
5. Who can find Hawai'i on the map?
6. What do you think all the blue color around Hawai'i stands for? Who knows the name of the ocean surrounding Hawai'i?
7. Who can find (home island) on the map?
8. Who can find (place of school) on the map?
9. Summarize discussion: What are maps and globes used for? Who uses them?

- Have students use the globe and maps to answer the following questions:

1. Who can find another island? What do you suppose an island is?
2. Point to a continent and ask: What do you suppose is the difference between an island and this continent? What do you think a continent is? Encourage students who have traveled to share their experiences.

## LEARNING ACTIVITIES AND RESOURCES

Map Activity

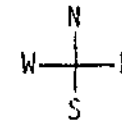
Review

3. Slowly rotate the globe and ask: Do you suppose there is more land or more water? Explain to students that there are names for different parts of the water and ask: Do you see the names of the oceans on the maps and globe?
4. Have the children locate the continents, oceans and Hawai'i on the globe and the wall map.

- Hand out an unlabeled map of the world. Using an overhead projector and transparency, help the children label the continents, oceans and large islands on their maps, e.g., Iceland, New Zealand, etc.
- Review cardinal directions: North, South, West, East

1. Use a compass to determine the directional orientation of the room. Place a chair or other object to represent North. Divide the class into three groups and ask each group to stand at one of the following directions in relation to North: South, West, East.

If students need help, write the directions on the board and have the groups figure out their positions.



Then ask the following questions:

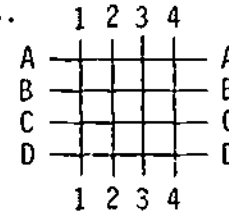
- a. Which group is standing where the sun sets?
  - b. Which group is standing where the sun rises?
  - c. Which group is standing closest to the North Pole?
  - d. Which group is standing closest to the South Pole?
2. Hand out or flash a transparency of a map of the home island with some locations identified on the map. Include a mileage scale. Have children state whether the places are north, south, east or west of the center. Continue with other directional questions.
- Explain the use of the mileage scale. Have students measure the distance of one location to another. The following may serve as guidelines until the students master the skill: How many inches from Place A to Place B? How many miles does one inch stand for? Multiply the two answers to get the distance.

Map Activity

## LEARNING ACTIVITIES AND RESOURCES

### Map Activities

- Draw a grid on the board or transparency. Label the horizontal lines with alphabets and number the vertical lines.



Place dots where the lines intersect and label with the children's names. Explain to students that these lines can help people locate places. Ask students how they would describe the location of the names. Give additional exercises if necessary.

- Handout or flash on transparency a world map, preferably with Hawai'i in the center, with latitude lines. Identify the equator and explain the purpose and numbering of the latitude lines. Give exercises if necessary.

Handout a map with longitude lines. Identify the prime meridian and explain the purpose and numbering of the longitude lines. Give exercises if necessary.

Follow-up with a map of Hawaii which includes both latitude and longitude lines. Have students locate places on their home island using latitude and longitude.

- Locate the Hawaiian Islands on the wall map.
  1. Hand out a map of the eight islands.
  2. Have students identify the eight major islands.
  3. Label each island and identify its color, shape, flower and main city.
  4. Compare the eight major islands with the islets, atolls and reefs in the northwestern section of the chain.
  5. Measure the distances between Honolulu and California, Japan, China, Indonesia, Peru.
- Present transparencies on Pacific winds, Pacific currents, mountains, rivers, rainfall.

See Department of Education, Geography and Geology Number 2, 1971.

## LEARNING ACTIVITIES AND RESOURCES

### Sharing Information Discussion

- For each transparency, have students share as much information as they already know or can read from the transparency. Then ask questions which will cause students to reflect on its importance to the climate or to the people and how it affects or may have influenced life in Hawai'i. For example:
  1. Do you think the climate would be different if the winds came from the hot equator? How do you suppose the winds affected life in early Hawai'i?
  2. What would happen to Hawai'i's climate if there were no mountains? Why do you suppose one side of the mountain is wet and the other side dry?
  3. Why do you suppose the early Hawaiians lived near rivers? Are rivers just as important to us today?
  4. Does rain affect us? Is rain important? How would our lives be affected if there were no rain? if it rained every day?

Also encourage students to raise their own questions.

### Reviewing

- Bring in different kinds of maps for information (children can help). Have the children look for transportation maps, general atlases, special maps, globes (celestial and terrestrial).
- Review well known geographical features by locating the following: isthmus, peninsula, lake, canyon, bay, swamp, volcano.
- Flash a transparency of a map of the city in which the school is located.
  1. Locate major landmarks.
  2. Draw in the location of the school. Have the children do the same on their own individual maps of the city.
  3. Have the children draw the route they take to and from school.

### Gathering Information

- Gather maps, pamphlets, travel brochures, and books on each island. Have the child ask for information from travel agencies and hotels. Go through the pamphlets, etc., and point out some interesting facts of each island. Have each student select one island to study.



## LEARNING ACTIVITIES AND RESOURCES

Discussion

- Discuss with the children what kinds of information would be interesting to a person who has never been to the islands. Outline the information and use the outline as a guide for the reports.

Names of the Island (e.g., Hawai'i - The Orchid Isle)

I Geographical Features

- A. Formation
- B. Land Regions

II History

- A. Earliest Settlement
- B. Historical Events
- C. Historical Landmarks

III Economy

- A. Agriculture
- B. Other industries
- C. Population

IV Special Activities

- A. Recreation
- B. Places of Interest

Reporting

- Have the students present their reports in the form of information charts consisting of pictures, facts, maps, graphs, etc.

Discussion

- When all of the reports are completed and mounted on the wall, continue with the discussion.

Ask the students:

1. Why are there so many people living on O'ahu?
2. Why are there so many different kinds of people from all over the world?
3. Why are there so few people on Lana'i?
4. How has the location of the Hawaiian islands affected its economy?
5. If you were a tourist, what would be some of your reasons for choosing Hawai'i as a vacation spot?
6. If your parents, grandparents or great grandparents came from another country, why did they choose Hawai'i? Interview them and find out why they chose to stay.

Application of  
Knowledge and skills

50

60

## LEARNING ACTIVITIES AND RESOURCES

Inquiry

7. Find out the population of each island today and twenty years ago.

Compare the population growth on each island. Hypothesize the causes of population growth.

- Flash a transparency of the world with the Pacific Ocean centrally located. Ask the students:
  1. Where do you suppose the islands came from?
  2. How did they appear in the middle of a large ocean? (Write the children's hypotheses on a chart.)
- Motivate the children to compose a legend - "How the Hawaiian Islands Came to Be". Encourage them to choose their own story title but to keep the same theme.
- Discuss
  1. Who is Pele? Have the children share their impressions of Pele.
  2. Where does she live? How do we know?

Story Telling

- Share with the children legends of Pele.  
Resources: Emerson, Nathaniel B., Pele and Hi'iaka  
Puku'iand Curtis, Tales of the Menehune  
Westervelt, W.D., Hawaiian Legends of Volcanoes

Lecture/Discussion

- Using transparencies, discuss the formation of the islands. Ask students if Hawai'i was once lava rock, then how do you suppose it got soil? How important was soil to the early Hawaiians? to us today?

Films

- "The Hawaiian Islands: Their Origin and Nature" #1170  
"Fire Mountain"  
"Hawaiian Volcanoes" #1173  
"Volcano - Birth of a Mountain"  
"Volcanoes of Hawaii" #4845  
"Hawaii - America's Tropical State" #3628

Fieldtrip

- Visit the Bishop Museum to study the table model of the formation of the Hawaiian Islands.

## CULMINATING ACTIVITIES

Planning a Tour

- Have the children plan a five day tour of one of the Hawaiian islands for someone traveling from the mainland United States or any other country for the first time.
  1. Time of arrival, by which airline, and from where
  2. Greeting
  3. Transportation to hotel
  4. Name of the hotel
  5. Places to see, shop, be entertained and eat
  6. Method of transportation while on the island
  7. Time of departure

Writing

- Write a creative story describing life in a Hawaiian community the day Mauna Kea erupted.

Map Activity

- Set up a bulletin board showing a map of the Pacific area with Hawai'i located in the center. Determine the homeland of the students' great grandparents and using colored yarn, attach one end to Hawai'i and the other to the homeland, such as Vietnam. Have the children compute the distance using the mileage scale.

## RELATED ACTIVITIES AND RESOURCES

Art

- Construct a model of a volcano or the islands using paper mache.

Science

- After viewing the films, discuss the various kinds of lava found in the lava flows of Kilauea. Bring in samples of lava for the children to examine:

pahoehoe

'a'a

Iehu

and by products:

olivine

pele's tears

- Demonstrate an eruption of a volcano using ammonium dichromate. Explain that this type of eruption is similar to that of Mount St. Helens in Washington state due to its ash-like fall-out. Hawaiian volcanoes are more fluid and flow and move slowly.
- Illustrate the eruption of a volcano from under the sea and how it builds up until it appears above the water.

63

64

## RELATED ACTIVITIES AND RESOURCES

Music

- Teach the island song for each island.  
See Explorations Ho'omāka'ika'i 1980 (or any other year)
- Teach Pele chants  
"E Pele"  
"Aia la e Pele"  
Create hula motions with the children.

Language Arts

- Stimulate an interest in legends by introducing more legends through books, films, filmstrips.  
Distinguish between legend, myth, and reality.
- Watch ETV "Hawaiian Legends and Folktales"

## BIBLIOGRAPHY OF TEACHER AND STUDENT REFERENCES

- Boom, Robert, Hāna Road Highlights. Honolulu: Bob Boom Books, 1977.
- Boom, Robert, The Island of Hawai'i. Honolulu: Bob Boom Books, 1975.
- Boom, Robert, The Island of Maui. Honolulu: Bob Boom Books, 1974.
- Boom, Robert, The Island of O'ahu. Honolulu: Bob Boom Books, 1976.
- Carter, Gann K., Sightseeing Historic Honolulu. Honolulu: Tongg Publishing Company, 1979.
- Day, Grove, Hawai'i and Its People. New York: Meredith, 1968.
- Department of Education, Geography and Geology of Hawai'i, No. 2, 1971.
- Dunford, Betty, The Hawaiians of Old. Honolulu: Bess Press, 1980.
- Emerson, Nathaniel B., Pele and Hi'iaka. Rutland, Vermont: Charles E. Tuttle Co., 1978.
- Explorations Ho'omāka'ika'i: 1980. Honolulu: Kamehameha Schools Press, 1980.

65

## BIBLIOGRAPHY OF TEACHER AND STUDENT REFERENCES

- Feher, Joseph, Hawai'i: A Pictorial History. Honolulu: Bishop Museum Press, 1969.
- Gleasner, Bill and Oiana, Kaua'i Traveler's Guide. Honolulu: The Oriental Publishing Company, 1979.
- Handy, E.S.C., Native Planters in Old Hawaii. Honolulu: Bishop Museum Press, 1965.
- Handy, E.S.C., Ancient Hawaiian Civilization. Rutland, Vermont: Charles E. Tuttle Company, 1965.
- Hawai'i - A Guide to All the Islands. California: Lane Publishing Co., 1980.
- Kyselka, Will, Mau'i - How It Came to Be. Honolulu: University Press of Hawaii, 1980.
- Lewis, Paul M., Beautiful Hawai'i. Beaverton, Oregon: Beautiful America Publishing Co., 1980.
- Malo, David, Hawa. Antiquities. Honolulu: Bishop Museum Press, 1971.
- Mitchell, Donald, Resource Units in Hawaiian Cultures. Honolulu: Kamehameha Schools Press, 1972.
- Pratt, Helen G., The Hawaiians An Island People. Rutland, Vermont: Charles E. Tuttle Company, 1963.
- Ruhle, George, Haleakala Guide. Hawai'i: Hawai'i Natural History Association, 1975.
- Pūku'i, Mary K. and Curtis, Caroline, Tales of the Menehune. Honolulu: Kamehameha Press, 1971.
- Westervelt, W.O., Hawaiian Legends of Volcanoes, Rutland, Vermont: Charles E. Tuttle Company, 1963

## UNIT II: MIGRATION

### Overview

The early Polynesians were among the world's most adventurous explorers. They traveled thousands of miles over the vast uncharted ocean without any navigational instruments. They relied on the navigator's knowledge of the sun, clouds, birds, currents, and stars to guide them on their migrations.

The history of Hawai'i, indeed, the history of all Polynesia begins with the migrations. Some scientists hold that the ancestors of the Polynesians migrated from Southeast Asia into Indonesia and then to the Polynesian islands. Other scientists believe that they came from Central or South America due to the presence of sweet potatoes in Polynesia.

Evidence indicates that the earliest immigrants to Hawai'i came from the Marquesas Islands between 500 to 750 A.D. and from Tahiti about 1200 A.D. Recent evidence suggests that an earlier migration may have occurred, as early as the fourth century A.D.

The immigrants to Hawai'i, the earliest Polynesian settlers, as well as the later ethnic groups, probably came for economic, political, or social reasons and brought with them their traditions, customs, beliefs, and values which still influence Hawai'i today.

This unit inquires into the reasons for immigration to Hawai'i by the Polynesians and later ethnic groups. It examines the Polynesian migration theories and the impact of the various groups' arrival to Hawai'i.

## Teacher Information

1. Some scientists believe that groups of people migrated from Southeast Asia to Indonesia and reached the Polynesian islands by canoes about 1500 B.C. These people settled in Tonga and Sāmoa and became the ancestors of all Polynesians. The following are two theories regarding the routes of migration:
  - a. The northern or Micronesian route extends from the Philippines to the Carolines, branching to the Marshall and Gilbert Islands, then into Polynesia and on to Hawai'i.
  - b. The southern or Melanesian route goes through Indonesia to New Guinea, to Fiji and into the Polynesian islands of Sāmoa and Tonga, then to Tahiti and Marquesas Islands, and on to Hawai'i, New Zealand and Easter Island.
2. Some botanists say that Central or South America is the original home of the Polynesians because of the presence of the sweet potato in Polynesia.
3. The following evidence indicates that Hawaiians came from Tahiti:
  - a. Chants, prayers and legends tell of Tahitian roots.
  - b. Stone adzes resemble those found in Tahiti.
  - c. There is a resemblance in physical structure of the people.
  - d. The language is similar.
  - e. The way of life of the people is similar.
  - f. Linguistic evidence indicates a definite relationship to the language of Tahiti.
4. Evidence also indicates that Marquesan voyagers probably came to Hawai'i between 500-750 A.D.
5. There is a theory that the settlers of Hawai'i known as the Menehune and the earliest settlers from Tahiti named Manahune were one and the same people. The Manahune were the common people of Tahiti who probably came along as the workers of the land.
6. These people who made long voyages over the vast Pacific Ocean without navigational equipment were courageous, intelligent, industrious, religious, and well trained in endurance and self control.
7. The Hawaiian navigators lived in harmony with nature and used the stars, ocean swells, currents, clouds, sun, and birds to guide them across the vast ocean.
8. The navigators could recognize and name more than 150 stars and planets and could foretell their changes and positions from month to month.
9. The Hawaiian 'ohana (family) relationship and cooperative (laulima) attitudes helped to make the long journey endurable.

10. There were many problems in voyaging: storms, lack of wind, loneliness, boredom, illness, lack of food and water, and psychological problems.
11. Radiocarbon dating tests made from samples taken from early campsites on the islands indicate settlements in Hawai'i by 750 A.D. Recent evidence reveals that an earlier migration may have occurred as early as the fourth century A.D.
12. The first voyagers probably ate hala fruit and ferns that they found on the islands.
13. Evidence suggests that the second wave of voyagers brought plants and animals to Hawai'i. They probably brought the following plants and animals to Hawai'i.

A. Plants

kalo	- taro	'uala	- sweet potato
'ulu	- breadfruit	wauke	- paper mulberry, used to make kapa
pia	- arrowroot	'awa	- kava, used in ceremonial drinks
niu	- coconut	hau	- tree useful for its light wood
mai'a	- banana	ipu	- bottle gourd
kī	- ti	kou	- tree used for calabashes
kukui	- candlenut	milo	- tree used for bowls
kō	- sugar cane	noni	- small tree used for medicine and yellow dye
'ōhi'a'ai	- mountain apple	'ōlena	- turmeric, used for medicine and dye
uhi	- yam	'ohe	- bamboo

B Animals

pua'a	- pig
'ilio	- dog
moa	- chicken
'iole	- rat

14. The people who arrived in Hawai'i found many plants already growing here. The following list includes some of these plants and the main use of each.

koa	- largest of native trees, trunk used for canoes
olonā	- shrub, bark used for ropes
māmaki	- small tree, bark used for cloth
'uki'uki	- lily, fruit used for dye
'a'ali'i	- hardwood shrub or tree, bark used for dye
kōlea	- shrub or tree, fruit used for dye
'ōlapa	- forest tree, bark used for dye
'ie'ie	- woody climber, roots used for baskets, fish traps



kuaila	-	hardwood used for tools
kaaia	-	hardwood used for tools
māmāne	-	hardwood used for tools
ālahē'e	-	hardwood used for tools
'ūlei	-	hardwood used for tools
alani	-	hardwood used for tools
wiliwili	-	lightwood used for floaters
'ākala	-	raspberries, used for food and dye
'ōhelo	-	shrub, berries used for food
hāpu'u	-	tree fern, inside of trunk used for food
'ōhi'a lehua	-	wood used for images
maile	-	twining shrub, fragrant leaves used for lei
'ilima	-	shrub, flowers used for lei
pūkiawe	-	black-eyed susan, a shrub, berries used for lei
mokihana	-	tree, berries used for lei

15. Cooking was done on a bed of sand on the platform (pola) of the canoe where a fire was built.
16. Fresh fish, birds, and other seafoods were taken from the sea as the journey continued.
17. Many migrations took place between 1100-1300 A.D. Then they stopped and the Hawaiians lived in isolation until the accidental arrival of the first foreigners to the Hawaiian Islands by Captain Cook.
18. During this lull period, the population grew and the land was cultivated for food. There was much fighting between chiefs (ali'i) for land possessions.

#### Generalizations

1. The immigrants to Hawai'i, the early Hawaiians as well as the later ethnic groups, probably came to Hawai'i for economic, political, or social reasons and brought with them their traditions, customs, beliefs, and values which still influence Hawai'i today.
2. Some scientists believe that the ancestors of the Polynesians migrated from Southeast Asia into Indonesia and then to the Polynesian islands. The following are two theories regarding the routes of migration.
  - a. The people left Southeast Asia and took the northern or Micronesian route which extends from the Phillipines to the Carolines, branching to the Marshall and Gilbert Islands, then into Polynesia and Hawai'i.

- b. The people left southeast Asia and took the southern or Melanesian route which goes through Indonesia to New Guinea, Fiji, and into the Polynesian islands of Sāmoa, Tonga, Tahiti, Marquesas Islands, Hawai'i, New Zealand, and Easter Island.
3. Some scientists believe that the Polynesians came from Central or South America because of the presence of the sweet potato in Polynesia.
4. The Polynesian navigators used the stars, ocean swells, currents, clouds, sun, and birds to guide them across the vast ocean.
5. The long voyage on canoes required physical, emotional, and spiritual strength and endurance to overcome the many problems encountered during the voyage.
6. One theory is that the Hawaiian Menehune and the Tahitian Manahune were one and the same people. The Manahune were the commoners of Tahiti who probably came to Hawai'i as the workers of the land.
7. Radiocarbon dating tests made from samples taken from early campsites on the islands indicate settlements in Hawai'i by 750 A.D. Recent evidence reveals that an earlier migration may have occurred as early as the fourth century A.D.
8. Evidence suggests that the early immigrants to Hawai'i were from the Marquesas Islands and from Tahiti.
9. Various groups of people from different parts of the world have settled in Hawai'i and contributed to life in Hawai'i.

#### Concepts

1. Migration: The act of leaving one country and settling in another
2. Change: To cause to become different

#### Objectives

1. Define migration.
2. Explain the factors that cause people to migrate: economic, political, social.
3. Explain theories of Polynesian migration.

4. Discuss the theory of the origin of the menehune.
5. Describe the dangers encountered by the voyagers as they traveled across the vast Pacific ocean.
6. Discuss some physical, emotional and spiritual needs of the voyagers.
7. Prepare some of the foods for voyaging.
8. Recognize some of the stars used in Polynesian navigation.
9. Discuss the contributions that the various ethnic groups who migrated to Hawai'i made to the lifestyle that later developed.

70

70

INDEX TO REFERENCES - MIGRATION

	Migration	Polynesian	Ethnic	European	Filipino	Japanese	Korean	Portuguese	
BAUER		24-25,26-33							
BUCK									
CURTIS									
DAY									
DUNFORD		20-27							
FEHER		24-35		399	356,377,401, 435, 463	271,273,275, 301-302,309, 335-337,350, 370,394-396	356,371,400, 409,415	299,356,371, 393,398	
HANDY (A.H.C.)		23-34, 319- 320,323,244-256							
HANDY (N.P.O.H.)	8-12								
HAZAMA									
LINDO		19, 28, 102-146							
MALO		7-9							
MITCHELL		9-22							
POTTER		9-16							
PRATT		3-6,13-17							
TITCOMB		8-10							

A.H.C. - Ancient Hawaiian Civilization

N.P.C.H. - Native Planters Of Hawai'i

8.

8i

## LEARNING ACTIVITIES AND RESOURCES

### Bulletin Board Display

- Mount a large map of the world with the Pacific Ocean in the middle of the map. Highlight the location of Hawai'i.  
Caption: "Where did the first Hawaiians come from?"
- Place pictures of various Polynesian people and other Pacific islanders on another bulletin board. (Sources: magazines, tourist brochures, Waikiki Press, Polynesian Cultural Center)  
Caption: "Which of these people is the Hawaiian?"
- Display map of the Hawaiian Islands with tabs of childrens' names on the table.  
Caption: "Where did you, your parents, grandparents, or great grand-  
parents come from?"

### Opening Discussion

- Encourage students to talk about their experiences in moving from one town to another or one island to another.
  1. Why did you move? List the children's reasons. As they identify where they came from, have them go to the bulletin board and place their name tags in the right location.
  2. What kinds of problems did you have? List the problems on a chart.

### Interview

- Hand out a questionnaire for the students to take home to interview their parents, grandparents, and/or great grandparents to find out about the first generation in the family who came to Hawai'i. The following questions which refer to the immigrants, may be included in the questionnaire.
  1. Where did you come from?
  2. When did you arrive?
  3. Why did you move?
  4. What customs or traditions did you bring with you?
  5. What kinds of problems did you encounter?

### Retrieval Chart

- Compile data on a chart. (Keep the chart for a later lesson.)

Name of family	Where from	Date arrived	Length of voyage	Reasons	Customs

## LEARNING ACTIVITIES AND RESOURCES

### Planning

From this retrieval chart compose a time line showing geographical locations and dates of arrival.

Looking at the time line, have the children hypothesize when the first Polynesian settlers probably arrived in Hawai'i.

- Divide the children into three groups ('ohana).

Hand out the map of the Pacific Basin. See the end of this unit for a copy of the map. Have each 'ohana select two islands, one "home island" and another, the island to which they will migrate.

Have students plan, as a group, a long voyage to their new island home. The following questions can help them plan for their voyage.

1. Why are you leaving?
2. What preparations do you need to complete?
3. What kinds of things are you taking? Why?
4. Who will be going? Why?
5. What are you going to use to guide you to another island?
6. How many canoes are sailing?

Have all three 'ohana sit and plan in their own groups the answers to these questions.

### Dramatizations

- Have each 'ohana dramatize a planning session. The dramatization should include the 'ohana's answers to the questions.

Record the following kinds of information on a chart as the dramatizations take place.

1. The home island
2. Reasons for leaving
3. What they are taking
4. Who will be going

### Inquiry

- Invite the children to ask questions about the early migrations based on the dramatizations. Record all of their questions on charts.

### Classify, Categorize

- Classify and categorize the questions. Have the children suggest the categories, for example:

## LEARNING ACTIVITIES AND RESOURCES

Research

1. Reasons for leaving
  - a. Why did they leave their homes to sail for undiscovered lands?
  - b. Did they have to go because of lack of food?
  - c. Why did they risk their lives on a dangerous sea voyage?
2. Things they took with them
  - a. Did they take any food?
  - b. What did they have to take to survive on a canoe for a long time?

- Have each of the three 'ohana select a category of questions to work on. When they have agreed on a category to research have the 'ohana organize for research. The following can serve as guidelines.
  1. Each 'ohana will select a haku (leader).
  2. Each person will volunteer how he/she wants to help. Everyone has to have a kuleana (responsibility) and must alu like (work together). Review these concepts at the beginning of each work session so that everyone laulima (cooperates) to get the hana (job) done.
  3. Each 'ohana must decide on a medium of reporting. For example: puppet show, T.V. program, movie roll or filmstrip, radio program, panel, etc.
  4. At the beginning of each work session have the haku of each 'ohana report on what his/her group has done and the 'ohana's plans for that day. At the end of each work session, evaluate with each 'ohana what it has accomplished.
  5. Have the children decide on a deadline as to when the reports should be ready.
  6. Have the children do the artwork during the art period.
  7. Give students some time during social studies periods to do their research.

86

87

## LEARNING ACTIVITIES AND RESOURCES

### Films

- Films that deal with migration:  
"Pacific Island" 11 minutes, navigational skills of the Polynesians.  
"The Navigators" #4283

### Books

- Books to use for research:  
Brown, People of the Many Islands: Polynesians and Rivers in the Sea, pp. 9-11, 24-25.  
Bauer, Hawai'i the Aloha State, p.p. 26-29.  
Handy, Ancient Hawaiian Civilization, pp. 11-12; 23-24.  
Pratt, The Hawaiians An Island People, pp. 3-4.  
Curtis, Keola, Boy of Old Hawai'i, pp. 127-135.  
Oay, Hawai'i and Its People, pp. 286-289.  
Titcomb, Ka Manu Lele, pp. 1-7.  
Feher, Hawai'i: A Pictorial History, pp. 24-35.  
Lindo, Polynesian Seafaring Heritage.

### Map Activity

- Do the following map activity during part of the social studies periods.  
Flash a transparency of the Pacific Basin and have students do the following:
  1. Identify Micronesia, Melanesia and Polynesia.
  2. Identify familiar islands, the continents and island countries.
  3. Draw the attention of the children to the bulletin board display of Pacific Islanders. Have the children infer the home island of the Polynesians and Pacific Islanders on the chart and share the evidence they are basing their inferences on. Chart these inferences.
  4. Ask the students:
    - a. How far do you think these locations are from Hawai'i?



## LEARNING ACTIVITIES AND RESOURCES

Resources

Map Activity

b. How do we calculate distances on a map? (mileage scale)  
(Calculating distances can be a good activity to do  
in math class.)

5. Hand out individual maps of the Pacific Basin. Have each child select one home island mentioned in activity 3 and chart his/her hypothetical migration route to Hawai'i. Have each student indicate the year and month of departure, the route, stopping places, landing point and date of arrival in Hawai'i on the map.

• Study the theories of migration using the following references:

Films: "Kapingamarangi", 40 min., color, available from University of Hawai'i

"Coming of the Polynesians", 11 min., 1975

Books: Curtis, Keola, A Boy of Old Hawai'i, pp. 127-135

Day, Hawai'i and Its People, pp. 286-289

Dunford, The Hawaiians of Old, pp. 20-22.

Handy, Ancient Hawaiian Civilization, pp. 23-34.

Lindo, Polynesian Seafaring Heritage, pp. 19-28.

Titcomb, Ka Manu Lele, pp. 1-7.

Check the references for Dr. Buck's India origin theory, Heyerdahl's Peru origin theory, and Emory's Indo-Malay origin theory.

• Hand out a new map of the Pacific Basin to the students. Have them use colored pencils for their map work.

Talk about each theory and discuss how scientists (archeologists) determine routes and origin (chants, legends, radiocarbon dating). See Hawai'i Multicultural Awareness Project, Behold Hawai'i, Module III, pp. 27-43.

Using a transparency map of the Pacific Basin, chart the routes as described by Buck, Heyerdahl and Emory. Have students draw the routes on their own maps.

## LEARNING ACTIVITIES AND RESOURCES

Discussion

1. Use a different color for each theory.
2. Instruct the children on the meaning or purpose of a map legend. Have the children suggest the color for each route and the design of the legend
3. Include the children's dates of arrival.

Encourage the children to color the continents, familiar islands, and the oceans lightly without detracting from the routes.

Reading

- Compare the theories with the inferences and hypotheses the children made earlier about the home islands of the Polynesians and possible migration routes. Refer to the inference chart and to the students' hypothetical migration routes. Discuss the length of time it might have taken for each migration. Have the children hypothesize a length of time for each route.
- Read excerpts from references listed earlier about the number of years it took for the migration to finally reach Hawai'i.

Reporting

- The day before the 'ohana's report is due, allow each 'ohana time to practice the presentation.
  1. Work with each group on voice, tone, animation and smoothness of delivery.
  2. Encourage each 'ohana to be well prepared.

Arrange the class so that the physical environment is set for whatever kinds of reports will be presented.

Encourage good audience participation and active listening.

At the end of each presentation, have the audience first share good things about the presentation, and then share those things that could make the report better the next time.

Retrieval Chart

- Chart the information gathered from the films and books read in class and from the presentations of the 'ohana. Information may include answers to the following questions:

## LEARNING ACTIVITIES AND RESOURCES

Generalizing

1. Why do people migrate?
2. What do they take with them?
3. What kinds of problems do they encounter
  - a. During the trip?
  - b. The first few months of living on a new island?

- Have the children verbalize what they have learned about the migration of people by asking them to summarize or make general statements about migration of people. E.g., People migrate for social, economic and political reasons and carry with them their customs, traditions and beliefs.

Bulletin Board Display

- Display a picture of a double canoe and map of the Pacific Basin. Arrange pictures of different plants and animals found in Hawai'i today on the bulletin board. Under the pictures write a caption - "What plants did the early Polynesians bring with them? What animals did they bring to Hawai'i?"

Table Display

- Display a variety of plants familiar to the children, e.g., sugar cane, coconut, taro, ti, banana, mountain apple, orange, apple, yam.  
Caption: "Which plants did the Polynesians bring with them to Hawai'i?"

Discussion

- Recall: Have the children recall how the islands were formed. Talk about and describe volcanic land.

Research

- Ask: What do you think was growing here when the Polynesians landed? What did the Polynesians bring with them?

Write their hypotheses on a chart.

- As a total class, find the answers to these questions.

References: Dunford, The Hawaiians of Old, pp. 13-27

Lindo, Polynesian Seafaring Heritage, pp. 122-123

Mitchell, Resource Units in Hawaiian Culture

## LEARNING ACTIVITIES AND RESOURCES

### Charting

- Enter the correct information on the chart in the correct column.

Plants Found Here		Plants Brought Here	
Our Guess	Research	Our Guess	Research

In the research column write the Hawaiian as well as the English name of each plant. See pp. 122-123 of Lindo's Polynesian Seafaring Heritage.

### Hawaiian Language Activity

- Encourage the students to learn the Hawaiian names.
  1. Label all the plants on the display table using Hawaiian names.
  2. Mix the labels and have the children test each other.
  3. Keep adding more plants as the children find them in the neighborhood.

- Call out the English name of a plant and have the children give the Hawaiian name in a competition game like a spelling bee.

### Planning

- Have the children pretend they are in an extremely crowded community. They are not happy there so they plan a voyage to find a new place to live with their 'ohana. There is much planning and work to do to prepare for the voyage.

Divide the class into five 'ohana. Have the children plan the entire preparation of going on a long voyage in a canoe. The following questions can serve as guidelines.

1. Who is going?
2. What kinds of food are you taking?
3. How will the voyagers be supplied with water?
4. How long will you be sailing?
5. How will you know where you are?

Have each of the five 'ohana meet to determine the food preparation and preservation techniques, to plan the route of the voyage and the navigational skills needed.

## LEARNING ACTIVITIES AND RESOURCES

Dramatization

- Have each 'ohana dramatize a planning session. The dramatization should include the decisions made by the 'ohana.

Inquiry

- Have the children ask questions about various aspects of the voyage after all the 'ohana have presented their dramatizations. Record these questions on charts.

Research

- Categorize the questions with the children and organize the children into research groups. Possible categories and questions may include:

Navigation:

1. How did the Polynesians navigate their canoes over such a wide expanse of water?
2. Who were the navigators?
3. How were they trained?
4. What stars did they use for traveling?
5. What did they use if the sky was clouded?

Food Preparation:

1. What foods did they take with them?
2. How did they prevent them from spoiling?
3. Where did they store the food on the canoe?
4. How did they store the water without weighing down the canoe?
5. What did they do when they ran out of food?

- Research can be done as group research or as a class project.

Resources

- Resources: Dunford, The Hawaiians of Old  
Lindo, Polynesian Seafaring Heritage  
Mitchell, Resource Units in Hawaiian Culture

Resource Person

- Invite a guest speaker from the Polynesian Voyaging Society (on O'ahu) or any such organization to talk about navigational skills, Hawaiian skies, life on the ocean in a canoe. Contact the Society for possible persons on other islands.

90

91

## LEARNING ACTIVITIES AND RESOURCES

### Field Trip

- Plan a field trip to the planetarium to see the program "Polynesian Skies". (Describes the navigation of canoes under Polynesian skies and the probable route taken by the first migrators.)

### Evaluation

- Pretend you are on a 100' long double canoe. You are sailing on the Pacific Ocean looking for another island on which to live. Write a five day journal of what it's like to be on a canoe in the vast Pacific Ocean not knowing where to go but in search of a new island. Tell about:
  1. Your activities during the day
  2. The food you eat
  3. The responsibilities you have
  4. The dangers or nice things that happen
  5. The things you see

### Bulletin Board Display

- Display pictures that reflect various ethnic groups in Hawai'i today.

### Discussion

- Ask the children how Hawai'i came to have such a mixture of ethnic groups. Refer to the retrieval chart made earlier in the unit and review why the various groups came to Hawai'i. Have the children compare the ethnic groups' migrations and the Polynesian migrations to Hawai'i.
  1. Why they came
  2. Length of voyage
  3. What they brought - customs, food, beliefs
  4. What they found in Hawai'i
  5. How their arrival changed Hawai'i

### Interviewing

- Have the children name various kinds of celebrations which their families participate in. Have students share their experiences. Call attention to the diversity of cultural practices in Hawai'i.
- Have the children interview a member of their family to gather information about an ethnic celebration. Plan appropriate questions with the students. The following can serve as guidelines.
  1. Name of celebration
  2. Purpose
  3. Description
  4. Change or adaptation to local conditions

## LEARNING ACTIVITIES AND RESOURCES

Sharing

Resource Persons

Various Activities

- Have the children share the information they gathered from the interview. Encourage them to discuss and ask each other questions. Point out that not all families celebrate the same celebration in exactly the same way.
- Ask parents if they would be willing to talk to the class about an ethnic celebration and if possible, share some of the food that may be part of the celebration.
- Do some of the lessons in the DOE/Hawai'i Multicultural Awareness Project, Times for Celebration. This program is a study of ethnic celebrations practiced in Hawai'i today. It explores the Samoan saofa'i, Hawaiian baby lu'au, Japanese bon festival, and Chinese new year celebration.

## CULMINATING ACTIVITY

Planning

- Tell students that earth has gotten too polluted and overcrowded and that a few families - your students and families - have been selected to colonize a habitable planet in another galaxy. The trip will take two years. Each family may take their valuable possessions.
- Have the children plan what they will take and give reasons for these. Ask the children to include all the things they would do on the new planet that is currently occurring in Hawai'i today and how their arrival on the planet may change the planet and the people already living there.

## RELATED ACTIVITIES AND RESOURCES

Science

- Study the stars that appear in the Hawaiian skies, especially the Dipper, Arcturus, the North Star, Sirius. Become familiar with the position of these stars. Plan a special night to go out to look for these stars on a clear night.
- Study cloud formations over land as opposed to over open seas.
- Collect the plants carried to Hawai'i by the first migrators. Make leaf presses. Note the uses of the plants.

10c

RELATED ACTIVITIES AND RESOURCES

Math

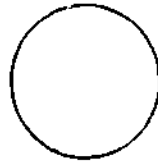
- Measure the distance between islands and island groups using a ruler and a map from the airlines or a shipping company. Ask someone at the Polynesian Voyaging Society to estimate the number of hours it would take a canoe to sail a certain distance.

Music

- Learn songs from Keli'i Tau'a's compositions on canoeing. (Recorded on "Hokule'a" album.)  
Compose simple chants based on "Hawai'i Loa" and "Mo'ikeha" chants.

Health

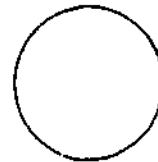
- "Who Am I?" - Have the children do a genealogical study of themselves.
  1. Interview their grandparents to get information about family background.
  2. Write a family tree showing three generations, racial extraction and pictures.



My Grandfather

\_\_\_\_\_  
Name

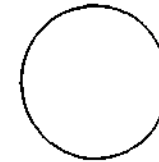
\_\_\_\_\_  
Racial Extraction



My Grandmother

\_\_\_\_\_  
Name

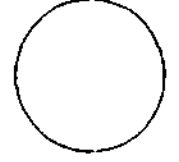
\_\_\_\_\_  
Racial Extraction



My Grandfather

\_\_\_\_\_  
Name

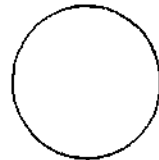
\_\_\_\_\_  
Racial Extraction



My Grandmother

\_\_\_\_\_  
Name

\_\_\_\_\_  
Racial Extraction



My Father

\_\_\_\_\_  
Name

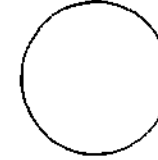
\_\_\_\_\_  
Racial Extraction



Me

\_\_\_\_\_  
Name

\_\_\_\_\_  
Racial Extraction



My Mother

\_\_\_\_\_  
Name

\_\_\_\_\_  
Racial Extraction



## RELATED ACTIVITIES AND RESOURCES

### Health

- Do a unit study of "I Am What I Am" to establish "Why I Am Me". What have we as a cultural group contributed to the culture of Hawai'i?
- Study the nutritional value of the foods eaten by the Hawaiians on their long voyages. Help the students prepare some of the foods the voyagers took with them on their long voyages, for example:  
Dry some bananas, taro, breadfruit, sweet potatoes.  
Salt and dry some fish.
- Keep a seven day record of everything you eat. Compare it with the diet of a typical Hawaiian boy or girl.  
Is the food you eat different from that eaten by a Hawaiian child? or a Filipino child? or a Samoan child? What is different? What has your cultural group contributed to the culture of Hawai'i? e.g., Chinese - chow mein and other Chinese dishes.
- Have children interview their grandparents' early experiences in Hawai'i on tape. Plan a suggested list of questions with the children. Ask students to share the tape with others.
- Make a chart of contributions representing all cultural groups in the classroom.
- Plan an international luncheon. Children will plan and parents will prepare a dish with their child using kōkua (help) and aloha (love) from their children.

### Language Arts

- Read legends and chants about migrations.
- Write a script for a short skit on a long voyage taken many years ago by a Hawaiian navigator.

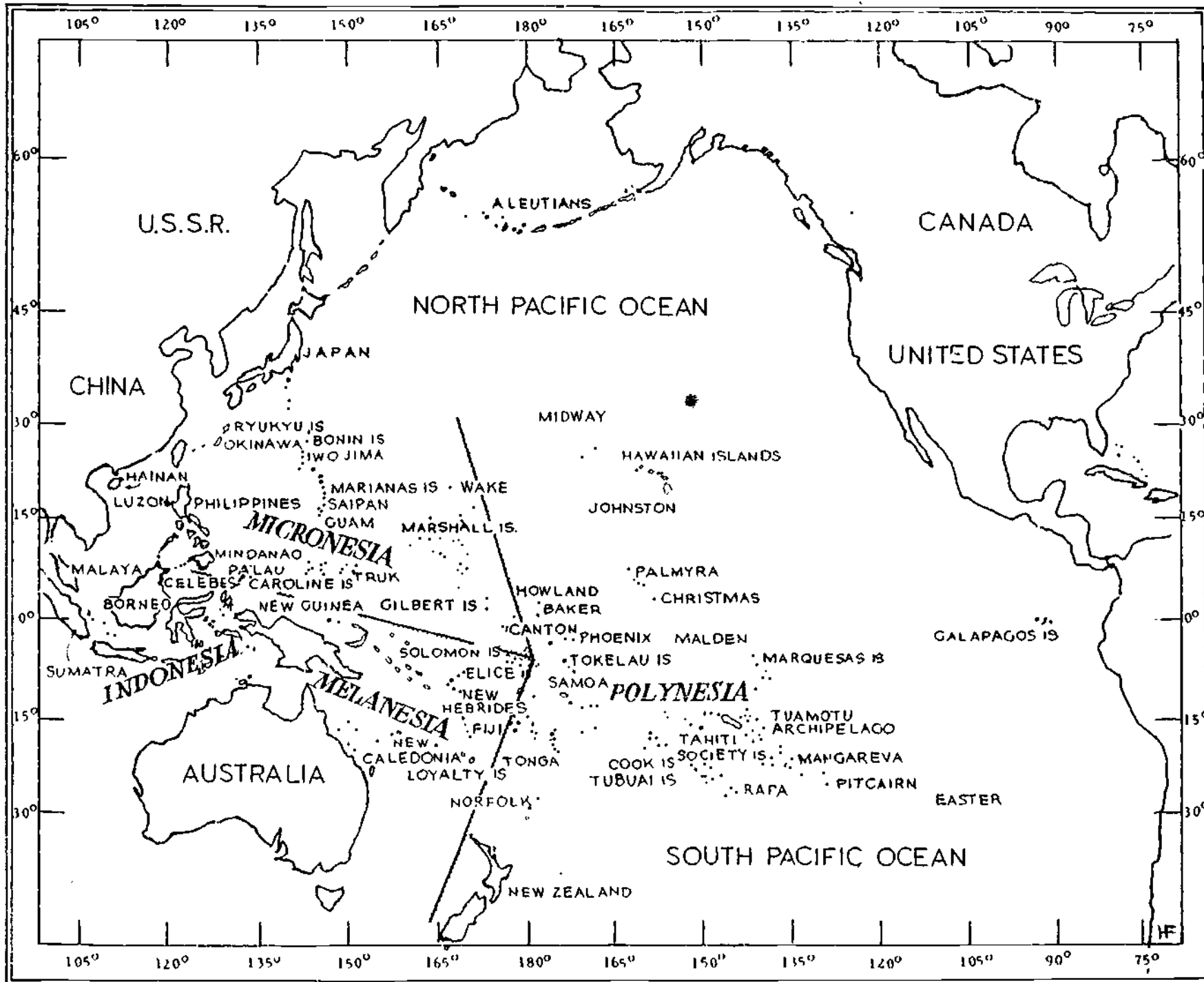
See the following books published by the Polynesian Voyaging Society in 1976.

Blackman, Maralyn, Hōkūle'a.

Kapepa, Stanley, A Canoe for Uncle Kila.

Mower, Nancy Alpert, The Voyage to Tahiti.

Mower, Nancy Alpert, The Vision of Mo'ikeha.





110

54

111

## BIBLIOGRAPHY OF TEACHER AND STUDENT REFERENCES

- Brown, Bill, People of the Many Islands: Polynesians and Rivers in the Sea. New York: Coward-McCann Publishing Co., 1958.
- Bauer, Helen, Hawai'i the Aloha State. New York: Doubleday and Co., 1960.
- Curtis, Carolyn, Keola, A Boy of Old Hawai'i. Honolulu: Tongg. 1957.
- Day, Grove, Hawai'i and Its People. New York: Meredith, 1968.
- DOE/Hawai'i Multicultural Awareness Project, Times for Celebration. Honolulu: 1979.
- Dunford, Betty, The Hawaiians of Old. Honolulu: The Bess Press, 1980.
- Feher, Joseph, Hawai'i: A Pictorial History. Honolulu: Bishop Museum Press, 1969.
- Handy, E.S.C., Ancient Hawaiian Civilization. Rutland, Vermont: Charles E. Tuttle Company, 1965.
- Handy, E.S.C., Native Planters in Old Hawai'i. Honolulu: Bishop Museum Press, 1972.
- Lindo, Cecelia, Polynesian Seafaring Heritage. Honolulu: The Kamehameha Schools and Polynesian Voyaging Society, 1980.
- Luomala, Katharine, The Menehune of Polynesia and Other Mythical Little People of Oceania. Honolulu: Bishop Museum Press, 1951.
- Malo, David, Hawaiian Antiquities. Honolulu: Bishop Museum Press, 1971.
- Mitchell, Donald, Resource Units in Hawaiian Culture. Honolulu: Kamehameha Schools Press, 1972.
- Potter, Norris W. and Kasdon, Lawrence M., Hawai'i Our Island State. Columbus: Charles E. Merrill Books, Inc., 1964.
- Pratt, Helen Gay, The Hawaiians, An Island People. Rutland, Vermont: Charles E. Tuttle Co., 1963.
- Titcomb, Margaret, Ka Manu Lele. New York: Dodd, Mead, 1963.

### UNIT III: CANOE BUILDING

#### Overview

"The canoe with its furniture was considered a valuable possession, of service both to the people and to the chiefs. By means of it they could go on trading voyages to other lands, engage in fishing, and perform many other errands." (Malo, p. 77). The kings and chiefs used it not only for transportation, but also as a means of displaying the strength of their armies.

The building of a canoe was a very important life activity for the Hawaiians and was imbued with religion. It was a long process which involved precise ceremony and definite roles played by the members of an entire 'ohana (family). The process expressed the skill of many specialists who were trained by their elders to produce the best, using the simplest tools made from products found in their environment. This human endeavor required great patience and physical endurance, for the process was a slow one and the workers had to live in the mountains until the canoe was built.

Religion played a major role in the lives of the Hawaiian people and thus the canoe-building process involved much religious ritual. The canoe expert (kahuna kālai wa'a) spent many hours training to be a skilled sculptor and priest. He conducted the entire process and made all the decisions, from the selection of the tree to the time and place of launching.

The canoe was a very important part in the lives of the Hawaiians for they depended on this craft for transportation. They had no beasts of burden to carry heavy loads from place to place so they depended upon their canoes. The sea was their main source of food so the canoe was a necessity for survival.

Thus we can see the reason for the importance placed on canoe building. Some have said that the Hawaiian canoe is one of the most remarkable achievements of the Hawaiians. It expresses their love and great knowledge of the sea. The canoe also transported them thousands of miles over rough seas and successfully brought them to these Hawaiian Islands.

The precision in the building process and their deep commitment and love for their gods were perhaps the reasons why they were a courageous, adventuresome people on the vast ocean.

This unit examines the process and work involved in canoe building, the materials and tools used, the roles of people involved, and the importance of religion and the 'ohana in canoe building.

### Teacher Information

1. The canoe was the principal medium of transportation in Hawai'i. It was used to transport people and goods from community to community and between islands.
2. Double canoes (kaulua) were used to settle many islands in the Pacific Ocean. These canoes may have weighed 5-10 tons and were probably 60-100 feet long. Thirty or more people could ride on the platform (pola) between the hulls of the canoe.
3. A house (hale) was built on the pola to protect the people from the hot sun and for food storage.
4. The leaders of these long voyages were the chiefs (ali'i) and navigator, or kahuna.
5. Single canoes were the ideal craft because the hulls could clear the coral reefs and they were light enough to be carried into canoe sheds (hālau wa'a).
6. The Hawaiian canoe with a single outrigger ('ama) was called a kaukahi.
7. Some of the tools used in canoe building were:
  - a. ko'i holu - broad adz
  - b. ko'i ho'oma - narrow, deep adz
  - c. ko'i kāpili - finishing adz
  - d. ko'i kila - steel adz
  - e. ko'i pa'ahana - adz for shaping hull
  - f. ko'i wili - socketed adz
  - g. 'ana - large pumice
  - h. 'elekū - lava crust polishing stone
  - i. 'ōahi or ōla'i - dense coral rock
  - j. 'ō'io - close grained basalt
  - k. pōhaku pao - chisel
  - l. pōhaku kāpili wa'a - stone handles
  - m. pūki'i wa'a - wooden clamps
  - n. puna - fine coral
  - o. pōhaku 'anai wa'a - stone rubbers
  - p. pōhaku kāpili wa'a - stone hammers
8. Materials used in canoe building were:
  - a. a large, sound log of koa for the wa'a (hull)
  - b. strips of wood for the mo'o (gunwale strakes), lā'au ihu (forward strakes) and la'au hope (aft strakes)
  - c. hau wood for the 'iako (booms)
  - d. wiliwili wood for the 'ama (outrigger)
  - e. coconut fiber to make 'aha (sennit)

9. The canoes were furnished with:

- a. hoe (paddles of koa)
- b. ka wa'a (baila of gourd)
- c. pōhaku hekau (stone anchors)
- d. kia - mast made of hau post
- e. lā (sail) of lau hala matting
- f. pa'u - mat made of lau hala to keep water out of the canoe

10. The building of a canoe was a religious affair. The canoe expert (kahuna kālai wa'a) was skilled in designing and shaping canoes. He was also a specialist in the religious ceremonies involved in the process of building canoes. The following outlines the steps in canoe building:

- a. When a man wanted to build a canoe he consulted the kahuna kālai wa'a or canoe expert.
- b. Upon finding a tall, straight koa tree, the kahuna went to the men's eating house (hale mua) and slept before the shrine.
  - 1) If he dreamt of a naked woman or man, it meant the tree was not a good tree.
  - 2) If he dreamt of a handsome well dressed man or woman, this was a sign that the tree was good for a canoe.
- c. The kahuna and his helpers prepared themselves for the trip into the mountains. They took with them a pig, coconuts, red fish (kumu), and awa to use as offerings to the gods.
- d. A religious thank you ceremony was held at the location of the koa tree and the offerings were made to the gods.
- e. In the morning of the next day, the pig was cooked and eaten. The kahuna checked the tree once more by watching for the elepaio bird which the Hawaiians believed was the goddess Lea of the forest. If it alighted on the tree and pecked at it, that was a sign that the tree was full of worms. If it passed the tree by, the kahuna kālai w proceeded with his adz (ko'i) and cut the tree.
- f. Again the gods were called upon for help. Only the kahuna was allowed to cut the tree down; if there were more kāhuna they could all help.
- g. When the tree began to crack, it was kapu for anyone to talk or make a noise.
- h. When the tree had fallen, the kahuna climbed onto the trunk, faced the cut end, and called for his white ceremonial malo. Having donned this malo he turned towards the top of the tree and smote his adz into the trunk to show where the head of the tree was to be cut off.
- i. There he tied an 'ie'ie lei and recited a prayer. Then he commenced to cut off the head of the tree.

- j. Having done this, the kapu was removed and the ceremony completed. The people cheered for now they could work.
- k. The kahuna planned the measurements for the inner parts such as the seats, the hollow inside and the walls. A neck was carved on the stern to which lines were tied for hauling the unfinished canoe down the mountain.
- l. When the canoe had been hollowed and shaped enough for transporting down the mountain, the kahuna declared another prayer to the gods and another feast was held.
- m. The gods were called upon to bless the canoe so nothing will happen to it on the way down the mountain.
- n. The ropes were tied to the neck of the canoe. The men, women and children of the village were called upon to help with the hauling of the canoe.
- o. The people took their positions. The kahuna was the last person among the multitude of people hauling the canoe down the mountain. No one was allowed to walk behind him. That place was kapu only for the god of the kahuna kālai wa'a. He blessed the area as they passed through.
- p. The canoe was carried carefully to the canoe house (hale wa'a) where more work on the canoe took place in the following sequence.
  - 1) Upper part was shaped
  - 2) Gunwales were shaved down
  - 3) Sides of the canoe shaped to perfection
  - 4) Mouth (waha) turned downwards
  - 5) Bottom (iwi kaele) hewn into shape
  - 6) Outside was then finished and rubbed smooth
  - 7) Outside painted black
  - 8) Inside finished with the reversible adz (ka'i owili)
  - 9) Rails (mo'o) were fitted on and tied to the gunwales with sennit or 'ahā
  - 10) Ornamental expansions (manu) fitted and tied on
  - 11) Cross-pieces ('iako) and outrigger ('ama) were made and attached
- q. Iolo-wa'a - Consecration Ceremony was performed after the entire canoe was completed. The canoe was placed in the ocean and taken out to sea. When a fish had been caught, it was brought back to shore and offered to Ku'ula, fish god. Then the ceremony began. Absolutely no disturbance was allowed throughout the ceremony; the canoe would not be good to use if any noise occurred.
  - 1) The canoe was carried into the hale wa'a
  - 2) Spread before the kahuna were the offerings to the gods: pig, red fish, coconuts
  - 3) The kahuna chanted a prayer to the gods to lift the kapu and to thank them for their guidance.



- 4) If the ceremony was unmarred, then a feasting took place and the kahuna turned the canoe over to the owner.
11. The lashing of a canoe was considered a very solemn function. No one was allowed to disturb the craftsman when he was lashing the canoe together. To do so when a chief's canoe was being lashed meant death for the offender.
  12. Types of canoes:
    - a. single canoe - kaukahī
    - b. double canoe - kaulua
    - c. triple canoe - (ka'ena-kane) pu-kolu
    - d. double canoe - one long and one short - ku'e'e
    - e. carved bow - lele 'iwi (the forward bow made broad)
    - f. short-wide - pou
    - g. large bow - ihu nui

### Generalizations

1. The Hawaiians were resourceful people who utilized their natural environment to build the canoe.
  - a. Trees were used for canoes.
  - b. Plant fibers were used for cordage.
  - c. Stone and wood were used for tools.
2. The canoe was the principal means of transporting the people and their goods.
3. Each step in making a canoe was a spiritual matter and traditional religious rites were observed during every aspect of canoe building.
4. The members of the 'ohana were interdependent in the entire process of building a canoe.
5. The kāhuna, men, women, and children all had definite roles to play in the process of canoe building.

### Concepts

1. Utilization of Resources: The allocation and use of resources
2. Process: A particular method of doing something, generally involving a number of steps or operations

3. Religion: Any specific system of belief, worship, conduct, etc., involving a code of ethics and a philosophy
4. Role: A learned behavioral pattern assigned to and performed by a person as he or she interacts with others in a group and includes privileges, rights and duties, and freedoms and responsibilities
5. 'Ohana: The extended family of the Hawaiians which included grandparents, parents, children, ties of blood, marriage and non-related persons adopted in friendship
6. Interdependence: Dependence on one another

### Objectives

1. Explain the importance of the canoes to the early Hawaiians.
2. Describe the roles of members of the 'ohana and the religious aspects involved in the canoe building process.
3. Identify the natural resources used by the Hawaiians for canoe building and explain their uses.
4. Record the steps in building a canoe in the form of a list, pictures, or verbalization.
5. Identify and explain the use of the tools in building canoes.
6. Identify and demonstrate the 'ohana concepts necessary for the success of canoe building.
7. Reproduce one kind of cordage used by the Hawaiians in canoe building.  
Example: 1. sennit - coconut fiber - 'aha  
2. hibiscus tiliaceus - hau

INDEX TO REFERENCES - CANOE BUILDING

	Canoe Building	Building Process	Tools and Resources	Role of 'Ohana	Role of Religion		
BAUER		27-32	31	39-42	31-32		
BUCK	Vol. VI						
CURTIS	135-156						
DAY	52, 139, 287, 302-304						
DUNFORD		115-117	109-111, 115-117		115-117		
FEHER	30-31, 50-55	50-53	52-57		50		
HANDY (A.H.C.)		242-244	26, 124, 242-244		40, 124, 242		
HANDY* (N.P.O.H.)							
HAZAMA							
LINDO	Entire book	38-41	42, 64-67	41	38-40		
MALO	126-135						
MITCHELL	116-124	118	117		118		
POTTER	13-14						
PRATT		104-112	36-42, 139	104-112, 140	140-112		
TITCOMB							

A.H.C. - Ancient Hawaiian Civilization

N.P.O.H. - Native Planters Of Hawaii

## LEARNING ACTIVITIES AND RESOURCES

Bulletin Board

- Display pictures of a variety of Polynesian canoes. (See the 1973 Dillingham Calendar. Artist: Herb Kane.)

Artifact Display

- Display on a table models of canoes, sails, paddles, hau wood, sennit, adz, pump drill, stones, and a variety of Hawaiian wood.

Opening Discussion

- Draw the children's attention to the bulletin board display of canoes. Discuss: Have you seen or ridden in a canoe before? Would you like to ride a canoe to           (name an island)          ? Encourage students to share experiences, ideas.

Discuss the importance of the canoe. Do you think canoes are important to the people of Hawai'i today? Explain. Do you suppose they were important to the early Hawaiians? Why or why not?

Dramatic Inquiry

- Draw the children's attention to the models and artifacts on the table. Encourage the children to browse and handle the artifacts. Have children choose one article from the table and discuss with others how the article may have been used.

Have students dramatize and discuss how the early Hawaiians may have built their canoes. Then ask the children what questions they would like to ask the Hawaiians about canoe building. List the questions on a chart. Have them hypothesize the steps in building canoes and list these steps on a chart.

Categorizing

- Categorize questions into workable subject headings. Have children suggest headings, e.g., tools, steps in building, roles, religious ceremony.

Research

- Divide the children into research groups ('ohana). Each 'ohana will select a haku (leader). Each group will:
  1. Select one category of questions to answer.
  2. Decide how the report will be presented to the class.
  3. List the jobs or tasks involved in getting the report ready for presentation. Decide as a group who will be responsible for each job listed.
  4. Decide on materials needed.

12,

## LEARNING ACTIVITIES AND RESOURCES

Stress the importance of the children demonstrating the following 'ohana concepts:

1. kōkua - sharing
2. kuleana - personal responsibility
3. laulima - cooperation
4. alu like - working together

Give students enough time to finish their research.

See "Bibliography of Teacher and Student References" and "Index to References" in this unit.

Charting and Discussion

- Begin a chart on the "Tools of Ancient Hawai'i" with suggested headings from the children, e.g.,

Tools	Sources	Uses

Discuss with students what they have learned about the Hawaiians. Call attention to the chart and encourage students to form generalizations about the early Hawaiians and their tools.

Comparison

- Compare the Hawaiian canoe with those of other Polynesian island groups. (Information available from the Polynesian Cultural Center on O'ahu.) List comparisons on a chart:

	Hawaiian	Tongan	Samoan
Wood used			
Style of Manu			
Length			
Purpose			

## LEARNING ACTIVITIES AND RESOURCES

### Field Trip

- Find out if your island has a Hawaiiana center which offers students an opportunity to learn about canoes. O'ahu students may go on a field trip to Kualoa State Park to learn about canoe building and paddling, the importance of canoes to the Hawaiians many years ago and today.

## CULMINATING ACTIVITIES

### Reporting

- Each 'ohana will present its report using a variety of techniques: filmstrip, radio program, T.V. broadcast, etc.

List the steps in building a canoe on a chart as reported by the 'ohana. Compare this chart with the hypotheses the children made earlier in the unit.

### Generalizing

- Have students form generalizations about the canoe building process. Help students to see the relationships among the religious beliefs, the environment, the social structure and the canoe building process.

### Movie Roll

- Have students prepare a movie roll and a group story to present to another class. Working as an 'ohana, have each student be responsible for illustrating one step in building a canoe.

### Discussion

- Compare the uses of the ancient Hawaiian canoe with those of today. Discuss how the canoe is used today and identify the customs that are still carried on today. Compare the builder of canoes today with the kahuna kālai wa'a.

Film: "Hōkūle'a" I, II

Which cultural practices are still being used today?

How have the roles of canoe builders and experts changed over the years?

Do they still use the same methods and tools?

Are the ceremonies (religious) still being observed today?

### Evaluation

- Each child will make a booklet on "Canoe Building in Early Hawai'i" which will include all of the information he or she can remember. The child will illustrate and write captions under the illustrations. The booklets can then be used as references by other children.

RELATED ACTIVITIES AND RESOURCES

Art

- Construct miniature canoes using hau wood.  
Make a sail using lau hala.  
Braid sennit using coconut fiber.

Music

- Compose a canoe chant in English and have it translated into Hawaiian.  
Chants: "Hoe Aku i Kou Wa'a" by M. Rosehill. See Lindo, Polynesian Seafaring Heritage, p. 36.  
Songs: "Ku'u Wa'a" and "Nā Hoe Wa'a". See Māhoe, Noelani, E Hīmeni Hawai'i-Hawai'i Kākou. Honolulu: Governor's Committee Hawaiian Text Materials, 1973, pp. 36, 92. This book along with three cassette tapes are available in most school libraries.  
Other compositions by Keli'i Tau'a, record: "Hōkūle'a"

Hawaiian Language

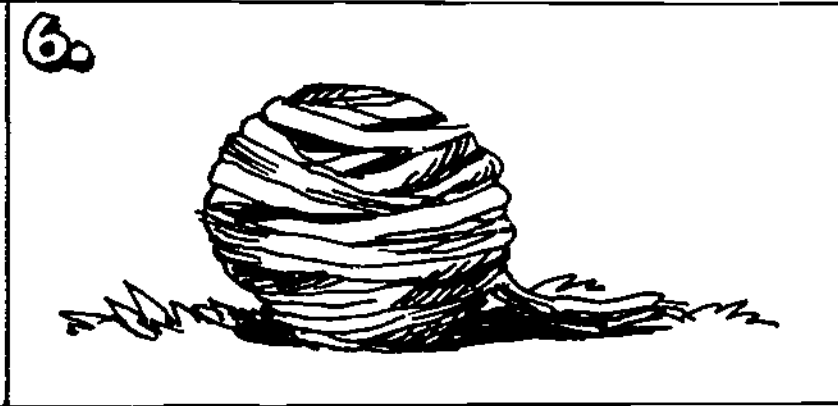
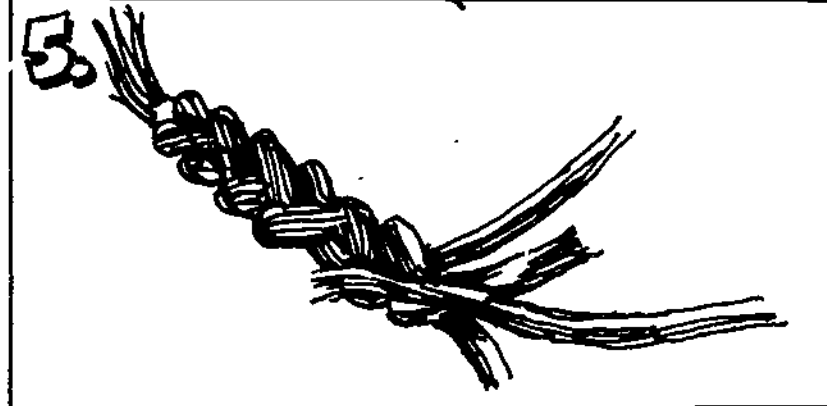
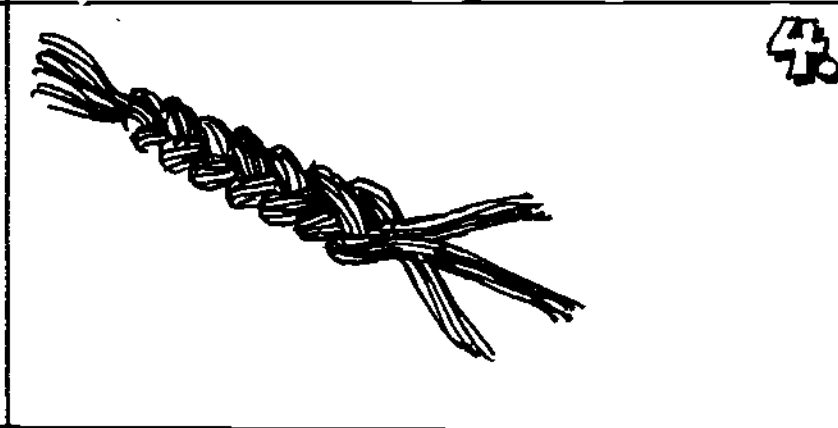
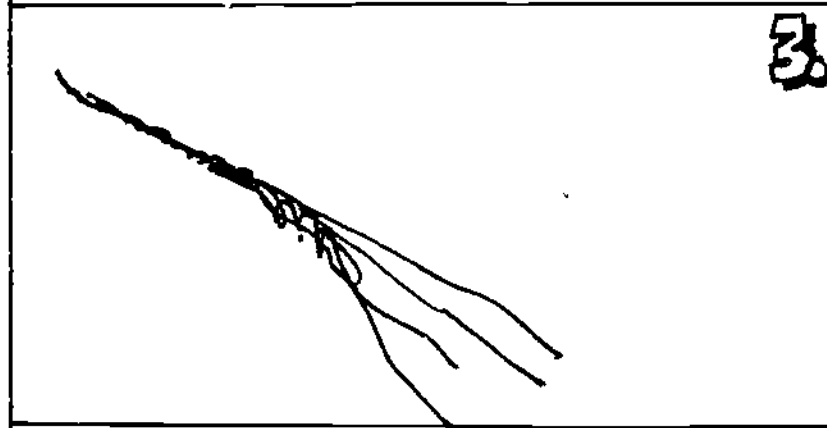
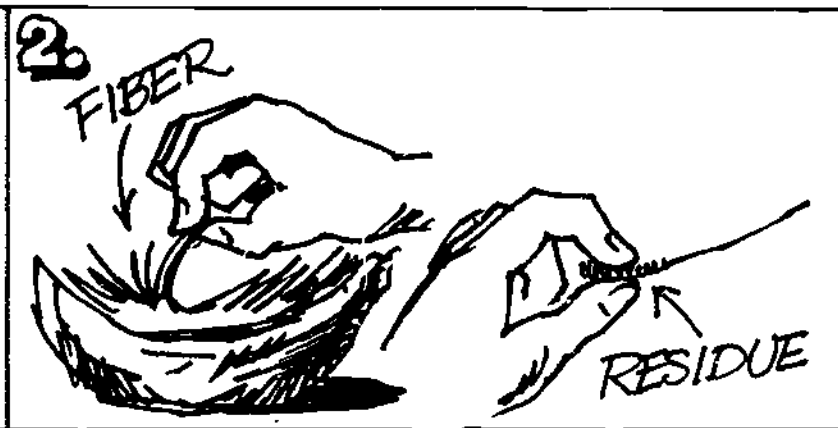
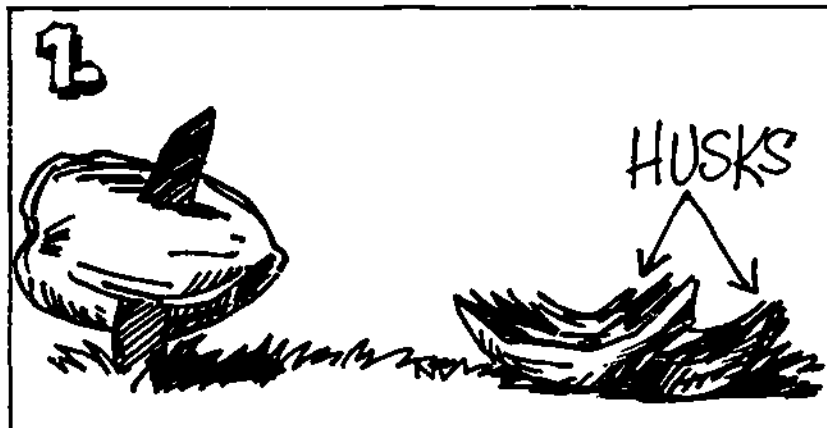
- Learn the different parts of the canoe using the Hawaiian names. See Lindo, Polynesian Seafaring Heritage, p. 36.

Language Arts

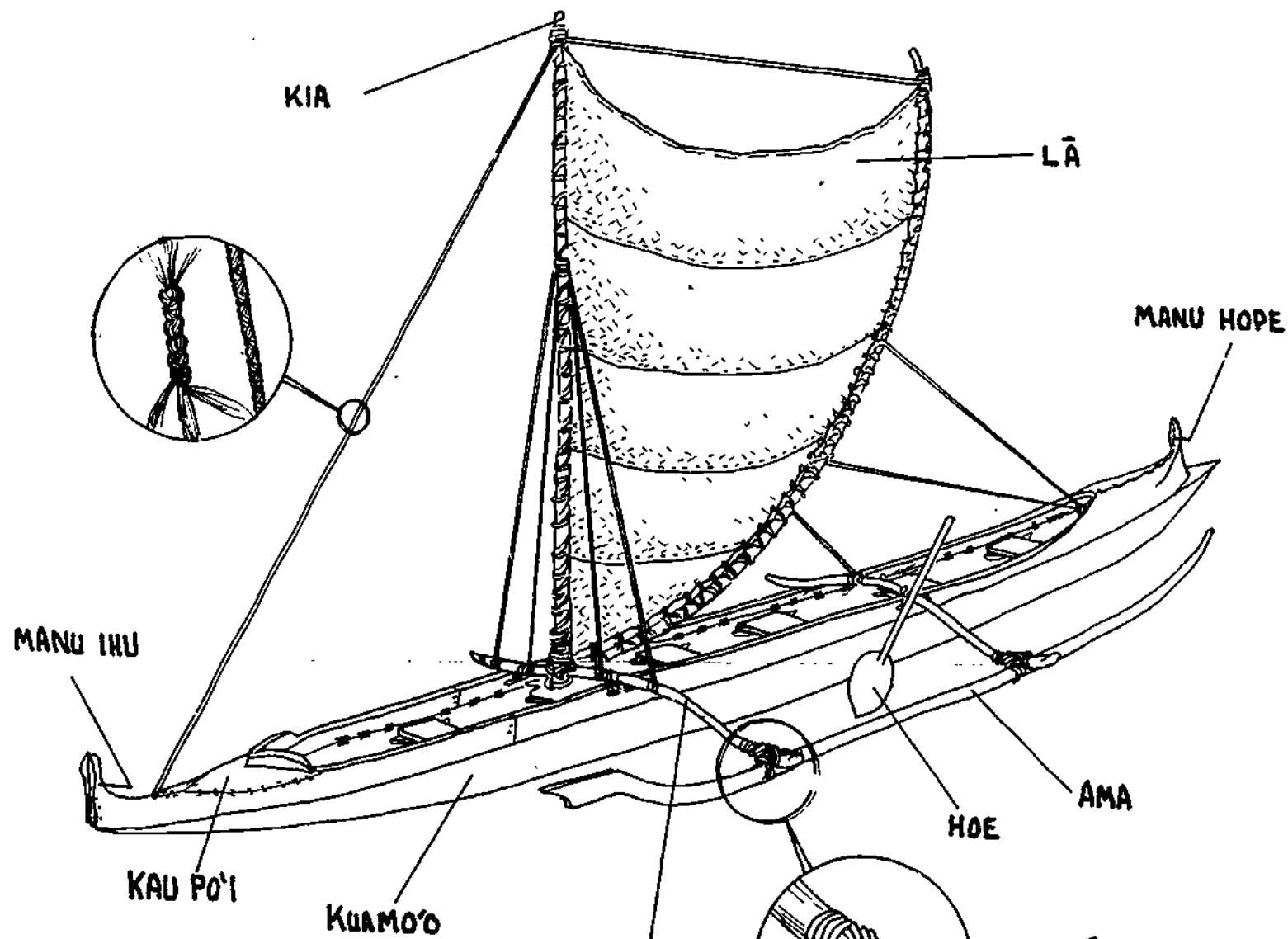
- Write an imaginative story of how you built a canoe. Include all the steps involved and the role you played in building it. Use as many Hawaiian words as you can.

Craft

- Braiding coconut fiber - 'aha
  1. Get a green coconut and husk it.
  2. Pull the fibers from the husk without breaking them and clean each fiber using your index finger and thumb.
  3. Having cleaned a sizable amount of fibers, take three and wrap a fourth around the bundle of three.
  4. Taking three of these bundles, braid them.
  5. When one end gets short, join another to it by placing the short strand in the middle. Place the new strand on the short strand in the middle and continue braiding.
  6. Continue this process until you have made 'aha long enough to tie the miniature canoe parts together.



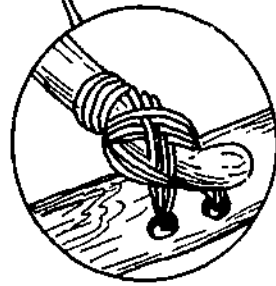




137

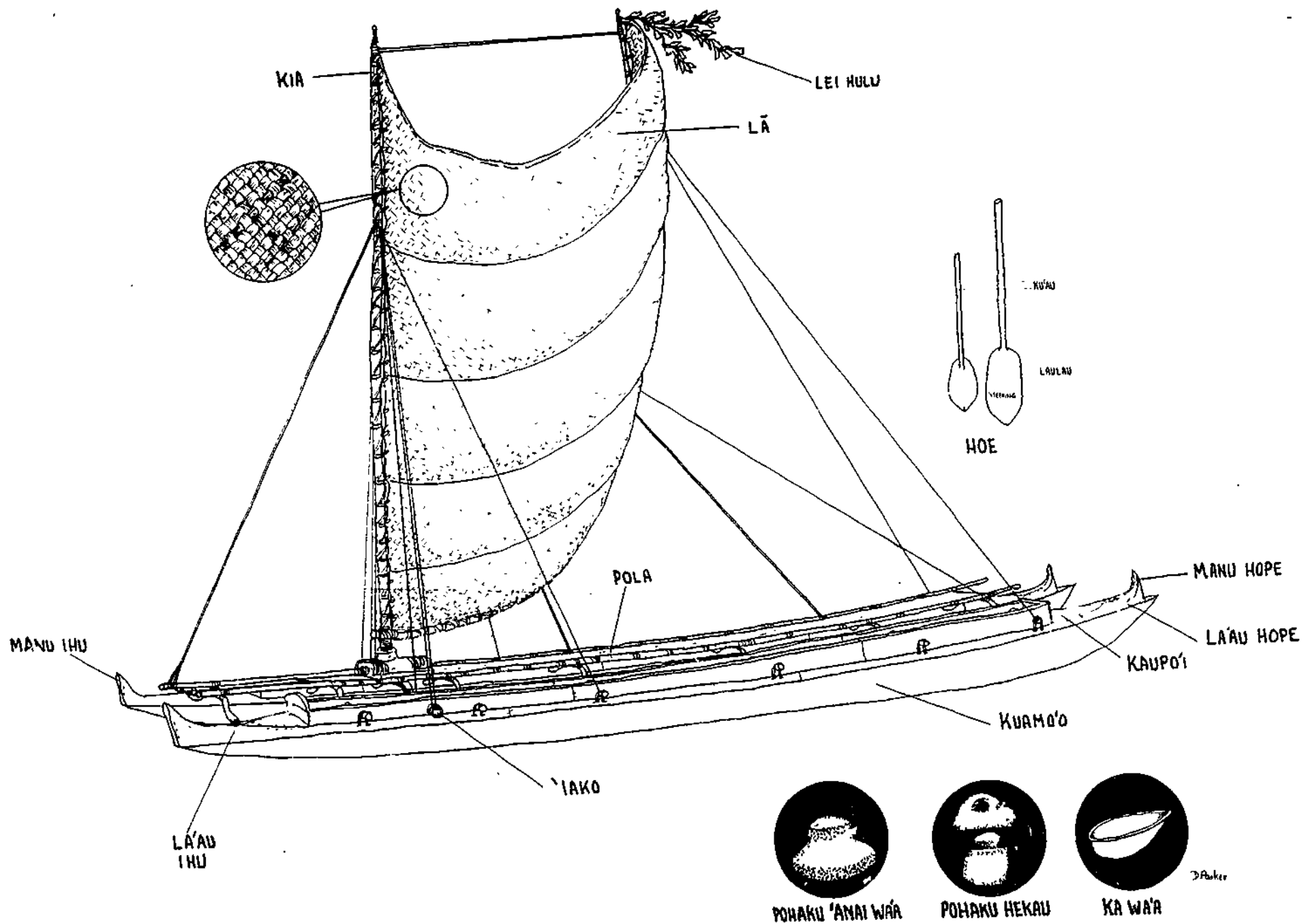


68



3/foke

138



139

69

140

BIBLIOGRAPHY OF TEACHER AND STUDENT REFERENCES

Books

- Curtis, Caroline, Life in Old Hawai'i. Honolulu: The Kamehameha Schools Press, 1970.
- Day, Grove A., Hawai'i and Its People. New York: Meredith Press, 1968.
- Feher, Joseph, Hawai'i: A Pictorial History. Hono'lulu: Bishop Museum Press, 1941.
- Hazama, Dorothy (Editor), Culture Studies: Hawaiian Studies Project, Transparency Masters and Data Box: Culture Studies: Hawaiian Studies Project. Honolulu: Department of Education, 1978.
- Lewis, Oscar, Hawai'i, Gem of the Pacific. New York: Random House, 1954.
- Lindo, Cecilia and Mower, Nancy, Polynesian Seafaring Heritage. Honolulu: Kamehameha Schools and Polynesian Voyaging, 1980.
- Malo, David, Hawaiian Antiquities. Honolulu: Bishop Museum Press, 1951.
- Mower, Lewis, The Voyage to Tahiti. Honolulu: Polynesian Voyaging Society, 1976.
- National Geographic (December 1974).
- Pratt, Helen G., The Hawaiians, An Island People. Vermont: Charles E. Tuttle Co., 1963.
- Pūku'i, Mary K., The Canoe Making Profession of Ancient Times, Vol. 15. Honolulu: Bishop Museum Press, 1941.

Film

- "Pacific Island", 11 minutes. Film describes canoe building skills.

## UNIT IV: LAND DIVISION

### Overview

The geographic factors and natural resources of the islands influenced the way the early Hawaiians divided their land, which in turn influenced the way the Hawaiians met their basic needs.

The basic unit of land division for the 'ohana was the ahupua'a (land sections that ran from the mountains to the sea), which enabled 'ohana members to produce most of the products needed to meet their needs. Members of the same 'ohana lived within one ahupua'a and were dependent upon each other for the satisfaction of their needs. The members of the 'ohana who lived by the seashore (kai) and those who lived and worked on the plains (kula) and inland (uka) areas shared the products of their labors with each other.

The Hawaiians believed that the land ('āina) was entrusted by the gods into the care of the highest chief (ali'i nui). The ali'i nui allotted some land for himself and divided the rest among his chiefs. Whenever a new ali'i took over rule of the island, some changes took place; new chiefs were selected to be in charge of the land divisions. However, the common people (maka'āinana) were generally not affected by these changes.

The ali'i and the maka'āinana were dependent upon the good will of each other. Without the favor of the ruling chief of the island, 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.

This unit investigates the method and units of land division, utilization of the land, and the roles played by members of the 'ohana within the ahupua'a.

## Teacher Information

1. In the days of the early Hawaiians each island was a separate unit and was ruled by a great chief (ali'i nui).
  - a. The island was divided into land areas that ran from the mountains to the sea. These districts were called moku. The ruler of a moku was appointed by the ali'i nui and was called the ali'i 'ai moku (chief who ruled a district).
  - b. Each moku was further divided into smaller sections that ran from the mountains to the sea.
    - 1) These sections were called ahupua'a (ahu - altar of stones; pua'a - pig). An image of a pig's head was placed on the altar during the Makahiki season when the taxes ('auhau) were collected and offerings made to Lono, the god of peace and agriculture.
    - 2) The ruler of the ahupua'a was a lesser chief, called the konohiki (headman).
    - 3) Ahupua'a varied in size. The boundary lines followed the natural lines of the land. It could be a ridge, a depression in the land, a stream, a tree, certain patches of grasses or even the home of a certain bird. Sometimes a stone was rolled down the mountain and wherever the stone stopped, that location became the boundary.

There were trained people who determined the correct boundaries. These experts were trained at an early age and were called to settle boundary disputes.
  - c. The ahupua'a were often further subdivided into sections called 'ili. The 'ili sometimes reached the sea.
  - d. An 'ili was divided into lele which were separate pieces of land scattered in different parts of the ahupua'a, e.g., lele for taro ('āina kalo), lele for plants ('āina kula), lele for the chief (kō'ele or hakuone), lele for house lots (pā hale).
  - e. A mo'o was a land division of an ahupua'a which usually did not reach the sea.
2. The ahupua'a was a tax unit and changed hands when a new chief was appointed by the ruling ali'i. It was usually a self sufficient economic unit.
  - a. The people living in the ahupua'a had the right to use the resources of the land within the ahupua'a.
    - 1) They went to the ocean (kai) for seafood.
    - 2) They traveled to the midlands (kula lands) for pili grass for their houses and for olonā for fiber.

- 3) They walked to the mountains (uka) for timber to build houses and fashion bowls for containers.
  - 4) They used the water that came from the streams that ran through most of the ahupua'a. Ditches ('auwai) were built so that taro (kalo) could be raised in wet patches (lo'i). Streams were also used for bathing, washing and drinking. Strict kapu prevented people from polluting the streams. Bathing and washing were allowed only at the mouth of the stream. People living in an ahupua'a without streams might get their water from springs, either on land or just offshore, or from human-made or natural wells.
- b. No person could take what grew in another ahupua'a.
  - c. The most permanent land division within an ahupua'a was the 'ili. These divisions were given to the 'ohana (families) that cultivated them. They lived in the 'ili and generally were permanent tenants even when the chief of the ahupua'a (konohiki) was changed due to the taking over of the island by a new ali'i nui.
3. The ali'i nui was interested in having large numbers of warriors to fight for him so it was probable that he insisted that the people living on his island be treated well by the chief of the ahupua'a (konohiki).
    - a. Any person living in an ahupua'a had the right to move from one ahupua'a to another if the konohiki was cruel.
    - b. The people lived under strict rules (kapu) so punishment for disobedience was expected. Unusual severity, however, could cause them to move out.
    - c. The konohiki lived in the ahupua'a and the common people (maka'āinana) were required to work his lands every fifth day. This was like a rental payment. They also had a yearly payment that had to be made during the Makahiki (yearly celebration of Lono, the god of agriculture and peace).
      - 1) The Makahiki lasted about four months: October, November, December, January.
      - 2) It was a time when men, women and chiefs rested and abstained from their work.
      - 3) The people participated in sports, feasting, dancing and having a good time.
      - 4) War was forbidden (kapu) and all the people participated in a great festival to honor Lono, god of the Makahiki.
      - 5) The Makahiki was divided into three periods.
        - a) The first period was the kapu time when the whole ahupua'a was sacred and no one was allowed to play.
          - (1) The taxes for the chief of the island (ali'i nui) had to be paid. They were brought to the altars of Lono and were called ho'okupu.

- (2) The ali'i received these gifts when the carved image of Lono was carried on the top of a pole to each ahupua'a. The gifts were accepted by the priests (kāhuna) and were divided by the ali'i nui, his followers and the priests.
  - b) The second period began after the gifts were collected and the priest said a prayer ending the kapu. The celebration, including hula dancing, sports, chanting and feasting then began. The pole was lowered as the priest left the village and raised again when they got to another ahupua'a.
  - c) The third period began at the end of the Makahiki Festival, when the ali'i nui went offshore in a canoe. When he returned, spears were thrown at him. He had to ward off the spears to prove he was worthy enough to represent Lono. Most of the ali'i nui had warriors to ward off the spears but Kamehameha I stood the test alone.
4. There were definite roles played by the people of an ahupua'a.
    - a. These roles were governed strictly by rules (kapu) and to break a kapu meant certain death or severe punishment.
    - b. To offset the harshness of the punishment, each moku had a place of refuge (pu'uhonua) for people who broke a kapu.
    - c. Each member in an ahupua'a had to perform his/her role so that the people could survive.  
For example: If the planter was lazy and did not plant enough kalo, it would adversely affect numerous people in the ahupua'a.

### Generalizations

1. Geographic features and natural resources of the islands influenced the way the early Hawaiians divided their land which, in turn, affected the way the Hawaiians met their basic needs.
2. The early Hawaiians believed that the land ('āina) was entrusted by the gods into the care of the ali'i nui (highest chief). Thus, the people did not own the land.
3. The division of land into ahupua'a, which were land sections that ran from the mountains to the sea, enabled the 'ohana to get the resources and produce the goods to meet their basic needs.
4. Members of the same 'ohana lived within one ahupua'a and were interdependent for the satisfaction of needs.

### Concepts

1. Economic organization: A pattern of arrangement involving the production, distribution, and use of goods and services and reflects the values and objectives of the particular society
2. Hawaiian land division: A system of division of lands which enabled the people to utilize the resources from the mountains to the sea
3. 'Ohana: The extended family of the Hawaiians which included grandparents, parents, children, ties of blood, marriage, and non-related persons adopted in friendship
4. Interdependence: Dependence on one another

### Objectives

1. Analyze the relationship between the geographic features, natural resources of the islands and the way the early Hawaiians divided the land.
2. Describe the system of land division in early Hawai'i.
3. Explain the importance of the ahupua'a to the 'ohana.
4. Describe and explain the interdependence of the members of the 'ohana for satisfaction of basic needs.
5. Describe and explain the role of the ali'i and the maka'āinana in the economic system.
6. Compare the past and present practices of land utilization.
7. Compare the economic role of the early Hawaiians and the people of Hawai'i today.



INDEX TO REFERENCES - LAND DIVISION

	Land Division	Method of Division	Utilization, Makahiki	Role of 'Ohana	
BAUER		34	45	39-42	
BUCK					
CURTIS			157-186		
DAY					
DUNFORD	40	41-42	40-43, 51-56	43-44	
FEHER		98-99	111-112, 136-137		
HANDY (A.H.C.)		37-40, 83-93	64-66 (Makahiki), 83-93		
HANDY (N.P.O.H.)	46-66		327-385		
HAZAMA					
LINDO					
MALO			141-158		
MITCHELL					
POTTER	35-39	35-37	34-39, 54-56		
PRATT		42-43	140-141		
TITCOMB					

A.H.C. - Ancient Hawaiian Civilization

N.P.O.H. - Native Planters Of Hawaii

## LEARNING ACTIVITIES AND RESOURCES

### Bulletin Board Display

- Draw and display a map of a hypothetical island showing mountains, streams, forests, beaches, plants.
- Mount another map of the town in which the children live showing physical features of the area.
- Obtain a map of the area in which the children live from the state Department of Land and Natural Resources showing the utilization of the land many years ago.

### Discussion

- 1. What is an island? Use a dictionary to find the correct definition.
- 2. Ask students to name the natural physical features that can be found on their island (mountains, streams, etc.). Encourage students to discuss the importance of the features to the early Hawaiians.
- 3. Hand out a map of the island on which you live showing the mountain ranges, harbors, streams, etc.

### Dramatization

- Divide the class into three 'ohana. Give each group a printed copy of a physical map of your island.

Situation: You are a group of people who has just arrived on a new island. You need to decide on the best way to divide the land among the three 'ohana. Think about your needs and decide on the best and fairest way to divide the land.

Each group will tell why they divided the island as they did.

### Recording

- Record on a chart the reasons why each group divided the land the way they did.

### Inquiry

- Have children present problems they encountered in reaching a decision. List questions they need to have answered about how the land was divided in early Hawai'i. Encourage children to ask questions about the rulers and their subjects.

## LEARNING ACTIVITIES AND RESOURCES

Research

Questions should include:

1. How was the land divided?
2. Who ruled the divisions? the island?
3. What were his responsibilities?
4. What was his title? How did he earn that title?
5. Who were the people who did all of the work?
6. Did they have slaves like the American plantation owners?

- Have each 'ohana do research using the following books:

Bauer, Hawai'i the Aloha State, pp. 26-27.

Dunford, The Hawaiians of Old, pp. 41-42.

Feher, Pictorial History of Hawai'i, pp. 98-99.

Handy, Ancient Hawaiian Civilization, pp. 83-86.

Handy, Native Planters in Old Hawai'i, pp. 46-56.

Hazama, Hawaiian Culture Studies, Data Card File.

Potter and Kasdon, Hawai'i Our Island State, pp. 34-39; Diagram,  
p. 37.

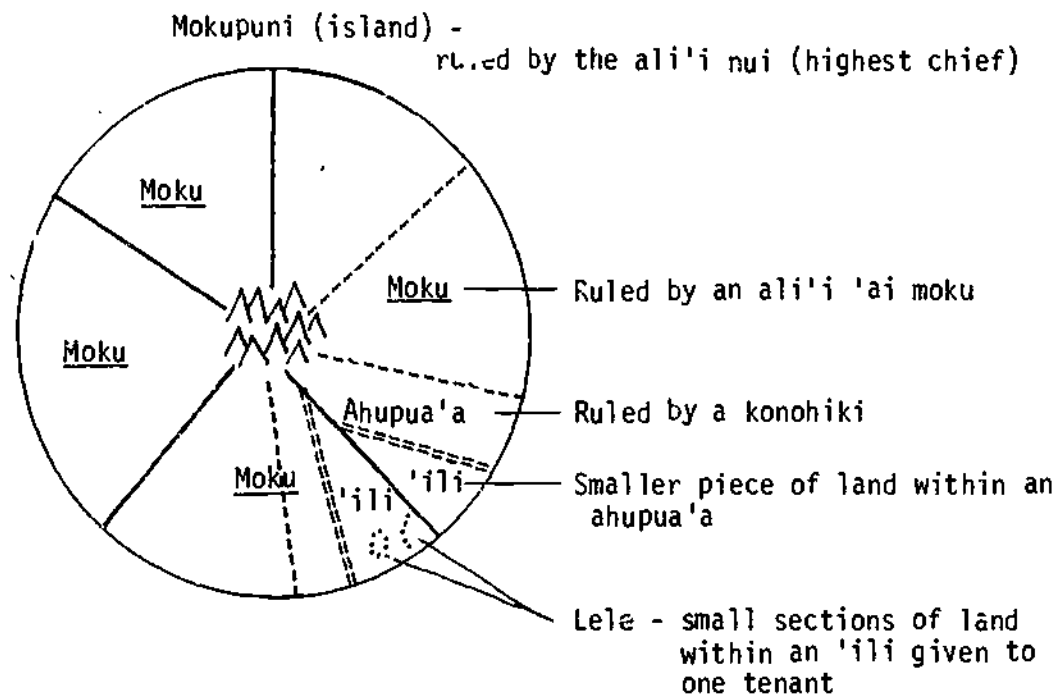
S'iggs, Lords of the Blue Pacific, pp. 116-117.

Labeling

- As the 'ohana report their data, compile the information and diagram and label the divisions of land on the map posted on the bulletin board with the following:

mokupuni - island  
moku - large districts divided from the mountain to the sea  
ahupua'a - smaller land divisions within each moku  
'ili - smaller land divisions within the ahupua'a  
lele - sections of land within an 'ili

157



Discussion

- Have a discussion to assess the students' thinking and the knowledge gained from their research. Encourage students to suggest analytical questions for discussion. Questions may include the following:
  1. Do you think there was warfare in the early days?
  2. Why did the Hawaiian people fight against each other? (land possession)
  3. Who fought these battles for the chiefs?
  4. Who was in charge of gathering men to fight for the chief? (the konohiki)
  5. If you were living in early Hawai'i under a mean konohiki, would you go to battle for him?
  6. What would happen if the konohiki could not send any men to the ali'i? (The ali'i would get very upset and ask the konohiki why the people moved away from the ahupua'a.) Why would the konohiki not be able to send any men to the ali'i?

150

## LEARNING ACTIVITIES AND RESOURCES

Dramatization

7. If you were a konohiki, how would you treat the people in your ahupua'a in order to get them to work for you so that there would be lots of food to eat?
8. Did the Hawaiians have to pay to live on the land?
9. How did they pay for the land?
10. When did they pay their taxes?
  - a. Discuss the Makahiki celebration. Talk about the god Lono and his role in the life of the Hawaiian planter and the people of the area.
  - b. Read excerpts from books describing the Makahiki season and the celebration of Lono.
  - c. Plan a Makahiki celebration including chants, dances, games and the ceremony of Lono. Share this with the entire school. Prepare some early Hawaiian food and have a feast (pā'ina). Include the parents of the children in the planning.

Recording

- Have the children hypothesize how they think the land was used many years ago. Use the Hawaiian artifacts and have the children dramatize life in an ahupua'a. Have them decide where their artifacts were used - in the uplands, midlands or by the sea. Divide the classroom into designated areas and have them dramatize life in the uplands (uka), midlands (kula) or by the sea (kahakai).
- Have them share their dramatizations with the total group.
- Sketch or write the information on the map of the hypothetical island on the bulletin board
- Encourage the students to ask questions about the artifacts and about life in an ahupua'a. Record the questions on charts.
- Talk about the utilization of the land today. Compare the students' hypotheses about the early Hawaiians' utilization of land with the uses today.

Discussion

161

## LEARNING ACTIVITIES AND RESOURCES

### Gather Information

1. Are there changes?
2. Why do changes occur?
3. Is it for the better? Why? Why not?

Discuss population change:

1. Who lived here many years ago?
2. How many people lived in this area?
3. How many people live here today?
4. What are some of the physical features of the land that attracted people to live here?

- Mount a map of your area in which the children live. Have the children study the map carefully to gather information on how the land was used.
- Study old photographs of the land taken many years ago. These can be brought in by the children or borrowed from state libraries in your location. Look for plant life, structures, people and how they were clothed, and activities in the photographs.
- Have the children interview the oldest members of their 'ohana who were living in Hawai'i before World War II to gather information on how the land was used.
- Mount a picture of the ahupua'a published by the Kanehameha Schools. Using the information the children have presented, point out the use of the land from the ocean to the mountains. Have the children discover more information by carefully studying the ahupua'a.

Look for information about:

- Plants - Where planted?
- Animals - Where were they raised?
- Houses - Location, number

### Discussion

- Look at the hypotheses they made about the ancient use of the land on the hypothetical island. Compare it with the information obtained from the picture of the ahupua'a.

## LEARNING ACTIVITIES AND RESOURCES

### Field Trip

- Field trip: Go on a walking trip to see the town.
  1. Point out natural features that still remain.
  2. Have the children create legends of how a natural feature came to be. Have them illustrate these legends.

### Discussion

- Have students name human made structures of their community and discuss their purposes. Then discuss the following questions:
  1. Do we need to divide the land today as the Hawaiians did many years ago? Why? or why not?
  2. How have needs changed the use of the land?

### Gather Information

- Study the ahupua'a once more and define the roles of men, women and children.
- Study pictures in books and formulate generalizations about roles.

### Dramatization

- List the following roles on a chart:
 

farmer	canoe maker	chief
fisherman	hula teacher	stone wall builders
kahuna		
- Group students according to the roles and have them dramatize their roles as a Hawaiian farmer, etc., their responsibilities, who taught them. Elicit questions from students as dramatizations are performed.
- List the questions on a chart under each role.
  - e.g., 1. Who performed this role?
  2. What were the responsibilities?
  3. What were the rules (kapu) which had to be followed?

### Research

- Have each group do its own research using its own initiative to find research materials in the classroom as well as the library.
  1. Stress the importance of the following 'ohana concepts.

## LEARNING ACTIVITIES AND RESOURCES

Iaulima - cooperation to get the work done  
 kōkua - help one another  
 alu like - work together as a group  
 aloha - love for one another  
 ho'omanawanui - patience

These were important concepts in the group life of early Hawai'i.

Reporting

- Have the groups present their finding to the total group.

Methods of presentation may include:

- a. Skits
- b. Oral report accompanied by pictures
  1. movie role
  2. film strip
  3. picture-slide show
  4. T.V. broadcast
- c. Oral report
  1. radio program
  2. news broadcast

Retrieval Chart

- Compile the information presented by the groups on a chart.

Occupations	Male	Female	Children

- Begin a list of kapu (rules) that governed the lives of the people in ancient Hawai'i.

Generalizing

- Have children formulate generalizations about rules and roles.  
e.g., Society develops rules to help individuals perform their roles.



## CULMINATING ACTIVITIES

### Discussion

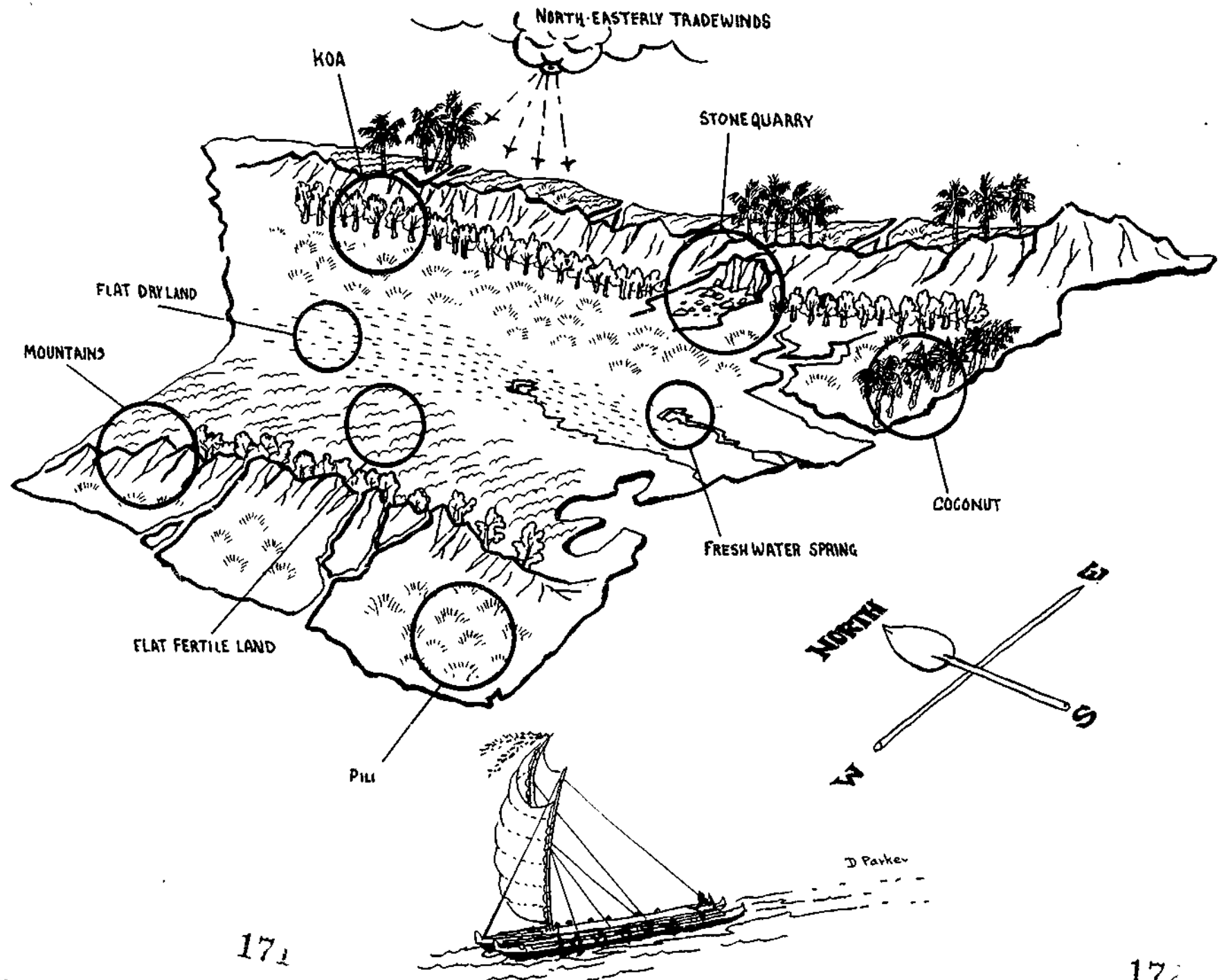
- Compare the role and responsibilities of the members of the early Hawaiian family and the students' families. Discuss the students' experiences and roles of their parents and grandparents.
  1. Discuss how roles change as one grows up.
  2. Discuss why roles change.
    - a. What will your role be when you become an adult?
    - b. Can a person assume more than one role at a time? e.g., farmer, daddy, husband; kapa maker, mother, wife.

### Simulation

- Hand out a map of the island located on the next page. Tell students: You are the highest ranking ali'i on your island. You have arrived on the island with five chiefs and with the following plants:

kalo - taro	niu - coconut	kukui - candlenut
'u'u - breadfruit	kī - ti	'uala - sweet potato
milo - tree used for bowls	kō - sugar cane	wauke - tapa plant
mai'a - banana	'ohe - bamboo	'ōhia 'ai - mountain apple

On the map show the land you are going to keep for your 'ohana and also show how you are going to divide the rest of the land for your chiefs and their 'ohana. Write the names of the plants on the map where you think they should be planted.



171

172

RELATED ACTIVITIES AND RESOURCES

Language Arts

- Write poems and legends about the natural features of the area in which the children live.
- Pretend you are a chief of a new island. Write a list of kapu you would immediately enforce on the people who live there.
- Read stories about the utilization of land in Curtis, Life in Old Hawai'i. See the book's table of contents for story titles, e.g., "In the Upland", p. 145.

Art

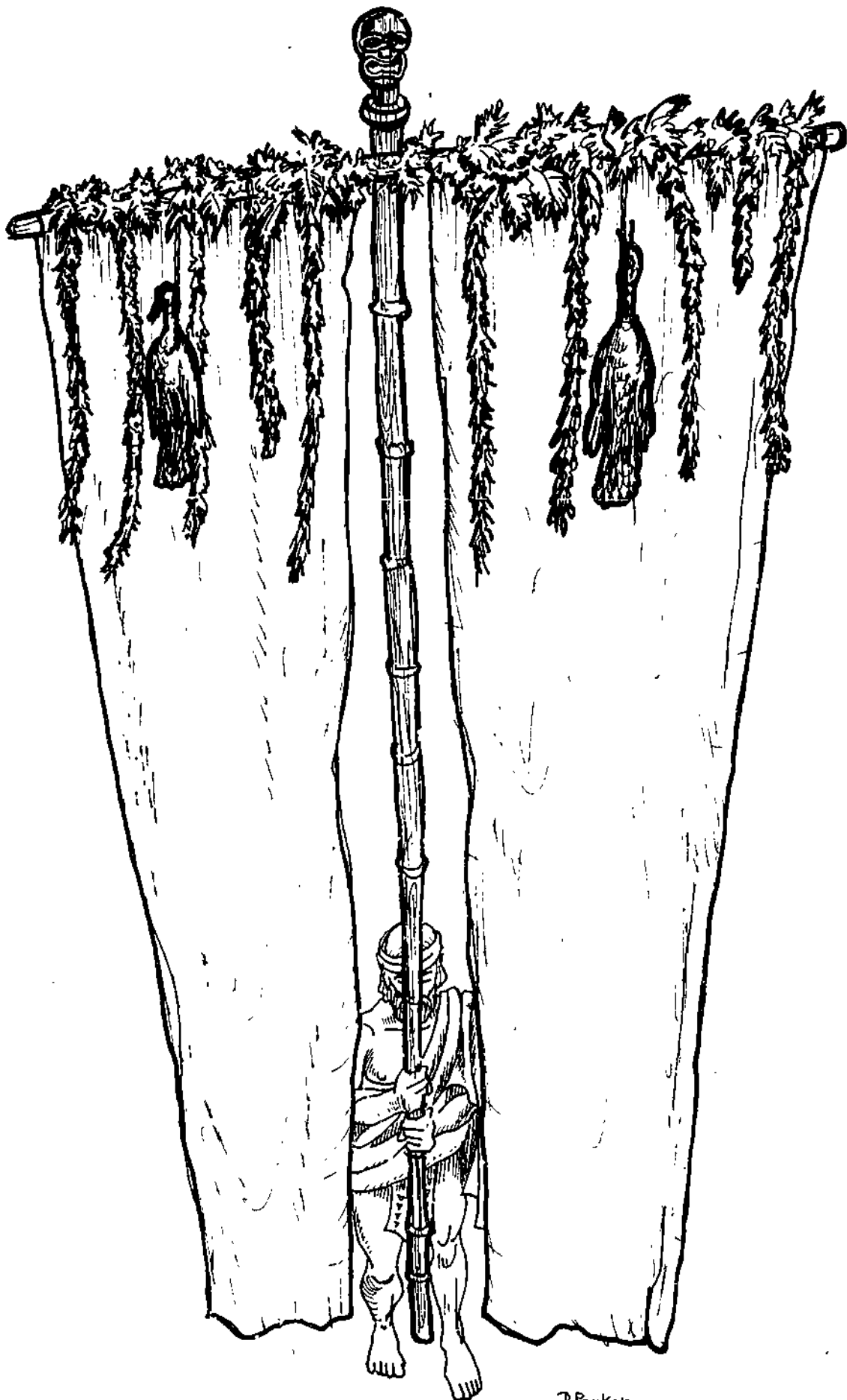
- Make dioramas individually or in groups
  - a. of the town they live in showing stores, schools, streets, etc.
  - b. of the town as it used to be many years ago, (ahupua'a), include fishponds, heiau, shrines, kalo fields, etc.

Music

- Create simple chants using poems.
- Chant simple chants like "Ke Ao Nani"

Health

- Compare life in a family today with that of early Hawai'i.  
 Make a chart of roles played by the students' fathers, mothers, grandmothers, grandfathers, brothers and sisters.  
 Compare with those played in ancient Hawai'i.



## BIBLIOGRAPHY OF TEACHER AND STUDENT REFERENCES

- Bauer, Helen, Hawai'i the Aloha State. New York: Doubleday & Co., Inc., 1960.
- Curtis, Caroline, Life in Old Hawai'i. Honolulu: The Kamehameha Schools Press, 1970.
- Dunford, Betty, The Hawaiians of Old. Honolulu: The Bess Press, 1980.
- Feher, Joseph, Hawai'i: A Pictorial History. Honolulu: Bishop Museum Press, 1969.
- Handy, E.S.C., Ancient Hawaiian Civilization. Rutland, Vermont: Charles E. Tuttle Co., 1965.
- Handy, E.S.C., Native Planters in Old Hawai'i. Honolulu: Bishop Museum Press, 1972.
- Hazama, Dorothy (Ed.), Culture Studies: Hawaiian Studies Project, Data Box. Honolulu: Department of Education, 1978.
- Potter, Norris W. and Kasdon, Lawrence M., Hawai'i Our Island State. Columbus: Charles E. Merrill Books, Inc., 1964.
- Suggs, Robert C., Lords of the Blue Pacific. Greenwich, Connecticut: New York Graphic Society, 1962.

## UNIT V: SOCIETY AND GOVERNMENT

### Overview

There was a definite interrelationship of society, religion and government in early Hawai'i. The societal structure of the early Hawaiians began with the 'ohana (family). It was in this unit that a child first learned the kapu, or rules which governed life in Hawai'i. As the child grew older, he/she took on more responsibility and had more kapu to learn and to obey. The kapu system had its foundation in religious beliefs and obedience to the kapu was an expected behavior. The fear of punishment by the gods was a heavy burden to bear.

The Kapu System delineated definite roles that needed to be played in each stage of life by each individual in each of the three social classes. Most activities were governed by kapu and the roles of the people were clearly understood. There was only right or wrong, no in-between.

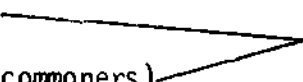
The Hawaiians believed that the ali'i (chiefs) and the mō'ī (highest chiefs) received their guidance from the akua (gods) and were therefore never wrong. They also believed that these leaders possessed a great deal of mana (spiritual power) from the gods. Thus, these beliefs which were formalized by the Kapu System, helped the chiefs to maintain power over the people. They wore special symbols of royalty signifying their high positions which they came by through birth. Their lives were ruled by religion and traditions and they were held in high esteem by the people.

This unit is divided into four parts: the family, government, symbols of royalty and religion. The unit examines the basis of Hawaiian society which is the 'ohana. It inquires into its characteristics, functions, and its importance in the socialization process. It also explores the role of religion in determining the rules for living, and the influence of the rules and roles of the class system on the governmental system.

## Teacher Information

1. Early Hawaiian society consisted of three main classes:
  - a. Ali'i (chiefs)
  - b. Maka'āinana (commoners)
  - c. Kauā (servants)

Kāhuna (temple priests, experts)


2. The ali'i class included the high chief and his lesser chiefs, the advisors, land supervisors and the historians.
3. The ali'i nui, or mō'ī (paramount or highest ranking chief), was the government.
  - a. He was the law of the land. He decided who was to live or die.
  - b. He had possession of the land and decided who was going to manage it.
4. The ali'i was raised with the sense of being sacred and superior and had to constantly display his courage and power. He was the leader in battle. Often, after a war, the slain chief was offered to the gods as a sacrifice. Then the land of the slain chief was taken by the victorious chief who then divided the land among his followers.
5. The ali'i nui was thought of as a god and, therefore, was surrounded by the strictest kapu to prevent the loss of his spiritual power (mana).
  - a. No one's shadow was allowed to fall upon him, his house or his clothes.
  - b. The maka'āinana were not allowed to stand in his presence, but had to lie face down, flat on the ground.
6. Each ali'i nui had a loyal advisor called a kālaimoku who was very knowledgeable.
  - a. He guided the ali'i in warfare, land management, battle strategies and maneuvers.
  - b. He was the one who divided the land into districts (moku) and assigned them to lesser chiefs.

7. The lesser chiefs (konohiki) were the managers who enforced the rules (kapu) and organized the people.
  - a. They supervised the farming and enforced the rules (kapu) that protected the fish.
  - b. They served as tax collectors for the ali'i nui.
  - c. They organized the common people into work squads when the ali'i needed big jobs done such as building heiau, irrigation ditches or canoes.
8. The Hawaiians believed that the temple priests (kāhuna) were in direct contact with the gods. They were responsible for advising the chief on behavior that pleased the gods. They had specific duties to perform and had to be well trained. A single error could bring disaster to the kāhuna. There were several orders of Kāhuna such as
  - a. Order of Kū - performed services to see if it was advisable to go to war.
  - b. Order of Lono - performed less stringent services.

These temple priests had to memorize lengthy chants and had to know how to perform the temple duties.

9. The maka'āinana were the common people who did most of the work which included the following: fishing, farming, building of canoes, ditches, and houses, making the clothes and furnishing the ali'i with everything they needed.
10. The experts in specific areas were also kāhuna and were from the maka'āinana class. The expert canoe builder (kahuna kālai wa'a), the sorcerer (kahuna 'anā'anā), the healer (kahuna lā'au lapa'au) were all members of this class.
11. The maka'āinana was an important segment of the population for they provided the goods and services of the ahupua'a (a division of land). If they were unhappy living under a cruel chief, they could leave the land and go to another ahupua'a or island, thus lessening the power of the chief.
12. The lowest class of people (kauā) were considered contaminated and evil and therefore could not mingle with the other people. These kauā lived as outcasts on land set aside from the rest of the people. They were not allowed to enter any house except that of their chief and even then had to cover their heads with kapa. They were used as human sacrifices and could never move out of their class. Each kauā born into the class remained a kauā forever until the overthrow of the kapu system.



### 13. The Kapu System

- a. The kapu is a system of rules set up to guide the people's conduct using the threat of punishment and spiritual dangers if a kapu is broken.
- b. Kapu (rules) were useful in maintaining law and order. Some were harsh and cruel.  
e.g., Women were killed if they entered the eating house of men or ate certain foods.
- c. Some kapu were declared only for special occasions and were temporary; others were long standing.
- d. The kahuna and chiefs made the kapu. The Hawaiians believed in mana or spiritual power. Everything had mana so kapu were made to guard the mana of persons and things from contamination.
- e. There were many kapu about the ali'i because they were believed to have much mana. Kapu sticks were set in front of the ali'i's house prohibiting people from entering. People could not approach the ali'i. They could not look upon him or touch his clothes.
- f. Some kapu were good:  
Fishing kapu helped conserve the fish life.  
Bathing kapu kept the streams clean for drinking water.
- g. The people obeyed the kapu. If they broke a kapu they knew they could be killed.

### 14. Roles were learned by watching and listening.

e.g., Kapa making was learned by the young girls who helped their mother make it. As they grew older, they did it alone.

A boy learned to cook, pound kalo, and cultivate the fields by working with his father and brothers.

Most of the boys became farmers, fishermen or craftsmen.

15. Kahuna is a very skillful person, an expert.
- It took much training to become a kahuna. It started from childhood and continued into adulthood.
  - The members of a kahuna order were selected for intelligence, interest and willingness to learn and could be drawn from the ali'i or maka'āinana class.

Kahuna nui	community high priest
Kahuna ho'oulu 'ai	agricultural expert
Kahuna kilo hōkū	astronomer
Kahuna kilo honua	geologist
Kahuna kilo makani	meteorologist who study winds
Kahuna nānā a'o	meteorologist who study clouds
Kahuna haku mele	poet
Kahuna kaka 'ōlelo	raconteur
Kahuna pa'a mo'olelo	historian
Kahuna lapa'au	medicinal healer - general practitioner
Kahuna lomilomi	physiotherapist
Kahuna hāhā	diagnostician
Kahuna koholua	surgeon
Kahuna ha'iiwi	bone specialist
Kahuna ho'ohanau	obstetrician
Kahuna kuhikuhi 'uone	architect
Kahuna 'ana'ana	sorcerer
Kahuna makaula	prophet (interpreted the signs of nature)
Kahuna pu'uone	engineer (planned the kauhale layout and the use of water in the taro patches)
Kahuna lua	master in boxing and wrestling
Kahuna ho'okele wa'a	navigator
Kahuna kālai wa'a	director of canoe building
Kahuna kū'auhau	recounter of genealogies

### Generalizations

- The lives of the early Hawaiians were influenced by their culture.
- Life in early Hawai'i was dominated by the kapu system which was a social, political, economic, and religious system. It was the most powerful influence on the Hawaiians and was intertwined with every aspect of life. Failure to conform led to dire consequences.
- The chiefs (ali'i) exercised power and leadership which were sanctioned by the gods and supported by the commoners (maka'āinana). The chiefs' positions of power were also supported by the kapu system.

4. The ali'i wore special symbols of royalty signifying their high positions which they inherited. Their lives were governed by tradition and religious rules.
5. The basic social structure in early Hawai'i was the 'ohana which was an extended family system. It was in this unit that children learned the rules (kapu) of their society, the roles they were expected to perform and the important 'ohana concepts of aloha, alu like, kuleana, kōkua, 'ike, laulima, lōkahi.

#### Concepts

1. 'Ohana: Extended family system of early Hawai'i which was important in the socialization of its members.
2. 'Ohana Concepts: Hawaiian family concepts which include love, harmony, cooperation, responsibility, help
3. Religion: Any specific system of belief, worship, conduct, etc., involving a code of ethics and a philosophy; part of kapu system of early Hawai'i.
4. Power: Rule, authority, government

#### Objectives

1. Describe the functions of a family of ancient Hawai'i and compare them to the functions of today's family.
2. Explain the importance of roles in the ancient Hawaiian village life.
3. Explain the role of the 'aumakua (family guardian spirits) in the lives of the people.
4. Practice the early Hawaiian concepts of aloha, alu like, kuleana, kōkua, 'ike, laulima and lōkahi.
5. Describe the role of the early Hawaiian ali'i nui (high chief) and of the governor today and compare the differences in leadership.
6. Identify and compare the function of religion in early Hawai'i and in modern Hawai'i.
7. Explain the role of religion in societal structure of early Hawai'i.
8. Identify the effects of kapu (rules) on Hawaiian society.

9. Describe and explain the importance of the symbols that were worn by the ali'i of old Hawai'i.

18,

19,

INDEX TO REFERENCES - SOCIETY AND GOVERNMENT

	Society and Government	'Ohana	Kahuna; Kapu	Role of Religion	Social Structure	Religion in Government	Featherwork	
BAUER		36-42	36-37, 57, 63-64,74,133	42-45,60,131, 143,149,151	34-36, 40, 44-45, 121	42-45		
BUCK				Vols.XI,XIII	Vol. XII			
CURTIS			244-255 (healing)				121-134	
OAY								
DUNFORD		32-33,42,53, 83,98,105,132	34-40	48-50	28, 35, 151-152	28, 38-40, 45-51	123-127	
FEHER				94-96	92-95, 97	94,96-97,110- 111,104-107,156		
HANDY (A.H.C.)	35-46		260-267(kahuna) 36-40,47-59 (kapa)		35-36	47-54,61-64, 113-120,229	135-139	
HANDY (N.P.O.H.)		287-290, 301-307			320-326			
HAZAMA		25						
LINDO		7-17						
MALO	187-204	87		81-87, 159- 187	52-71		76-77	
MITCHELL			194-195	67-76			77-85	
POTTER				40-47	32-34		54	
PRATT		135-138	137-138		139-142		132-134	
TITCOMB								

A.H.C. - Ancient Hawaiian Civilization

N.P.O.H. - Native Planters Of Hawaii

LEARNING ACTIVITIES AND RESOURCES (Family)

Bulletin Board Display

Discussion

Gathering Information

- Mount pictures of families of various cultures showing family members doing their chores.
- Mount a blank chart titled: "What did you do this morning?"
- Have the children share all the things they did from the time they got up in the morning. List them on the chart.
  - e.g., Brushed my teeth
  - Washed my face
  - Ate breakfast with a fork
  - Helped wash the dishes
- Put a star by those activities they learned from their family. Ask:
  1. Who taught you how to \_\_\_\_\_ ?
  2. What does a family do for you besides these activities we've already listed? Add another chart "Family Functions." Have the students categorize their answers into the following: Education, Loving, Protection and Care, Recreation, Reproduction, Socialization.
  3. What is the Hawaiian word for family? ('ohana)
  4. How is today's family similar to or different from the 'ohana of early Hawai'i?
  5. What kinds of questions do you have about the family of 'ohana of early Hawai'i?
- Read the articles in Appendices I-IV on 'Ohana.
- Have the children interview their parents on how they were raised and what their family life was like. Ask children to interview their grandparents also for contrast and share the information.
- Read excerpts about family life from Nānā i Ke Kumu by Mary K. Pūku'i
- Creative writing: If you had a choice would you choose to live under the early Hawaiian system? Write a story of what your life would be like in early Hawai'i.

LEARNING ACTIVITIES AND RESOURCES (Family)

Inquiry

Hawaiian Language  
Development

- Discuss:
  1. Who lives in your family? List members on a chart.
  2. Is every family the same?
  3. What are some good things about having lots of children in a family? What are some disadvantages?
  4. What are some advantages of having grandparents or aunts and uncles who live in the same house with you? What are some disadvantages?
  5. How did the children benefit from the extended family type organization?
  6. Would you like to have been a child living in early Hawai'i? Why? Why not?
- Using the chart mentioned above (who lives in your family?) introduce the Hawaiian terms for the family members. Also introduce the idea that different cultures have different ways of looking at and naming relationships.
  1. mother - makuahine
  2. father - makuakāne
  3. grandmother - kupuna wahine
  4. grandfather - kupuna kāne
  5. older sister of a female - kaikua'ana
  6. older sister of a male - kaikuahine
  7. younger sister of a female - kaikaina
  8. younger sister of a male - kaikuahine
  9. older brother of a male - kaikua'ana
  10. older brother of a female - kaikunane

LEARNING ACTIVITIES AND RESOURCES (Family)

Drawing

11. younger brother of a male - kaikaina
12. first born: maka hiapo or hānau mua
13. last born: muli loa or hānau hope
14. aunty, uncle: same terms as mother, father

- Have the children draw pictures of the members in their 'ohana, label them with the Hawaiian terms and mount them on a bulletin board titled "Our 'Ohana".

Discussion

- Compare early Hawaiian family life with that of other ethnic groups represented in the classroom such as

Japanese	Chinese	Vietnamese	Samoan
Filipino	Portuguese	Caucasian	

Discuss likenesses and differences.

- Introduce important family concepts that bind the family together

1. Have the children share feelings that are important to making a family happy

- |                                |                                   |
|--------------------------------|-----------------------------------|
| a. Love - aloha                | e. Sharing - māhele               |
| b. Helping - kōkua             | f. Recognition - 'ike             |
| c. Working Together - alu like | g. Cooperating together - laulima |
| d. Responsibility - kuleana    | h. Harmony - lōkahi               |

2. Using the 'ohana reading in Appendix IV, share the Hawaiian counterparts.

Enrichment Activities

- Do the following enrichment activities:

1. Discuss
  - a. How do we show aloha? (in the home, school, community)  
Give examples.



## LEARNING ACTIVITIES AND RESOURCES (Family)

- b. What does Aloha mean besides Love? List on a chart the meanings of Aloha as the children share them.
  2. Introduce the song: "What Aloha Means".
    - a. Language Arts: Have the children write poems about "What Aloha Means to Me".
    - b. Art: Have the children illustrate their poems and mount them on a bulletin board display titled "The Many Meanings of Aloha".
  3. Music: Sing some of the following songs:
    - "There's a Little Word"
    - "What Aloha Means"
    - "You Gotta Feel Aloha"
  4. Write the word aloha on a flashcard and post it in a visible place on the wall.
  5. Teach the children a few Hawaiian greetings using the word aloha.
    - a. Aloha kakahiaka - "good morning"
    - b. Aloha awakea - "good day" (used in the middle of the day - no equivalent use in English)
    - c. Aloha 'auinalā - "good afternoon"
    - d. Aloha ahiahi - "good evening"
    - e. Aloha a hui hou - "goodbye until we meet again"
    - f. Aloha nō - "greetings"

Music: Introduce the greeting song:

"Aloha Kakahiaka Means Good Morning to You"

## LEARNING ACTIVITIES AND RESOURCES (Family)

See E Hīmeni Hawai'i Kākou by Noelani Māhoe available in most school libraries.

6. Use the word Aloha throughout the day and remind the children about the word as they associate with each other.
  7. Introduce each of the other words in the same manner. As each word is introduced, integrate it into the daily activities reminding them of its value when opportunities arise. Go over each word each day as more flash cards are mounted on the 'Ohana wall until the children are using them in their everyday speech.
  8. Use the class as the school 'ohana and work together as a family. Solve problems together and come to decisions as a group working together. Use the Hawaiian system of solving problems: Ho'oponopono.
  9. Set up activities so that the children are given opportunities to help each other. For example:
    - a. In math, John can help Jerry who has difficulty doing 2 - place multiplication (kōkua)
    - b. In social studies: group research  
Jessie cannot spell very well and has difficulty reading so Mary helps by doing the report while Jessie does the illustrations. (kōkua, alu like)
- Have the students fill in a chart showing all the kinds of things they did within one week to show that they have internalized the 'ohana concepts.

Aloha	Alu Like	Kuleana	'Ike	Kōkua	Laulima
Kissed my mom goodbye.	Helped clean the house.	Cleaned my room.	To'd John he sings well.	Helped my brother with his homework.	Worked with my family in the yard.

Charting

## LEARNING ACTIVITIES AND RESOURCES (Family)

### Opening Discussion

- Draw attention to the pictures on the bulletin board showing family members doing chores within the family.
- Discuss:
  1. Do all parents play the same role all over the world?
  2. Do the children in a Japanese family play the same role as children in a Hawaiian family of today? of long ago? Compare the Chinese, Filipino and other racial groups represented in the class. Gather cultural information from the children.

### Small Group Discussion

- Divide the children into 'ohana. Have them decide together on the roles of a father - makuakāne, mother - makuahine, boy - keikikane, girl - kaikamahine. Encourage them to work together (alu like) to get the responsibility (kuleana) done. List the roles on a retrieval chart each 'ohana shares the group's thoughts. Discuss the similarities or differences.

### Interviewing

- Have students interview each member of their family to get the individual's concept of what his/her role is in the family.
  1. Have students compare the results of this assignment with what is already on the chart.
  2. Discuss: why are there differences or similarities? Do roles differ as one observes families from different countries? Why?

### Reading

- Have students explore role changes as one goes through developmental stages.
  1. Read stories or legends that illustrate the changes in roles as a boy grew older in early Hawai'i or as a girl advanced from a kaikamahine (girl) to a wahine.
  2. Compare role changes within our society today.

### Discussion

- Discuss the role of the student as a member of his/her 'ohana in the family, school and community. How important is it that the individual's role is carried out? What rules do the student follow?
- Ask: If women in early Hawai'i performed men's roles, what happened? (It was kapu for women to do certain tasks such as pound the kalo.)

202

## LEARNING ACTIVITIES AND RESOURCES (Family)

Breaking a kapu like this could mean death!) Talk about other roles. See Handy, Native Planters in Old Hawai'i, pp. 301-312, "Family Relationships and Roles in the Kauhale".

What about today? Can men become nurses? Can women become doctors? Can women become policewomen and men become beauticians?

## CULMINATING ACTIVITY (Family)

- Write the following title on the chalkboard:

"I was adopted by a Hawaiian family in old Hawai'i". Allow the children to collect their thoughts about the Hawaiian 'ohana. Encourage them to think about the 'ohana concepts and family members, the roles they played and the way they lived. Have them write a story about a little boy or girl who was adopted by a Hawaiian family. Have them write it in the first person. The story should reflect:

1. Hawaiian vocabulary
2. Hawaiian concepts
3. Roles played, rules they had to follow
4. Typical activities in the kauhale (compound) or ahupua'a
5. Names of plants, foods, or animals

## LEARNING ACTIVITIES AND RESOURCES (Government)

Bulletin Board Display:  
Government

Opening Discussion

- Mount two pictures on the board: One of the governor of Hawai'i and one of Kamehameha the First.
- Ask students questions that will help them to see the relationship between government and the social structure in early Hawai'i. For example:
  1. What were some of the rules or kapu that the people of Hawai'i - the ali'i, maka'āinana, kauā - had to follow?
  2. Were there kapu which applied to certain groups of people?
  3. Who made the kapu?
  4. Where do you suppose the children of old Hawai'i learned all the kapu?
  5. What did the chiefs (ali'i) get from the people (maka'āinana)?
  6. What did the maka'āinana get from the ali'i?

Compare similarities and differences with society today.

Discussion

- Ask the following questions to assess students' knowledge. Encourage students to participate in the discussion.
  1. Who is the head of our state government?
  2. What are his/her roles and responsibilities? (Write their guesses on one side of a chart.)
  3. Do you see a picture of the person who heads our state government in our room?
  4. Who is the other person on the bulletin board?
  5. What were his roles and responsibilities about 200 years ago? (List their responses on the other half of the chart.)

Gathering Information

- Have students compare the roles and responsibilities of these two people.

LEARNING ACTIVITIES AND RESOURCES (Government)

Dramatization

References: The governor's office prints a yearly booklet on the government of Hawai'i. Copies may be picked up at the Capito!.

Dunford, The Hawaiians of Old, pp. 29-30, 38 (See the index for more information.)

Continue adding to the chart as more information is gathered.

- Ask two volunteers to play act the roles of a chief and governor in situations involving the people over whom they rule. Simulate situations and have them verbalize how they think the ali'i and the governor would handle the situations. For example:
  1. A little keiki (girl) has such great love for you that while you were visiting in her kauhale, she came up to you and touched you. (The chief would order the child killed and the governor would probably pick up the child and give her a hug.)
  2. While walking through a kauhale, an older woman and a few children clapped their hands. (The chief would order them killed and the governor would probably smile and greet them.)
  3. While conducting a meeting in the meeting house, one of the important members of your court walked in dressed in a loin cloth (malo). (The chief would welcome him and the governor may send him home to clothe himself.)
  4. A newborn baby (boy) is born into your family. He has a large brown birthmark on his face and has only one arm. (The chief would order the child killed and the governor would probably keep and child and raise him.)

Do not give students the correct answers.

Inquiry

- Elicit questions from the children about the government in early Hawai'i as well as that of today.

Early	Modern

## LEARNING ACTIVITIES AND RESOURCES (Government)

### Research

- Preparation for research:

Ask: How shall we find our answers? List on the board. Their suggestions may include:

1. Resource speakers
2. Films
3. Interviews with people in government
4. Field trips to the Capitol
5. Books, magazines, pamphlets
6. Telephone calls to senators or representatives

- Have the children divide into two 'ohana. Have them volunteer for whichever type of government they would like to study - Early or Modern.

Organize the questions with each group and have them meet to choose a leader (haku).

Have them plan their research procedures and assign responsibilities. Encourage alu like (working together) and carrying out responsibilities (kuleana) for the good of the group.

Give students some time during the social studies periods to gather information and to plan for their presentation.

### Developmental Activities

- Mount picture of the ahupua'a on the bulletin board. The picture is available from Kamehameha Schools.
- Have the children participate in the following whole group activities:-

1. Have them study the ahupua'a on the bulletin board. Point out the division of land as being from the mountain to the sea.

Ask: Who ruled an ahupua'a? (See if they can recall the information from the unit on land division.)

2. Display the chart on land division and point out the rulers. See Potter, Hawai'i Our Island State, p. 37.

Ask: What were their responsibilities? How much power did they have?

### Bulletin Board Display

203

LEARNING ACTIVITIES AND RESOURCES (Government)

Research

- Research readings:

Potter, Hawai'i Our Island State, 1979 edition. This reference presents information interestingly on the government of early Hawai'i, pp. 32-39, and the government of Hawai'i today, pp. 307-330. There is an excellent chart on page 321 that can be reproduced as a large wall chart to show the organization of the state government.

Dunford: The Hawaiians of Old, pp. 28-56. Presents an easy to read and understand narration on the class system and the role of the ali'i, maka'ainana, and kaua. It describes the land system and how religion was an integral part of the everyday life of the early Hawaiians.

Feyer: Pictorial History of Hawai'i. Excellent presentation in picture and in narration.

Data Cards - Hawaiian Studies Project.

- As the 'ohana continue to do research, encourage each group to construct a diagram of the government of early Hawai'i and of today's government.
- Plan a field trip to the Capitol. Arrange it with a representative or senator from your district. If this is not possible, invite your representative or senator as a guest speaker.
- Encourage the groups to use visual aids when they present their reports. As the students give their reports, compare the duties of of a governor with those of an ali'i. Prepare a chart showing the similarities and differences.

Reporting

211

212



LEARNING ACTIVITIES AND RESOURCES (Government)

For example:

Governor Differences	Chief Differences
<p>Elected by the people. Laws made by the people.</p> <p>Talks and mingles with people from various social classes.</p> <p>Does not make final decision on lawbreakers.</p> <p>Dresses in no special clothes.</p>	<p>Chief by birthright. Made the kapu under the guidance of the gods. Talks only to ali'i class. Does not mingle with lower classes. Whatever the chief decides is what takes place. Wears special symbols of royalty.</p>
Similarities	Similarities
<p>Has to follow rules or laws.</p> <p>Has many persons working with him.</p>	<p>Has to obey some set kapu (rules)</p> <p>Has a following of lesser chiefs who take care of ruling over his moku.</p>

Field Trips

- Arrange to tour the 'Iolani Palace as a contrast in not only style of architecture but also types of government.
- Further, arrange to visit the governor's home (Washington Place) which used to be Queen Lili'uokalani's home. This trip should encourage questions about the individual ali'i (kings).

Evaluation

- Have the children decide whether they want to be chiefs or governors. Have them prepare a campaign speech so that the people will vote for them. Have them include why the people should vote for them. Also have students discuss if they would rather be ruled by a chief or a governor.

Assess students' knowledge by having them react to the hypothetical situations dramatized earlier.

Bulletin Board Display

- Draw students' attention to the bulletin board's pictures of the Kamehameha Dynasty, the elected kings and the only reigning queen.

## LEARNING ACTIVITIES AND RESOURCES (Government)

### Discussion

- Draw students' attention to the pictures and discuss:

Do any of these ali'i look familiar? What do you know about them? (Have them share) (Bank of Hawai'i published a pamphlet containing a page of information on each monarch and a good sized picture. If available, use as a reference)

Briefly, tell something of interest about each ruling ali'i and about life in Hawai'i when they ruled. Use Feher's Pictorial History of Hawai'i. Motivate the interest of the children in any one of the ali'i.

Have each student choose one ali'i about whom to do a report.

Possible ali'i selections and other important people:

- |                                       |                              |
|---------------------------------------|------------------------------|
| 1. Kamehameha I                       | 15. Kamāmalu                 |
| 2. Kamehameha II ('Iolani Liholiho)   | 16. Kalama                   |
| 3. Kamehameha III (Kauikeaouli)       | 17. Queen Emma               |
| 4. Kamehameha IV (Alexander Liholiho) | 18. Kapi'olani               |
| 5. Kamehameha V (Lot Kamehameha)      | 19. Charles Reed Bishop      |
| 6. Lunalilo                           | 20. Liloa ]                  |
| 7. Kalākaua                           | 21. 'Umi a liloa ] (Hawai'i) |
| 8. Lili'uokalani                      | 22. Keawe a'uni ]            |
| 9. Ruth Ke'elikokalani                | 23. Kakūhihewa (O'ahu)       |
| 10. Bernice Pauahi Bishop             | 24. Pi'ilani ] (Maui)        |
| 11. Ka'iulani                         | 25. Kahekili ]               |
| 12. Keōua/Keku'i'apōiwa               | 26. Kaumuali'i (Kala'i)      |
| 13. Ka'ahumanu                        |                              |
| 14. Keōpuolani                        |                              |

### Research

- Preparation:

1. After selecting an ali'i each student will be responsible for locating and using at least three references.
2. Arrange a trip to the library with the children. Encourage the children to use the state library also.
3. Have them browse through their books to look at pictures and read excerpts about their ali'i.

LEARNING ACTIVITIES AND RESOURCES (Government)

Planning/Outlining

- Have the children plan and decide on the most important points that need to be researched and noted.

Ask: What are some of the most interesting or exciting things you want to learn about your ali'i? As the children volunteer responses, write them on a chart. Then add to or delete until you come up with the basic topics. On another chart, outline their ideas. For example:

- I. Early Life
  - A. Birth
  - B. Boyhood
  - C. Education
- II. Young Adult
  - A. Training
  - B. Marriage
  - C. Children
- III. Life as an ali'i
  - A. Life in Hawai'i
  - B. Type of Government
  - C. Accomplishments
- IV. Death
  - A. Cause
  - B. Place of burial
  - C. Heir to the throne

(Much of this can be taught during the language arts periods.)

- Give students some time during the social studies periods to locate and gather information.
- Teach the children how to do research by studying the life of Kamehameha the Great as a class.
- Have the children share all they know about Kamehameha. List the information on a chart.
- Encourage the children to ask appropriate questions about Kamehameha by looking at the general outline for research; write these questions on charts.

Additional Research

Discussion

217

218

LEARNING ACTIVITIES AND RESOURCES (Government)

Research Activities

- Using different colors, color code the questions into the big topics by marking the questions that are about his early life with one color, and those about his adult life another color, etc.

- The following resources may be used to gather information.

1. Film: "Boyhood of Kamehameha." Describes the birth of Kamehameha and the conditions of his birth.

2. Day, Kamehameha, First King of Hawai'i, pp. 15, 19, 23, 25. This is a good source to use in order to teach research skills as well as gain insight into the life of an ali'i. Describes Kamehameha I in the eyes of foreigners.

a. Use the resource to teach reading for information. Have the children read each paragraph pointing out important facts about Kamehameha's life.

b. Use the overhead-transparency to show students how to take notes on 3" x 5" cards, noting source and topic heading.  
For example:

Kamehameha - Early Life
Birth of Kamehameha
Thought to be born in November, 1758
Halley's comet was seen over the islands
Father: Keōua
Mother: Keku'i'apoiwa
Source: Kamehameha, First King of Hawai'i - Day

c. Set up a genealogy chart showing Kamehameha's family tree as depicted in research. Use the symbol ▲ for the male and the symbol ● for the female.

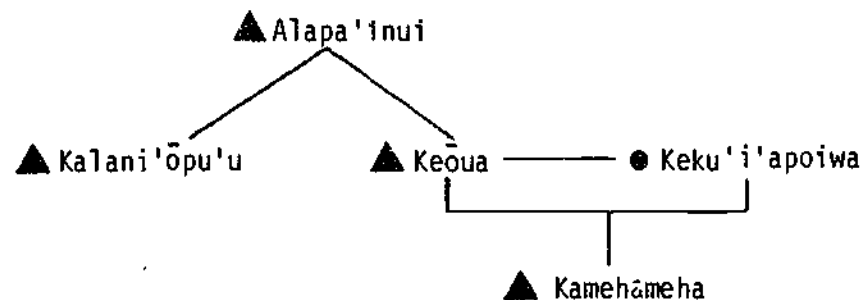
210

221

LEARNING ACTIVITIES AND RESOURCES (Government)

e.g.

Genealogy of Kamehameha



3. Potter, Kasdon, Hawai'i, Our Island State, pp. 64, 67-68, 70.

4. Curtis, Builders of Hawai'i.

5. Wong and Carey, Hawai'i's Royal History.

Checking

- Periodically check on the children's progress in their individual research on their ali'i. Develop a time schedule for the completion of each step in the research process.

e.g. Selection of a title: April 7.  
 Gather references: April 11.  
 Questions to be answered: April 13.  
 Bibliography: April 14.  
 etc.

Enrichment Activities

- Have children do any of the following enrichment activities about the life of Kamehameha I.
  1. Using descriptions of Kamehameha as contained in books written by white men who visited the islands such as Vancouver, have the children draw their impressions of Kamehameha.
  2. Having seen the film of Kamehameha's boyhood, have the children imagine themselves as Kamehameha living in the peaceful mountain area. Have them write a five day diary of life with Nae'ole and his wife.

## LEARNING ACTIVITIES AND RESOURCES (Government)

3. Encourage more creative thinking by having them imagine themselves as the Naha stone. Have them tell about all the great ali'i who tried to lift the stone. Describe who did and who didn't, what kind of men they were and why they failed or succeeded. Have them personify the Naha stone and describe its feelings when Kamehameha lifted the stone.
4. Have the children dramatize select portions of Kamehameha's life.
  - e.g. Law of the Splintered Paddle
  - Boarding Captain Cook's Ship
  - Lifting the Naha stone
  - Building the heiau - Pu'ukoholā
5. Have the children pretend they are the people on O'ahu who are under the rule of Kalanikupule. "Your kauhale (community) is expecting a big attack by Kamehameha I, whose fleet of canoes numbering in the hundreds can be seen approaching the island. The warriors are ready. Your makua kāne (father) is one of the warriors ready to fight. Write a description of "The Day My Makua Kāne Met Kamehameha".
6. Have the children draw pictures of a canoe equipped with a swivel gun or cannons led or commanded by John Young and Isaac Davis.
7. Give all of the children a map of the islands. Trace the following sequence of the conquest/acquisition of the islands by Kamehameha I.
  - a. Hawai'i
  - b. Maui
  - c. Lāna'i
  - d. Moloka'i
  - e. O'ahu
  - f. Kaua'i
  - g. Ni'ihau
8. Compose a time - line chart of the events that took place in Hawai'i starting with the birth of Kamehameha and ending with his death. Include such events as

1779	Captain Cook is killed
1782	Kalani'ōpu'u dies
	Law of the Splintered Paddle

LEARNING ACTIVITIES AND RESOURCES (Government)

Organizing

9. Visit the Bishop Museum to see the feathered cloak and the feathered feathered image of the god Kū ka'ilimoku that was placed in Kamehameha's scare.

● Guide students to do the following:

1. Place all of their research cards on Kamehameha I on their desks and categorize them into the big headings: Early Life, Young Adult, Life as Ali'i, Death.

2. Work on organizing each category into an appropriate sequence.

Writing

3. Write the "rough draft" using the information they have gathered from a variety of resources.

4. Proof-read, then rewrite for final copy.

5. Draw illustrations, or duplicate pictures from books, that depict life in Hawai'i during the rule of Kamehameha I.

6. Make a cover and Title Page.

7. Write a bibliography of all the books used in research.

8. Write the table of contents, dedication, and introduction.

● Decide on the highlights of Kamehameha's life.

Depict these by having every participant help. Sketch a picture that portrays a certain time of life of Kamehameha I. Share this as a movie roll with another class or grade level.

Checking

● Check on the students' individual research on their ali'i.

Encourage the children to design a cover.

Each report should include:

a. Cover

b. Title Page

c. Introduction

d. Dedication

e. Body

f. Illustrations

g. Bibliography

LEARNING ACTIVITIES AND RESOURCES (Government)

Reporting

- Have each student share the information they have gathered without reading their booklets cover to cover. They may share pictures, highlights and interesting stories about their ali'i.
- Display the reports in the library.

CULMINATING ACTIVITY (Government)

- Have the children become authors. Talk about a biography and the kinds of information contained in one. Have a unit on biography in language arts as this unit is in progress so that the children will be prepared for this exercise.
- "Pretend you are an ali'i of the islands. The missionaries have already arrived and you've learned to write. Write a story about your life in Hawai'i. Include much of the information requested on the outline you used for your reports. Tell about your birth, childhood, parents, how you were trained and educated to be an ali'i, how you ruled the people, etc.

226

227



## LEARNING ACTIVITIES AND RESOURCES (Religion)

Bulletin Board  
Display: Religion

Discussion

- Display on the bulletin board pictures of the feathered image god Kūka'ilimoku, Jesus, Buddha, the Bible, and other religious pictures.
- Introduce the following activities on religion by drawing the students' attention to the bulletin board and asking students to identify the pictures. Encourage students to share their knowledge and religious experiences.
- Help students to see the role of religion in the lives and governing of the early Hawaiians. The following may serve as guidelines:
  1. Do you think religion was important in the lives of the early Hawaiians? Can you give some examples of the importance of religion?
  2. Do you think religion was important to the ali'i as they ruled the people. Can you give some examples of the importance of religion in the government of early Hawai'i?

Have students compare with contemporary Hawai'i.

Resource Speaker/  
Field Trip

- Invite a resource person to speak to the children about the various ali'i and the role of religion in their lives.

Go on a field trip to Kawaiaha'o Church ('Oahu) to see the pictures of the ali'i painted in oil. Arrange to have one of the lay ministers talk about the ali'i and about how our state motto was pronounced in the church many years ago by Kamehameha III.

Follow-up Discussion

- Discuss:
  1. What kind of church did we visit? (Christian, Protestant, Congregational).
  2. Who is the God that they worship in that church?
  3. Where do you go to church?
  4. Whom do you worship?
  5. What are the different religions in Hawai'i today?

LEARNING ACTIVITIES AND RESOURCES (Religion)

Research

6. Why do people worship "gods" or God?
7. Did the early Hawaiians worship gods? Why?
8. Who were their gods?
9. Where did they worship these gods?
10. What are some questions you have about the religion of the early Hawaiians?

- Write the questions on chart paper and categorize them for research. From the question session there should be some concerns about the Kāhuna of early Hawai'i and the kapu system. Categories of questions should include: Kapu, Kāhuna, Heiau, Akua-'aumākua (gods).
- Gather reading materials for the children such as:
  1. Buck, Art and Crafts of Hawai'i - Religion.
  2. Curtis, Life in Old Hawai'i.
  3. Dunford, The Hawaiians of Old.
  4. Feher, Pictorial History of Hawai'i.
  5. Handy, Ancient Hawaiian Civilization.
  6. Hazama, Cultural Studies - Hawaiian Studies Project, Data cards and teacher reference guide.
  7. Ihara, Bishop Museum Bulletins on Religion.
  8. McBride, Kāhuna.
  9. McBride, The Kāhuna, Versatile Mystics of Old Hawai'i.
  10. Mitchell, Resource Units in Hawaiian Culture.

23,

231

LEARNING ACTIVITIES AND RESOURCES (Religion)

Enrichment Activities

- Do the following enrichment activities:
  1. Study other religions so that the children will have some basis for comparison.
    - a. Invite guest speakers of different religious groups to talk about their religion (including parents).
 

e.g., Buddhist, Taoist, Hindu, Hawaiian Christian
    - b. Compare and contrast the religions as the children gather the information from speakers, interviews, magazines, pamphlets, friends, etc. Chart the information.

RELIGION	CENTRAL FIGURES(S)	TEXT	CEREMONIES	REWARD
Early Hawaiians	Many Gods	Chants (oral)	Sacrifice, offerings of food, chanting	Life in Milu; He'eai, Kea and He'eia Ul: associated with life after death.
Buddhists	Buddha		Chanting, Funerals	Nirvana
Catholic	God-Jesus	Holy Bible Writings of the Church Fathers	Baptism, fasting First Communion, Confirmation, Marriage, Funerals	Live in paradise if you've lived a good life after the coming of Jesus to earth again.

LEARNING ACTIVITIES AND RESOURCES (Religion)

Reporting

2. Invite Hawaiian resource persons to come in to talk about their experiences
    - with Kahuna (expert) as they were growing up.
    - with Heiau they visited or heard stories about from others.
    - with kapu they observed or heard about while growing up
  3. Encourage them to seek legends dealing with kapu and heiau or any phase of Hawaiian religion. They will find that almost every legend contains some aspect of religion.
- Have the children use various methods of reporting on the religion of the early Hawaiians . . . pictures, charts, movie rolls, posters, etc.

CULMINATING ACTIVITY (Religion)

Writing

- Have the children imagine the following:  
Pretend you are a child in early Hawai'i and you have been selected to be an understudy to a kahuna hui (priest who performed special temple ceremonies for the deification of an ali'i). You are only 4 or 5 years old and you've been chosen to study under the Kahuna hui. Write about some of the activities you engage in and about all the things you learn dealing with respect for the gods, kapu, sacrifices and memorization of chants.

234

234

RELATED ACTIVITIES AND RESOURCES (Religion)

Language Arts

- Share some legends dealing with the role of various kahunas. For example: Curtis, Life in Old Hawai'i.
    1. Kahunas dedicates a new house, pp. 10-14.
    2. Kahunas kalamai wai'a (canoe carver), pp. 143-156.
    3. Kahunas of Healing, pp. 244-255.
  - Field trip to the Bishop Museum to see the religious artifacts--
    1. 'Aumakua
    2. Kū'ula rocks
    3. Replica of a heiau
    4. Ki'i (Tiki)
    5. Medicine bowls
  - Introduce the legend of the birth of man. See Appendix II: "Story of Hāloa".
  - Point out the roles of the gods in the history of the Hawaiians:
    1. Read legends that tell about the main gods and goddesses.
 

Kāne	- God of Life	Kū	- God of War
Lono	- God of Agriculture	Pele	- Goddess of the Volcano
Kanaloa	- God of the Sea		
    2. Read stories that deal with 'aumakua (family guardian spirits). Talk about the various 'aumakua and the role they played in the life of the people.
- Sources: Dunford, The Hawaiians of Old, pp. 94-95.  
 Puku'i, Tales of the Menehune, pp. 85-86, p.62 (shark)

RELATED ACTIVITIES AND RESOURCES (Religion)

Have the children organize themselves for reporting about the stories and legends they read. Provide them with the materials to illustrate their reports.

Compile the information on a chart similar to the one below:

KAHUNA	HEIAU	MAIN GODS	KAPU SYSTEM	'AUMAKUA
--------	-------	-----------	-------------	----------

Art

- Reconstruct a simple heiau using beach pebbles. Study one of the heiau located on your island. Read about and visit the heiau. Plan the project with the children and have everybody help gather materials. Stress 'ohana concepts in building the heiau.

Physical Education

- Participate in Hawaiian games which were an important part of the Makahiki season. The god Lono was worshipped for he was the god of agriculture. Talk about the Makahiki season which took place during the months of October - January.

Sources: Malo, Hawaiian Antiquities (teacher reference).  
 Dunford, The Hawaiians of Old.  
 Curtis, Life in Old Hawai'i.

LEARNING ACTIVITIES AND RESOURCES ( Symbols of Royalty)

Table Display:  
Symbols of Royalty

- Display some symbols of royalty made by the teacher or borrowed from schools or art academy:

1. red malo, 9" x 9'
2. cloak or cape ('ahu'uia)
3. feather helmet (mahiole)
4. kapu stick (Pūlo'ulo'u)
5. scrap bowl (ipu kaha)
6. skirt (pā'ū)
7. feather head lei (lei hulu manu)
8. kāhili (may also be the top of a tī (kī) plant.
9. Whale tooth lei (lei niho palaoa)

Bulleting Board  
Displays

- Divide one large bulletin board in half.

Place on one side, pictures of the Kamehameha dynasty and the monarchy up to Queen Lili'uokalani.

On the other side, plan a display of today's government in the form of a chart or pictures or both

e.g. Executive - Governor, Lt. Governor  
Legislature - Legislators  
Judiciary - Judges

- On another bulletin board mount the chart of the ahupua'a published by the Kamehameha Schools.

Discussion

- Introduce students to this section by asking students: Are there special clothes, or symbols that are worn by people in government service today? By the rulers and ali'i in old Hawaii?

Dramatization

- Call students' attention to the display table of symbols of royalty and inform them that they were worn by the ali'i. Allow the children to browse and handle the artifacts. Encourage them to discuss and talk freely about the things they see and touch.

LEARNING ACTIVITIES AND RESOURCES (Symbols of Royalty)

Discussion

Ask volunteers to dramatize how the Hawaiians may have used the artifacts. Encourage students to work together (alu like) as a group and plan a brief narration to go along with their dramatization. Have them present their dramatization to the entire group.

- Encourage the children to react to the dramatization by asking:
  1. What have we learned about these artifacts?
  2. What are some of the things you already know? (Write some of their hypotheses down on a chart.)
  3. Who wore these articles of clothing?
- Show a picture of a Hawaiian chief and chiefess.

Ask:

1. Who is this? What class do you think this person belongs to?
2. What is the person wearing around his shoulder? What do you think the cloak is made of? (List answers on a chart.)
3. Where do you think the Hawaiians went to gather the materials to make the cloak? How do you suppose they gathered the materials?
4. What tools do you think they needed?
5. What other questions do you have about these artifacts? Encourage the children to ask as many questions as they need to have answered about the artifacts. List them on charts.

Classifying

- Have the children classify the questions and suggest the topic headings.
  - e.g., Steps in making cloaks
  - Birds and Bird Catching
  - Designs and Ornaments
  - Materials and Tools

Research

- Divide the class into 'ohana. Have the children volunteer for which 'ohana they would like to work. Have each 'ohana choose a topic heading.



## LEARNING ACTIVITIES AND RESOURCES (Symbols of Royalty)

### Enrichment Activities

- Have each 'ohana do the following:
  1. Meet in 'ohana and choose a haku (leader) who will discuss responsibilities and use the strengths of each member to determine his/her responsibility.
  2. Study the question sheet with your questions dealing with your topic and group similar questions together.
  3. The haku will assign questions to people in the 'ohana to research.
  4. Do research using books, pictures, slides, charts, etc.
  5. Plan strategy for reporting back.

e.g., movie roll	tv program
mural	radio program
filmstrip	charts and narration
  6. Each haku must be sure everyone has a responsibility.

Give students some time during each social studies period to gather information and work on the presentation.

- Resource Speaker

Contact someone in the community to speak to the class about the art of feather lei making. Have them bring in samples of hat band lei, lei for the po'o (head), lei for the neck, kāhili (hand and standard) and capes.
- Investigate field trip possibilities on your island. O'ahu students may visit the following:
  1. Bishop Museum
  2. Kawaiha'o Church to see the Kings and Queens and the kāhili
  3. Academy of Arts to see the symbols of royalty
  4. Queen Emma Museum to view the many feathered artifacts

LEARNING ACTIVITIES AND RESOURCES (Symbols of Royalty)

Reporting

Have each 'ohana present its report. Compare and contrast their findings with their hypotheses. Clarify concepts and build up their knowledge of the culture of early Hawai'i. Encourage them to use the Hawaiian terminology for the artifacts.

Compare and contrast the symbols of royalty with those used today by the heads of our government.

Do our leaders wear symbols of royalty or rulership in our present day government?

Where and on what occasions do we see the early Hawaiian symbols worn or displayed?

When the head of our government appears in public, does he or she wear any kind of special symbol?

RELATED ACTIVITIES AND RESOURCES (Symbols of Royalty)

Art

- Do some of the following activities to develop and enrich the students' learning.
- Art Activities:
  1. Prepare hau fiber. Study the steps in making olonā. See Dunford, The Hawaiians of Old, pp. 111. Since olonā is scarce, cut hau branches using a ko'i (adz) and have the children prepare hau cordage.
  2. Work on charts, movie rolls, filmstrips and other illustrations.
  3. Teach the children how to make a net foundation (nae) for the Hawaiian cloak ('ahu'ula). Use a resource person such as a parent who is a net fisherman who patches his own nets.
  4. Have the students design a cloak for themselves. Have them decide on a motif that represents early Hawaiian life.
  5. Have all the children prepare a feathered pin or feathered barette for their makuahine (mother). Feathers of all colors are available in stores such as the Bishop Museum, Silver Feather, Floradec, or Hula Supply, or they may be donated by parents. Other materials such as the pin and barette may be obtained at any lapidary shop. Sew or glue the feathers on to a backing such as leather or felt and glue the backing on to the pin or barette.
  6. Make a lei niho palaoa (human hair and whale tooth pendant neck piece).  
Collect long strands of fine black yarn and form several braids.  
Carve a bar of white soap into the correct shape. Feher, Pictorial History of Hawai'i.  
Visit the Bishop Museum to see one of the original models.
  7. Make a mahiole (helmet) using papier mach'e.

RELATED ACTIVITIES AND RESOURCES (Symbols of Royalty)

Language Arts

- Language Arts Activities:
  1. Pretend: Have the children imagine themselves as children in an early Hawaiian setting. Have them write a story about life in the kauhale as the son or student of a feather gatherer. Have them describe the kauhale area, the forest area, the feather gatherer and his rituals and his everyday activities.
  2. Write poems about the birds of Old Hawai'i.
  3. Write a description of "The Day the King Visited My Ahupua'a".
  4. Read a legend to the children, "The First Cloak of Feathers". Lyons, Fire and Water and Other Hawaiian Legends, pp. 34-41. Discuss the important elements of the story, e.g., Why were only the men in the 'ohana allowed to make the cloak?
  5. Film: "Hawaiian Feather work" HPT 1965 20 min., (See TAC listing).

250

251



252

128

253

BIBLIOGRAPHY OF TEACHER AND STUDENT REFERENCES

- Buck, Peter, Arts and Crafts of Hawai'i, Volume XI. Honolulu: Bishop Museum Press, 1964.
- Curtis, Caroline, Life in Old Hawai'i. Honolulu: The Kamehameha Schools Press, 1970.
- Oay, Grove, Hawai'i and the Its People. New York: Meredith Press, 1968.
- Dunford Betty, The Hawaiians of Old. Honolulu: The Bess Press, 1980.
- Feher, Joseph, Hawai'i: A Pictorial History. Honolulu: Bishop Museum Press, 1969.
- Handy, E.S.C., Native Planters in Old Hawai'i. Honolulu: Bishop Museum Press, 1972.
- Handy, E.S.C., Ancient Hawaiian Civilization. Rutland, Vermont: Charles Tuttle Company, 1965.
- Lyons, Barbara, Fire and Water and Other Hawaiian Legends. Rutland, Vermont: Charles Tuttle Co., 1973.
- Māhoe, Edwina, E Hīmeni Hawai'i Kākou. Honolulu: Governor's Committee Hawaiian Text Materials, 1973.
- Malo, David, Hawaiian Antiquities. Honolulu: Bishop Museum Press, 1971.
- Mitchell, Donald, Resource Units in Hawaiian Culture. Honolulu: Kamehameha Schools Press, 1972.
- Potter, Norris W. and Kasdon, Lawrence M., Hawai'i Our Island State. Columbus: Charles E. Merrill Books, Inc., 1964.
- Pratt, Helen G., The Hawaiians, An Island People. Rutland, Vermont: Charles Tuttle Co., 1963.
- Pūku'i, Mary K., Hawaiian Dictionary. Honolulu: University Press, 1973.
- Pūku'i, Mary K., Nānā I Ke Kumu. Honolulu: Hui Hānai, 1972.
- Mary K., Nānā I Ke Kumu, Volume II. Honolulu: Hui Hānai, 1979.

Overview

Agriculture was of utmost importance in early Hawai'i as it helped to ensure an adequate supply of food plants for the people.

Agriculture was one of the principal occupations of early Hawai'i. It required extensive knowledge of the soil and seasons. The Hawaiian farmer had to know the type of soil in which each plant grew best and the best time for planting in relation to the seasons and stages of the moon. He had extensive knowledge of dry land and wet land farming, and impressive skills in terracing land and building irrigation ditches ('auwai).

Religion was an integral part of a farmer's life and the religious aspect of farming was strictly observed. The major gods and other gods and goddesses were associated with various phases of agriculture and prayers were said, offerings were made and kapu were observed during the required times.

The most important food crop for the Hawaiians was the taro (kalo). It was not only the main crop of the Hawaiians but also was believed to be the first-born son of the god Wākea (skyfather). Kalo was also symbolically significant to the family. An offshoot from the kalo plant is called an 'ohā, which is the root word for 'ohana, the name for family.

The men, women, and children of the 'ohana had definite roles to play in all processes related to food.

This unit examines how the early Hawaiians cultivated food plants to meet their basic need for food. It also inquires into the methods of food preparation, the roles played by various members of the 'ohana, and the influence of the kapu system.

## Teacher Information

1. The Hawaiians were basically an agricultural and fishing people.
2. Early foreign explorers like Captain James Cook were impressed with the extensive evidences of cultivation.
3. The Hawaiian farmer (mahi'ai) was a skilled agriculturist who was able to produce enough food to feed his 'ohana.
  - a. The farmer knew the type of soil in which each plant grew best. He enriched the soil by the ceremonial placing of octopus (he'e) or fish (i'a) with a new plant.
  - b. He understood the weather, knew about the seasons, winds and rain. He planted, weeded and harvested only at certain times. Some days were kapu.
  - c. The farmer's only tool was a simple digging stick ('ō'ō) made of hardwood which generally was pointed at one end and spadelike at the other. They also used their hands, feet and bodies to do the raking, weeding, and shoveling.
4. All farmers prayed to their gods (akua and 'aumākua) for rain and for help to make the plants grow. They gave offerings to the gods as thanks.
5. Taro (kalo) was very important to the Hawaiians. The following are some basic information about kalo:
  - a. Kalo was the main crop of the Hawaiians and was often grown in irrigated patches (lo'i kalo) in valleys, on mountain slopes and in swamps. Dry land kalo was also cultivated.
  - b. Kalo was believed to be the first-born son of Wākea (skyfather) and Ho'ohokuika'ani, his daughter. Man was the second-born child, so the kalo was more important than man himself.
  - c. An offshoot from the kalo plant is called an 'ohā which is the root word for 'ohana, the Hawaiian name for family.
  - d. It is thought that when the first settlers came to Hawai'i they brought about ten varieties of kalo. From these they learned to grow over three hundred varieties.
  - e. Kalo grows best in water. It is cultivated by cuttings called huli. When the plant is mature the underground stem or corm is big and ready to harvest. The Hawaiians mashed and ate the corm as poi and ate the stems and leaves as vegetables.
  - f. Only the men cultivated and cooked kalo. Women were considered unclean (due to their menstruation) and were not allowed to plant or cook kalo.
  - g. The Hawaiians built well engineered irrigation ditches called 'auwai. They built dams and had rules about how much water they could take from the streams. How much they took depended upon how hard they worked.



- h. Many people gathered together to make a new taro patch (lò'i) generally in the following sequence:
- 1) They first used a digging stick ('ō'ō) to dig up the soil.
  - 2) They used the soil to build walls or banks around the patch.
  - 3) The people pounded the banks with the thick end of coconut fronds (kū'au niu) to make them solid. They added grass and leaves to make the banks firm and water tight.
  - 4) Water was added to the floor of the patch and the people stamped the bottom of the patch to make it firm and water tight.
  - 5) A feast was held and an offering was made to the gods.
  - 6) The farmer then took his cuttings or huli and planted them in mounds of soil.
  - 7) Then he let water into the patch.
  - 8) When the first green leaves opened, the water was taken out for two weeks.
  - 9) When the roots were set in the soil, the water was let in again.
  - 10) The plants grew in cool, running water until they were pulled up to be eaten.
- i. Kalo takes 8-12 months to mature. The Hawaiians took out only the amount of kalo they needed. After all the kalo was harvested, the lo'i was left to rest for 2-3 months before it was planted again.
- j. Kalo was cooked in an underground oven called an imu. The food was cooked in two separate imu since it was kapu for men's and women's foods to be cooked together.
- k. Kalo pounded on a board without the addition of water was called pa'i 'ai. It could be kept for a long time without spoilage. Pa'i 'ai mixed with water becomes poi.
- l. The Hawaiian farmers worked together and shared their work and crops. The farmer member of the 'ohana shared his kalo with other members who were not farmers.

## 6. Methods of cooking

### a. Cooking in an imu (oven)

Steps in building an imu (See Culture Studies transparencies, available in school libraries.)

- 1) Dig a hole in the ground (imu).
- 2) Line it with brown or gray, porous but dry lava rocks (not "blue" basalt rock).
- 3) Place firewood on the rocks.
- 4) Cover the firewood with more porous "imu stones".

- 5) Light the fire and let the rocks heat until they become red hot. (Be careful because wet rocks may explode and hurl shards of stone.)
- 6) Place wet banana and ti leaves (lā'ī) on the hot rocks. (This will provide protection for the food and steam for cooking.)
- 7) Place the food to be cooked on the leaves.
- 8) Cover all the food with more leaves, old lau hala mats and then dirt. (Today burlap bags and canvas are used for the covering or hāli'i.)

- b. kō'ala - broiling meat or fish over coals
- c. kunu - broiling meat or fish over coals
- d. pūlehu - cooking in hot embers (Sweet potatoes, breadfruit and bananas were cooked in this manner.)
- e. pālaha - broiling meat over coals
- f. lāwalu - broiling food wrapped in ti leaves over coals
- g. hākui - steaming vegetables, meat and fish in a sealed bowl using hot stones in water (See Hawaiian Culture Studies Transparency.)
- h. pū holo - steaming, especially by stuffing flesh, as of pig (pua'a) with hot rocks and placing in a sealed calabash ('umeke)

7. Dishes, utensils and implements (See Culture Studies: Hawaiian Studies Project, Teacher Resource Book and Data Cards.)

- a. 'umeke - bowl made of kou, milo and kamani wood
- b. pā - platter made of the same woods to serve pig, dog and fish
- c. hue wai - water gourds
- d. papa ku'i 'ai - poi pounding board
- e. coconut leaves (lau niu) were woven into trays
- f. banana leaves (lau mai'a) and ti leaves (lā'ī) were used as serving dishes
- g. 'apu - cups made from coconut shells or small gourds
- h. kī'o'e palau - small scoops made out of coconut shells used as spoons
- i. ipu holoi lima - finger bowls
- j. wa'u - shell scrapers used for removing skin
- k. pahī - knives made from bamboo, shark teeth and stone flakes
- l. pōhaku ku'i - stone pounders made for pounding poi, herbs

8. The Hawaiians ate three kinds of animals.

a. Pig (pua'a)

- 1) Pigs were bred in large numbers and were used in important feasts or as offerings in religious ceremonies.
- 2) A pig was killed, organs removed, hair singed off by rubbing the carcass over hot rocks, salted and cooked in an imu for 2-4 hours, depending on its size.

b. Dog ('īlio)

- 1) Bred in large numbers, dogs were the principal meat at feasts.
- 2) They were baked in the imu and was the meat preferred by the Hawaiians.

c. Birds

1) Chicken (moa)

- a) The chicken resembled the fighting cocks of today.
- b) Some were trained for cockfighting but most of them were eaten.
- c) The eggs were not eaten but incubated by the hen.
- d) The chicken was killed, cleaned, wrapped in ti leaves (lā'ī) and cooked in coconut cream.

2) Wild birds

Any of the native birds were considered good to eat. There were 32 edible species according to David Malo. (Malō: 37-39; Handy, Native Planters in Old Hawai'i, 257-259)

9. The following were foods kapu to women:

- a. pua'a (pork)
- b. 'mai'a (bananas)
- c. niu (coconut)
- d. ulua (fish)
- e. honu (turtle)
- f. 'ea (tortoise)
- g. nai'a nu'ao (porpoise)
- h. palaoa (whale)
- i. hihimanu (sting ray)

### Generalizations

1. The lives of the Hawaiians were influenced by the availability of natural resources which could be used for food and tools.
2. The Hawaiians were skilled agriculturists and fishermen who wisely utilized the resources of their environment to meet their need for food.
3. The Hawaiians were interdependent within the ahupua'a to meet their need for food.
4. The kapu system influenced aspects of planting, gathering, preparation or cooking, and eating.
5. The men, women, and children all had definite roles to play in the processes related to food.

### Concepts

1. Utilization of resources: The allocation and use of resources
2. Kapu system: The social, political, economic, religious system of ancient Hawai'i which was intertwined with every aspect of living
3. Role: A learned behavioral pattern assigned to and performed by a person as he or she interacts with others in a group and includes privileges, rights and duties, and freedoms and responsibilities
4. Interdependence: Dependence on one another
5. Conservation: Wise use of resources

### Objectives

1. Describe how the Hawaiians used their environment to meet their need for food.
2. Explain the practices of conservation in old Hawai'i.
3. Describe and explain the role of religion and the kapu system in the process of growing, preparing, and eating food.
4. Explain the interdependence of members of the 'ohana in satisfying the basic need for food.

5. Identify the important food plants of early Hawai'i and define their uses.
6. Compare and contrast early Hawaiian food preparation with that of today.
7. Draw or list the steps in preparing an imu.
8. Identify some of the poisonous plants of Hawai'i.
9. Name foods we eat today that have been passed on from the early Hawaiians.
10. Prepare some of the foods the Hawaiians ate.
11. Use some of the tools used by the Hawaiians for planting and preparing food.
12. Reproduce some of the utensils or implements used in food preparation.
13. Dramatize the building of a taro patch and the planting of taro.

INDEX TO REFERENCES - FOOD - AGRICULTURE

	Food - Agriculture	Food Plants	Kalo Cultivation	Methods of Cooking	Role of Religion	Role of 'Ohana	
BAUER		24-25, 39-40, 45	27, 40, 41	40, 117-118	36-37, 45, 60, 63	39-42	
BUCK	Vol. I						
CURTIS			49,53-58,77- 79,238-240				
DAY		287,294-297	294-297				
DUNFORD		57-80	59-67	65-66	59-63, 70	59-83	
FEHER		34-41	40-41	36-40	49		
HANDY (A.H.C.)		95-103	117-121	96-103	102-103		
HANDY (N.P.O.H.)	71-146, 149-166		71-118	242-259 (animals)			
HAZAMA							
LINDO							
MALO	42-44, 204-208						
MITCHELL	86-87, 96-107	87-95		100		100	
POTTER	49-51						
PRATT		13-16, 62-64	50-62, 139- 140, 161-162	57-60	57-60	50-61, 140	
TITCOMB							

A.H.C. - Ancient Hawaiian Civilization

N.P.O.H. - Native Planters Of Hawaii

260

261

## LEARNING ACTIVITIES AND RESOURCES

### Bulletin Board

- Display pictures showing the preparation of food in early Hawai'i.  
Caption: "How did the Hawaiians get their food to eat?"
- Mount the diagram of the ahupua'a. (Available from Kamehameha Schools Press.)

### Discussion and Investigation

- Introduce students to this unit by asking them about the kinds of foods they ate for dinner last night. The following can serve as guide questions.
  1. What did you eat for dinner last night? (List foods on a chart.)
  2. Where do you think these products came from? (Market)
  3. Did one person supply the markets with all of the products?  
Have children hypothesize where some of the products came from.
- Encourage students to investigate and find out where the products came from. Have the children give suggestions about various ways of finding out where the goods came from. (Ask the managers of the markets and stores, read the label on the goods.)  
Discuss their findings. List the goods and sources on a chart.

### Hypothesizing

- Have students hypothesize: What kinds of foods do you think the early Hawaiians ate? Where do you suppose these foods came from?  
Have students examine the ahupua'a diagram. Make a class chart of the food plants and animals found on the ahupua'a.

### Planning

- Ask the children to study the chart and plan a dinner menu for a family in early Hawai'i.

### Dramatization

- Divide the class into three 'ohana. Have them plan a dramatization of how the early Hawaiian family probably prepared the food for dinner.  
During the dramatization, observe each 'ohana for the following: roles played by family members in the preparation of food; methods of preparation; serving utensils; place of eating; 'ohana concepts: kōkua, laulima, alu like, aloha.

## LEARNING ACTIVITIES AND RESOURCES

### Inquiry

- Encourage children to ask questions about the concepts and activities dramatized by the 'ohana. List the questions on a chart. Encourage inquiry in higher levels of thinking by encouraging the use of why and how questions.

e.g., If a family lived in the mountain area, how did the members get fish or products from the sea?  
Who cooked all of the food? Why?  
Where did they eat? Why?  
Did they need dishes? Why or why not?  
Did they cook all of their food? How?

Categorize questions into topic headings.

e.g., Roles played in food preparation  
Methods of preparation (cooking), steps in building an imu  
Kapu observed in food preparation  
Utensils and implements

### Research

- Divide the class into 'ohana to do research. Have each 'ohana select a topic and plan how the 'ohana will present the report. Have each 'ohana decide what needs to be done, how it should be done and who will do what. Encourage the children to plan for creative presentations.

#### References:

Buck, Arts and Crafts of Hawai'i - Food

Curtis, Life in Old Hawai'i

Dunford, The Hawaiians of Old

Feher, Hawai'i: A Pictorial History

Handy, Ancient Hawaiian Civilization

Handy, Hawaiian Planters in Old Hawai'i

Ihara, Life in Ancient Hawai'i

Lewis, Hawai'i Gem of the Pacific

Malo, Hawaiian Antiquities

Mitchell, Resource Units in Hawaiian Culture

276



## LEARNING ACTIVITIES AND RESOURCES

Goal setting

- At the beginning of each work-study period, have the 'ohana decide their goals or objectives for the period. At the end of the period, ask students to evaluate the work accomplished. Discuss problems students may have encountered.

Reporting

- Have each 'ohana share its report with the class.

Display

- Display the following:
  1. A kalo plant in its entirety. /
  2. A drawing of the kalo plant
  3. Poi pounder, bowl, poi board, coconut dish, scraper.

Have children touch and handle the articles and discuss how implements and tools may have been used.

Hypothesizing

- Have students hypothesize and write their hypotheses on a chart.
  1. How was kalo cultivated?
  2. Where was it grown?
  3. How was it grown?
  4. How long did it take to mature?
  5. What tools were necessary for its growth?
  6. How many varieties were there in ancient Hawai'i?

Gathering Information

- Have students read about kalo to validate their hypotheses. See "Index to References" for student references on Kalo. Discuss students' findings.

Discussion

- Discuss the importance of the kalo.
  1. Identify the legendary aspect of the kalo. Point out the legendary importance of the kalo as being man's older brother. See "Teacher Information" at the beginning of this unit.
  2. Identify the parts of the kalo plant and their uses. Place names of the parts on the drawing posted on the bulletin board.

## LEARNING ACTIVITIES AND RESOURCES

### Demonstration

- Poi Pounding
  1. Point out the corm of the kalo as being the most valuable part of the taro plant.
  2. Encourage children to dramatize steps in pounding poi.
  3. Identify the kapu (rules, customs, and beliefs) involved in the preparation of kalo and the roles played by men and women.
  4. Have the children experience the pounding of poi. After all the children have had a turn at pounding poi, discuss the problems and difficulties they experienced, and techniques that worked or didn't work.
- Ask a community resource person, parent, or kupuna (grandparent) to give a demonstration on poi pounding.

### Discussion

- Discuss how poi is prepared today. Compare methods of cooking, cleaning, mashing, storing.
- See "Taro Tales", video available from ETV.

### Field Trip

- Visit a poi factory to observe the process involved in making poi.

### Craft Activity

- Construct some digging tools ('ō'ō) of hau or guava branches. Have the children experience using the adz (ko'i) to cut the branches. Use shark-tooth knife or 'opihi shells to remove the bark. Use a stone chisel to shape the end for digging.
- Evaluate the activity by asking the following questions:
  1. How did your 'ō'ō turn out?
  2. What kinds of problems did you encounter?
  3. What are your feelings about being Hawaiian?

### Generalizing

- Have the children form generalizations about the early Hawaiians. e.g., 1. Hawaiians were very skillful.

## LEARNING ACTIVITIES AND RESOURCES

### Construction

2. They made good use of the resources in their environment to produce the necessary tools for farming.
3. The Hawaiians were hardworking people.

- Find a small area outside the classroom. Have children attempt to construct a mini kalo patch (lo'i kalo) close to a water supply, using their newly constructed 'ō'ō sticks. Have them follow the steps in planting. Plant some kalo and care for the wetland taro patch (lo'i).

### Gathering Information

- Encourage students to think about foods we eat today that are made of kalo, e.g., kūlolo-pudding dessert, taro chips, taro puffs.  
Have them do research at home in recipe books to look for recipes using poi as an ingredient. Choose a recipe to demonstrate in the classroom as a modern day use of kalo. Use parents as demonstrators.

### Field Trip

- Field trip to see kalo patches. Check to see if there are places open to the public.  
e.g., Waipahu Cultural Garden Park, O'ahu  
Paradise Park, O'ahu  
Polynesian Cultural Center, O'ahu  
Moanalua Gardens, O'ahu  
University of Hawai'i-Mānoa lo'i kalo, O'ahu  
(Call Indo-Pacific Language Dept. for information)  
Lo'i kalo in Kalihi, O'ahu; Ke'anae, Maui; Waipi'o Valley, Hawai'i;  
Hanalei, Kaua'i
- Preparation before the field trip.
  1. Write a letter asking to visit.
  2. Prepare worksheets for the children with questions they would like answered.
  3. Make a list of things you or they would like to see.
- Discussion after the field trip.
  1. How is kalo planted today?
  2. Are the steps the same?

### Discussion

270

271

LEARNING ACTIVITIES AND RESOURCES

Charting

3. Do we use the same tools? How are the tools different?
4. What kinds of kalo are there today?
5. Do you think they are as hearty today as they were a long time ago?
6. What are some of the problems of kalo farmers today?

- Have class fill in the information on a retrieval chart of food plants.

FOOD PLANTS

	Tools	Roles	Method of Irrigation	Varieties	Problems
Early		Males			
Modern					

Other Study Topics

- Study other plant foods in similar fashion. As the study proceeds, add more information to the chart.

For example:

Plant	Leaves	Corn/Stem	Fruits	Roots	Other
Kalo	Cooked and eaten as a vegetable.	Baked in the imu; corn pounded into poi; stem cooked and eaten. Juice of stem placed on insect bites.			

- Other important food plants to study as an entire 'ohana or as smaller 'ohana (2-3 members):

coconut	- niu	banana	- mai'a
sweet potato	- 'uala	yam	- 'uhi
breadfruit	- 'ulu	sugar cane	- kō
arrowroot	- pia		

25.

## LEARNING ACTIVITIES AND RESOURCES

- Other useful plants to study:

cordia subcordata	- kou	pandanus	- hala
hibiscus tiliaceus	- hau	candlenut	- kukui
paper mulberry	- wauke	gourd	- ipu
touchardia latifolia	- olonā	ti	- kī
piper methysticum	- 'awa		
curcuma domestica	- 'ōlena		

Areas of study may include:

1. Description of the plant
2. Varieties cultivated
3. Cultivation and planting
4. Methods of cooking
5. Uses
6. Kapu or legends surrounding the planting or usage of each plant, especially food kapu to women.

Card File

- Have children assist in setting up a permanent card file on plants and herbs of early Hawai'i. Information on the cards may include the name of the plant, a picture and origin of the plant, its habitat, uses, and varieties available today.

Plant Search

- Plant Search: Have children look in the community for each of the plants studied and make a scrapbook of pressed leaves.

## CULMINATING ACTIVITIES

Lū'au

- Using the concepts of 'ohana, plan and prepare a lū'au or feast (pā'ina). Organize it with the cafeteria manager and enlist the kōkua of the children's parents.

## RELATED ACTIVITIES AND RESOURCES

### Science

- Study medicinal and poisonous plants of Hawai'i. Work on identification and uses.  
See Gutmanis, June, Kahuna Lā'au Lapa'au: The Practice of Hawaiian Herbal Medicine. Honolulu: Island Heritage Ltd., 1977.  
Hazama, Dorothy (Ed.), Cultural Studies: Hawaiian Studies Project Data Cards.
- Plant some of the plants studied in the same way the Hawaiians did.
- Experiment with some of the plants to see if the ancient Hawaiian usage was and still is usable today.
  1. Glue two pieces of wood together using the milky sap of the breadfruit.
  2. Use the leaves of the breadfruit to sand wood.
  3. Polish gourds with kukui nuts to see if they really are useful as oil to polish furniture.

### Music

- Sing songs and chants
  1. "Ku'i i ka poi"
  2. "Huki i ke kalo"
  3. "Pala'ie Chant"
- Create simple chants, dances, songs.

### Language Arts

- Write simple chants or poems such as haiku, cinquain, etc., about plants, foods or agricultural practices of old.
- Pretend you are a modern day journalist looking at a community scene in the early 1700's. Write a descriptive account of "The Day Our Community Prepared a King's Feast for King Kamehameha."
- Write a creative legend of origin for any of the plants studied.
- Write a story involving a situation in which a planting or food preparation kapu was broken.

28<sub>3</sub>

28<sub>0</sub>

## RELATED ACTIVITIES AND RESOURCES

### Art

- Make crayon rubbings of the leaves of the plants.
- Make a movie roll of the important plants in the lives of the Hawaiians. Include as much information as possible.
- Tī leaf (lā'ī) crafts:
  1. make tī leaf slippers
  2. wrap laulau in leaves
  3. tī leaf lei
  4. whistle
  5. cup
  6. carrying bundle - pū'olo
  7. kāhili

See Aloha Council, Boy Scouts of America, Hawaiiana, A Handbook for Scouts, 1973.

- Coconut crafts:
  1. pala'ie (midribs) loop and ball game
  2. pūlumi broom
  3. bowls (shells)
  4. drum (knee as well as pahu hula)
  5. mats (leaves)

See Explorations Ho'omāka'ika'i, 1980. Honolulu: The Kamehameha Schools Press, p. 90.

- Kukui nut crafts:
  1. lamp - using nuts strung on a coconut midrib (nī'au)
  2. Torch - place nuts in a bamboo container
  3. 'inamona - relish
  4. kukui nut top

### Games

- The following games are described in Mitchell, Donald, Resource Units in Hawaiian Culture. Honolulu: The Kamehameha Schools Press, 1972, pp. 149-151, 154.
  1. Pala'ie - Loop and ball game. Use the chant "Pala'ie Chant".
  2. Hū - Kukui nut top spinning contest

## RELATED ACTIVITIES AND RESOURCES

- 3. Kīlu - Coconut bowls
- 4. Kī - Ti leaf sliding
- 5. Hei - String game
  
- Other games are described in Mitchell, Donald, Hawaiian Games for Today. Honolulu: The Kamehameha Schools Press, 1975.

## BIBLIOGRAPHY OF TEACHER AND STUDENT REFERENCES

- Buck, Peter, Arts and Crafts of Hawai'i - Food. Honolulu: Bishop Museum Press, 1964.
- Curtis, Caroline, Life in Old Hawai'i. Honolulu: The Kamehameha Schools Press, 1970.
- Dunford, Betty, The Hawaiians of Old. Honolulu: The Bess Press, 1980.
- Feher, Joseph, Hawai'i: A Pictorial History. Honolulu: Bishop Museum Press, 1980.
- Handy, E.S.C., Ancient Hawaiian Civilization. Rutland, Vermont: Charles E. Tuttle Co., 1965.
- Handy, E.S.C., Native Planters in Old Hawai'i. Honolulu: Bishop Museum Press, 1972.
- Ihara, Ku'ulei, "Life in Ancient Hawai'i - Foods - A Supplement," Research Materials, Bulletin Number 15. Honolulu: DOE, 1978 (paper).
- Lewis, Oscar, Hawai'i Gem of the Pacific. New York: Random House, 1954.
- Malo, David, Hawaiian Antiquities. Honolulu: Bishop Museum Press, 1971.
- Mitchell, Donald, Resource Units in Hawaiian Culture. Honolulu: The Kamehameha Schools Press, 1972.



## UNIT VII: FOOD - FISHING

### Overview

Fishing was important in early Hawai'i as it helped to ensure an adequate supply of protein for the people.

Fishing was an extensive food procuring occupation of the Hawaiians. It required a great deal of skill and training. A fisherman had to learn about the stars, winds, currents and clouds. He needed to study the contour of the reefs, crevices, and sandy areas of the ocean. He had to learn where each different fish lived, when they were spawning, what method to use in order to catch them, what time of the day to catch them, which tide and what kind of day. He needed to learn when to use live bait and cooked bait, when to take helpers and when to go alone. A man became a fisherman only after going through many stages of preparation.

The early Hawaiians had fishponds which provided a convenient source of food for the Hawaiians. They furnished the chief and his retinue with the fish they required at any time. The common people found it a ready resource to meet their need for protein. It was a source of fish that did not require the skill and knowledge of an expert fisherman.

Religion was a very important part of a fisherman's life. It was imbedded in every aspect of his life, from the building of a new canoe, the making of the fishing gear, the baiting of the hooks, to final preparation and eating of the fish. Strict kapu (rules) governed the fisherman's preparation for fishing and they had to be carefully observed lest the gods be angered.

Fishermen were persons of honor. They were highly respected and honored. They observed the traditions and customs of their ancestors for they believed that the future food supply in the ocean depended upon the observation of these customs and traditions.

This unit will examine the methods of procuring fish, the kapu that helped in the conservation of food from the sea, and preparation and preservation of food from the ocean as practiced by the early Hawaiians.

## Teacher Information

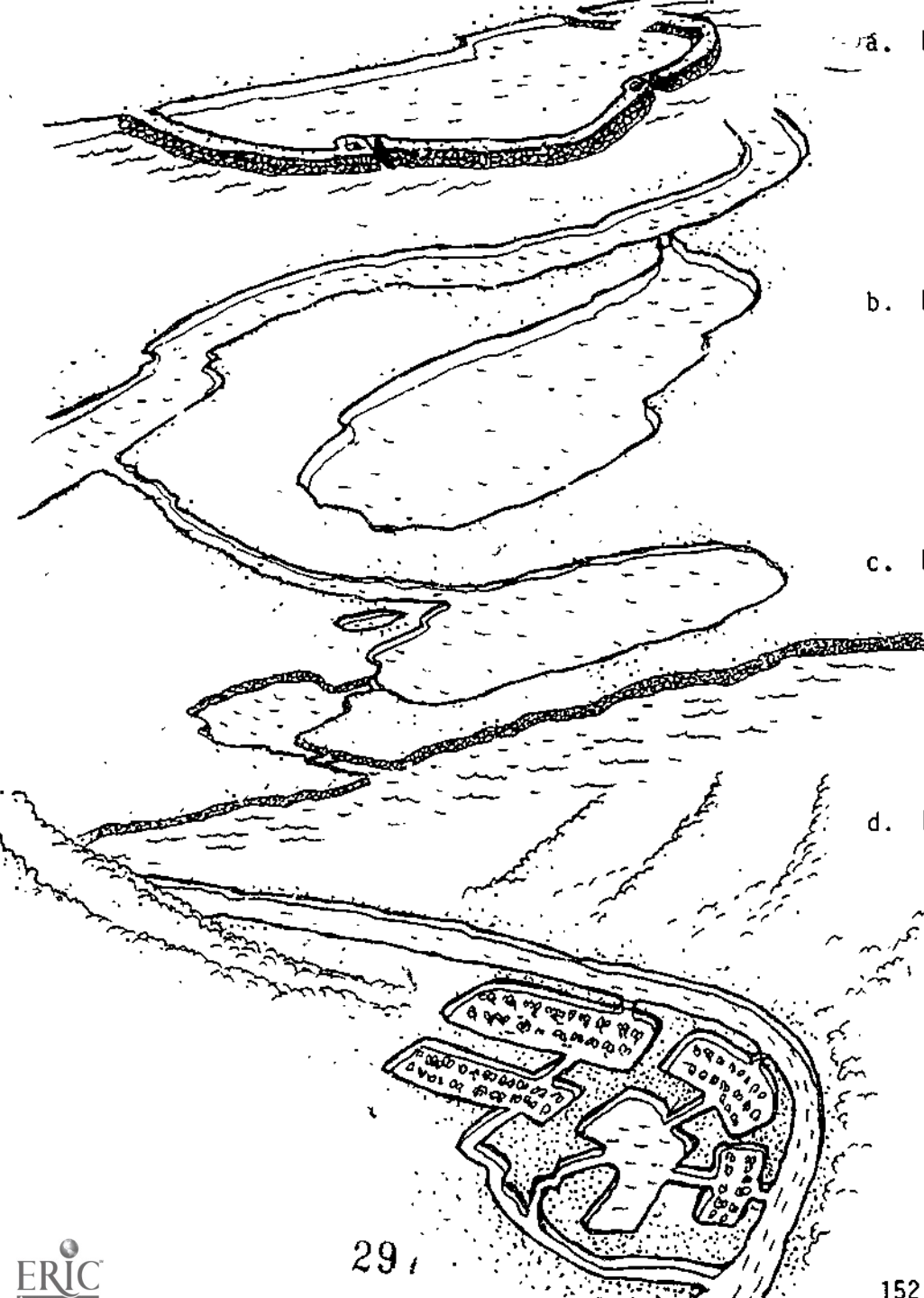
1. Fishing was one of the most skilled occupations of the early Hawaiians.
2. It demanded knowledge of the stars, winds, currents, clouds, ocean, habits of fish and kapu and religious ceremonies.
3. There were many religious ceremonies closely associated with fishing. The fishermen believed that they needed some spiritual power to aid them in their activities, hence, religion was an important part of the ceremonies and customs in fishing.
  - a. Each had his own special family god ('aumakua). The principal fishing god was Ku'ula who brought luck and success.
  - b. There were many fishing shrines (ko'a) made of heaps of stones on the beach; fishermen going out to fish contributed a stone to the shrine. Offerings of fish were placed on the shrines after a successful fishing trip. This was done to bring him luck for the duration of the fishing season.
  - c. Prayers were offered to the gods whenever a new net, new canoe, or new fish hook was completed.
  - d. The first thing made and consecrated was never given away. The family god ('aumakua) was always asked to increase or multiply the article.
4. The kapu system (rules) regulated the life of the Hawaiian people and so it was in fishing.
  - a. No one was allowed to speak while a fisherman was lashing his hook. The Hawaiians believed that fishes have ears.
  - b. No one was allowed to step on a hook or on a net or on lines.
  - c. Women made the fishlines and net, but once completed they were not allowed to touch them.
  - d. Women were not allowed to go canoe fishing; also certain kinds of reef fishing were restricted to men.
  - e. The bones and left overs of fish used in offerings at special ceremonies were thrown into the sea to prevent defilement.
  - f. The following seafoods were kapu to women:

ulua	niuhi (shark)	porpoise	sting ray
kūmū	sea turtle	whale	

5. The Hawaiians practiced conservation.
  - a. They placed kapu on certain fishes during the spawning season.
  - b. Some fishes were kapu to everybody except the high chief (mō'i'i).
6. The Hawaiians were able to enforce the kapu because they believed that the gods would be angered if any kapu were broken.
7. The fishermen shared their fish with members of their 'ohana living throughout the ahupua'a. Sometimes in return, they received wood for a canoe or kalo to make poi.
8. Fish was cooked in various ways. (See descriptions in "Unit IV: Food - Agriculture".)
9. A man training to become a fisherman had to go through several steps in order to become a fisherman.
  - a. He had to serve under an experienced fisherman for several years.
  - b. As soon as he caught his first fish, he had to stop fishing for the duration of the fishing trip.
  - c. When he got to shore, he took his fish to a kahuna who cut it into small pieces, wrapped them in ti leaves, and cooked them.
  - d. All the leading fishermen were invited to attend the celebration.
  - e. A prayer was said to all the family gods ('aumakua) of the East, North, West, and South, of the sky and of the deep sea and then everyone ate.
  - f. The fish bones were wrapped together, taken to the sea where a prayer was offered and then dropped into the sea.
  - g. Only when all of this had been completed could a person be a full fledged fisherman.
10. The fishermen knew just where to go to find fish. When they found good fishing grounds (ko'a), they marked them by certain landmarks and never forgot their location.
11. Every fisherman also had to know how to handle his canoe and was careful to observe the traditions and customs of his ancestors.
12. There were several kinds of fishing:
  - a. Night fishing: Torches were used to attract the fish. Nets, spears, or lines were used to catch the fish.

- b. Inshore fishing: Inshore fishing was done mostly by women, who with their children gathered seaweed, 'opihi and wana. The men used several methods to catch fish along the reefs and in holes in the coral.
  - c. Offshore fishing: Nets were used.
  - d. Deep sea fishing: Poles, line and hook, and nets were used.
  - e. Fresh water fishing: Men and women caught shrimp ('ōpae) in baskets and gathered shell fish (hīhiwa). They caught 'o'opu with nets and sometimes with their bare hands.
13. Methods of fishing ranged from catching by hand to fishing with fish hooks and nets.
- a. Hand fishing: Lobsters, shrimp and sometimes fish and eels were caught.
  - b. Fish baskets and traps: Shrimp ('ōpae) and fish were caught in baskets which were used like scoop nets. These baskets were also used as traps.
  - c. Spear fishing: Wooden spears, six to nine feet long were used to catch fish on the reef or in deeper water.
  - d. Hook and line fishing: The lines were made of strong olonā bark and the hooks were made of pearl, bone, turtle shell, or animal bone and wood. Many fish were caught with a single line and hook or a single line with multiple hooks.
  - e. Pole fishing: Poles were used to catch aku when the fishermen sailed out to sea. They watched the sea birds for the birds ate the same little fish the aku ate. When they came to the right place, they threw live bait into the water to attract the aku. They were very successful in catching aku with this method.
  - f. Net fishing:
    1. A special person made the big net out of olonā cord. He used wood such as hau for floaters and stones as sinkers. He dyed it in a bath of water with kukui bark so the fish would not be able to see it.
    2. The nets ranged in size from thirty to a hundred feet long.
    3. The fisherman chewed kukui nuts and upon reaching the fishing ground, spat the oil on the water which cleared the water enabling him to see if the fish were there. The men in the canoes put the net into the water. Divers drove the fish into the net by splashing. They surrounded the school of fish and pulled the nets into the canoe. (The throw net used today is not the traditional Hawaiian way of fishing. The Japanese brought this way of fishing to Hawai'i and the Hawaiians quickly adapted to this style.)

14. To store and raise fish, the Hawaiians built fishponds. There were four basic types of fishponds.



a. Loko kuapā

These were built in shallow areas along the coast. They have a wall of stone, coral blocks or both. The walls were made permeable so that the water could flow through to reduce stagnation. There was also a gate (mākāhā) which allowed the ocean water to run freely through while keeping the fish in the pond.

b. Loko wai

These fresh water ponds were set inland and were connected to the ocean or mountain streams by ditches.

c. Loko pu'uone

These ponds were coastal bodies of water with loose, irregular walls of sand and coral. The walls allowed seawater to enter while fresh water springs along the shore provided internal seepage. The fish from these ponds were preferred as delicacies.

d. Loko i'a kalo

These ponds were actually kalo patches but were also used as fish ponds for raising awa, 'anae, 'o'opu, āholehole and 'ōpae. The taro in these loko were planted in mounds so that the fish could swim in the channels. This kind of pond made it easy for a person to catch a few fishes and pick a few leaves (lū'au) for vegetables to eat along with kalo or poi.

15. When the chief wanted a fishpond built, he spoke to the master architect - kahuna kuhikuki pu'uone. He knew the geography of the land and the nature of the spirits of the site. The land over-seer (konohiki) and the caretaker of the pond saw to it that the construction, repairing and cleaning took place. They also harvested the fish when instructed to do so.
16. The fishpond was a symbol of chiefly power, since all of the land with its resources and produce was "owned" by the chief (ali'i 'ai moku). Specific fishponds and major temples belonged to and were controlled solely by the chief. Other fishponds were contracted to lesser chiefs who in turn left the control to the commoners. As the power of the chief increased, the political and economic roles of the fishponds took on more significant meanings in meeting the needs of members of royalty.
17. The fishponds were exempt from restrictions during spawning times and could provide food at any time of the year. The fishermen raised particular kinds of fishes and acquired rocks with limu (seaweed) to provide food for the fishes.
18. The construction and upkeep of a fishpond were tremendous. It took a large supply of workers to construct the walls of a pond. When a warring chief invaded the lands of another, he often ordered the destruction of the irrigation ditches that fed the fishponds as well as the agricultural plots. The walls of the fishponds were also destroyed, and thus the commoners as well as the ali'i class suffered from the depleted supplies.
19. All bodies of water, including fishponds, were guarded by mo'o, the guardian spirit in the form of a lizard. Their role was to protect the water from pollution.
  - a. The caretaker of the pond (kia'i loko) had to make offerings regularly to the guardian spirits to ensure a sufficient supply of fish.
  - b. Famine was greatly feared so violation of the kapu was death or plucking out of the eyes. Some of the disrespect was in the form of:
    1. Verbal insults against the fishpond or caretaker.
    2. Pollution of the pond.
    3. Women with their menses going near the fishpond.
  - c. The kia'i loko had a guard house built on the wall of the fishpond near the gate (mākāhā) to keep out intruders.
20. Fishponds were manifestations of the chief's political power and his ability to control his resources. They were for the purpose of raising select types of fish and not intended to produce a great amount of fish.

### Generalizations

1. The lives of the Hawaiians were influenced by the availability of natural resources which could be used for food and tools.
2. The Hawaiians were skilled fishermen who wisely utilized the resources of their environment to meet their need for food.
3. The Hawaiians were interdependent within the ahupua'a (a unit of land division) to meet their need for food.
4. The kapu system influenced various aspects of fishing from the training of a fisherman and building of a canoe for use in fishing to preparation and eating of the fish.
5. The various members of the 'ohana all had definite roles to play in the processes related to fishing.
6. The Early Hawaiian fishponds provided a convenient source of protein for the people.

### Concepts

1. Utilization of resources: The allocation and use of resources
2. Kapu system: The social, political, economic, religious system of early Hawai'i which was intertwined with every aspect of living
3. Role: A learned behavioral pattern assigned to and performed by a person as he or she interacts with others in a group and includes privileges, rights and duties, and freedoms and responsibilities
4. Interdependence: Dependence on one another
5. Conservation: Wise use of resources

### Objectives

1. Describe how the Hawaiians used the resources of the ocean and their environment to meet their need for food.
2. Explain the conservation practices in early Hawai'i.
3. Describe and explain the role of religion and the kapu system in the processes related to fishing.
4. Explain the interdependence of members of the 'ohana in satisfying the basic need for food.
5. Explain the importance of the fishponds to the Hawaiians.

INDEX TO REFERENCES - FOOD - FISHING

	Food - Fishing	Methods of Fishing	Methods of Cooking	Areas of Fishing	Fishponds	Role of Religion	
BAUER	27	41-42, 123		123-125	33,78,149,151	45	
BUCK	Vol. VII						
CURTIS		89-92, 95-97 (salt), 192-200, 211-214, 259-262	25	33-42, 192-200, 212-213	256-258	38,42	
DAY	252-297						
DUNFORD		87-104	105-106	87-104	104-105	47,50,85-86, 105-107	
FEHER		42-47	42-45, 46-47		64-65		
HANDY (A. H.C.)		105-111, 278	96-103	84, 91, 92		105-111	
HANDY (N.P.O.H.)	259-262				260-264		
HAZAMA		18					
LINDO							
MALO	45-47,208-213						
MITCHELL	108-115	108-110		108-111	111	111 m, n	
POTTER	13, 26, 48-49	48-49		49	49	49	
PRATT		75-103		78-99	83	75-103	
TITCOMB							

A.H.C. - Ancient Hawaiian Civilization

N.P.O.H. - Native Planters Of Hawaii



## LEARNING ACTIVITIES AND RESOURCES

Arranged Environment

- Display on a table: Fish hooks, nets, spears, lures, traps, line with hook, pole, sinkers, floats.
- Bulletin Board: Mount pictures of different types of sea life such as fish, seaweed, shellfish, lobster, shrimp, crab, etc.

Discussion

- Have a discussion to find out students' knowledge and experiences. The following questions can serve as guidelines:
  1. What did you eat for dinner last night?
  2. Who has never eaten fish?
  3. What kinds of fish do you eat?
  4. Where do your parents get the fish?
  5. How do people get fish? Who catches them?
  6. What do you use to catch fish?
  7. What kinds of fish can you catch with the equipment on the display table?

Recording

- Record their sharing on a chart.

### FISHING TODAY

Who Fished?	Equipment Used	Fish Caught
Men	Throw net	Mullet

Exploration

- Encourage the children to examine the display items and to discuss them with each other. Questions: How did the early Hawaiians use these things? What kinds of food did they get from the ocean?

Dramatization

- Dramatic Inquiry: Have each student pick one item and decide in which part of the ocean it might have been used. Have each of them sit in any one of three designated areas: Deep sea, Inshore, Reef. Have them dramatize a fishing trip including the time of the day, tide, transportation, equipment and supplies needed, fish to be caught, method of catching the fish and roles of the men, women, or children who caught the fish.

## LEARNING ACTIVITIES AND RESOURCES

### Questioning

- Encourage the children to share their concerns and ask questions about those things they didn't understand. Record all these questions on charts.

- Classify the questions into categories:

Have the students suggest topics such as: Methods of fishing, Areas of fishing, Kapu and Rituals, Roles.

### Research

- Planning and Organizing for research:

1. Have each 'ohana meet to discuss what they are responsible for and how they are going to find the needed information. Each 'ohana is to choose a leader (haku) and decide on a method of presenting the information to the class.
2. Point out available references, such as Hazama, Culture Studies: Hawaiian Studies Project data cards, books listed in the Bibliography, pictures from Dillingham Corporation's tidal calendar on methods of procuring fish, parents and relatives, and community people.
3. Remind children about 'ohana concepts as they work together in their groups:

kōkua - help  
alu like - work together  
kuleana - responsibility  
laulima - cooperation  
lōkahi - harmony

Give students some time during each Social Studies period to do the research and work on their presentations.

### Other Developmental Activities

- On-going Activities:

1. Read excerpts from teacher references on the part religion played in fishing. See Malo, Hawaiian Antiquities, pp. 208-213, Curtis, Life in Old Hawaii.

30,

30,

## LEARNING ACTIVITIES AND RESOURCES

2. Conduct picture studies to help children become more aware of the details found in pictures.
3. View film: "Glamour fish of Hawai'i".
4. Resource Persons

Invite parents or community people to come into the classroom to share about their fishing experiences, traditional Hawaiian methods or modern techniques of fishing, and rules or kapu observed.

Invite a speaker from the State Department of Land & Natural Resources, Fish and Game Division, to speak on conservation today.

Construct retrieval charts showing contrasts and similarities between traditional and modern fishing and conservation practices.

5. Observe a real fish. Have children study a real fish . . . describe and name the various parts. Clean it using a shell scraper. Cut it using a bamboo or shark's tooth knife. Clean the insides. Prepare the fish for tasting in the following ways:
  - a. Season with salt and limu (poke).
  - b. Wrap in ti leaves (lā'i) and cook over coals (lāwalu).
  - c. Season with salt and dry.
  - d. Wrap in ti leaves (lā'i) and bake in the imu.
6. Read from Curtis, Life in Old Hawaii, pp. 33-42.

Discuss: What religious procedures needed to be followed? Why was strict observance so important?

Have children hypothesize where they think the Hawaiians worshipped the gods.

## LEARNING ACTIVITIES AND RESOURCES

### Locate information

- a. Go on a field trip to a heiau.
- b. Observe the way the heiau was constructed.
- c. Have children make inferences on how it was built, who built it, what purpose did it serve, how it was used.
- d. Have children read information in books and construct a retrieval chart.

NAME OF HEIAU	TYPE	WHERE FOUND
---------------	------	-------------

- e. Make a chart of the gods of old Hawaii and their functions.

GOD	FUNCTION
Lono	God of Agriculture, etc.

Have children state generalizations on the importance of the heiau and religious ceremony in fishing.

7. Prepare a flannel-board presentation of the "Magic Fishhook of Pearl". See Pratt, The Hawaiians An Island People, pp. 176-178, or read the story to the children.
  - a. Discuss the fishing information and religious implications.
  - b. Encourage the children to make a movie roll of the story and share it with another class.

### 8. Films:

Magic Gift of Rongo	1770
Hawaiian Fishhooks	3684
Tuna Fishing	2978
Fishing for a Living	0933
Seashore Oddities	2559

31.

## LEARNING ACTIVITIES AND RESOURCES

### 9. Industrial Arts

- a. Make cordage using hau bark or coconut sennit.
- b. Make or shape fishhooks out of soup bone.
- c. Make a group fish net using a parent or guest as a resource person.
- d. Construct lures or fishing torches using kukui nuts.
- e. Construct a miniature fishing heiau.

10. Investigate field trip possibilities on your island. O'ahu students may go to the following: Tamashiro Fish Market, Glass Bottom Boat ride, Waikiki Aquarium, Hawaiian and the Sea exhibit, Sea Life Park, Bishop Museum - display on fishing implement.

Reporting

- Have children share the results of their research using visuals, charts, murals, etc.
- Make a retrieval chart on fishing as the children present their reports.

Early Hawaiian Fishing		
Who fished?	Method of Equipment Used?	Fish Caught
Men & Women	Hand fishing	'o'opu

Further Inquiry

- Discuss: How did the Hawaiians store the fish they caught? Have the children hypothesize and list the hypotheses on the board.

311

## LEARNING ACTIVITIES AND RESOURCES

### Learning Activities Fishponds

#### • Activities:

#### 1. Field trip to a fish pond on O'ahu:

Moli'i Fishpond - Kualoa Regional Park

Kahouna Fishpond - Located in Kahalu'u across from the Hygienic store.

He'eia Fishpond - Located in Kane'ohe beyond the long bridge.

Nu'upia Fishponds - Located on the Kane'ohe Marine Corps Air Station.

#### 2. Resource speaker on fishponds.

Investigate possible resource persons on your island who may have extensive knowledge about Hawaiian fishponds.

#### 3. Read in books about the importance of fishponds, how they were built, how they were cared for, kinds of fish raised. Curtis, Life in Old Hawaii, p. 256. Kamakau, The Works of the People of Old, pp. 47-50. Titcomb, Native Use of Fish in Hawaii, pp. 6-8.

#### 4. Have a speaker from the Oceanic Institute or a fishery speak to the children about modern day aquaculture.

#### 5. Construct a fishpond modeled after one still in use today. Discuss the following:

- a. Who built the ponds?
- b. What religious ceremonies were observed?
- c. What kinds of building materials were necessary?
- d. What kinds of fish were raised in the ponds?
- e. Who took care of the ponds?
- f. How does a fishpond work?
- g. Who owned the fishpond?
- h. Where were the fishponds located?

## CULMINATING ACTIVITIES

Planning, Drawing

- Have students plan and draw a mural depicting a typical ocean scene showing life in the ocean from the shore all the way into the deep blue sea. Depict methods of fishing, life in the sea, location of sea life, greenery, coral reefs, etc. Use 3-D or raised relief method.

Fish Pā'ina

- Plan a fish pā'ina (feast) using several methods of cookery. Include the gathering of Hawaiian salt from the rocks by the ocean.

Fishing

- Have the children encourage their parents to take them on a fishing trip using any fishing method. Have them bring the fish to school and demonstrate cleaning it using ancient tools.

Simulation

- Have students do a simulation. See "Fashioning a Fishing Device" at the end of this unit.

Generalizing

- Have students form generalizations about the early Hawaiians and their use of natural resources, their beliefs and the roles of the people as they pertain to fishing.

Writing

- Have the students write a story about a boy in early Hawai'i who lived in a fishing village. Describe life in the village and how he grew up learning to be a fisherman. Describe the kapu he had to observe and the daily rituals of fishermen. Tell of the activities that went on such as patching nets, sharpening spears, cooking and preparation of fish and other seafoods and how he finally becomes a full-fledged fisherman.

RELATED LEARNING ACTIVITIES AND RESOURCES

Music

- Sing songs about fishes and the Sea:

"He'ono"

"'Ōpae E" (Eddie Kamae)

"Hukilau"

"Ku'u Pūpū Kau Pōhaku" (Alice Namakelua)

"Laupāhoehoe" (Aluli)

"Pūpū Hinuhinu"

See Māhoe, Noelani, E Himeni Hawai'i Kākou. Honolulu: Governor's Committee Hawaiian Text Materials, 1973.

Art

- Make a torch for fishing using a bamboo section with kukui nuts.
- Make fishhooks out of a variety of materials: bone, wood, mother of pearl.
- Draw pictures of life in the sea. Draw them to scale and place them on a mural of the sea.
- Construct a squid lure.

Language Arts

- Write letters of concern to the governor telling him of the concern you have for the life in the sea. Suggest three ways to help increase the number of fish in the ocean.
- Write simple poems about some creature of the sea.

317

318



### "Fashioning a Fishing Device"

**Situation:** You are stranded on an island and you have no food or tools. You need to look to the sea for food or you will starve. You need to make a fishing device with the materials you can find on the island.

**Directions:** Look at the map and determine the materials you would use to make your fishing device. Describe the steps you would follow to make your device beginning with the gathering of materials. Draw your device and label the drawing with the materials used.

310

NORTH-EASTERLY TRADEWINDS

KOA

STONE QUARRY

FLAT DRY LAND

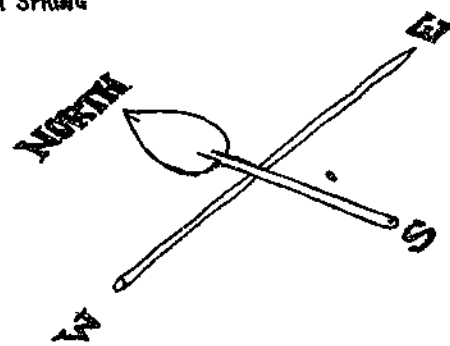
MOUNTAINS

COCONUT

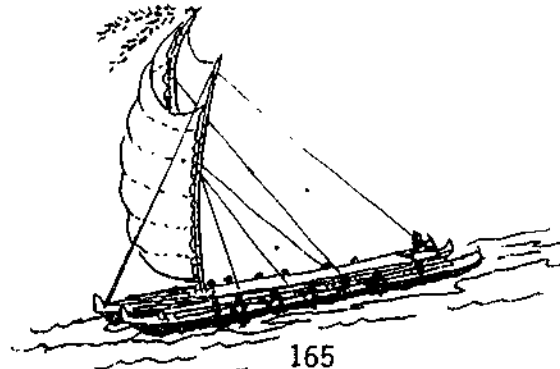
FRESH WATER SPRING

FLAT FERTILE LAND

Pili



D Parker



## BIBLIOGRAPHY OF TEACHER AND STUDENT REFERENCES

- Buck, Peter, Arts and Crafts of Hawai'i, Vol. VII. Honolulu: Bishop Museum Press, 1964.
- Curtis, Caroline, Life in Old Hawai'i. Honolulu: The Kamehameha Schools Schools Press, 1970.
- Day, Grove, Hawai'i and Its People. New York: Meredith, 1968.
- Dunford, Betty, The Hawaiians of Old. Honolulu: The Bess Press, 1980.
- Explorations Ho'omāka'ika'i.. Honolulu: The Kamehameha Press, 1980.
- Feher, Joseph, Hawai'i: A Pictorial History, Honolulu, Bishop Museum Press, 1969.
- Handy, E.S.C., Native Planters in Old Hawai'i. Honolulu: Bishop Museum Press, 1972.
- Hawaiiana, A Handbook for Scouts. Honolulu: Aloha Council, Boy Scouts of America, 1973.
- Hazama, Dorothy (Ed.), Culture Studies: Hawaiian Studies Project, Data Box. Honolulu: Department of Education, 1978.
- Kamakau, Samuel, The Works of the People of Old. Honolulu: Bishop Museum Press, 1976.
- Malo, David, Hawaiian Antiquities. Honolulu: Bishop Museum Press, 1971.
- Mitchell, Donald, Resource Units in Hawaiian Culture. Honolulu: Kamehameha Schools Press, 1972.
- Potter, Norris W. and Kasdon, Lawrence M., Hawaii Our Island State. Columbus: Charles E. Merrill Books, Inc., 1964.
- Pratt, Helen G., The Hawaiians An Island People. Rutland Vermont: Charles E. Tuttle Co., 1963.
- Titcomb, Margaret, Native Use of Fish in Hawai'i. Honolulu: University of Hawaii Press, 1972.

## UNIT VIII: SHELTER

### Overview

A house (hale), to the Hawaiians who lived many years ago, was not just a place to live in and to get protection from the weather. It was a place with its own qualities of warmth, friendship and love. Thus, it was of utmost importance that in building a house (hale), the correct procedure was followed so that the home and the family would form a happy household unit.

The procedure for building a hale required the expertise of a kahuna kuhikuhi pu'uone (housebuilding expert) who prayed to the gods for guidance in choosing the right site. He carefully watched for the correct signs and went through the appropriate ceremonies so that the gods would look favorably upon the hale and so that the family moving into the hale would be happy.

Every Hawaiian household unit had a group of houses (kauhale) to live in instead of a single hale like we do today. There were strict kapu that governed the use of each hale and the breaking of these kapu sometimes meant death.

This unit examines the process of building a Hawaiian hale. It inquires into the problems involved in the gathering of materials and in the actual construction of the house using simple tools. It also examines the roles played by the members of the 'ohana and the importance of religion in the process of building a hale.

## Teacher Information

1. The early Hawaiian house (hale) was used chiefly for protection from cold and wet weather.
  - a. When the weather was pleasant the Hawaiians slept on mats in the open air.
  - b. The hale was used as protection for the people and their belongings from cold and wet weather, from enemy forces and from the strict kapu times imposed by the ali'i when no one was allowed outside and no noise was allowed.
2. Hawaiian hale were of different sizes, the chiefs owning the largest hale.
  - a. Each hale had only one room.
  - b. Some hale had walls and others looked like roofs built right over the ground.
  - c. Some hale had walls built out of rocks.
  - d. The hale of chiefs had high roofs built on walls.
3. The Hawaiian family had a group of one room hale instead of a single house with several rooms. This group of hale were called kauhale.
4. The materials used for building the hale were found in the environment, such as stones, shells, plants and bone.
  - a. Wood used for the framework included:

uhiuhi	pua	'ōhi'a 'ai (mountain apple)
naio	kauila	'ulu (breadfruit)
'a'ali'i	hau	lama
mamane		
  - b. Stones were used for walls and for raised foundations.
  - c. 'Uki'uki grass was braided to make sennit to lash poles together.
  - d. Thatch
    - 1) Pili grass was used most because of its fragrance and durability.
    - 2) Other grasses were kualohia, pueo, kawelu.
    - 3) Other thatch consisted of sugar cane (lau kō), ti or kī (lā'ī), and pandanus leaves called lau hala.
5. Before the construction of a hale, an expert skilled in picking out good sites studied the land and pointed out where the hale should stand and face. This expert was called a kahuna kuhikuhi pu'uone.

6. The process involved in building a hale was as follows:

a. Gather the materials needed:

- 1) Timber from the forests
- 2) 'Uki 'uki grass
- 3) Grass for thatch (gathered by women and children)

b. Clear and level the ground.

c. Dig the holes for the main posts using the 'ō'ō stick.

d. Add the rafters and framework.

e. Thatch the house.

f. Consecrate the hale.

- 1) A kahuna recited a prayer while cutting the thatch that was left hanging over the door. A red goat fish (kūmū or weke) and a white crab ('ama'ama) were placed under the threshold.
- 2) This ceremony was conducted only after the hale was completely finished and furnished.
- 3) The name of this ceremony was "'oki 'ana i ka piko o ka hale" (cutting the navel string of the house). This was symbolic of cutting the umbilical cord of a newborn child. (See Malo, pp. 123-125.)

7. The Hawaiian household had several dwellings, each serving a special purpose:

a. Hale noa - sleeping house (noa means "free of kapu")

It was divided into two parts.

- 1) One part was raised and covered with fine mats for sleeping. No one was allowed to play, walk or sit on it.
- 2) The lower division was covered with wider mesh mats and was used by the family for sitting, talking and playing quiet games.

b. Hale mua - men's eating house and altar

- 1) Kapu to women.
- 2) Men and older boys ate their meals here.
- 3) The leader (haku) offered 'awa to the family 'aumakua.

- c. Hale 'aina - women's eating house
    - 1) Women and girls and young boys ate together.
    - 2) Young boys ate with the women until they were 5 or 6. After "Kā i Mua" ceremony (thrust to the Mua), the boys were given their first malo and given to the men in the hale mua.
  - d. Hale pe'a - women's menstrual house
    - 1) Women menstruating remained in their hale pe'a until the period was over.
    - 2) Women were not allowed to take part in any activity outside of the hale. They could weave mats during their stay there.
    - 3) Men were not allowed in the hale under the penalty of death.
  - e. Hālau
    - 1) Fishermen had a hālau to keep their nets, canoes and other fishing supplies.
    - 2) Canoe builders had a hālau where they finished building their canoes.
  - f. Hale papa'a - store house to store crops and implements used in planting
  - g. Hale kuku - kapa beating house.
  - h. Hale kahūmu - cooking house used when the weather was bad
    - 1) One was for the women and one for the men.
    - 2) Walls were made of stone with a thatched roof or no walls with posts and roof only.
    - 3) Kapuahi (kapu-restriction; ahi-fire, restricted place for fire) was a shallow depression in the ground, surrounded by stones to keep the fire confined.
  - i. Hale papa'i - temporary dwelling used only for short periods
8. The household furnishings were simple and few in number.
- a. moena lau hala - floor mats
  - b. hikiele - bed made of layers of mats
  - c. kapa moe - blankets made of five layers of kapa
  - d. uluna - pillows made of plaited lau hala
  - e. ihoiho kukui - kukui nut candle
  - f. poho kukui - stone oil lamp. Kukui oil was placed in a hollowed stone and a kapa wick was lit.
  - g. lamakū - torches made of kukui nut kernels in a sheaf of tī leaves tied to a bamboo handle

- h. ipu 'aina - scrap bowl
- i. ipu holoī lima - finger bowl
- j. huewai - water container
- k. pōhaku ku'i 'ai - stone kalo pounders
- l. papa ku'i 'ai - kōu (a hard wood) boards
- m. ipu ku'i - stone mortar  
mea ku'i - stone pestle
- n. 'umeke - wooden bowls
- o. pā - platters
- p. pahi - knife of stone, shark's teeth, or bamboo
- q. 'apu - cup
- r. pūlumi nī'au - broom made of coconut midribs tied in a bunch
- s. kahi lauoho - comb made of coconut midribs tied to a band of bamboo
- t. kilo pōhaku - mirror made from a polished stone in a calabash of water
- u. kī'o'e - spoons of coconut shells
- v. food scrapers of 'opihi shell

### Generalizations

1. The structure and design of the hale was influenced by the culture and the availability of natural resources.
2. The Hawaiians were resourceful people who utilized the resources of their natural environment to build their houses (hale).
  - a. Various kinds of woods were used for the framework.
  - b. Stones were used for walls and raised foundations.
  - c. Grasses and leaves were used for thatch.
3. The Hawaiian family had a group of one room houses (hale) which served different purposes, instead of a single house with several rooms. This group of houses (hale) or compound was called kauhale.



4. The building of a hale was also a spiritual matter and religious rites were observed during the construction process.
5. The members of the 'ohana were interdependent in the process of building a hale.
6. The kāhuna, men, women, and children all had definite roles to play in the process of building a hale.

#### Concepts

1. Utilization of resources: The allocation and use of resources
2. Process: A particular method of doing something
3. Religion: Any specific system of belief, worship, conduct, etc., involving a code of ethics and a philosophy
4. Role: A learned behavioral pattern assigned to and performed by a person as he or she interacts with others in a group and includes privileges, rights and duties, and freedoms and responsibilities
5. 'Ohana: The extended family of the Hawaiians which included grandparents, parents, children, ties of blood, marriage and non-related persons adopted in friendship
6. Interdependence: Dependence on one another

#### Objectives

1. Describe the Hawaiian community (kauhale) as it was many years ago.
2. Describe the interactions that went on between people in a Hawaiian community and compare these with modern Hawai'i.
3. Describe the process in building a Hawaiian hale.
4. Name the materials and tools needed in building a hale.
5. Describe the role of religion in the process of building a hale.
6. Identify the roles of the 'ohana members.

7. Construct models of furnishings which can be found in a typical hale.
8. Determine the best location for a hale by analyzing the wind patterns, land contour, action of the ocean, kapu, fertility of the land, etc.
9. Demonstrate 'ohana concepts.

335

336

INDEX OF REFERENCES - SHELTER

	Shelter	Building Process	Materials and Tools	Role of Religion	Role of 'Ohana	Furnishings	
BAUER		37	36-39	36-37	36-37, 39-42		
BUCK	Vol. II						
CURTIS	1-16	3-8	3-16	7, 10-14			
DAY	295-296						
DUNFORD		130-139	108-115	130-139	130-139		
FEHER		56-63, 97	56-57	62		62-63	
HANDY (A.H.C.)	69-73, 79-80, 130, 132	69-73	69, 277-278, 304	73-77		77, 80, 130-131, 139-143, 277-278	
HANDY (N.P.O.H.)	290-300						
HAZAMA	Entire Book	31-42		16-43	25-43	31-42, 45-50	
LINDO							
MALO	118-126						
MITCHELL	157-170	159-160	158-160	159	159	160-164	
POTTER	51-52, 56						
PRATT		113-125, 140	114-125	118-119	113-119	84-88, 120, 125	
TITCOMB							

A.H.C. - Ancient Hawaiian Civilization

N.P.O.H. - Native Planters Of Hawaii

330

## LEARNING ACTIVITIES AND RESOURCES

### Arranged Environment

Table Display

Bulletin Board

Book Corner

### Discussion

- Place adz, sennit, pili grass, lau hala.
- Mount picture of the ahupua'a (Kamehameha Schools Kit).
- Arrange the following books: Hazama, Ancient Hawaiians; Buck, Arts and Crafts; Apple, Hawaiian Houses; Pratt, The Hawaiians.
- Have a discussion to motivate interest and to assess students' thinking and knowledge.  
Show pictures of three kinds of houses: Eskimo igloo, Indian tepee, and grass house.
- Discuss students' observations. Have students compare different kinds of houses. The following can serve as guide questions.
  1. What kinds of materials were used to build each house? Why do you suppose those materials were used?
  2. What kinds of tools do you think were used?
  3. What does your house look like today? What kinds of tools and materials do we use today to build houses? Why do we live in these kinds of homes today? (condominiums, townhouses, apartments, etc.)
  4. What kinds of houses did the early Hawaiians live in many years ago? (Direct their attention to the ahupua'a.) Why did they live in those kinds of houses? Did they own the land? Did they have to pay taxes?

### Constructing

- Construct a miniature Hawaiian hale.  
Purposes:
  1. To experience the process in building a frame without nails and modern tools.
  2. To raise questions as to how the Hawaiians solved their problem of providing shelter.
  3. To discover the resourcefulness of the Hawaiians.

## LEARNING ACTIVITIES AND RESOURCES

Hypothesizing

Research

- Materials needed:
  1. disposable chopsticks
  2. twine, 6" - 8" lengths
  3. scissors
  4. worksheet (See worksheet at the end of this unit.)
- Procedure:
  1. Pass out worksheets and have the children divide into 'ohana to discuss and plan.
  2. Have students share their plans with the total group.
  3. Build the frame.
  4. Evaluate the experience (fill out the bottom of the worksheet).
    - a. accomplishments
    - b. learnings
    - c. problems encountered and questions raised
    - d. feelings about the Hawaiian people.
  5. List the questions on a chart. Categorize the questions into the following possible headings. (Have children suggest headings):  
MATERIALS, USES, LOCATION, RELIGIOUS CEREMONIES, STEPS.
- Have the children hypothesize: "If we were to build a Hawaiian hale today, what would be the steps involved?"  
List the steps on a chart.
- Divide the children into 'ohana and have them decide on the topic their group would like to be responsible for. Refer to the headings suggested earlier. Have each 'ohana meet to plan their research activities which include the following:
  1. Choose a haku (leader).
  2. Decide on method or type of presentation. e.g., 'ohana working on "STEPS" may decide to do a movie roll to illustrate the steps in building a hale.

341

342

## LEARNING ACTIVITIES AND RESOURCES

### Enrichment Activities

3. Assign responsibilities.
4. Decide on resources and how to get information (library, speakers, films, etc.).
5. Plan necessary charts, pictures, diagrams, etc., for presentation.

Give the children several periods to do research. Have the 'ohana set goals before each period and evaluate their work at the end of the period. Have students discuss reasons why they were or were not able to meet their objectives.

- Investigate field trip possibilities on your island. O'ahu students may go to the following:

- a. Plan a trip to the Polynesian Cultural Center with the children. Have them plan a worksheet noting building materials, tools, furnishings, thatch, design, height, flooring, functions. Have each 'ohana do a comparative study of at least three villages.

Pool all the information acquired. Define differences and have children form hypotheses as to why one island group built one kind of house and another group built another kind of house.

- b. Visit the Bishop Museum and study the Hale pili there noting the framework, the materials used, how the frame was lashed together, the cordage used, the furnishings. Point out the foreign influences.

- Read excerpts about the home from Bryan, Ancient Hawaiian Life, pp. 18-21 and Brigham, The Ancient Hawaiian House, pp. 75-103.

### Reporting

- Have each 'ohana share their findings using the format they planned earlier. Encourage the children to be well organized and plan so that each member of the 'ohana is involved in the presentation and not only the haku.

### Evaluating

- After each 'ohana presents its report, have the children give positive things they liked about the presentation. "Things to improve on" can be given when everyone is finished. Ask various 'ohana to evaluate themselves.

## LEARNING ACTIVITIES AND RESOURCES

### Discussion

- Discuss some of the ideas and facts learned from the reports. The following can serve as samples:
  1. How many houses did the typical Hawaiian family have?
  2. What were the names and functions of these houses?  
For example: Hale mua - men's eating house
  3. What do we call a group of houses belonging to one household? (kauhale)
  4. Do we have kauhale today? What do we have instead? (See the end of this unit for a picture of a kauhale.)

## CULMINATING ACTIVITIES

### Constructing

- Build a real hale on the school grounds.  
Objectives: The student will be able to
  1. build a replica of the Hawaiian hale substituting modern materials where traditional materials are not available.
  2. make substitute cordage to use for tying frame; braid sennit using coconut fiber.
  3. weave a small lau hala mat.
  4. tie bundles of grass for thatching.
  5. lash the framework so that it remains sturdy.
  6. work together (alu like) with others to build a house.
  7. verbalize and follow the steps involved in building a Hawaiian hale and in dedicating a Hawaiian hale.
  8. make some of the furnishings for the Hawaiian hale.  
e.g., pūlumi - broom  
kahi lauoho - comb  
ki'o'e - spoons  
ihoiho kukui - kukui nut candles  
hue wai - water containers

34.

34.

## CULMINATING ACTIVITIES

Simulation

### References:

Keala, Resource Unit in Hawaiian Arts and Crafts

Hazama, The Ancient Hawaiians

Mitchell, Resource Units in Hawaiian Culture

- Hand out copies of the map and directions located at the end of this unit. Have students plan the kind of dwelling they would build using the materials found on the map.
  1. Location? Why?
  2. Who arrives with them on the new island?
  3. What materials are they using?
  4. What tools can they make?
  5. What are they going to use for a temporary shelter?
  6. Direction the house is going to face.

Have the children work alone, with a partner, or in a group.

A simulation is a fun way of evaluating whether or not the children have met their objectives.

## RELATED ACTIVITIES AND RESOURCES

Language Arts

- Create legends that tell of the origin of special landmarks where they live.

e.g., Kailua area: How did Olomana come to be?  
Kāne'ōhe: How did Coconut Island become a separate island and why is it called Coconut Island?
- Write stories about life in their community during the early 1700's. Tell about the community activities and their own family activities. Have them include as much of the learnings from other areas of study such as fishing, canoe building, religion, etc.

34,

340



## RELATED ACTIVITIES AND RESOURCES

Art

- Continue developing research skills.
  1. Use of the index, table of contents.
  2. Use of the Readers' Guide. Use of magazines, pamphlets, brochures and newspapers.
  3. Use of encyclopedias.
  4. Use of resource persons.
    - a. How to interview people.
    - b. How to tape resource persons for future reference.
  
- Plan and create a mural depicting life in their community. Decide on a media form, outlay, activities to be shown, plants and animals to be included, people, etc.
  
- Arts and Crafts Activities
  1. Weave lau hala mats, bracelets.
  2. Make a lā'au lomi (lomi stick), pūlumi (broom), kahi lauoho (comb), kī'o'e (spoon), ihoiho kukui - kukui nut candle, etc.
  3. Cut some hau branches using the ke'i (adz) to experience using a stone tool. Then use a modern tool. Which tool was faster or easier to work with?

Make cordage following the process described below.

    - a. Strip the bark in continuous strip:, scrape the outside bark, and strip into thin strips.
    - b. Soak the white bark for several days changing the water daily until all of the slime is gone.
    - c. Dry the bark.
    - d. Twist the hau strips into cordage.
  4. Teach the children how to husk coconuts. Use the husk to make sennit.
  5. Gather young coconut fronds. Split them into halves and weave them together to make thatch or temporary shelters.

Weave coconut hats, trays, baskets.

34

35

Worksheet

Building a Miniature Hawaiian Hale

You are living in early Hawai'i and your 'ohana needs a new hale. Meet with your partners and write a list of things you need to do before you begin the construction. Put the steps in sequential order and decide who will do what job.

<u>JOB</u>	<u>PERFORMED BY</u>
1.	_____
2.	_____
3.	_____
4.	_____
5.	_____
6.	_____
7.	_____
8.	_____

Share and discuss this with the class.

Now build a frame for a hale using chopsticks and twine.

List below your problems encountered and questions that your group raised.

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.

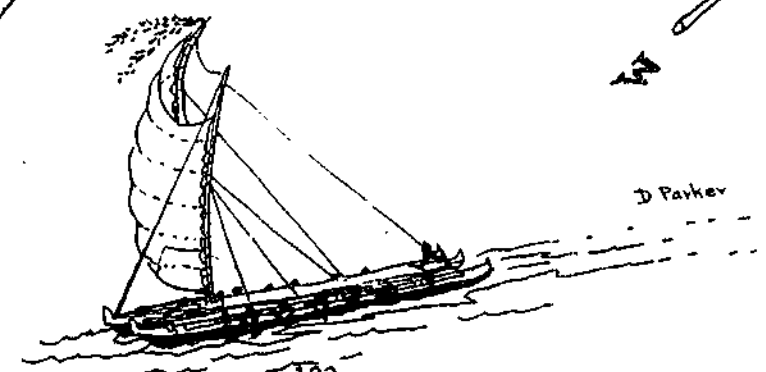
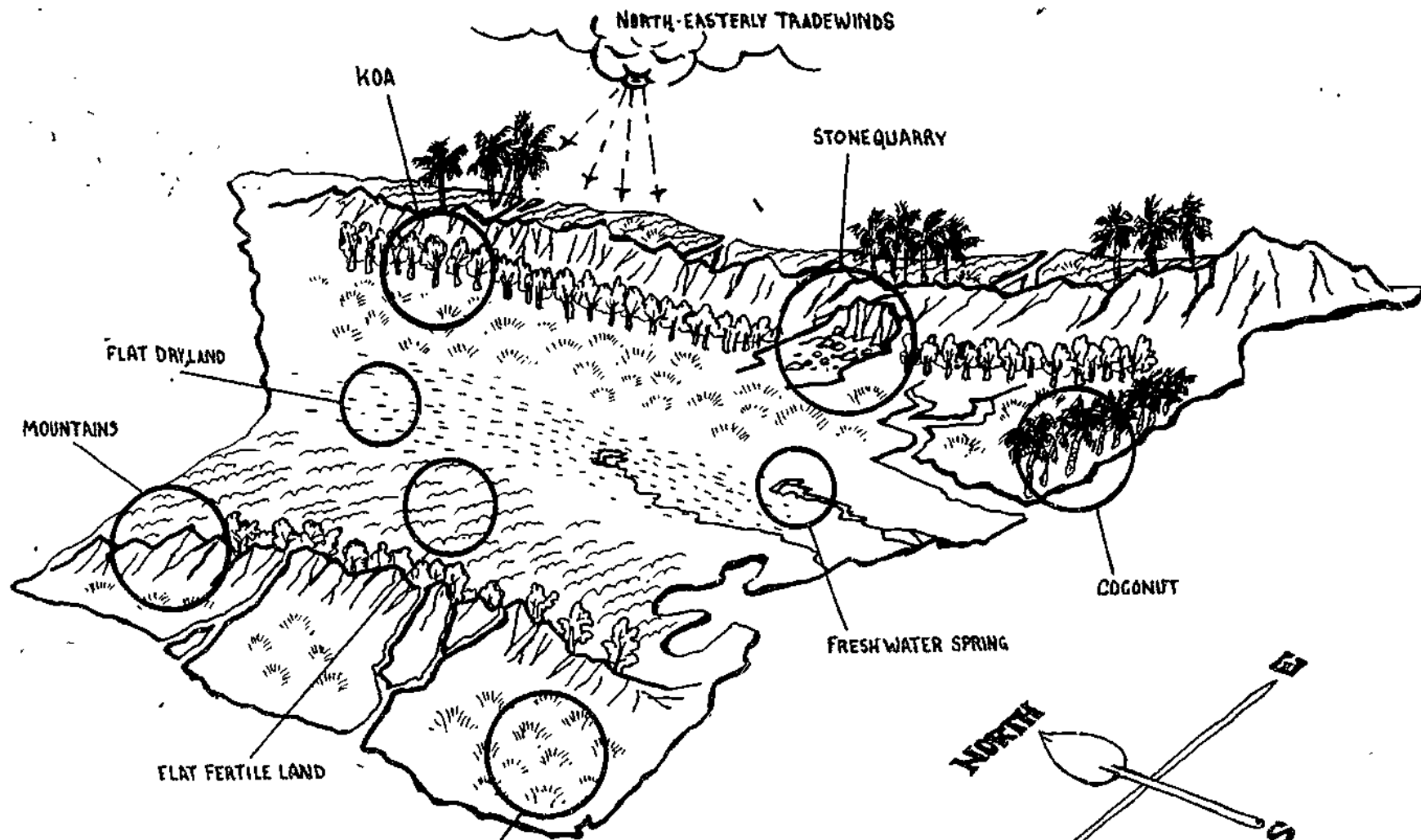
## BUILDING YOUR HALE

### Simulation:

Here is a fun activity for you to do in a group, with a partner, or alone if you choose. Study the map carefully and pretend you are a Polynesian looking for a new island. You find this island and have to choose a good location to build your house.

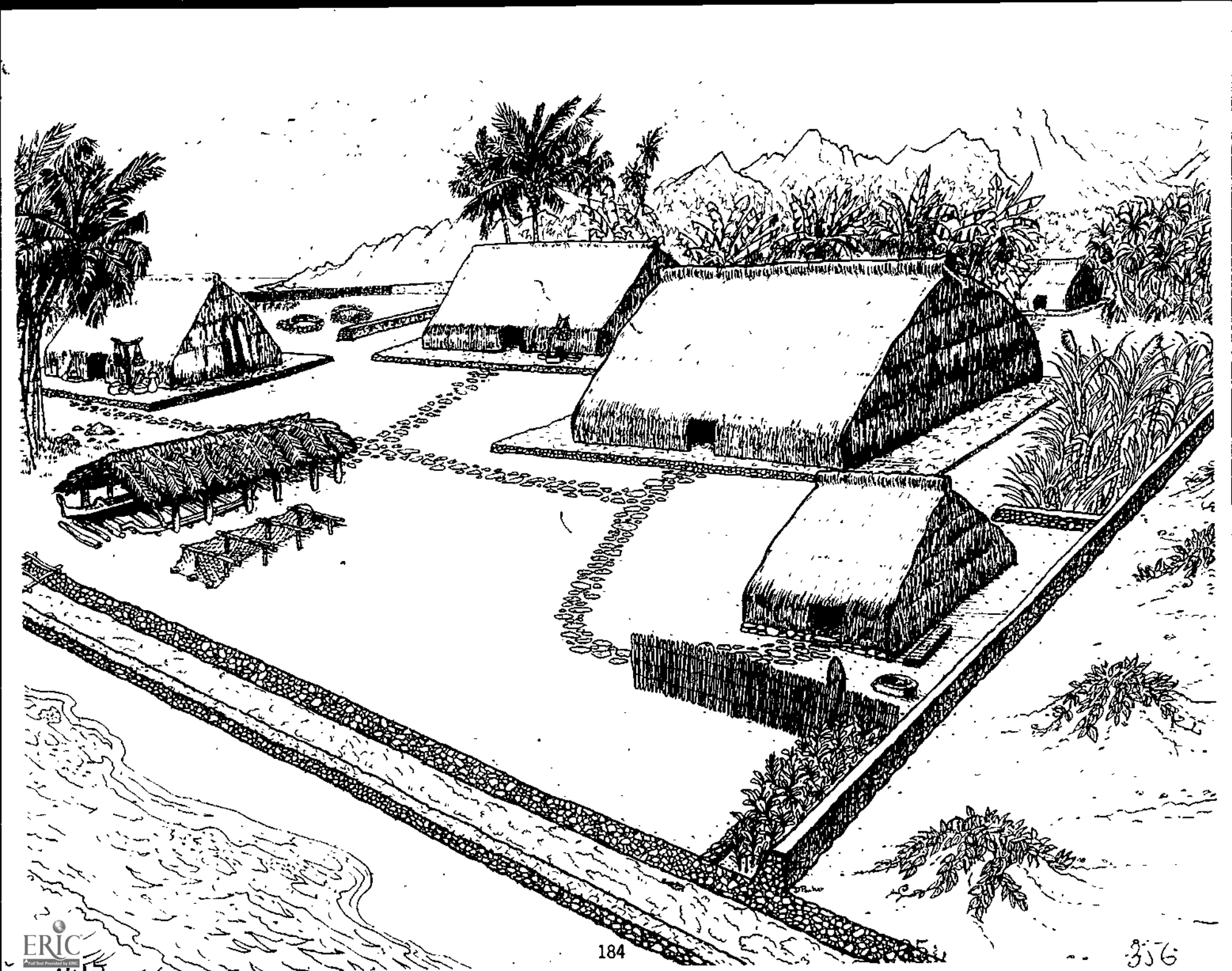
### Procedure:

1. Describe yourself and the people who arrive with you. Who are you? Who are they? How many people came with you? What did you bring with you? What did you sail on?
2. Examine the map and mark off your ahupua'a. Then choose a site to live on and tell why you want to live there. Mark the site on the map with a red marsh pen. Be sure your location is in the ahupua'a.
3. Describe exactly what you do from the time you arrive until one year later. Tell how you go about building up your kauhale, providing food for your family, making good use of the land, etc. Give as much information as possible. Think back about all that you have learned this year and include religious observances, kapu and other customs.



35

35



## BIBLIOGRAPHY OF TEACHER AND STUDENT REFERENCES

- Apple, Russell, Hawaiian Thatched House, Use, Construction, Adaptation. Norfolk: Island Heritage, 1974.
- Brigham, William, The Ancient Hawaiian House. Memoirs of the Bernice Pauahi Bishop Museum, Vol. 3. Honolulu: Bishop Museum Press, 1911.
- Bryan, Edward, H., Jr., Ancient Hawaiian Life. Honolulu: Advertiser Publishing Co., 1938.
- Buck, Peter, Arts and Crafts of Hawai'i. Volume II. Honolulu: Bishop Museum Press, 1964.
- Curtis, Caroline, Life in Old Hawai'i. Honolulu: The Kamehameha Schools Press, 1970.
- Day, Grove, Hawai'i and Its People. New York: Meredith Press, 1968.
- Dunford, Betty, The Hawaiians of Old. Honolulu: The Bess Press, 1980.
- Feher, Joseph, Hawai'i: A Pictorial History. Honolulu: Bishop Museum Press, 1969.
- Handy, E.S.C., Ancient Hawaiian Civilization. Rutland, Vermont: Charles E. Tuttle Company, 1965.
- Handy, E.S.C., Native Planters in Old Hawai'i. Honolulu: Bishop Museum Press, 1972.
- Handy, E.S.C., The Polynesian Family System in Ka'ū, Hawai'i. Rutland, Vermont: Charles E. Tuttle Company, 1972.
- Hazama, Dorothy, The Ancient Hawaiians. Honolulu: Hogarth Press, 1974.
- Keaka, Rowena, Resource Units in Hawaiian Arts and Crafts. Honolulu: Department of Education, 1981.
- Malo, David, Hawaiian Antiquities. Honolulu: Bishop Museum Press, 1971.
- Mitchell, Donald, Resource Units in Hawaiian Culture. Honolulu: Kamehameha Schools Press, 1972.

## BIBLIOGRAPHY OF TEACHER AND STUDENT REFERENCES

- Potter, Norris W., and Kasdon, Lawrence M., Hawai'i Our Island State. Columbus: Charles E. Merrill Books, Inc., 1964.
- Pratt, Helen G., The Hawaiians An Island People. Rutland, Vermont: Charles E. Tuttle Co., 1963.
- Pūku'i, Mary K., Hawaiian Dictionary. Honolulu: University Press, 1973.
- Pūku'i, Mary K., Nana I Ke Kumu. Honolulu: Hui Hanai, 1972.
- Pūku'i, Mary K., Nana I Ke Kumu. Volume II. Honolulu: Hui Hanai, 1979.

350

## UNIT IX: KAPA

### Overview

Although the climate in Hawai'i was mild, the first inhabitants of Hawai'i needed some clothing to protect them from the wind, rain and colder temperatures of the winter season. They brought with them the plants and skills needed to produce this clothing for themselves.

The process of making cloth (kapa) in early Hawai'i was such a highly skilled one that no one has been able to duplicate the soft, fine texture of the Hawaiian kapa. It is said to be the finest in the Pacific and maybe even the world. The process required a great deal of knowledge, skill and training. One also had to have the proper raw materials and tools in order to produce a sheet of fine textured Hawaiian kapa.

There were definite roles played by the men and women in the process of making kapa. Kapa making was a long, time consuming life activity, especially for the women. The entire 'ohana helped in its production and practiced kōkua (helping), laulima (working together in close cooperation), lōkahi (harmony) and kuleana (responsibility). Everyone knew his/her responsibility and each person willingly carried out his/her kuleana.

Kapa was important not only for clothing but also for various other uses which included blankets, the wick for the kukui nut oil lamp and sails for fishing canoes.

This unit examines the process of making kapa, the tools and resources used, the many uses of kapa and the roles of men and women in the production of kapa.

### Teacher Information

1. When the Polynesians migrated to Hawai'i they brought with them both the plants and the skills to make and decorate their kapa.
2. The kapa makers improved their tools and techniques so markedly, especially after the introduction of metal, that Hawaiian kapa is considered unique.



3. Story tellers have handed down legends about the origin of the kapa, such as the following:
  - a. The first wauke plant grew out of the grave of an elderly man named Maikoha who was buried in Nu'uaniu. He became the ancestor-god of kapa-makers.
  - b. Lauhuki, his daughter, became the patroness of kapa beaters and her sister, La'ahana was the family god ('aumakua) of those who created kapa designs.
  - c. 'Ehu, a Hawaiian man, became the patron of those involved in the dyeing processes.
  - d. Hina, mother of Maui, was the great kapa maker according to legend.
4. Religion was an integral part of every aspect of Hawaiian life, including kapa making. Religion was also the foundation of the conservation practices of the kapa makers.
  - a. When the people walked to the forest to gather the roots and plants for dyes, they made an offering at the shrine at the edge of the forest.
  - b. They took special care to work quietly for they knew that the gods did not like noise.
  - c. They were also careful that they did not waste any products of the forest lest they stir the anger of the gods.
5. Hawaiian kapa has been said to be the only kapa in Polynesia that could be successfully washed.
6. Arrowroot starch (pia), poi, or other plant saps were often used to replace the natural adhesive in kapa that was removed in washing.
7. The process of making kapa involved cutting the wauke, stripping the bark, rolling the inner bark and soaking it until soft, beating it until it is soft and the right thickness, drying, bleaching, dyeing and printing.

36.

8. Kapa was made from 3 plants

1. wauke
2. mānaki
3. pō'ulu

9. Tools and implements included

- a. adz (ko'i) - to cut the plants
- b. clam or 'opihi shell - to split the bark
- c. turtle bone scraper - to scrape off the outer bark
- d. stone anvil - on which to pound kapa
- e. flat topped wooden anvil
- f. beaters
  - 1) round beater (hohoa) - for first beating
  - 2) square faced beater (i'e kuku)
- g. calabashes or gourds - to store water
- h. stone weights - to keep kapa from blowing away when drying in the sun.

10. Plants used for dyes were

- a. ia'ali'i - boil ripe seeds - red-brown dye
- b. hibiscus (koki'o) - pound root or stem bark with water - brown dye
- c. kou - crush mature leaves and add water - brown dye; when boiled -  
d. yellow dye
- d. kukui - pound root or stem and add water - brown dye
- e. kukui nut soot mixed with oil - black dye
- f. cotton plant (ma'o or huluhulu)-pound the leaves with water - green  
dye
- g. noni - pound the root, add water - yellow dye; add coral lime - red  
dye
- h. 'ōlena - crush the root, add water - yellow dye
- i. 'uki'uki - crush berry skins in water - blue dye
- j. 'ōler - boil the ripe seeds - lavender dye
- k. red dirt ('alaea) - add water - red-brown dye

11. There were several tools and implements used for dyeing and decorating kapa:
  - a. a calabash ('umeke) to hold the dye
  - b. a kapa swab (kapa 'āpana) to apply dye to kapa
  - c. a tightly twisted cord (kaula kākau) dipped in dye and snapped onto the kapa
  - d. bamboo stamps ('ohe kāpala) carved on one end, were dipped in dye and imprinted on kapa
  - e. bamboo liners (lapa) with prongs were used to form lines
  
12. The women pounded, dyed and printed the kapa but the men made the stone and wooden tools. The men picked the wauke and māmaki and delivered them to the women.
  
13. The uses of kapa were many:
  - a. kapa moe (bed covering)
  - b. pa'ū (skirt)
  - c. malo (loin cloth)
  - d. kīhei (shawl) worn by men and women when it was cold
  - e. sails of fishing canoes
  - f. pū lo'u lo'u - kapu sticks which had round balls covered with white kapa on one end
  - g. wick in kukui nut oil lamps
  - h. lupe (kites)
  - i. bandages
  - j. wrappings around the dead
  - k. door flaps
  - l. flags
  - m. outfit or clothing of kahuna (white)
  - n. braided into sandals
  - o. wrappings around the oracle tower (ānu'u) in heiau
  
14. Kapa was scented by placing fragrant plants and blossoms such as maile, mokihana berries and pieces of sandalwood between their folds.

366

## Generalizations

1. The kapa (cloth) of the early Hawaiians were influenced by the the culture and the availability of resources.
2. The production of kapa required much knowledge, skill, training and time.
3. The kapa makers improved their tools and techniques so markedly, especially after the introduction of metal, that Hawaiian kapa is considered unique.
4. The men and women had definite roles to play in the production of kapa.
5. Religion was an integral part of kapa making. Religion was also the foundation of the conservation practices of the kapa makers.

## Concepts

1. Utilization of Resources: The allocation and use of resources
2. Role: A learned behavioral pattern assigned to and performed by a person as he or she interacts with others in a group and includes privileges, rights and duties, and freedom and responsibilities.
3. Conservation: Wise use of resources
4. Religion: Any specific system of belief, workship, conduct, etc., involving a code of ethics and a philosophy

## Objectives

1. Explain the importance of religion to the kapa makers.
2. Identify the roles of men and women in the production of kapa.
3. State generalizations about the cooperative effort involved in making kapa cloth to supply the estimated 300,000 population of Hawai'i with clothing and cloth to meet their needs.
4. Describe and explain the process of making kapa.

5. Identify the plants used in making and dyeing kapa.
6. List several uses of the kapa.
7. Produce some of the dyes.
8. Use some printing tools to print or design kapa.
9. Demonstrate how the Hawaiians wore their clothing.

36-4

INDEX TO REFERENCES - KAPA

	Kapa	Production Process	Tools & Resources	Uses	Role of Religion	Legends	
BAUER		41	41	39-41	42-45		
BUCK	Vol. V						
CURTIS	21-32	24-32	24-32	24-32	24-32	22-24	
DAY	299-300						
DUNFORO		117-122	117-122	117-150			
FEHER	68-79	71-79	70-79	68-70, 79			
HANDY (A. H. C.)		129-131	129-131				
HANDY (N. P. O. H.)	206-211						
HAZAMA							
LINDO							
MALO	48-50						
MITCHELL	171-190	172-178	173-178	179-180	171-172	171-172	
POTTER	54						
PRATT		126-131	126-131	126			
TITCO:	Entire Book	13-31	13-31	17, 35-44	44-45	20-25	

A.H.C. - Ancient Hawaiian Civilization

N.P.O.H. - Native Plants of Hawaii



## LEARNING ACTIVITIES AND RESOURCES

### Arranged Environment

- Bulletin Board: Mount pictures of Hawaiians engaged in daily routine activities--men, women, children wearing a variety of traditional Hawaiian clothing (malo, pā'ū, kīhei).
- Table Display: Place kapa beaters, kapa stamps, pandanus brush, coconut bowl, adz sharks's tooth knife and 'opihi (limpet) shell scraper on a display table.
- Place 2 pieces of kapa (or cloth such as muslin) on the table, 5' x 12", and 4½' x 24". On each piece of kapa or cloth, place the question: How would you wear this?

### Discussion

- Focus the children's attention on the bulletin board. Discuss the following questions:
  1. What do you see in these pictures? Discuss the activities. . . who is doing what.
  2. What do the pictures tell you about the weather?
  3. What are the various persons wearing?
    - Men?
    - Boys?
    - Women?
  4. Compare the clothing of these people with that of present day people of Hawai'i.
  5. Where do we get our clothing from?
  6. Where do you think these people got their clothing from?

### Dramatic Inquiry

- Allow the children time to browse and handle artifacts, to discuss with each other and experiment with the cloth. Encourage them to wear the cloth just as the Hawaiians might have in ancient Hawai'i.

### Planning

- Encourage a few students to pick artifacts from the table and sit in a circle. Have them plan together how they think the Hawaiians might have made their clothing.

### Recording

- After a few minutes of planning, have them dramatize the process.
- Write the process as the children dramatize it. Record the children's inferences.

36,

36,

LEARNING ACTIVITIES AND RESOURCES

Inquiry

- Encourage the children to raise questions about the kapa.
  1. What kind of wood did they use for the beaters? the anvil?
  2. Where did they have to go to get this wood?
  3. What were the steps involved in making kapa?
  4. How did they get it to be so wide and soft?
  5. Were there any rituals that had to be observed?
  6. What were some of the necessary tools?
  7. How did they make their dyes? etc.
  8. Who made the kapa?
  9. What were some of the uses of kapa?

Categorizing

- Categorize questions into topic headings. Allow children to contribute headings, e.g.,

Tools	Uses	Steps	Dyes	Steps in dyeing	etc.
-------	------	-------	------	-----------------	------

Research Activities

- Divide the class into 'ohana groups
  1. Have children volunteer for the group and topic they're interested in.
  2. Help them plan a method of research and a style of reporting.
  3. Point out references for each 'ohana and have students set goals to reach for each period they do research. See "Index to References" in this unit.
  4. Each 'ohana will select a haku (leader) and then begin working.
  5. At the end of each work period, have the 'ohana evaluate what they have accomplished and plan what they need to do during the next period.

Enrichment Activities

- Enrichment Activities
  1. Compare Hawaiian kapa with that of other Polynesian islanders in terms of:

	Texture	Colors	Uses	Designs	Source
Hawaiian	Soft, fine	Brown, Pink, blue, yellow	blankets, bedding clothing, wick	small fine lines	paper mulberry
Samoan					



## LEARNING ACTIVITIES AND RESOURCES

Show a film on kapa making

"Tapa Making" #286

Demonstration of the making of kapa, Samoan style.

2. Compare the clothing of old Hawai'i with that worn by missionaries and with those worn today.
3. Produce kapa using Paper Mulberry (wauke) or breadfruit ('ulu).
4. Experiment making dyes from plants used by the early Hawaiians. See Hazama, Culture Studies: Hawaiian Studies Project - Data Cards.
5. Make a simulated kapa by following the process described.
  - a. Make bamboo stamps of authentic designs by cutting out pieces of inner tubing and glueing them onto bamboo sticks. See Hawaiian Studies Artifact Kit.
  - b. Cut out 12" x 18" sheets of brown paper. Brown shopping bags may be used.
  - c. Have the children crinkle the sheets and soak the sheets in a pan of well diluted or watered-down brown paint.
  - d. Squeeze the sheets gently and lay out in the sun.
  - e. When the sheets are dry, have children experiment by printing designs on the sheets with the stamps from the kit and/or those they made out of inner tubing.

Prepare hau fiber for the kaula kākau or snapping cord. This is similar to string painting. For steps in making hau fiber see "Related Activities and Resources" in "Unit VIII: Shelter".

6. Show film: "Kapingamarangi" (University of Hawaii listing)
7. Teach the children how to put on a malo by following the pictured steps in Titcomb, The Ancient Hawaiians.
8. Go on a field trip to the Bishop Museum to see the tools, implements and kapa of old Hawai'i. After the trip, students can do research on the various uses of kapa.

## LEARNING ACTIVITIES AND RESOURCES

Reporting

- Each 'ohana will present its report  
Set up a retrieval chart. Fill in the information after all the reports have been given.

KAPA MAKING IN ANCIENT HAWAII					
Steps	Tools	Uses	Dyeing Tech.	Roles	etc.

## CULMINATING ACTIVITIES

Demonstrating

- Plan with the children a demonstration lesson on the process of making kapa.
  1. Have the children determine how to divide the lesson into categories:
    - a. Preparation of the wauke for pounding.
    - b. Making of the 'ohe kāpala (bamboo stamps).
    - c. Preparation of the kaula kakau (snapping cord) out of hau.
    - d. Preparation of the dyes from Hawaiian plants.
    - e. Demonstration of the printing on the prepared kapa made by the children out of wauke or ulu.
    - f. Demonstration of the steps involved in wrapping a malo on a male and a pā'u on a female.
    - g. Show the varied uses of the kapa kapu stick (pulo'ulo'u), wick for a lamp ('uwiki), shawl (kihei), etc.
  2. Decide with the children the procedure for the demonstration lesson. Suggested procedure:
    - a. Having decided on the categories, have the children divide into 'ohana. Encourage them to work with new partners.
    - b. Have each 'ohana select a category.
    - c. Have them select a haku and plan the procedure.
      1. Write the steps on paper
      2. Decide each person's kuleana (responsibility)
      3. Practice the procedure as an 'ohana. Prepare illustrations if necessary.

## CULMINATING ACTIVITIES

### 3. Evaluation of demonstration:

- a. How did they plan and work together (alu ike)?  
Did they practice the 'ohana concepts?
- b. Did they use the Hawaiian vocabulary in their presentations?
- c. Did they bring in the concept of "proper roles" of people?
- d. Did they show knowledge about the kapu and religious aspects of the process.
- e. Did they enjoy doing what they chose as their kuleana?
- f. Did they show confidence in their presentation?

## RELATED ACTIVITIES AND RESOURCES

### Language Arts

#### • Creative Writing

1. Show the children a picture of the wauke plant and ask:
    - a. Where do you think the wauke plant originated?
    - b. If you were living in early Hawai'i, how would you have answered this question as a kupuna (grandparent) teaching your mo'opuna (grandchild)?
  2. Motivate the children to write a legend of origin about the wauke. Have them illustrate their legends in art class.
  3. Have the children share their legends using the illustrations they drew.
- Read a legend/story from several sources or encourage the children to read legends to locate those that tell about kapa making.
1. Share the legend of origin about the wauke. Read from Curtis, Life in Old Hawai'i, "Kapa Making" pp. 21-32.
  2. Introduce the story by talking about roles in kapa making. Have them compare these roles with those of today.  
  
Who makes clothes today? Is it women or men or both?
  3. Ask: What were some very important religious thoughts and practices involving kapa making?

## RELATED ACTIVITIES AND RESOURCES

4. Read the story, inserting Hawaiian vocabulary wherever possible. e.g., "A group of wahine stood in reverent silence while Laua'e laid a ho'okupu on a little shrine."

5. Discussion:

a. Questions for discussion:

- 1) How did you like the legend of origin?
- 2) Have you heard these kinds of legends before?
- 3) Does the legend make sense as far as the Hawaiian practices are concerned?

(Bring out cultural aspects such as the old man being buried next to a stream so that the shoots could float down the stream and start new plants for others to use.)

b. Talk about the two daughters of Maikoha who taught the art of kapa making and dyeing to the people of Hawai'i.

- 1) What roles did they assume after they died?
- 2) Why did the people make offerings of flowers, leaves, and fruits to Maikoha?
- 3) Why did they pray to his two daughters, Lauhuki and La'ahana? (They all became the gods of kapa making.)

6. Retrieval Chart

Have the children share all the things they learned about kapa making and write them on a retrieval chart marked into subjects such as:

Steps in Kapa Making	Dyeing and Printing	Offerings made
----------------------	---------------------	----------------

• Others legends on kapa

Pūku'i, The Water of Kane, "The Song of the Kapa Log" pp.162-167

• Illustrate the legend of origin of the wauke plant. Have the children plan their illustrations and then decide whether they want to do a movie roll, filmstrip,

## RELATED ACTIVITIES AND RESOURCES

mural or single picture. They may even decide to do a diorama. Have available a variety of drawing and painting media such as:

- crayons
- paint
- marsh pens
- pens

Music

- Take one of the chants in the story of "Kapa Making" from Curtis, Life in Old Hawai'i, pp. 21-32, and have it translated into Hawaiian by a kupuna (grandparent) or by a Hawaiian speaker. Have the children make up the chant notation and learn the chant.

Science

- Plant some wauke and dye plants on the school grounds in a special Hawaiian garden.

37,

37,

BIBLIOGRAPHY OF TEACHER AND STUDENT REFERENCES

- Buck, Peter, Arts and Crafts of Hawai'i, Volume V. Honolulu: Bishop Museum Press, 1964.
- Curtis, Caroline, Life in Old Hawai'i. Honolulu: The Kamehameha Schools Press, 1970.
- Day, Grove, Hawai'i and Its People. New York: Meredith Press, 1968.
- Dunford, Betty, The Hawaiians of Old. Honolulu: The Bess Press, 1980.
- Feher, Joseph, Hawai'i: A Pictorial History. Honolulu: Bishop Museum Press, 1969.
- Handy, E.S.C., Native Planters in Old Hawai'i. Honolulu: Bishop Museum Press, 1972.
- Handy, E.S.C., Ancient Hawaiian Civilization. Rutland, Vermont: Charles E. Tuttle Company, 1965.
- Hazama, Dorothy (Ed.), Culture Studies: Hawaiian Studies Project, "Data Box". Honolulu: Department of Education, 1978.
- Malo, David, Hawaiian Antiquities. Honolulu: Bishop Museum Press, 1971.
- Mitchell, Donald, Resource Units in Hawaiian Culture. Honolulu: Kamehameha Schools Press, 1972.
- Pratt, Helen G., The Hawaiians An Island People. Rutland, Vermont, Charles E. Tuttle Co., 1963.
- Pūku'i, Mary K., Hawaiian Dictionary. Honolulu: University Press, 1973.
- Titcomb, Margaret, The Ancient Hawaiians. Honolulu: Hogarth Press, 1974.

APPENDIX I

'OHANA  
by Mahealani Pescaia

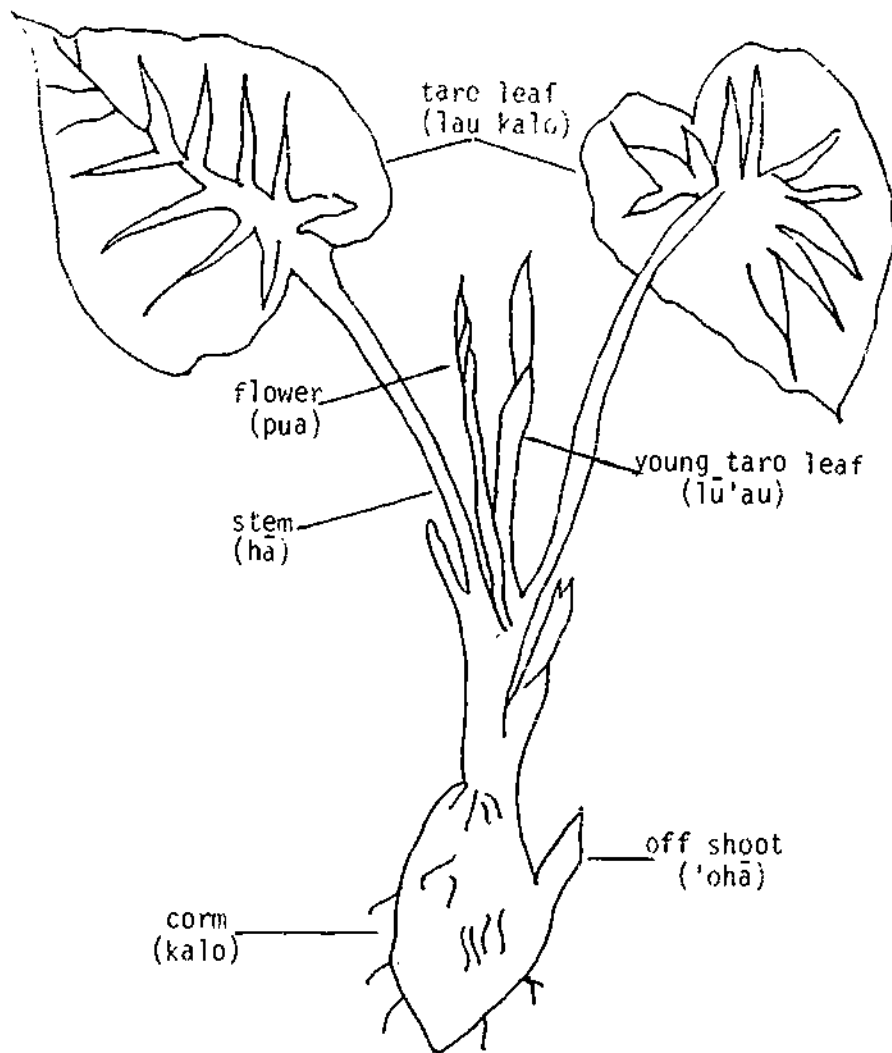
"Members of the 'ohana, like taro shoots, are all from the same root," says Mary K. Fūku'i.

Kalo, the corm of the taro plant, was the "staff of life" in the Hawaiian diet. It was also closely linked to the origin of the people with the birth of Hāloa. (See the story of Hāloa in Appendix II.)

'Ohana included those born with blood ties, those who were unrelated but accepted by the 'ohana, and those who died and remained spiritual ancestors of the 'ohana. It included the:

- 'aumākua - the spiritual ancestors
- lūpuna - the grandparents and all relatives of the grandparent generation
- kūpuna kuakahi - great grandparents
- kūpuna kualua - great, great grandparents
- mākua - the parents and relatives of the parent generation (aunts and uncles)
- keiki - the children who were all brothers, sisters and first cousins within the 'ohana or adopted (hānai)

The 'ohana was the unit that provided for the social, economic, and educational needs. The 'ohana who lived in the uplands shared taro (kalo), banana (mai'a), and sweet potato ('uala) with their 'ohana by the seashore who in turn gave them products from the sea. The entire 'ohana showed up to help an 'ohana member build a house (hale).



... of the 'ohana. The 'ohana provided the child with the daily tasks necessary for survival. The child grew up knowing his or her place in the family line.

Nā keiki were given responsibilities, too. They took care of the aged members of the 'ohana and helped their mākaia, carrying food, water and materials for building houses, canoes, etc. Nā keiki were sometimes adopted (hānai). Nā mākaia sometimes gave a baby to a close relative as a sign of love (aloha). This was usually done only within an 'ohana so that the keiki grew up knowing his or her real parents.

Nā keiki in an 'ohana grew up having many mākaia to care for them. The 'ohana provided the emotional support, love and security to the child especially when he/she lost his/her parents or was reprimanded by them. Each child grew up with a feeling of well-being, acceptance, self-identity and self-worth.

The grandparents (kūpuna) were dearly loved and revered by the 'ohana. They were the source of wisdom and understanding. The oldest kūpuna usually was the first born (hānau mua) or head (haku) of the 'ohana. He/she settled problems and called the 'ohana meetings. These kūpuna took care of the little children in the 'ohana while the mākaia worked. They developed close ties with their grandchildren (mo'opuna), especially with the oldest. They were the teachers of the 'ohana and taught planting, fishing, housebuilding and weaving. They taught the chants, wise sayings, stories, genealogies and customs. Those children who showed special talents were sent to special experts (kāhuna) or teachers (kumu) for instruction.

The 'aumākaia were the ancestors who remained members of the 'ohana in spirit form. They were guardians and provided strength, inspiration and help. They appeared to members of the 'ohana as sharks, birds, lizards, eels, fish, rocks or plants. They were a real part of the Hawaiian 'ohana then, and still are in some 'ohana today.

#### Bibliography

Dunford, Betty, The Hawaiians of Old. Honolulu: The Bess Press, 1981.

Handy, E.S. Craighill, The Polynesian Family System in Ka'u, Hawai'i. Rutland, Vermont: Charles E. Tuttle Company, 1972.

Pūku'i, Mary K., Nānā I Ke Kumu I. Honolulu: Hui Hānai, 1972.



## APPENDIX II

### STORY OF HĀLOA (MO'OLELO O HALOA) retold by Mahealani Pescaia

Many years ago when there were only the heavens and the earth, Wākea (skyfather) ruled the earth. Their first born was a girl child (kaikamahine) named Ho'ohokūikalani (to bear fruit in the heavens).

Wākea fell in love with his daughter (kaikamahine) when she became a young maiden (wahine). A priest (kahuna) advised him to declare kapu nights when he and his wife had to sleep separately. It was on these nights that he slept with Ho'ohokūikalani until he was discovered by Papa, his wife (wahine).

A child (keiki) was soon born to Wākea and Ho'ohokūikalani but the baby (kamaiki) was so ugly (pupuka) and so deformed that he died soon after birth. The child (keiki) was buried close to the house in the eastern corner.

Soon a strange plant sprouted from the spot where the keiki was buried. Its broad green leaves grew on long stalks that swayed in the breeze. The plant was supported by a bulbous corm which produced many offshoots ('ohā). It was the taro (kalo) plant. They named this first born son (keiki kāne) Hāloanaka because of its quivering (naka) leaves and long (hāloa) stems. The kalo continued to grow producing many offshoots (keiki) called 'ohā. The keiki were planted and more 'ohā were produced until bountiful amounts of kalo were growing in Hawai'i.

Ho'ohokūikalani and Wākea were soon blessed with another keiki. He was also named Hāloa after his older brother. He had many 'ohā or children and his descendants were the Hawaiian people and their leaders.

A strong bond holds man and the kalo. The old Hawaiians say that it was the will of the gods that Hāloanakalaukapalili (long-stemmed trembling leaf) was born first for he provided the necessary food for the Hawaiian people who came later.

In reverence to this older brother, the people of Hawai'i considered the kalo as a very sacred plant. Women (nā wahine) were not allowed to handle the kalo at all. When the poi bowl was placed on the table, the people were not allowed to argue or speak any kind of evil while eating.

The kalo plant with its 'ohā is likened to a family with its keiki. Thus the term 'ohana was used to include all members of the family clan, nuclear or extended.

'ohā - off shoot

"That which is composed of offshoots."

-na - nominalizing suffix

## APPENDIX III

### CHILDREN OF THE 'OHANA by Marilyn Okumura and Mahealani Pescaia

The 'onana or extended family included: (1) mākuā who were the parents and all relatives of the parent generation (aunts and uncles); (2) kūpuna who were grandparents and all relatives of the grandparent generation; (3) keiki who were the children in the 'ohana who considered themselves brothers and sisters to each other irregardless of natural parentage (Pūku'i: 162); and (4) 'ohua who were unrelated dependents and helpers.

In the 'ohana the hiapo or first-born child had his/her future clearly predestined before birth. Rarely was the hiapo reared by his/her natural parents. The hiapo was the "living history book" who memorized the family genealogical chants, social and religious customs, kapu and specialized skills and knowledge. He/she was to assume the responsibilities of the leader (haku) in times of family illness, dispute and other family crises. As a result of his/her position, the hiapo often became the favorite of the kūpuna. (Pūku'i: 51)

The grandparent generation in the 'ohana had the privilege of adopting (hānai) the hiapo of one's children. The feeling was that the hiapo belonged to the kūpuna and the natural parents had the child on "loan" until he/she was given to the grandparents. The grandparents' responsibility for the child took precedence over that of the parents. If the first born child was a male, he was taken by relatives on the husband's side. If the first born was a girl, she was taken by those on the wife's side. Those who took the child taught him/her to do the work skillfully. Sometimes these children were not allowed to work at all. They became the kūpuna's favorites and were hand fed by their attendant (kahu). They were the favorites (pu'ahale).

When talking to each other, the terms for brothers and sisters were used for address as well as being descriptive. However, a son would not address his male parent as "father" because family member terms were only descriptive. Relatives, whatever their relationship, addressed each other by name. A grandparent was correctly addressed as kupuna in the old days. Kūkū/tūtū, derived from the word "kupuna", became more frequently used terms of endearment for "grandparent". (Handy: 44-45)

A ceremony to decide whether or not a child was ready to be weaned placed the decision with the child. A mother and child would sit facing each other with two stones or bananas, representing the mother's breasts, placed between them. A prayer to the god Kū and his wife Hina was offered by a third person asking that the baby will no longer wish for his/her mother's milk. If the child reached for the objects and tossed them away he/she was ready to be weaned. If the child did not toss the objects away nursing continued and the ritual was repeated again later. (Handy: 88-89)

When a male child was born, he was taken to the men's eating house (hale mua) where he was dedicated to the gods. If he was the son of a chief (ali'i) he was taken to a temple (heiau) to be dedicated. There his navel (piko) was cut and the placenta was washed in water and was buried by the kahuna in a separate, secret place where it would not be disturbed. The child was bathed, wrapped in kapa and taken to the offering stand (kuapala) and dedicated to the gods.

In the Hawaiian life cycle there did not exist any form of ceremonial ritual of initiation into manhood. At age seven or eight a boy was circumcised by a skilled kahuna and a feast was held. There was no significance to this event other than that the circumcision facilitated cohabitation and enhanced pleasure. (Handy: 94)

If a boy showed a special aptitude in an art, he was sent to live with an expert (kahuna). Training started at an early age and a boy training to be a kahuna (expert) was placed under strict kapu. His food, utensils, water gourd, clothing, bed and house were considered sacred. He was not allowed to mingle with other people and especially not with women. After his training was completed and the cleansing had been performed, he was allowed to associate with other men. But, he had to keep himself free of women and had to abide by all of the kapu taught him by his kahuna. Somehow, the kahuna always knew when his student had broken a kapu. To observe all the kapu well was to learn all of what the kahuna had stored in his head. (Handy: 90)

Grandparents had special affection for certain children who were attractive and charming. These children were made "favorites". They were given special dishes and the best of everything. In Ka'u, a "carnival" was held every few years for the display of each grandparent's favorites. (Handy: 101)

Each child had duties according to his or her size in such activities as planting and fishing, house-building, preparing feasts, working on irrigation ditches, taro terraces, walls and on ponds. A child's age was determined not by years but by the tasks he or she could do. For example:

"The size that enables him to carry a water bottle."

(A two-year-old was given a small gourd of water to carry from the upland.)

"The size that enables him to carry two coconuts." (age five or six)

"The size that enables him to carry a smaller member of the family on his back." (age ten) (Handy: 178)

Children learned by watching and doing. To ask questions was considered bad manners. Children were taught that certain gestures were rude, offensive and might even bring death as an offended person may consult a sorcerer by way of revenge. Treating parents and grandparents with utter disregard of their feelings was not acceptable. Children were taught that they were not to behave in a bold manner toward strangers, ask for things, go through the premises of others without permission, claim something that was not one's own. These rude behaviors were called maha'oi. For children to interrupt a conversation was rude. The head was regarded as sacred; therefore, to pull the hair or strike the head of another was considered an insult. (Handy: 188-91)

## Bibliography

- Handy, E.S. Craighill and Mary Kawena Pūku'i, The Polynesian Family System in Kā'ū, Hawai'i. Vermont: Charles E. Tuttle Company, 1972.
- Pūku'i, Mary Kawena, E.W. Haertig, and Catherine A. Lee, Nānā I Ke Kumu. Vol. 1. Queen Liliuokalani Children's Center, 1972.
- Kamakau, Samuel M., Ka Po'e Kahiko. Honolulu: Bishop Museum Press, 1964.

## APPENDIX IV

### CONCEPTS OF SELF AND 'OHANA by Mahealani Pescaia

Aloha, e nā kumu!

As educators, our main goal is to equip our students with the tools of survival that will help them live happy and successful lives. In order to do this we need to educate the total person. Each student needs to gain understanding and knowledge not only of content areas but also of himself or herself and others.

This reading is for you to examine and to learn more about working with children and people in general. Understanding yourselves and others can help you be more effective teachers and human beings.

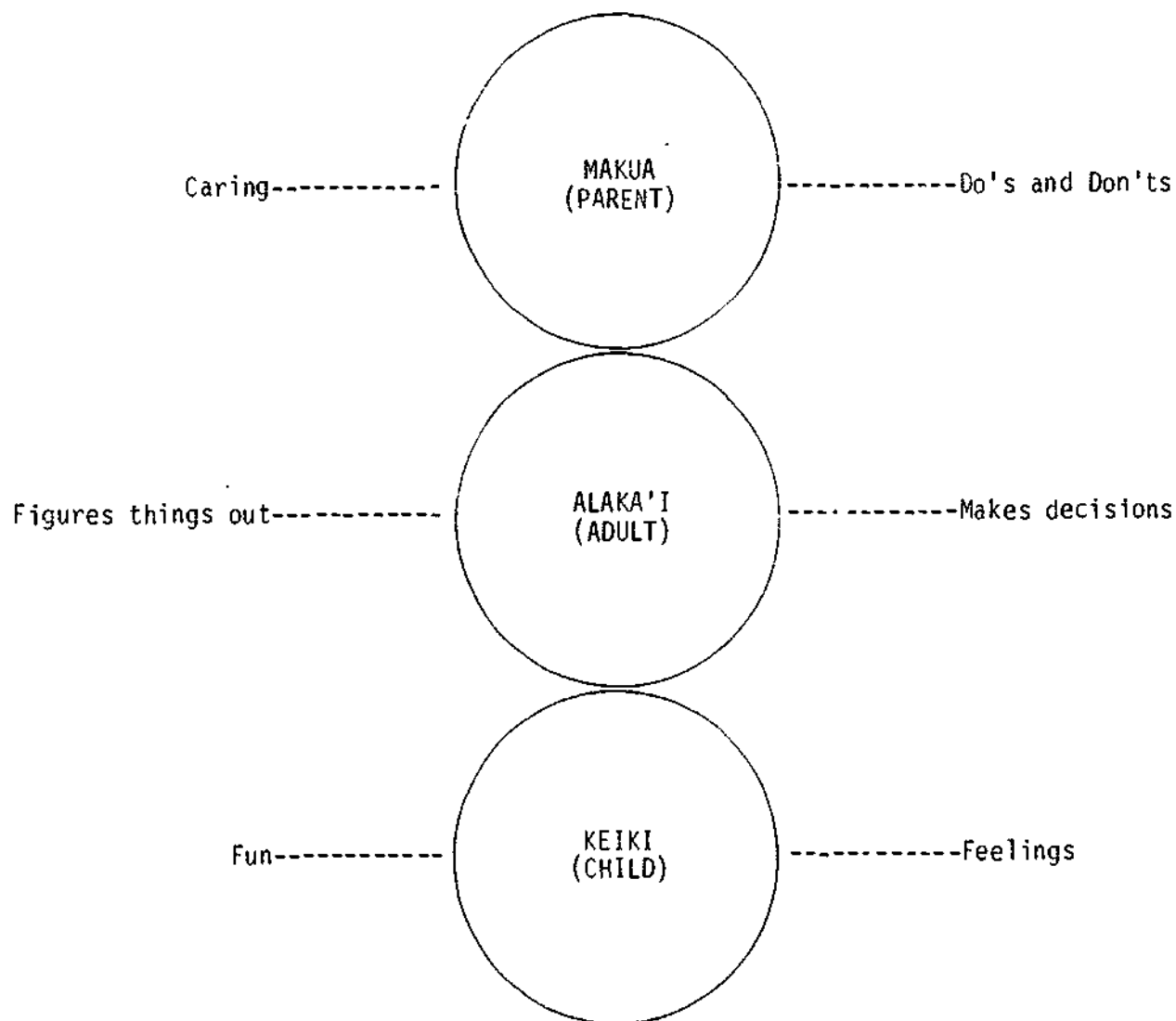
There is a need today for parents and teachers to give each child positive recognition. Often this recognition is missing in the home so the school environment is a major source. A positive classroom environment can build positive self-concepts that will lead to an atmosphere conducive to learning. Often within a busy day of meeting our academic objectives, we often neglect to develop the "whole person." We set our goals geared to the average and neglect the emotional and intellectual needs of the two extremes. We are drawn to the needs of the verbal, and fail to recognize the needs of the "quiet and well behaved."

The information compiled in these pages combines information from Games People Play by Dr. Eric Berne and from Nānā I Ke Kumu, I by Mary K. Puku'i. I hope it will provide you with "tools" as you work with your students.

I would like to thank Mālie Mossman, Counselor at Windard Community College, for her mana'o (ideas) in this area and for sharing some of her materials.

## THE THREE ME'S

Inside each one of us there are THREE ME'S. These three me's influence what we do and each one acts and reacts differently.



## THE THREE ME'S



## ME, THE MAKUA

Makua is the Hawaiian word for parent. The makua part of us reflects the things we learn from our parents or the people who brought us up. They taught us how to do things and how not to do things; and we learned by just watching how they talked to each other and how they treated us.

There are two parts to our makua. One part is critical or bossy, reminding us of the things we should or should not do. The other part is caring, encouraging us to show love and affection, such as kōkua, laulima, and aloha.

Anytime we behave like parents, we are using our makua. Phrases like "don't do that", "clean your room", "behave yourself", "don't worry", "I'll take care of you", "let me help you" are all makua kinds of phrases.



'O AU KA MAKUA  
(ME, THE PARENT)

DO YOUR WORK!



## Me, The Alaka'i

Alaka'i is the Hawaiian word for director. This is the part of us that thinks and figures things out. The alaka'i part of us gets the facts, examines them, and speaks logically and rationally. It is said that the human brain can handle over one billion bits of information which is more than any computer can handle. We see, then, that we can learn anything our alaka'i decides to learn. Sometimes the makua or the keiki parts of us can inhibit us from learning effectively. Now that we know this, we can watch out for the keiki and makua and make sure that doesn't happen. The more things we learn about people and the world around us, the stronger our alaka'i becomes and the better decisions we can make. As we are reading this, we are using our alaka'i. When we examine and evaluate and use words like how, what, where, why, and better, nicer, easier, we are using our alaka'i.

'O AU KE KANAKA NO'ONO'O  
(ME, THE ADULT THINKER)  
ALAKA'I



401

## Me, The Keiki

Keiki is the Hawaiian word for child. The keiki is the part of us that expresses feelings of fear, anger, happiness, or sadness. The keiki part of us also likes to have fun. Sometimes we let the keiki run wild like staying up too late, eating too much candy, or fighting. We need to use our alaka'i and makua to guide us so that all three parts of us are in balance. When we use words that express our feelings like "wow", "want", "I'm scared", "aw, shucks", "great", "I don't want to", we know our keiki is at work.

402

403

# 'O AU KE KEIKI (ME, THE CHILD)

'Eha (Pain) Maka'u (Fear)

Pā'ani (Play)

Aloha (Love)



The concepts of self can also be used to help students understand behavior. When students learn to understand themselves and others, they will be better equipped to function in the classroom, on the playground, as well as in the home.

The Hawaiian children were nurtured with much love and aloha. This led to positive concepts of the self. These feelings of self worth and attitudes of acceptance were reinforced in their daily lives by the practice of 'ohana concepts of aloha (love), kōkua (help), laulima (cooperation), kuleana (responsibility), and lōkahi (harmony, unity). 'Ike (recognition) was given to each other freely and openly. Within the close 'ohana (family), they received 'ike not only from parents but also from grandparents, aunts, uncles, and cousins.

These concepts of 'ohana are also applicable in classrooms today. Many teachers may already be using these concepts with their students.

The following pages present the Hawaiian concepts of aloha, kōkua, laulima, kuleana, lōkahi, and 'ike which can be taught to the children.

The children should be continually encouraged to demonstrate these 'ohana concepts in their relationships with each other.

# EVERYBODY NEEDS "IKE" (RECOGNITION)

'Ike is to recognize everyone as people. Everyone needs to be recognized, especially children. 'Ike can be given in a number of ways in school. It can be a look, a word, a touch, a hug, a gesture, a kiss and even a scolding. Children need to give 'ike to each other so if the teacher models the giving of 'ike then the children will internalize the behavior. Just to tell the children how nice they look, or how happy you are that they are quiet, or "How pretty the ribbon in your hair looks" or "What a handsome shirt you have on today!" are all ways of giving 'ike. It helps create a positive atmosphere in the classroom and makes everyone feel "maika'i" (good).



Kamaiki (Baby)



Nā Mākua  
(Mom and Dad)



Keiki Kāne (Son)



Nā Kūpuna  
(Grandparents)

# ALOHA



Aloha has many meanings: love, affection, compassion, mercy, pity, kindness, charity, hello, goodbye, greetings, farewell, alas, regards. It can be shown in a variety of ways. The 'ohana provided a ready source of love, affection, kindness, courtesy and hospitality. Aloha was shown and given not only to 'ohana members but to all who visited.

409



# KŌKUA

In every 'ohana in old Hawai'i, every member helped to get the work done. Kōkua (help) was an important part of every household and family members usually did not have to be asked to kōkua; they helped whenever they saw work being done.



# LAULIMA

Everyone in the 'ohana shared the work load whether it be planting, building a house or a fishpond, preparing meals, or fishing. Each person did a share of the work to get it done. If a man wanted a house built, his 'ohana willingly came to help. The men gathered the building materials, built the foundation, put up the frame and attached the thatch. The women wove the floor mats of lau hala and made kapa out of wauke (paper mulberry). They also gathered the pili grass and other thatching materials. The children helped in whatever capacity they could depending on their age and sex. This kind of laulima made the work easier and more enjoyable.



411

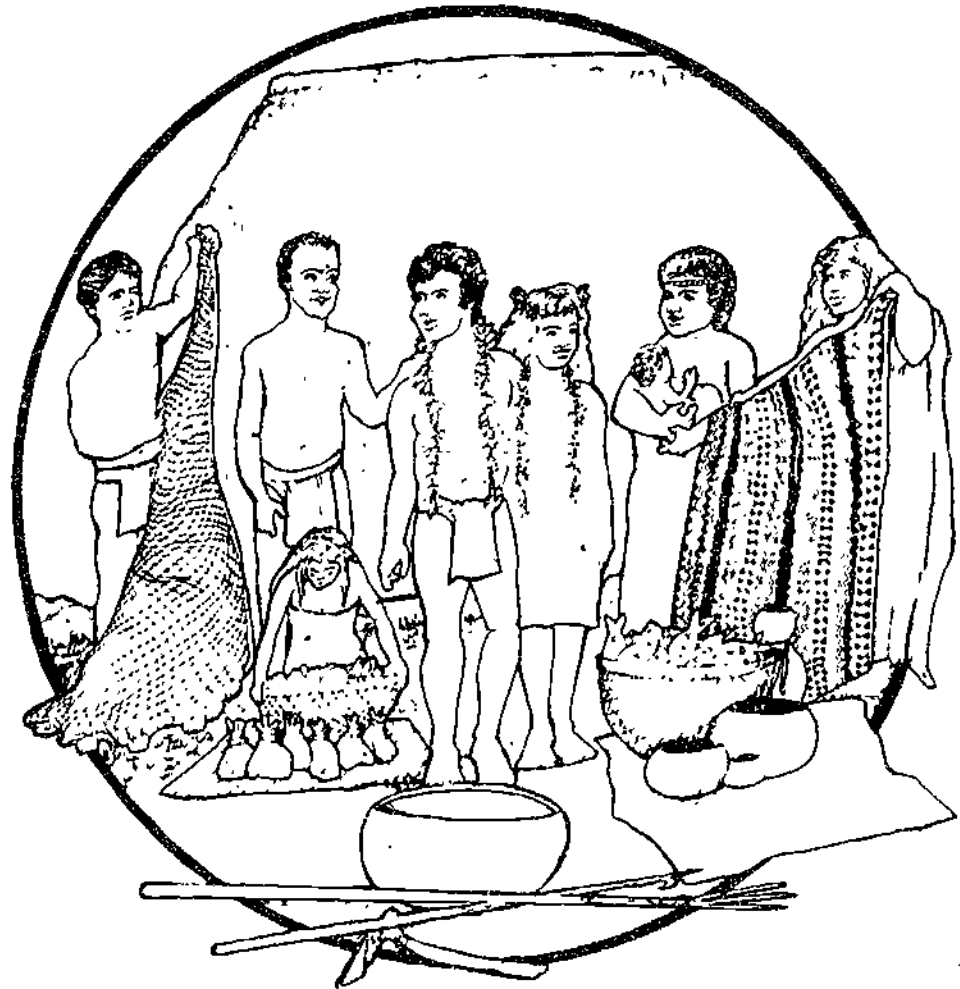
# KULEANA

One of the most important kuleana (responsibility) of every 'ohana member was to maintain acceptable standards of behavior. Attention seeking behavior was frowned upon and respect for social rank and seniority was a must. Each person was taught what was acceptable and not acceptable. He or she learned to accept and carry through his or her kuleana willingly.



# LŌKAHI

The 'ohana considered lōkahi (harmony, unity) very important, lōkahi not only with people but also with the universe. The members of the 'ohana showed this in their daily living by sharing goods and services with each other. The 'ohana members generously gave to others no matter how little they themselves had. Strangers were greeted with aloha and were invited to come in and partake of food. Anyone visiting another area took food or a gift of some kind as a symbol of hospitality. They established lōkahi with the universe by observing the kapu of daily living, which included homage to the gods. These kinds of behaviors nurtured harmony or lōkahi in the 'ohana.



414

Teachers have a tremendous influence on the children with whom they relate and so are very instrumental in changing behavior. Many children today are growing up with both parents working and therefore need to have some family-oriented activities with which to identify in school.

As teachers, we can establish a family-type atmosphere in the classrooms by creating a positive, supportive atmosphere. In early Hawai'i, the people lived in large 'ohana with parents, aunts, uncles and cousins, grandparents and great grandparents living in close proximity. When a child was reprimanded by his/her parents, he/she had many other sources of aloha and support to make him/her feel better. Today, we, as teachers, can provide support systems for our students by teaching them to give 'ike (recognition) to each other more freely. This behavior is learned, so the model we bring to the classroom is of great importance.

I hope that this narrative on 'ohana has helped you become more aware of the Hawaiian 'ohana concepts. By using and modeling these concepts in your classroom, the students will be better equipped to build positive self concepts and attitudes of acceptance in the classroom.

## APPENDIX V

### HO'OPONOPONO (PROBLEM SOLVING PROCESS) by Mahealani Pescaia

The Hawaiians had a practical way of dealing with problems and personal conflicts. They used a process called ho'oponopono which means "to make right". The process involved prayer (pule), discussion (mahiki), confession (hihi), mutual restitution and forgiveness (hui kala or kala hala). A family elder or kupa usually conducted the meeting. The persons directly involved were included in the sessions. Ho'oponopono was basically a family matter but often involved a non-relative.

The Hawaiians knew that emotional problems caused physical illnesses. When a person needed medical attention, the kahuna always asked if ho'oponopono had been conducted to cleanse and purify the inner self. He treated the physical malady only after ho'oponopono had been conducted.

Ho'oponopono was also a religious process. The Hawaiian gods and family gods were asked to help the family solve its conflicts. Prayers were frequently recited throughout the sessions. The procedure for ho'oponopono was as follows:

1. Pule: The leader offered a prayer to the gods, calling upon them for guidance.
2. Kūkulu kumuhana: The problem was stated and the energies (mana) of the people present were pooled together into a unifying force.
3. Mahiki: Each successive problem was discussed and corrected like the peeling of an onion. The people spoke directly to the leader who in turn questioned the members of the group about the problem. Each person vented his or her feelings and there was remedial action for each aspect of behavior. 'Oia'i'o (spirit of truth) was a very important part of ho'oponopono. No matter how painful it was, revealing what really happened was of utmost importance. Sincerity was a basic requirement of interpersonal relationships, especially of ho'oponopono. Hihia was the entanglement of resentment, hostility, guilt, depression and discomfort. This affected everyone including the innocent bystanders; for as the truths were revealed, a confusion of different kinds of feelings resulted in the revelation of hurts that went back for days, months and even years before the present hurt took place.
4. Ho'omalū (Silent period): A leader may call ho'omalū to allow the participants to fall into silent thought for meditation, or to cool tempers, or simply to rest. It sometimes could last a few minutes or as long as a week. Family members could not talk about the problem at all, especially to outsiders.

5. Mihi: Repentance or confession was a big part of ho'oponopono. Sometimes mihi was accompanied with gifts of food to the gods. These gifts were reparation to the people who feasted on the foods after the gods had taken the spiritual essence (manā) from the food offerings. After the spiritual essence was removed, the living family later feasted on the offerings.
6. Hui Kala (Forgiveness): The person who was wronged must forgive the person who wronged him/her. Each must release and free each other of the grudges and embarrassments permanently.
7. Mō ka piko (Cutting the cord): If a person refused to forgive and release, then mō ka piko was declared. The family severed the cord that tied him/her to the family and he/she was no longer a part of the 'ohana. He/She had to physically remove himself from the community and live elsewhere.
8. Pule ho'oku'u: When everyone had forgiven each other for the wrong doing, a closing prayer was recited which terminated the ho'oponopono session.

Ho'oponopono can be used today in the classroom. The children involved in a conflict can carry on a discussion of the problems under the guidance of the teacher. The procedure is similar to that used in group therapy and the success of the process depends upon the willingness of the children to be open and truthful. When children are allowed to vent their inner feelings, they learn to accept criticism from others in the group. This open communication allows everyone to feel free to express his or her feelings without the fear of being threatened. The ho'oponopono procedure for the classroom can be as follows: (Have the children sit in a circle on the floor.)

1. Ho'omalū (Quiet period): A brief period of silence for the children to concentrate on the purpose of the session (20-30 seconds).
2. Kukulu kumuhana (Statement of the problem): The teacher states the problem as he or she understands it.
3. Mahiki (Discussion): The children express themselves and give their views of the conflict. They talk to the teacher who in turn asks appropriate questions of others in the group. As the discussion continues and as the bad feelings become pacified, the children will begin talking directly with each other. The teacher tries to stay out of the discussion as much as possible to allow the children to freely express their feelings. The teacher may ask questions like:
  - a. What do you like about (Student's name) ?
  - b. What does he/she do that irritates you?
  - c. What are some helpful ways we can help him/her improve?

4. Ha'ina (Confession): The children will readily admit to guilt if they do not feel threatened by the others. All children involved in the conflict will admit their guilt in the incident and ask forgiveness from each other.
5. Kalana (Forgiveness): When the feelings in the group are supportive, then forgiving is a natural reaction. Both parties have to be willing to forgive each other in order to clear away the bad feelings of guilt, shame and malice.
6. Panina (Closing): Have the children react naturally to the end of the session. Encourage some kind of positive showing of aloha such as a pat on each other's back or a hand shake or a hug. Touching is a magical cure-all and leads to warmer relationships.

Ho'oponopono has proven to be an effective technique in working with conflict. Teachers will find that even the children can do ho'oponopono within their own peer groups. Teaching them the technique and using the process to solve conflicts will eventually lead to a lessening of physical aggression in preference to "talking it over."

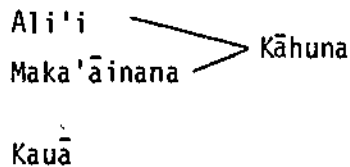
#### Bibliography

- Pūku'i, Mary K., Nānā I Ke Kumu I. Honolulu: Hui Hānai, 1972.
- Pūku'i, Mary K., Nānā I Ke Kumu II. Honolulu: Hui Hānai, 1979.



APPENDIX VI  
CLASS SYSTEM  
by Mahealani Pescaia

1. There were three classes in the old Hawaiian system:



2. The Ali'i (chiefs) were high in rank and their genealogies were transmitted orally through chants.
- a. Ali'i of the highest rank - mō'iī, ali'i nui, ali'i 'ai moku and their top advisors were those who were in direct linkage with the gods and who had the most control over the governing of the people.
  - b. Ali'i of secondary rank served as
    - ilāmuku - police officers
    - kuhina - ministers of state
    - konohiki - supervisors of land
  - c. Konohiki had many responsibilities:
    1. Supervised the distribution of land, planting, harvesting, water rights, the building of irrigation ditches.
    2. Served as tax collector
    3. Was in charge of fishing along the shore and offshore.

### 3. The Kāhuna

- a. There were two orders of temple priests. These Kāhuna came from the ali'i class.
  1. Kahuna Pule o Kū were the highest ranking temple priests. Their job was arduous and required many years of apprenticeship.
  2. Kahuna Pule o Lono were of lower rank and so the ritual was less stringent.
- b. The work of these temple priests required long prayers and chants that had to be recited without error.
- c. They had to be precise in their dress, food, colors, kapu, decorations, etc.
- d. Only the more gifted boys were chosen to become kāhuna pule.
- e. There were other kahuna besides Kahuna Pule. These were experts in healing, carving, building, fishing, and doctoring. These kāhuna came from the maka'āinana class. See Appendix VIII, "Kāhuna," for a listing of various kinds of Kāhuna.

### 4. Maka'āinana

- a. The common people were called maka'āinana.
- b. They worked the land and were the farmers, fishermen, housebuilders, canoe-makers, etc.
- c. They could live on the land as long as they were loyal to the Ali'i. They were free to leave the land and settle elsewhere if they pleased. They were tenant on the land but not serfs.

### 5. Kauā

- a. These were outcasts who were considered defiled people.
- b. Some historians hypothesize that they might have been the aborigines who were already settled here when the later migrants from the southern islands arrived.
- c. They were used as human sacrifices. They could never refuse when asked.
- d. Commoners and ali'i were forbidden to associate with or marry kauā.

## Bibliography

- Ounford, Betty, The Hawaiians of Old. Honolulu: The Bess Press, 1980.
- Feher, Joseph, Hawai'i: A Pictorial History. Honolulu: Bishop Museum Press, 1969.
- Handy, E.S.C., Native Planters in Old Hawaii. Honolulu: Bishop Museum Press, 1972.
- Malo, David, Hawaiian Antiquities. Honolulu: Bishop Museum Press, 1971.

## APPENDIX VII

### HAWAIIAN RELIGION by Mahealani Pescaia

Hawaiian Religion involved the worship of all the powers of nature; it permeated every phase of life. The Hawaiians thought of themselves as being an intricate part of nature, therefore, each phase of life had its own god or goddess. The people worshipped gods who were responsible for different occupations. Canoe builders, fishermen, hula dancers, kapa beaters, bird catchers, farmers, warriors, and experts all had their own gods who gave them guidance and inspiration.

An integral part of religion was an invisible power or force called mana. This divine power was present within all things--gods, chiefs, people, animals, plants, and natural objects. It was exhibited in people as power, skills, success, luck, intelligence, accomplishment and even the right to rule over others. An ali'i nui (chief) had more mana than a maka'āinana (commoner) who in turn had more mana than a kauā (slave). Ho'omanamana (imparting mana to objects) was possible through prayer and meditation by strict observation of kapu or by offering sacrifices to the gods.

The Hawaiians believed that the gods imparted their mana to the chiefs who were their representatives on earth. Therefore, the chiefs were responsible for everything on earth.

There were four major gods:

1. Kāne: God of life, fresh water, provider of sunshine
2. Lono: God of rain, peace, agriculture and the forests. He was honored at the annual Makahiki festival during which games were played in his honor and wars were kapu (forbidden). The priests of Lono went around the island from ahupua'a to ahupua'a in a clockwise direction collecting taxes ('auhau) for the ali'i nui in the name of Lono.
3. Kū: God of war and medicine. He was the only god who demanded human sacrifices.

#### 4. Kanaloa: God of the ocean and ocean winds

These gods, according to the Hawaiians, took many forms in nature. For instance, Kane appeared as taro, sugar cane (kō), bamboo ('ohe) and lightning (uila). Kū appeared as breadfruit ('ulu) or coconut (niu). Lono could be found in rain clouds (aoku) sweet potatoes ('ula) or gourds (ipu).

There were hundreds of lesser gods and goddesses. Some of these were:

1. Pele - goddess of volcanoes
2. Kānehekili - god of thunder
3. Kihawahine - mo'o goddess (lizard), a deified chiefess of Maui
4. Ku'ula - god of fishermen
5. Lauhuki - goddess of kapa beaters
6. Lea - goddess of women and canoe builders
7. Laka - goddess of hula

The 'aumakua were ancestral guardian spirits or family ancestors who became personal gods of their 'ohana. They were prayed to for strength, guidance, and inspiration. They appeared as sharks (mano), lizards (mo'i), birds (manu), fish (i'a), stones (pōhaku), plants (la'au), owl (pueo), or eel (puhi).

'Unihipili were the spirits of the dead that were encouraged or enticed to re-enter the bones or hair of the deceased relative. These spirits were either helpful or harmful depending upon the desires of the person nurturing the 'unihipili. Some people say that the unihipili were fed and nurtured only by kahuna, and if neglected, punishment to the kahuna and his family was severe.

Kālaipāhoe were images, fearful in appearance, carved out of wood that were considered poisonous. Scrapings from the back of the image were placed in an enemy's food to kill him.

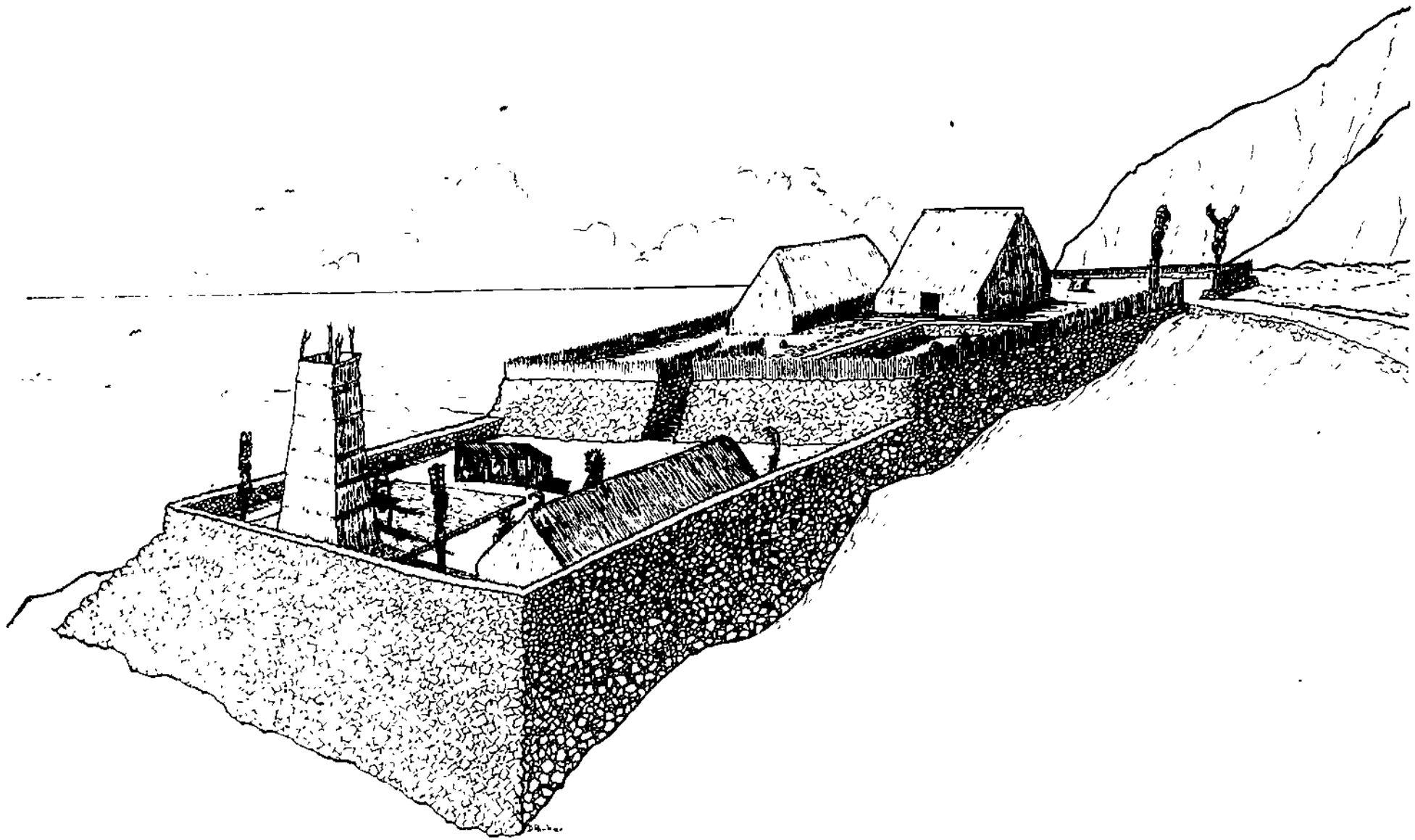
Heiau were temples or places of worship. They consisted of one or more stone-paved platforms or terraces enclosed by stone walls. There were a few houses, each with some special use during worship ceremonies.

There were several classes of heiau:

1. Laukini - a large war temple where the ruling ali'i worshipped. Construction was ordained and supervised by the ali'i nui

seeking to gain the favor of Kū, the god of war. An example of this kind of heiau is Pu'u koholā Heiau in Kawaihae, Hawaii built by Kamehameha the Great. Human sacrifices were made at this heiau. The body of Kamehameha's cousin and arch-rival, Keoua Ku'ahu'ula, was used as a sacrifice to dedicate this luakini.

2. Waihu heiau were agricultural temples with rituals held to improve crops. Offerings for sacrifices were usually pigs (pua'a), bananas (mai'a) and coconuts (niu).
3. Pu'uhonua were places of refuge where people, guilty or innocent of breaking kapu, could run to in order to escape punishment. An example is in Hōnaunau, Hawai'i now officially called Pu'uhonua o Hōnaunau (City of Refuge).
4. Heiau Ho'ōla were healing temples. Prayers were very important in order to put the mana into the medicine (from plants). The kahuna lapa'au was very knowledgeable. The best known example today is Keaiwa Heiau in Aiea, O'ahu.
5. Kuahu was an altar or place of worship in each family dwelling erected for the family god or 'aumakua.
6. Pōhaku o Kāne was a place of worship for the family. It consisted of an upright stone surrounded by tī plants
7. Ko'a were shrines made of rounded piles of coral or stone. They were used to make fish multiply; if they were built on bird islands, then they were used to make birds multiply.
8. Ku'ula were open altars near the ocean for the worship of the fish gods.



431

234

431

## Bibliography

- Handy, E.S.C., Ancient Hawaiian Civilization. Rutland, Vermont:  
Charles E. Tuttle Company, 1965.
- Ihara, Ku'ulei. Research Materials - Bulletin Number 18 Life in  
Ancient Hawai'i - Religion". Honolulu: Department of Education,  
1971.
- Mitchell, Donald, Resource Units in Hawaiian Culture. Honolulu:  
Kamehameha Schools Press, 1972.



## APPENDIX VIII

### KĀHUNA

by Mahealani Pescaia

Kāhuna were the educated professionals of early Hawai'i. They were persons of ability who became the educators, scientists, lawyers, doctors and agriculturists. The kāhuna were responsible for advancing the knowledge and maintaining the religious system so the apprentices were very carefully selected. The training program sometimes lasted for more than twenty years and was held in secrecy. Strict observation of the kapu was an absolute necessity and imperfections were not allowed in the conducting of ceremonies.

The children selected to be trained as kāhuna were chosen on the basis of intelligence, interest and desire to learn. Most of them were from the ruling class (ali'i); but children from the common class (maka'āinana) with exceptional ability were also accepted into the training program. Instruction usually started at dawn and continued until dusk. The student learned the ways of the gods and the rules of the profession. He became faithful to the god of his order. He memorized chants and rituals and was taught that the favor of the gods increased with the successful performance of the rituals.

The students in a graduating class selected one student who had performed outstandingly throughout the training period. This student was honored by being given the choicest part of the pig (pua'a) cooked for the graduation ceremony ('ai lolo).

A kahuna who became skilled in many fields could be called a high priest. A person who had mastered all learning was awarded the highest title Puhī Okaoka. Earning this title was very difficult for the tutor never taught all of his knowledge lest his student surpass him in knowledge. Sometimes a favorite student received the last bit of knowledge from the lips of the dying master.

There were many areas of specialization numbering in excess of three hundred. Some of these were:

kahuna oule: dedicated new homes  
kahuna kuhikuhi pu'uone: selected the site and planned the building of a heiau  
kahuna ho'oulu 'ai: agricultural expert  
kahuna kālai wa'a: performed canoe building ceremonies  
kahuna kilo makani: observed the winds for navigation purposes  
kahuna kilo honua: studied the earth (geologist)  
kahuna huli honua: studied the landscape to help agriculturists and house-builders  
kahuna kilo hōkū: astronomer  
kahuna kālai ki'i: expert at carving images  
kahuna kilokilo: foretold the coming of good or bad events by observing the skies  
kahuna ki'i: caretaker of images; wrapped, oiled and stored them and carried them to battle.  
kahuna nui: community high priest  
kahuna ho'oulu 'ai: agricultural expert  
kahuna nānā a'o: meteorologist, studied clouds  
kahuna haku mele: poet  
kahuna kaka 'ōlelo: raconteur  
kahuna pa'a mo'ōlelo: historian  
kahuna lomilomi: physiotherapist  
kahuna nāhā: diagnostician  
kahuna koholua: surgeon  
kahuna ha'iiwi: bone specialist  
kahuna makaula: prophet, interpreted signs of nature  
kahuna lua: master in boxing and wrestling  
kahuna ho'okele wa'a: skilled navigator  
kahuna xu'auhau: recounted genealogies

There were many medical kāhuna of old Hawai'i. These experts began their education at an early age and studied intensively for 20 years. They learned the use of over 300 plants and many other ingredients from the ocean. In no field was there such advancements as in the field of medicine.

The kahuna lapa'au examined the patient, diagnosed the malady, prescribed the diet and medicine and ordered the amount and kind of rest or activity, and administered the purge necessary to rid the body of wastes.

The most delicate surgery was the removal of cataracts from the eye using the sharp edge of a grass. It is thought that attempts were made to replace damaged cranium with pieces of coconut shell. They treated maladies like high blood pressure, broken bones, rheumatism, internal bleeding, and many other ailments.

The following kāhuna lapa'au played an important role in the lives of the ancient Hawaiians:

- kahuna ho'ohāpai keiki: induced pregnancy
- kahuna ho'ohanau keiki: delivered babies
- kahuna 'o'o: kept the fontanel of infants closed and practiced lancing
- kahuna hāhā: diagnosed by feeling with his fingers
- kahuna a ka 'alawa maka: could see dislocations and sprains and diagnosed by insight
- kahuna 'anā'anā: used 'anā'anā (sorcery) in treatment
- kahuna ho'opi'opi'o: used counteracting sorcery in the treatment
- kahuna makani: treated the spirits of illness
- kahuna pā'ao'ao: treated children's diseases

Reference to the role of kāhuna is made in many books. The following are some of the books that contain information about the roles of different kāhuna in the lives of the ancient Hawaiians.

1. Curtis, Life in Old Hawai'i

- A. Canoe - Building (pp. 135-156)  
Kahuna kālai wa'a
- B. Housebuilding (pp. 1-20)  
Kahuna kuhikuhi pu'uone
- C. Medical Expert (pp. 244-255)  
Kahuna Lapa'au - training to become one
- D. Special Kahuna of the Makahiki (pp. 157-186)  
Tells of the importance of the kahuna in the yearly makahiki ceremony.

2. Dunford, The Hawaiians of Old

- A. Sorcery  
Kahuna 'anā'anā - 35, 48, 113
- B. Craftmen  
Kahuna kālai ko'i - pp. 108-110  
Kahuna kālai ki'i - pp. 113-114  
Kahuna kālai wa'a - pp. 115-117

- C. Astrologer - pp. 54, 143  
Kahuna Kilo
  - D. Historian - pg. 35  
Kahuna Kū'auhau
  - E. Medical Doctor - Pg. 35-37, 44  
Kahuna lapa'au
  - F. Priests  
(See index of the book for references)
3. Handy, Native Planters in Old Hawai'i
- A. Kahuna Pule - pg. 322
  - B. Other kahuna - pp. 322-323
4. Hazama, The Ancient Hawaiians - Who Were They: How Did They Live?  
Housebuilding (pp. 31-43)
- Kahuna kuhikuhi pu'uone
  - Kahuna Pule
5. Malo, Hawaiian Antiquities
- A. Sorcery (Kahuna 'anā'anā) pp. 97, 99, 100-104, 106
  - B. Akua ka'ai - pp. 135-139
  - C. Kahuna hui - pg. 105
  - D. Kahuna kalai wa'a - pg. 126
  - E. Kahuna Kilokilo - pg. 112-114
  - F. Kahuna kuhi kuhi puuone - pp. 161, 177
  - G. Kahuna kuni - pp. 100-104, 106
  - H. Kahuna lapa'au - pp. 107-109, 245
  - I. Kahuna o na ki'i - pp. 188-190, 199
  - J. Kahuna pule - pp. 121, 124

43

## Bibliography

- Curtis, Caroline, Life in Old Hawai'i. Honolulu: The Kamehameha Schools Press, 1970.
- Dunford, Betty, The Hawaiians of Old. Honolulu: The Bess Press, 1980.
- Handy, E.S.C., Native Planters in Old Hawai'i. Honolulu: Bishop Museum Press, 1972.
- Hazama, Dorothy, The Ancient Hawaiians - Who Were They? How Did They Live? Honolulu: Hogarth Press, 1974.
- Malo, David, Hawaiian Antiquities. Honolulu: Bishop Museum, 1971.

## APPENDIX IX

### KAPU SYSTEM

by Mahealani Pescaia/Lokomaika'iokalani Snakenberg

Society in early Hawai'i was strictly regulated. There were many kapu (rules), based on the concept of mana (spiritual power and religion). The kapu system kept society secure by identifying what people could do and what they couldn't do. It insured the subordination of the lower classes, thus enabling the ali'i and kahunas (priestly class of experts) to maintain their power.

The Hawaiians believed that the kapu were made by the gods and interpreted by the ali'i and kahunas who were also required to observe the kapu. There was a strict kapu placed on all of the personal effects of an ali'i. No one was allowed to touch the clothing or anything else that the ali'i had touched except for the kaukauali'i (lesser chiefs) who were assigned to the care of his belongings and personal effects. The Hawaiians believed that any kind of contact with a person of lesser rank caused the mana (spiritual force) to be drained off. To prevent this from happening severe punishment was dealt to those who broke the kapu. The law officer (ilamuku) sought out kapu offenders and saw to it that they were put to death by strangulation, clubbing, stoning, burning or drowning. There was no trial, no probation, no compassion. Often, psychological guilt on the part of the offenders caused their deaths before the ilamuku got to them. They knew that the wrath of the gods was tremendous and this preyed heavily on their minds.

The one safety valve which existed to prevent the kapu system from being totally oppressive was the pu'uhoonua (place of refuge and forgiveness) which was established in each moku (district). Probably the most famous example is the Pu'uhoonua o Hōnaunau, a large restored area in South Kona (Kona Hema), Hawai'i which is now part of the U.S. National Park System. This, however, is only one of many pu'uhoonua which existed. If a kapu breaker was able to reach the enclosure of the pu'uhoonua ahead of those seeking to kill him or her, the kahunas would then provide shelter, protection and forgiveness which would soon permit the former kapu breaker to reenter the community and the 'ohana (family) in safety. The gods (akua) had been appeased through the prayers and rituals of the kahunas and therefore humans (kānaka) had no further need to punish the offender.

There were many kinds of kapu interwoven with governmental, societal and religious organizations. Some of these were:

1. General kapu: Declared at certain times by the chief to honor the gods or to celebrate important events
2. Common kapu: The people had to stop all work and attend religious services of the heiau.
3. Strict kapu: All of the people had to remain inside their houses. All of the animals had to be muzzled and no one was allowed to make a sound.
4. Permanent kapu: Places frequented by the king were kapu (forbidden) to the common people and kauā.
5. Certain areas were kapu (restricted) to men such as the men's eating house and worship houses. Certain areas were kapu (restricted) only to women such as the Hale Pe'a (menstrual house).

The kapu system began to break down after Kamehameha the Great died. The Hawaiians could see that the foreigners or haole ate together without the wrath of the gods falling upon them.

From the time of Capt. Cook's arrival, Hawaiians noted the disparity in the kapu system so when Kamehameha I died, the strength of the kapu system began to deteriorate. Finally, in November of 1819, Kamehameha II, Keōpūlani (his mother) and Ka'ahumanu (his stepmother) sat together for the first time to eat, thus breaking ('ai noa) the long established kapu of men and women eating separately. This was followed by the breaking of more kapu until the system began to fall apart. This breakdown in the kapu system was also a breakdown in formal religious practices of the people making it easy for the missionaries to fulfill the spiritual needs of the Hawaiians when they arrived in April, 1820.

## Bibliography

- Dunford, Betty. The Hawaiians of Old. Honolulu: The Bess Press, 1980.
- Handy, E.S.C. Ancient Hawaiian Civilization. Rutland, Vermont: Charles E. Tuttle Company, 1965.
- Hanoy, E.S.C. The Polynesian Family System in Ka'u, Hawai'i. Rutland, Vermont: Charles E. Tuttle Company, 1972.
- Malo, David. Hawaiian Antiquities. Honolulu: Bishop Museum Press, 1971.
- Mitchell, Donald. Resource Units in Hawaiian Culture. Honolulu: Kamehameha Schools Press, 1972.



## APPENDIX X

### SYMBOLS OF ROYALTY by Mahealani Pescaia

The royalty or ali'i of ancient Hawai'i were set apart by strictly enforced rules (kapu) pertaining to persons of high rank and by the wearing of royal garments and symbols made for their exclusive use.

#### Kapu

There were many rules pertaining to the royalty. They were based on the Hawaiians' belief that the ali'i (chiefs) were the gods' representatives on earth. The Hawaiians believed that the chiefs possessed a great deal of mana or spiritual power so it was important that kapu (laws) be declared to protect the mana of the chiefs from contamination. The kahuna and the chiefs established the kapu which were based on religion. These kapu were strictly enforced. Kapu sticks called pūlo'ulo'u were set in the ground in front of a high chief's house. No one was allowed to stand when a chief approached; he/she had to lie prone in the ali'i's presence. Touching a chief's clothing or person meant certain death. These are only a few of the kapu; there were many more and it was difficult for a chief to leave his house

#### Royal Garments

The high chiefs wore special garments which symbolized their status. They wore a long feather cloak ('ahu'ula), a feather helmet (mahiole), and a loin cloth (malo), made of the finest kapa. Sometimes they also wore a feather sash (kā'ei), and a neck ornament (lei niho palaoa). The lesser chiefs wore the shorter capes and malo. These garments were worn only on very special occasions and in battle. It was a great achievement for any warrior to overcome a chief and take his long feather cloak (ahu'ula).

In the name 'ahu'ula, 'ahu is a garment worn around the shoulders and 'ula is red. The significance of 'ula (red) in the word 'ahu'ula relates to the fact that in the South Pacific, from where the Hawaiian ancestors came, red feathers were rare and therefore prized. In Hawai'i, however, red feathers were common and yellow feathers were rare and most prized. Cloaks in Hawai'i were usually made of a combination of red, yellow and black feathers and continued to be called 'ahu'ula. The only pure yellow cloak was that of Kamehameha I which took, according to some researchers, over a hundred years to make. It can be seen in the Bishop Museum today.

The 'ahu'ula was a garment of great significance. It was made in the shape of an inverted crescent. This crescent represented the rainbow which was a sign of the ali'i's personal magnetism or aura, power (mana) and sacredness (kapu).

The feathers were fastened to the netting with olonā cordage in an overlapping pattern, like shingles. Olonā was a fibrous plant used to make cordage. The Hawaiianstwisted the fibers into one of the finest and strongest cordages. They made a netting (nae) of very small mesh in the shape of a crescent. The expert tied his first row of feathers along the lower border going left to right. It is not surprising to find a cloak weighing as much as six pounds.

Helmets (mahiole) were made in the same fashion but the foundation was made from a vine called 'ie'ie (freycinetia arborea) which grew in the forest. The feathers were attached with olonā cordage. Images of gods were also constructed in similar fashion. Kūka'ilimoku, known as Kamehameha's War God, is the most well known feather image in the Bishop Museum.

### Royal Symbols

The ali'i also had other symbols of royalty which were made for their exclusive use.

Lei niho palaoa were the exclusive possession of the ali'i. It was a lei made of many strands of finely braided human hair with a skillfully carved hook hanging from it. The hook was made from the tooth of a sperm whale. These lei were worn by chiefs and chiefesses on ceremonial occasions. The chiefs wore their lei niho palaoa into battle to show that they were chiefs.

Kāhili, royal standards, were made of bird feathers and were sacred emblems of Hawaiian royalty. They were used only when the ali'i attended a state occasion. When not in use, caretakers carefully dismantled the kāhili and stored the feathers in a calabash. Feathers used in the older kāhili were from the 'iwa bird (frigate), koa'e (tropic) and the ō'ō bird. The choicest feathers were the black and yellow feathers of the 'ō'ō bird. Later, feathers from the introduced birds were used. These were the peacock, ostrich, duck and chicken. The birds were seldom killed. If a bird had only a few of the desired feathers, they were released to renew their plumage after the desired feathers were plucked. In some cases where most of the feathers were used, the birds were killed and used for food.

The handles of the kāhili were made from tortoise shell, ivory, bone and kauila wood. The most sacred kāhili were those whose handles were made from the bones of defeated chiefs.

Large kāhili were made by men and were named after some ancestor or beloved person. They were 12-14 feet high with feather cylinders of 24-50 inches high and 13-34 inches in diameter.

The small hand-held kāhili were made by women. They were carried by bearers who attended the chiefs and chiefesses. They were used on solemn occasions and carried over royal persons while they ate, slept, or visited with friends.

Lei hulu or feather lei were made by the men and women. They were worn only by the royal women as decoration on the head or around the neck. Lei were made of various colors but the choicest lei were those made with the yellow, red, and green feathers from the mamō, 'ō'ō, 'i'iwi and 'ō'ū birds.

Liloa was one of Hawai'i's greatest chiefs. He lived in the 15th century. He wore a feather sash (kā'ei) across his shoulder made of 'ō'ō and 'i'iwi feathers with human teeth embedded in one end. It was the only one of its kind and was perhaps used in deeply religious ceremonies. It was given the name Kā'ei Kapu o Liloa. A replica can be seen on the statue of Kamehameha I. The authentic Kā'ei is in the Bishop Museum.

Another "one of its kind" featherwork is the pā'ū of Nahi'ena'ena. It is a skirt made of 'ō'ō feathers with red 'i'iwi feathers at the ends. Nahi'ena'ena was the daughter of Kamehameha I and she wore the pā'ū just once. It was later used as a pall in her funeral and at the succeeding monarchs' funerals until 1891. Today it can be seen in the Bishop Museum.

### The Gathering of Feathers

The garments and other symbols of royalty required many feathers gathered over a period of time.

The gathering of feathers by the feather hunters (po'e kāwili) was an arduous task requiring great skill, courage, knowledge and patience. The po'e kāwili had to travel deep into the forests and had to learn the habits, the songs and the feeding habits of the birds. They had to know when the moulting season arrived in order to pluck the choice feathers before they were shed in the forest and were lost.

The brightly plumaged birds prized for their yellow feathers were the mamō and 'ō'ō. These two birds grew only a few yellow feathers. The brilliant red feathers were obtained from the 'i'iwi and apapane birds. The 'ō'ū provided the green feathers and was found in the wet upland forests of the larger islands.

There were several techniques used in capturing the birds. A sticky substance made from breadfruit gum (kēpau), or kukui tree gum (pilali) was smeared on sticks (kia). These sticks (kia) were placed on branches where birds perched. The feet of the birds stuck to the sticky gum and the feather hunters (po'e kāwili) were able to hold the birds, pluck the feathers, and clean the birds' feet with kukui nut oil to remove all the gummy substance.

The feather hunters (po'e kāwili) were experts at setting traps and snaring birds with cordage. They sometimes pelted the birds with sticks and stones. Live birds were sometimes used as decoys to attract other birds. Even nets were thrown over the much desired birds. These methods required constant watching and much patience.

Featherwork in Hawai'i was indeed a work of true craftsmanship. The process of making feather articles from the initial snaring of birds, the gathering and sorting of feathers, to making the net and tying each feather on the net required much patience, diligence and skill. It's remarkable that Hawaiians managed to produce such large numbers of feathered articles using the brilliantly colored feathers of the forest birds.

#### Bibliography

- Curtis, Caroline, Life in Old Hawaii. Honolulu: The Kamehameha Schools Press, 1970.
- Day, Grove, Hawaii and Its People. New York: Meredith, 1968.
- Dunford, Betty, The Hawaiians of Old Honolulu: The Bess Press, 1980.
- Feher, Joseph, Hawai'i: A pictorial History. Honolulu: Bishop Museum Press, 1969.
- Handy, E. S. C., Ancient Hawaiian Civilization. Rutland, Vermont: Charles E. Tuttle Company, 1965.
- Malo, David, Hawaiian Antiquities. Honolulu: Bishop Museum Press, 1971.
- Mitchell, Donald, Resource Units in Hawaiian Culture. Honolulu: Kamehameha Schools Press, 1972.

APPENDIX XI  
INDEX TO REFERENCES - MISCELLANEOUS

	Petroglyph	Recreation & Physical Fitness	Poetry & Music	Hula & Instruments	Tools & Toolmaking	Medicine	
BAUER		45		168, 170	40		
BUCK		Vol. VIII		Vol. IX			
CURTIS		262-268		98-111	215-238 (adz)	244-255	
DAY							
DUNFORD	128-129	153-169	174-.76	177-189			
FEHER	33, 127-131, 142, 145, 149, 153	112-115	122-126	122-123	50-51, 57, 64, 77-78		
HANDY (A.H.C.)	54-56	145-157	160-164, 173- 187, 201-203	56, 62, 65, 72, 147, 157, 176, 201, 203, 208-209, 317	26, 69-70, 24- 125, 131, 141, 225-228, 304		
HANDY (N.P.O.H.)					53		
HAZAMA							
LINDO		68-72					
MALO		214-234		231	51-52		
MITCHELL	33	125-156	47-66	48-51	86('ō'ō), 173-174	191-219	
POTTER							
PRATT							
TITCOMP							

A.H.C. - Ancient Hawaiian Civilization

N.P.O.H. - Native Planters Of Hawaii

450