

Aloha 'Āina Packet

**E ola with ‘ōlena [turmeric]!
(Immunity Boosting Plant)**

Aloha! ‘O _____
ko‘u inoa.
(*Hi, my name is...*)

No _____ mai au.
(*___ is where I'm from*)

Manawa (date): _____

The purpose of this Aloha 'Āina Packet is to provide keiki with fun activities that can connect them to 'āina from home while we “shelter-in-place” during the COVID-19 crisis. We want to encourage our keiki to go outside and to open their senses to the environment around them in a safe and healthy way.

All activities in this packet can be done with your 'ohana!

The Aloha 'Āina Packet was brought to you by the
Wai'anae Wellness and Place-Based Learning Alliance:

The Cultural Learning Center at Ka'ala
Hoā 'Āina O Mākaha
Mālama Learning Center
MA'O Organic Farms
PALS/PLACES Program, University of Hawai'i at Mānoa,
Searider Productions
Wai'anae Coast Comprehensive Health Center

The Wai'anae Wellness and Place-Based Learning Alliance is an informal association of community-based organizations that are dedicated to providing hands-on, place-based learning experiences and connections to healthy living for Wai'anae children and families.

Mahalo to Hoā 'Āina O Mākaha, Ulu A'e Learning Center, and all of our partners for making it possible to get these packets into the hands of our keiki.

Produced in April 2020

If you have any questions about this packet, please contact
Mālama Learning Center at info@malamalearningcenter.org or
808-305-8287.



Mālama
Learning
Center

E Ola with ‘Ōlena! (Turmeric)

‘Ōlena - Ginger Turmeric

Scientific Name: *Curcuma domestica*

‘Ōlena, or turmeric, is a very nutritious plant to have growing in your garden. This immunity boosting plant was a canoe plant brought to Hawai‘i by the early Polynesian settlers in their voyaging canoes. The plant can be grown from just a “thumb sized” root, making this plant an ideal plant to bring on a canoe with very limited space. Turmeric is known all throughout the world and is a member of the ginger family. ‘Ōlena is native to India, Thailand and other tropical Asian regions. There are several species of turmeric found all over the world.

Uses of ‘Ōlena

Traditionally, the ‘ōlena root was used medicinally. The roots can be pounded and mixed with water to create several medicinal remedies. A couple drops of the ‘ōlena juice in the ear can help take away earaches or can also be squirted into the nose to help clear the sinuses. If you prepare ‘ōlena into a tea and drink it, it is said to help with tuberculosis, bronchitis, colds, asthma, and even reducing inflammation in the blood! On top of all of that, if you apply a little ‘ōlena to a cut or wound, it helps to stop the bleeding. Along with all the medicinal uses of ‘ōlena, ‘ōlena can be used to add a nice spice to your dish. Finally, ‘ōlena can not only be consumed; but can also be used as a dye. The young roots can be steamed or boiled to make a light yellow dye and the older mature roots can be used to make a golden or deep orange dye. These dyes were traditionally used to color kapa (tapa cloth). In ‘Ōlelo Hawai‘i, ‘ōlena also means yellow, due to the color of dye that it creates. **Note: ‘Ōlena should be used carefully and sparingly as too much could cause negative reactions in your body.**

*Source: <http://www.canoeplants.com/olena.html>

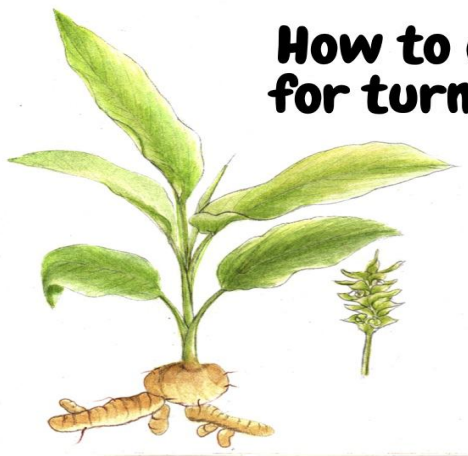


‘Ōlena was traditionally used as a purifier. Ceremonially, the crushed ‘ōlena root was mixed with sea water and sprinkled to remove any negative spirits from places, persons, and things.



‘Āina Activity - Grow Your Own ‘Ōlena Plant

How to care for turmeric



1. Pick a good spot

Turmeric likes to have partial sun and well-drained soil with at least 1 foot of space on each side.

2. Prepare the soil

Use a shovel to make the soil fluffy. Your area should be about 1 foot wide, 1 foot long and 6 inches deep for each turmeric plant. If you have compost, this is a great time to mix in one scoop!

3. Plant!

Dig a small hole 2-3 inches deep. Place the turmeric in the hole and cover with soil. It is best to plant between March and May, in springtime.

4. Water every week

Give the area 2" of water every 5 to 7 days. This is about 1 gallon of water per week.

Tip: count how many seconds it takes you to fill up an empty gallon of milk with your hose at home!

5. Weed the area

During the first 3 months, pull any weeds that might steal water, sun and nutrients from your plant!

6. Harvest!

Once the leaves begin to die back between January and March, carefully use a shovel to dig around the roots and pull them out of the ground. Wash with water to scrub off any soil and store in a cool, dry place. Make sure to save some to replant between March and May!

Planting directions by Kristen Jamieson, Wai‘anae Farm to School Coordinator

Mahalo nui loa to the UH College of Tropical Agriculture and Human Resources (CTAHR) Waimānalo Learning Center for their extremely generous donation of ‘ōlena that have been provided for these packets!



‘Ōlelo No‘eau

(Hawaiian Wise Saying/Proverb)

‘Ōlelo No‘eau:

Huli ka lima i lalo, ola!

Turn your hands down, life!

When your hands are turned down to the soil (‘āina) to work, you are productive and bringing life to the land that in turn gives our communities life, wealth, and abundance.

Source: ‘Ōlelo No‘eau: Hawaiian Proverbs and Poetical Sayings by Mary Kawena Puku‘i.

What does this saying mean to you? How do you give back to our ‘āina? Write your answers below.

Let's Reflect

Think about your one hānau or birthplace -- where you are rooted. Try to find out the following information below about your one hānau. Then, draw a picture of it in the space below.

‘O _____ ku‘u one hānau.

(My birthplace is _____.)

‘O _____ ka ua.

(The rain is _____.)

‘O _____ ka makani.

(The wind is _____.)

‘O _____ ke kuahiwi.

(The mountain is _____.)



Sound Map

Directions: Listen for different sounds. It's helpful if you close your eyes while you listen. What do you hear? Is the sound in front of you? Behind you? Draw a symbol for the sound you hear and where you hear it. Each different sound gets a different symbol. *For example, the sound of wind gets a wave symbol. The sound of birds gets a bird symbol.* Write your symbols with descriptions in your map legend.

The area in front of
you

The area to the left
of you



The area to the
right of you

This dot represents the location where
you are sitting

The area behind
you

Map Legend

example



symbol for wind

Kilo 'Āina

(Observing our Environment)

Take 15 minutes everyday to observe natural phenomena (wind, sun, moon, rain, clouds, plants, animals, ocean, etc...) and describe what you see, hear, and feel. You can also draw pictures. Try to do this in silence so that you can really connect to your place. You can also show progress of the seeds that you've planted!

Kilo Day 1

Manawa (date):

Mahina (moon):

Kilo (observation):

Kilo 'Āina

Kilo Day 2

Manawa (date):

Mahina (moon):

Kilo (observations):

Kilo Day 3

Manawa (date):

Mahina (moon):

Kilo (observations):

Kilo 'Āina

Kilo Day 4

Manawa (date):

Mahina (moon):

Kilo (observations):

Kilo Day 5

Manawa (date):

Mahina (moon):

Kilo (observations):

Kilo 'Āina

Kilo Day 6

Manawa (date):

Mahina (moon):

Kilo (observations):

Kilo Day 7

Manawa (date):

Mahina (moon):

Kilo (observations):

'A'ole Invasive Species!

Can you design a trap to catch CRB?

What are Invasive Species?

Invasive species have been introduced to Hawai'i (either on purpose or by accident) and cause harm to the environment, economy, and/or human health. Invasive species tend to spread rapidly -- their populations become uncontrollable and can overtake native habitats.

The Coconut Rhinoceros Beetle

The Coconut Rhinoceros Beetle (CRB) was first detected in Hawai'i in December 2013. CRB is native to the Asian tropics, however, was accidentally introduced to western and central Pacific islands. CRB is considered a highly invasive species in Hawai'i due to the damage they cause to our palm species, including our native loulu palm. Signs of CRB damage to palms include bore holes within the crown (the top) of the tree and V-shaped cuts within the leaves of the palms.



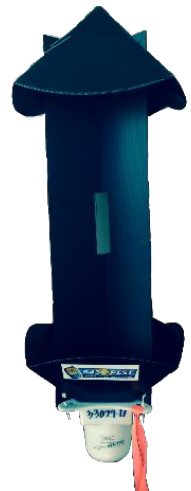
Bore hole caused
by CRB



V-shaped cuts
within the leaves
caused by CRB

CRB Traps

Have you seen these traps around your neighborhood and wondered what they were for? The Hawai'i Department of Agriculture currently has deployed more than 3,000 of these traps on the island of O'ahu. These traps are used to trap and track the movement and location of CRB, not kill it. The traps are all black so the beetle cannot see the traps at night. When they fly around at night, they tend to hit the traps and fall into the cup at the bottom. The trap also has a pheromone or chemical attractant attached to it, which draws the beetle towards it. A diagram of how the trap works is displayed on the next page. The traps seem to be effective, however the cost to construct the trap is quite expensive, especially when the State must construct over 3,000 of them!

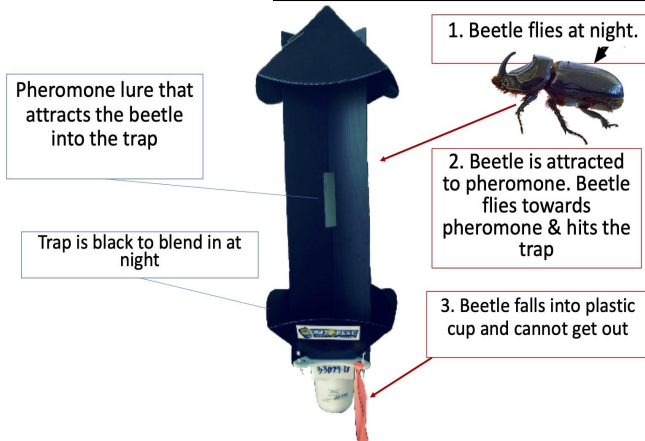


'A'ole Invasive Species!

Can you design a trap to catch CRB?

Design a trap to catch the CRB! If you were the engineer, how would you design a trap to catch the Coconut Rhinoceros Beetle (CRB) knowing that it is nocturnal (active at night) and flies around at night? How could you create a less expensive trap using recycled/reused materials? Should anything else be added to the trap to make it more effective? Make sure to label your trap and provide reasoning for your design.

How the CRB Trap Works



Draw your unique design of a CRB trap:

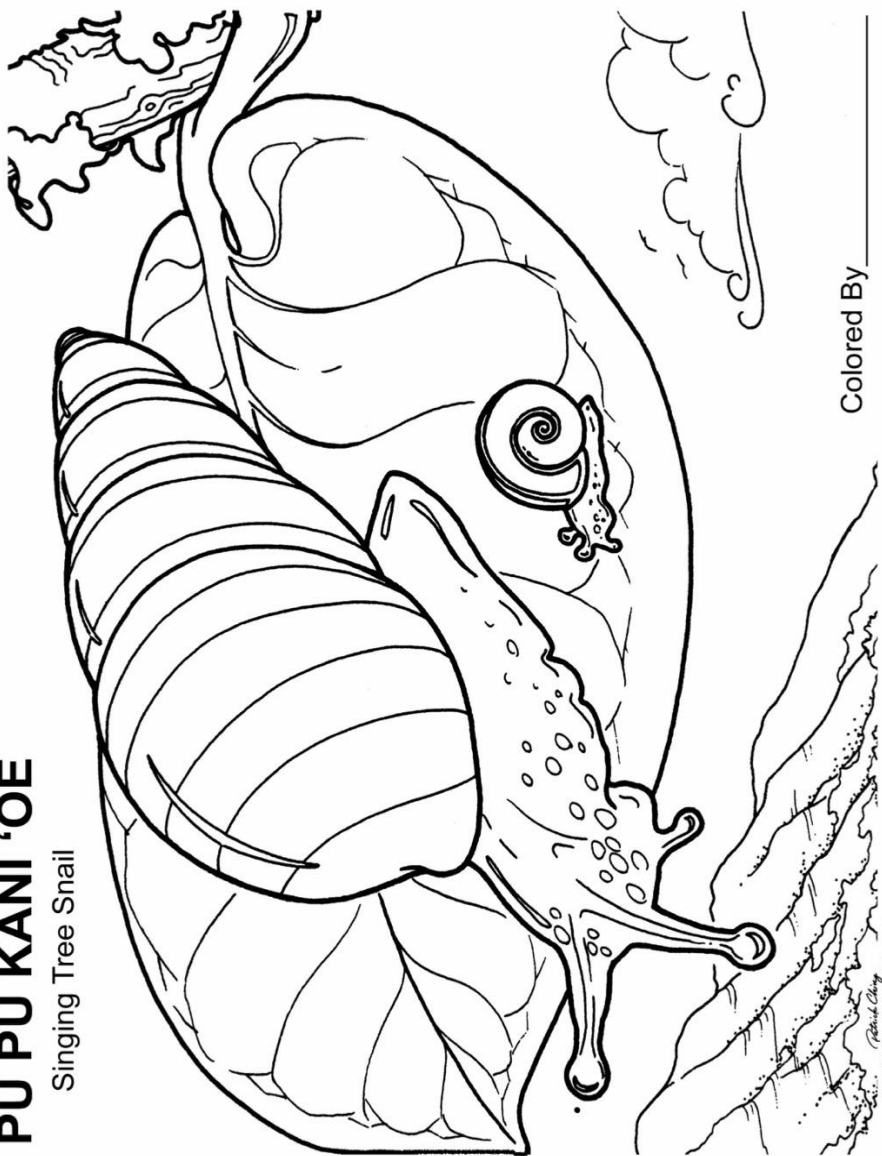
Hana No'eau Art Activity

The Native Kāhuli, or Pupu Kani 'Oe, Tree Snail: Enjoy this coloring sheet made by Native Hawaiian artist Patrick Ching. *Achatinella mustelina*, the native kāhuli tree snail, is endemic to Hawai'i- this particular species can only be found on the island of O'ahu! Kāhuli tree snails are very small, only growing to about 2.5 centimeters long. The snails live on native trees and eat the fungus that grows on the leaves of trees and shrubs. The kāhuli's shells were once used to make lei, causing an initial decline in their population. Today, predators such as rats, Jackson chameleons, and introduced snails such as the rosy wolf snail are the greatest threats to kāhuli tree snails.

Information from The National Wildlife Federation and from the Bishop Museum's Malacology Lab

PU PU KANI 'OE

Singing Tree Snail



Colored By _____

Hana No'eau Art Activity

What is a Watershed?

A watershed collects and delivers water to the land. In Hawai'i, an ahupua'a is a land divided watershed and a unique part of our landscape. All watershed processes start from Mauka and flow Makai. Healthy native forests capture fresh water. Unfortunately, our native forests are being threatened by human impacts and invasive species. *How can you help your watershed?*

Parts of an Ahupua'a

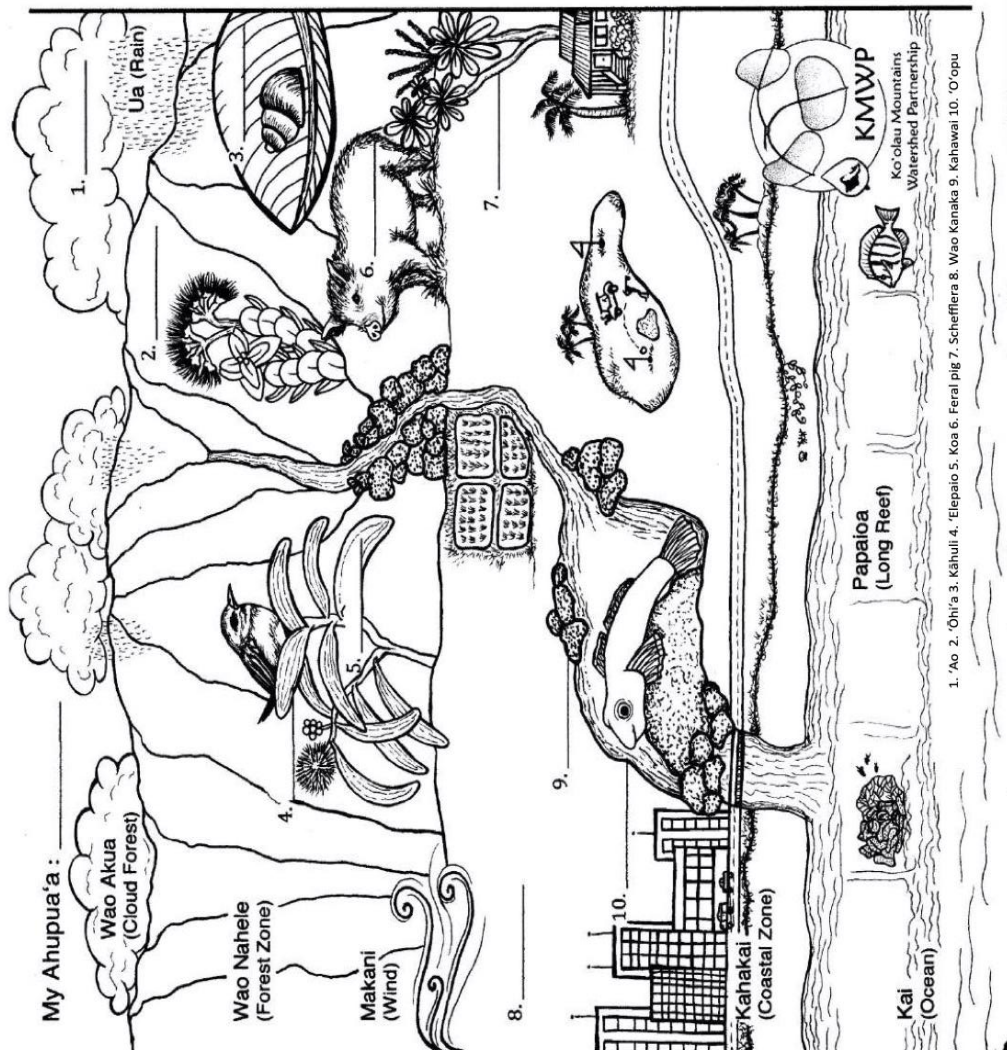
Wao Kanaka (where we live)
Kahawai (stream) - 'O'opu
'Ōhi'a - Koa - Kāhuli snail
'Elepaio - Feral pig
'Ao (cloud) - Schefflera

Now, draw where you live in the watershed!

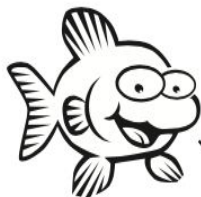
About Ko'olau Mountains Watershed Partnership

KMWP recognizes that the Ko'olau Mountains watershed is an invaluable resource for the island of O'ahu. It is integral to the island's present and future water supply. Proper management of the forested watershed is needed to preserve and protect the usefulness and value of the watershed perpetuity.

Website: koolauwatershed.org
Email: koalupartnership@gmail.com
Phone: (808) 435-6110



Tons of Trash!



Litter is generated by many sources, from boats and oil rigs on the water to picnickers, fishermen, and beachgoers along the shore. Hidden below is a list of objects that have been discarded into our oceans. See if you can find them all!

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

BAIT CONTAINER
BALLOON
BUCKET
BUOY
CIGARETTE

CRATE
CUP
DIAPER
DOLL
FISHING LINE

FISHING NET
GLASS BOTTLE
GLOVE
HARD HAT
HOSE

LUMBER
PAINT BRUSH
RADIO
ROPE
RUG

SHOE
SODA CAN
STRAW
TIRE
TRASH BAG

‘Ohana Activity

‘Ōlena Natural Dye

What You’ll Need:

- 2 tablespoons ground ‘ōlena (turmeric) per cup of water
- White distilled vinegar (1 tablespoon per cup of strained dye)
- Saucepan with lid
- White dish
- Fine-mesh strainer
- A second saucepan or container to hold & store liquid dye
- Paper towels
- Things to dye: Eggs, fabric, bags, etc....
- Gloves to keep your hands from getting stained

Instructions:

- Follow the ratios given above for each ingredient to make more or less dye.
- Add water to a saucepan.
- Add the dye matter and bring the water to a boil.
- Turn the heat down to low and simmer, covered, for 15 to 30 minutes.
- Check the color. The dye is ready when it reaches a hue (color) a few shades darker than you want for dyed material. Drip a little dye onto a white dish to check the color.
- When the dye is as dark as you like, remove the pan from the heat and let the dye cool to room temperature.
- Strain well by pouring the cooled dye through a fine-mesh strainer into another saucepan/container (e.g., mason jar, plastic tub).
- Stir the vinegar into the dye — use 1 tablespoon of vinegar per cup of strained liquid. This helps to keep the dye from fading.
- Start dyeing! The longer you keep your material in the dye, the darker the color will be.



Note: Dye may stain pots and countertops. The color will eventually fade, but making a thick paste of baking soda and water and scrubbing the stain can help.

Recipe Source:

<https://www.thekitchn.com/how-to-make-vibrant-naturally-dyed-easter-eggs-holiday-projects-from-the-kitchn-112957>

How to Make...

Ginger Candy + Syrup

Ingredients : + Ginger Root
+ Sugar
+ Lime Juice

Steps:

for syrup
add lime juice
and dilute
with water
to taste.
Enjoy hot
or cold!

1. Peel ginger
2. Slice ginger, thinly
* trick: use a mandoline for
thin - even pieces
3. place 1 cup ginger slices
in a sauce pan with
1 cup sugar and 2 cups
water. Bring to a boil
4. Simmer low for 1-2 hours
5. Strain well
6. Use ginger syrup for
teas, pancakes!
- for candy { 7. Dip slices in sugar
8. Bake at 200°F for 1-2 hours
until dry. Enjoy!

'Ohana Activity

E Kama'ilio kākou! Let's Converse!

Practice introducing your 'ohana in 'ōlelo Hawai'i
(Hawaiian language).

Ko'u 'Ohana (My Immediate Family)

'O _____ ka inoa o ko'u makuakāne.
(My father's name is _____.)

'O _____ ka inoa o ko'u makuahine.
(My mother's name is _____.)

'O _____ ka inoa o ko'u (kaikua'ana).
(My sister/brother's name is _____.)

*See below for more sibling terms.

Noho pū lākou ma _____.
(They live in _____.)

A hānau 'ia au, 'o _____, ko'u inoa.
(I was born, _____, is my name.)

Kaikua'ana - Older sibling of the same gender

Kaikaina - Younger sibling of the same gender

Kaikuahine - Sister of a boy

Kaikunāne - Brother of a girl

‘Ono Healthy Recipe

Enjoy this ‘ono ‘Ōlena Tea recipe with your ‘ohana at home.

Ingredients

- 2 cups milk of choice such as almond pecan, coconut, or dairy, or use bone broth in place of the milk for a more hearty tea
- 1 tsp ‘ōlena (turmeric) root ground powder
- ½ tsp cinnamon
- Pinch of ground black pepper
- Tiny piece of fresh peeled ginger root or ¼ tsp ginger powder
- Pinch of cayenne pepper (optional)
- Honey or maple syrup (optional)

Instructions

- Blend all ingredients, except pepper, in a high-speed blender until smooth.
- Pour into a small saucepan and heat for 3-5 minutes over medium heat until hot, but not boiling.
- Add the pepper, stir to combine. (The pepper helps to activate heat absorption of turmeric and its anti-inflammatory properties.) Drink immediately.

Note: This may stain blenders and countertops. The color will eventually fade, but making a thick paste of baking soda and water and scrubbing the stain can help.

Nutrition

Serving: 1/2 cup | Calories: 61kcal | Carbohydrates: 4.4g | Protein: 1.9g | Fat: 4g | Saturated Fat: 0.3g | Fiber: 1.9g | Sugar: 2.5g

Recipe Source: <https://wellnessmama.com/223/turmeric-tea/>

Weekly Mahalos!

Write or draw three things you're thankful for this week:

1.

2.

3.

Olakino

(Healthy Body)

Here's some reminders to keep you and your 'ohana safe & healthy during the health crisis we are facing with COVID-19:

- Drink lots of wai (water) to stay hydrated.
- Be active. Work your muscles!
- Get a good night's rest everyday.
- Eat well. Limit fast foods that are high in fat and sugar.
- Wash your hands with soap frequently for at least 20 seconds.
- Avoid touching your face (eyes, nose, mouth).
- Clean and disinfect frequently touched objects and surfaces.
- Avoid hugs, handholding, and handshakes. Give the shaka!
- Spread aloha always.

What else can you do to keep your 'ohana safe and healthy?

Did you know? Invasive snails tend to carry more of the parasitic nematode-
Angiostrongylus cantonensis (rat lungworm) - than native snails. This parasitic
nematode is what causes rat lungworm disease. **ALWAYS THOROUGHLY WASH
YOUR FRESH PRODUCE & HANDS BEFORE EATING!**

Share Your Progress!

Mahalo for completing our Aloha 'Āina Packet! We hope you enjoyed the activities! Please share your progress with us by taking photos of anything you'd like to share and posting to your social media (tag us). Or send your photos directly to us through email. We would love to see how you're doing! We plan to make weekly packets with different activities until the end of your school year.

Mālama Learning Center

Social Media: #malamalearning #malamalearningcenter

**Hashtags for this project: #alohaainapacket
#growingseedsintimesofneed**

Email: info@malamalearningcenter.org



Mālama
Learning
Center

Mālama Learning Center is a private non-profit organization in West O'ahu that brings art, science, conservation, and culture together to promote sustainable living throughout Hawai'i.

www.malamalearningcenter.org