BREADFRUIT ('ULU) CURRICULUM RESOURCES

- 'Ulu & You Lesson Plan and Benchmarks
- Terms for the parts of a breadfruit tree
- Coloring sheets:
 - ·Legend of Kū and the 'Ulu-
 - ·Tree
 - ·Leaf
 - ·Whole fruit
 - ·Fruit cross section



MALE FLOWER

BARK

ROOTS

ROOT SHOOT

Illustrations by Linda S. Philips

BREADFRUIT INSTITUTE - NATIONAL TROPICAL BOTANICAL GARDEN



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This project is funded by the Kaulunani Urban and Community Forestry Program of the DLNR Division of Forestry and Wildlife; and State and Private Forestry, branch of the U.S. Forest Service, Department of Agriculture, Region 5

'Ulu and You

Grade Level - 3rd

HCPS III Benchmark WL.IE.3.4.1 - Describe mutual contributions of products and practices of the culture being studied and own culture

Sample Performance Assessment (SPA) - The student: Gives examples of shared products, practices, and beliefs (e.g., food, art, clothing, music, stories, customs, sayings, celebrations, religions, gestures) between the culture being studied and his/her own culture by creating lists, drawings, or making an oral presentation. Examples may be given in native language or language being studied.

Rubric

Advanced	Proficient	Partially Proficient	Novice
Describe mutual	Describe mutual	Describe mutual	Describe mutual
contributions of	contributions of	contributions of	contributions of
products and practices	products and practices	products and practices	products and practices
of the culture being			
studied and own culture,			
in great detail.	in detail.	in some detail.	in minimal detail.

Sample Lesson Plan:

Day #1 – Write the daily vocabulary terms and their definitions on the board or on "word wall".

mo'olelo = story, legend, history

'ulu = breadfruit

kumu = tree

 $K\bar{u}$ = ancient Hawaiian god of war

Read the mo'olele about 'ulu to students.

Mo'olelo 'ulu

The god Kū decided to live secretly among mortals as a farmer; married and had children. He and his family lived happily until a time of terrible famine. Kū could not bear watching his children suffer, and told his wife that he could deliver them from starvation, but he would have to leave them. She reluctantly agreed, and Kū said farewell and descended into the ground. His family waited there day and night, watering the ground with their tears, until suddenly a small green shoot appeared where Kū had stood. The shoot quickly grew into a tall and leafy green tree that was laden with heavy fruit that Kū's family and neighbors gratefully ate, joyfully saved from starvation.



Individual - Hand out coloring sheet titled "Breadfruit Legend". As students are looking over the coloring sheet with you, ask them questions like, "Why is them an outline of a human diving down the trunk into the ground?" to prompt their memory recall of the mo'olelo you just shared with them. Now, have students write the mo'olelo from memory (two or three sentences) in the upper left hand corner or on the back side of the coloring sheet. Have students color the handout.

Pair Share - Instruct students to discuss with their neighbor dishes made with 'ulu that they have eaten at home. Other products? How is it prepared? If neither students has eaten 'ulu at home, instruct them to brainstorm ways they think that it might be prepared. Have them write their thoughts down on the handout.

Class Share – As a class, go around the room and have students share their uses of breadfruit.

Day #2 – Prepare a copy of the handout titled, "Breadfruit = 'ulu" so that there are blank lines for each part of the kumu. Provide a copy for each student. Guide students through the proper labeling of the kumu. Have students color the handout.

Day #2 - #3 - Do the same as above with the remaining handouts: leaf, fruit, and cross section of fruit.

Grade Level - 4th

Benchmark SS.4.3.1 - Explain the origins and culture of early Hawaiians

Sample Performance Assessment (SPA) - The student: Describes features of early Hawaiian life, such as rules and laws, gods/religion, roles of women/classes of people, sports and games, food, kapu system, land ownership taxes, and/or education.

Rubric

Advanced	Proficient	Partially Proficient	Novice
Explain, with clear and	Explain, with detail, the	Explain, with minimal	Ineffectively explain the
precise detail, the	origins and culture of	detail, the origins and	origins and culture of
origins and culture of	early Hawaiians.	culture of early	early Hawaiians.
early Hawaiians.		Hawaiians.	

Benchmark SS.4.3.10 - Describe how significant people, including those of legend (including Papa and Wakea, Pele, and Pa'ao) affected pre-contact Hawaii.

Sample Performance Assessment (SPA) - The student: Explains the significance of different people's contributions in the early history of Hawaii.

Rubric

Advanced	Proficient	Partially Proficient	Novice
Describe, with clear and	Describe, with detail,	Describe, with minimal	Ineffectively describe
precise detail, how	how significant people,	detail, how significant	how significant people,
significant people,	including those of	people, including those	including those of
including those of	legend, affected pre-	of legend, affected pre-	legend, affected pre-
legend, affected pre-	contact Hawaii.	contact Hawaii.	contact Hawaii.
contact Hawaii.			

Benchmark SS.4.6.1 - Explain how language, traditional lore, music, dance, artifacts, traditional practices, beliefs, values, and behaviors are elements of culture and contribute to the preservation of culture

Sample Performance Assessment (SPA) - The student: Describes how specific components of Hawaiian culture assure continuity of the culture and embody cultural values.

Rubric

Advanced	Proficient	Partially Proficient	Novice
Analyze how language,	Explain how language,	Explain that language,	Recognize language,
traditional lore, music,	traditional lore, music,	traditional lore, music,	traditional lore, music,
dance, artifacts,	dance, artifacts,	dance, artifacts,	dance, artifacts,
traditional practices,	traditional practices,	traditional practices,	traditional practices,
beliefs, values, and	beliefs, values, and	beliefs, values, and	beliefs, values, and/or
behaviors are elements	behaviors are elements	behaviors are elements	behaviors as elements of
of culture and contribute	of culture and contribute	of culture and contribute	culture.
to the preservation of	to the preservation of	to the preservation of	
culture.	culture.	culture.	

Grade Level: Botany

HCPS III Benchmark SC.B.4.1 - Describe how plant products (e.g., drugs, timber, spices, herbs, fossil fuels, fibers) impact human life.

Sample Performance Assessment (SPA) - The student: Explains how timber has impacted human life (e.g., history, economics).

Rubric

Advanced	Proficient	Partially Proficient	Novice
Compare the impact of	Describe how plant	Give examples of plant	Explain that plant
various plant products	products impact human	products that impact	products impact human
on human life.	life.	human life.	life.

Grade Level – 12th grade Social Studies/Geography using "Pacific Map" of breadfruit names.

Benchmark SS.12G.2.2 - Describe why places and regions are important to individual human identity and as symbols for unifying or fragmenting society (e.g., physical and symbolic characteristics of places, effects of climate on culture).

Sample Performance Assessment (SPA) - The student: Explains the connections between a student-selected culture and its traditional location.

Rubric

Advanced	Proficient	Partially Proficient	Novice
Describe, with clear and	Describe, with detail,	Describe, with minimal	Ineffectively describe
precise detail, why	why places and regions	detail, why places and	why places and regions
places and regions are	are important to	regions are important to	are important to
important to individual	individual human	individual human	individual human
human identity and as	identity and as symbols	identity and as symbols	identity and as symbols
symbols for unifying or	for unifying or	for unifying or	for unifying or
fragmenting society.	fragmenting society.	fragmenting society.	fragmenting society.

Benchmark SS.12G.4.2 - Assess the impact of human migration on physical and human systems (e.g., effects on ecosystems, resource use, and economic development; effects on population characteristics such as religion and average age)

Sample Performance Assessment (SPA) - The student: Chooses a specific instance of human migration to study and compares statistics about the area before and after.

Rubric

Advanced	Proficient	Partially Proficient	Novice
Assess the impact of	Assess the impact of	Assess the impact of	Ineffectively assess the
human migration on	human migration on	human migration on	impact of human
physical and human	physical and human	physical and human	migration on physical
systems, drawing	systems, drawing	systems, drawing	and human systems.
relevant and strongly	relevant conclusions.	partially relevant	
supported conclusions.		conclusions.	

Works Cited

"Hawaii Content & Performance Standards III Database." Hawaii Department of Education. June 2007. Department of Education. 13 Oct. 2013. Retrieved from http://165.248.30.40/hcpsv3/index.jsp

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BREADFRUIT TERMS

FRUIT

SKIN (PEEL)

CORE

PULP (FLESH)

SEED

MALE FLOWER

LEAF

TOP OF LEAF

BOTTOM OF LEAF

LEAF EDGE

LEAF INDENTATIONS

MIDRIB

FINE VEINS

TREE

CANOPY

TRUNK

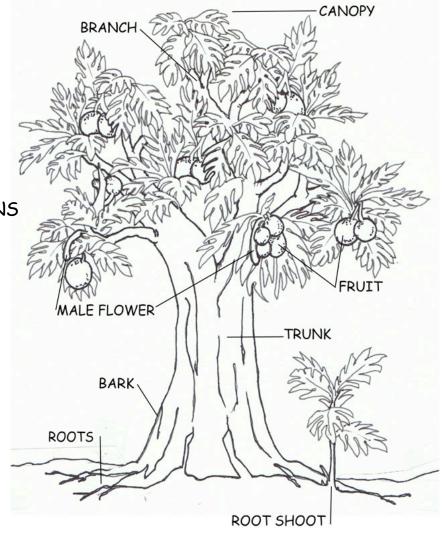
BRANCH

BARK

ROOTS

ROOT SHOOT

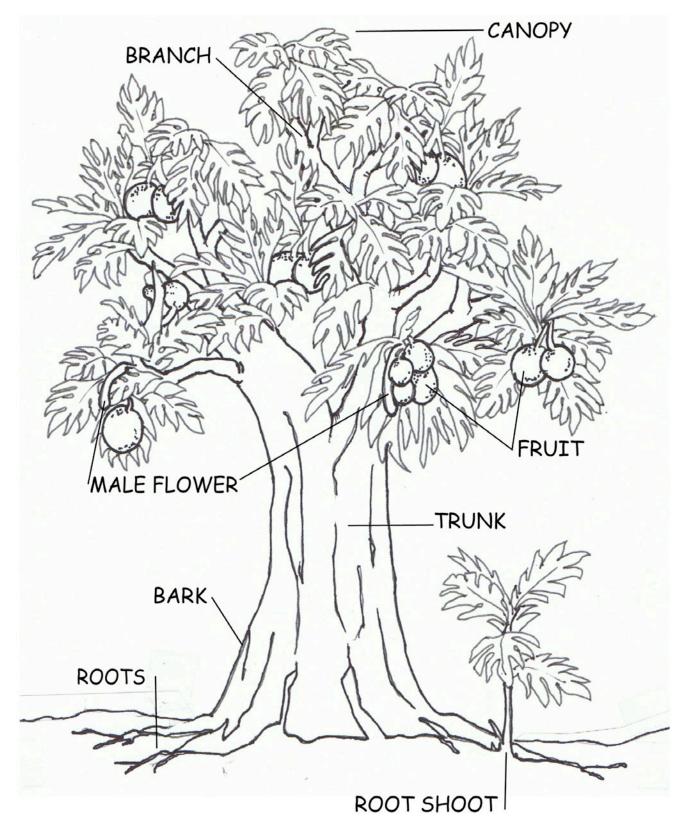
SAP



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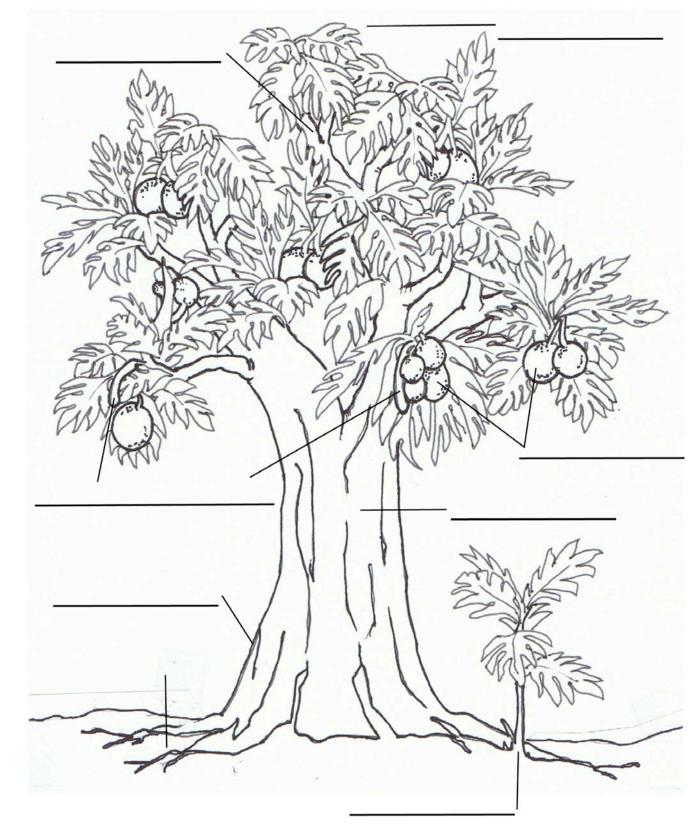
TREE



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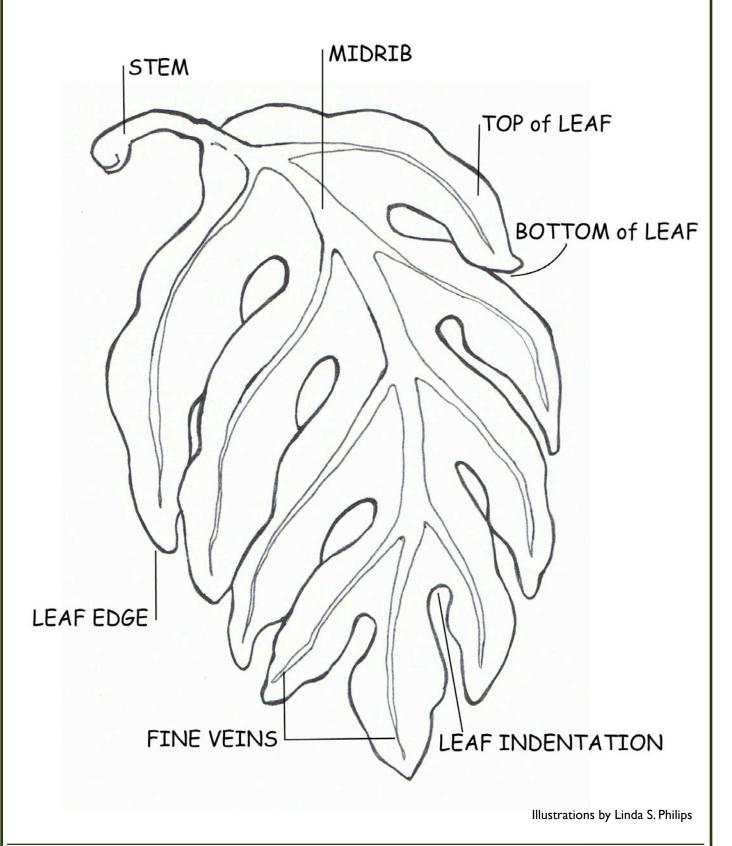
TREE



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LEAF





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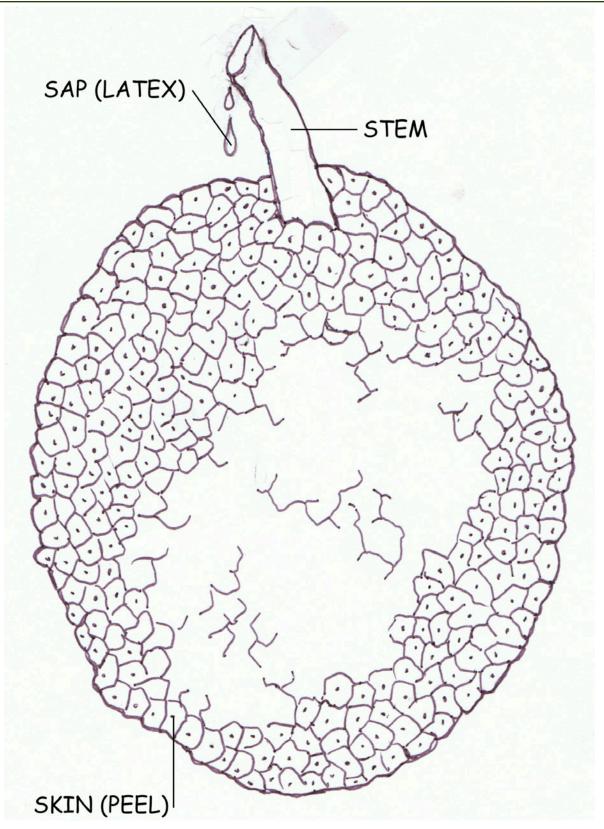
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BREADFRUIT LEAF

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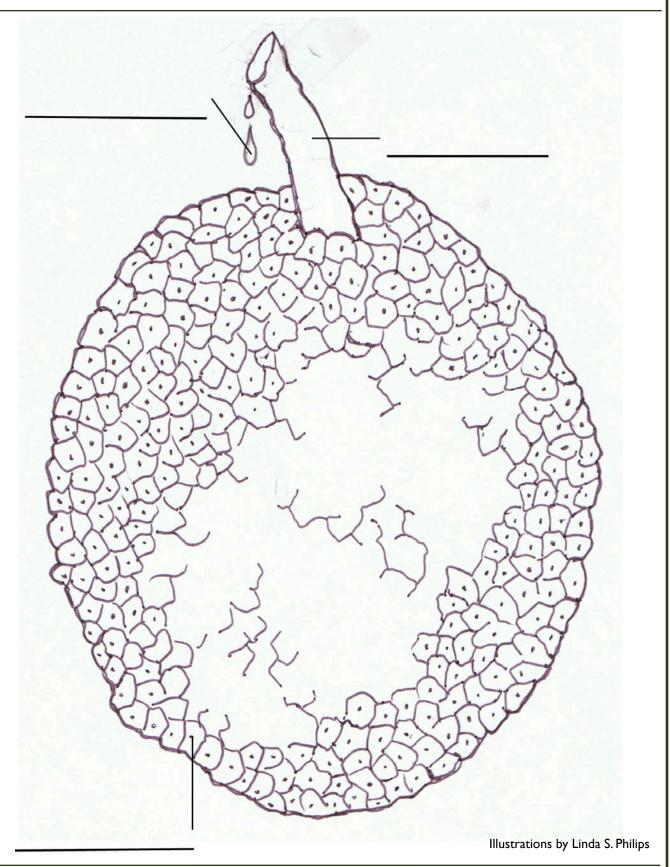
FRUIT



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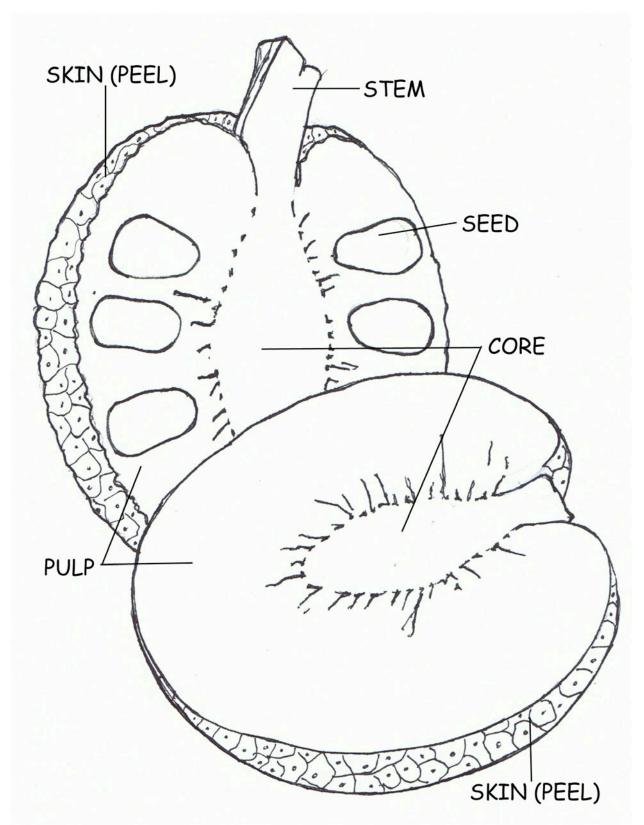


FRUIT





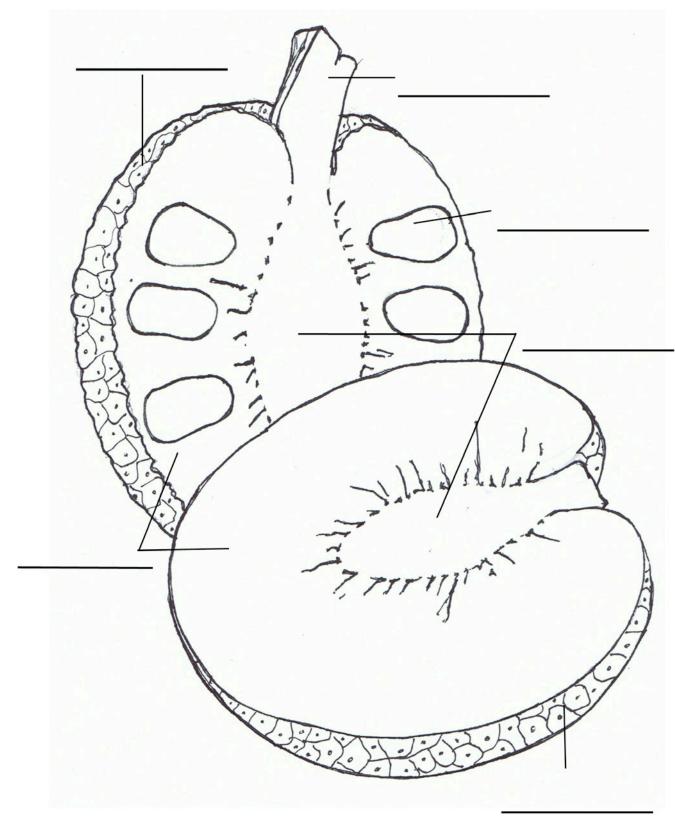
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Breadfruit Names in the Pacific Islands

DUGDUG LEMAI

Kosrae

NORTHER GUEIM

EBELE GUAM Palau

MEI, MAI

MOS

Marshall Is.

MA

RIMAS

Philippines

Papua New Guinea

KAPIAK-

BULO

OCEAN

Yaip and Chullisym Pohnpei Markhall Estands

Solomon ls.

Tokelau Samoa

Kiribati

Fijj ru Van

ME

Tonga

'ULU

COOK ISLANDS

Marquesas MEI



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BETA

Vanuadu

NORFOLK ISLAND

VANUATU

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