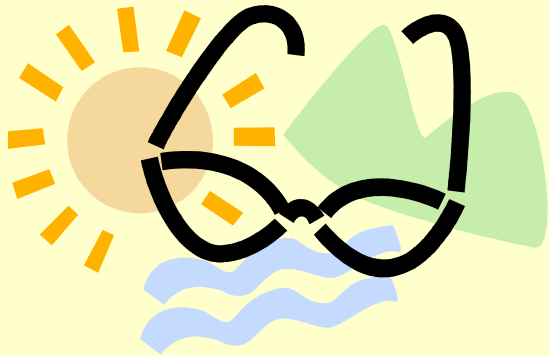
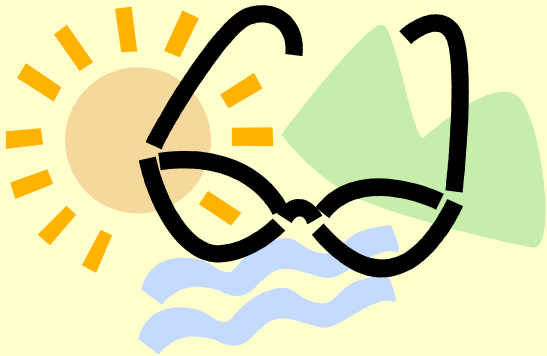
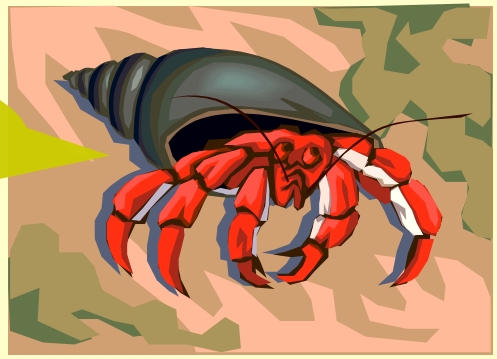
Howzit Kids! Come join me, “Henry the Happening Hermit Crab,” on an amazing adventure through some of Hawai‘i’s most beautiful shoreline habitats. Grab those sunglasses and let’s go!

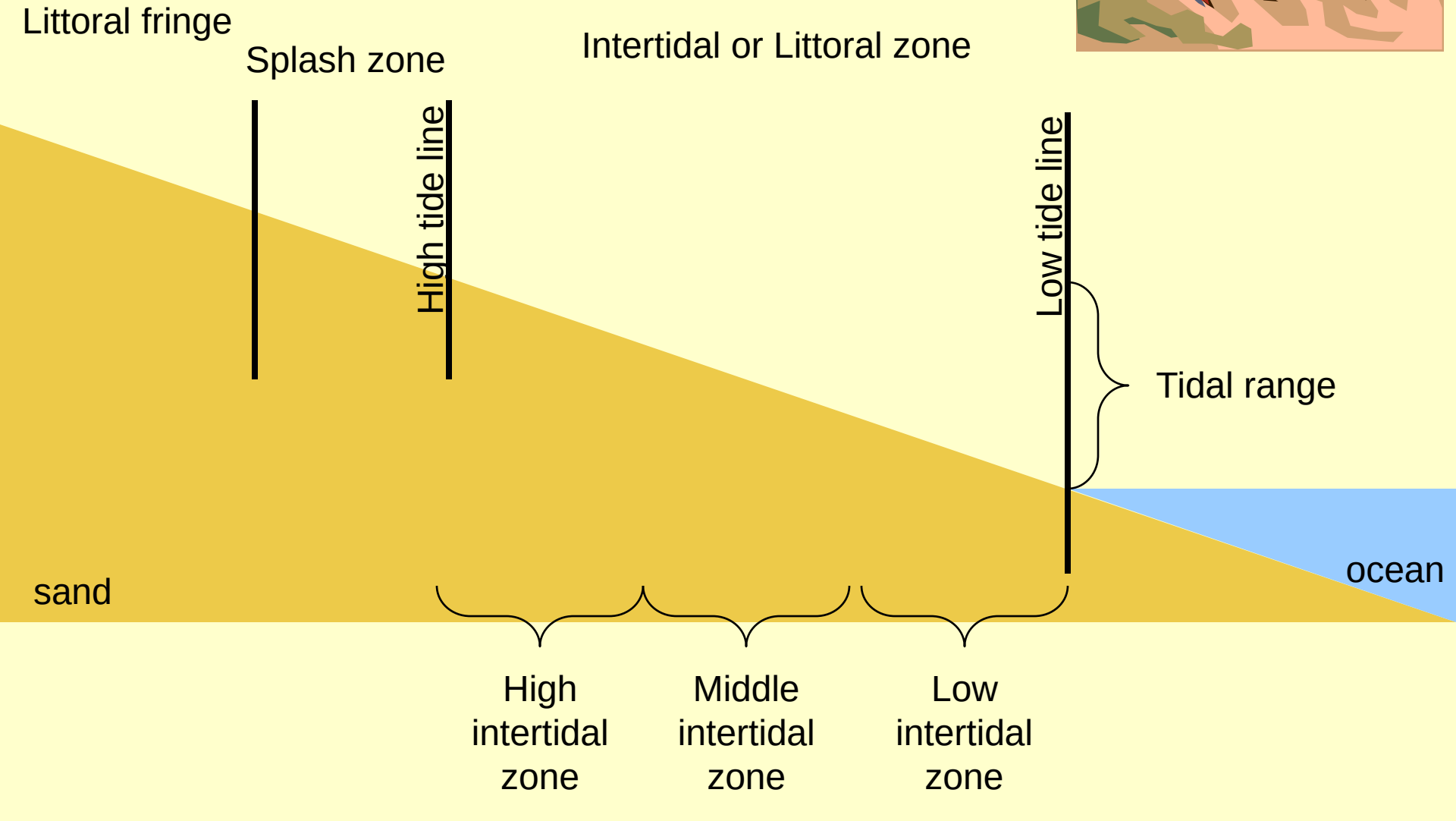


Scientists divide the shoreline habitat into different zones to study them more easily. I want to show the zones to you and some of my friends that live in each zone.



These are the different zones, or neighborhoods where my friends live in the shoreline habitat.





Hi, Nancy NAUPAKA! I'm glad to see you looking so waxy and beautiful. I know those thick waxy leaves help prevent water loss. Good thing for those shallow spreading roots to help hold you in place in the loose sandy soil! The LITTORAL FRINGE, or the land along the shore out of reach of tides and waves, can have some pretty tough living conditions, like no freshwater, strong winds, and scorching sun. I'm amazed how beautiful and green you stay, you're one tough plant!

Oh Henry, you do go on about my beautiful ADAPTATIONS!! You know everyone that lives in the LITTORAL FRINGE, and the adjacent INTERTIDAL ZONE must be tough guys with special adaptations to survive. Just look at those beautiful NERITE SNAILS, PERIWINKLES, and ROCK CRABS. Now those guys live in the SPLASH ZONE because water loss and overheating are major problems for them! At least I don't get sprayed and splashed by salty waves too often.

Hi there Aaron the ‘A‘AMA CRAB, or ROCK CRAB! I see you are hanging out with Nalu the NERITE SNAIL and Pohai the PERIWINKLE. I notice you all have water tight shells and skeletons to help you retain moisture.

You can call me Pip, short for my Hawaiian name PIPIPI

Instead of Pohai Periwinkle, you can call me PUPU-KOLEA, my real Hawaiian name.

You know Henry, here in the SPLASH ZONE, we can lose water easily and become overheated. By clustering up next to each other we can retain our moisture and help reduce the awful heat. Teamwork!

You all sure look crowded all piled up there together!

Aaron ‘A’AMA crab, you are fast dude!

Henry Dude, I have to be agile and quick to avoid strong waves, like the one coming! My body is also flat to help deflect the force of waves. Check out my strong legs for gripping rocks too. You better scurry fast Henry...

This shell is getting too difficult to move in, I think it's time for a new shell. I'm going to find a bigger, more beautiful one to crawl into and make my home!

Now we're talking...how about this snazzy new shell? You know, finding the right shell for my "happening house" is part of my ADAPTATIONS. Because my body is soft and I continue to grow, I need to change "houses" or shells. Notice my big claw allows me to "close" my door and hide safely inside.

This is an example of a tide pool, one of my personal favorites for hanging out in. They are carved out by waves crashing into the rocky shorelines. They're called tide pools because they get "refilled" when the tide comes in.

Some organisms like these limpets, or *'opihi*, in Hawaiian, are specially designed to withstand some of the most rugged shorelines. Their unique cap-shaped shell provides protection from the strong waves. The animal inside has a very strong foot that helps it cling to the rocks.

There are some pretty cool organisms that live in tide pools. Tide pools can range from just a few inches in diameter and very shallow to knee deep and several feet in diameter. The plants and animals that live in tide pools, like myself, are very hardy. We have to withstand extreme temperature changes, without wearing different clothes! At low tide, sunny day can be very warm, it also gets really salty as water is evaporated. During high tide, the temperature drops as cooler water from the ocean covers the pools. Sometime we can really get pounded by waves!

Golly, look it's a GOBY, or in Hawaiian -*'O'OPU*. These dudes can camouflage themselves to blend into the tide pool environment. They also have pelvic fins that are fused together to a suction disc. This helps them cling to rocks when waves wash through the tide pools.

Randy the ROCK-BORING SEA URCHIN, look at those moveable spines to protect you! I won't get too close! Not that I could get to you tightly wedged into the crevices and rocks!

Eh brah, this is a Hawaiian tide pool, call me *'INA KEA*

Here's where all my friends you met live in the shoreline habitat.

Littoral fringe

Splash zone

Intertidal or Littoral zone

Trees

Birds

Naupaka

Rock crabs

High tide line

Low tide line

Tidal range

Crabs

limpet

Periwinkles

Nerite Shail (Pipipi)

Mussels

Barnacles

Tide pools

Turf algae

urchins

Small fish

rock

ocean

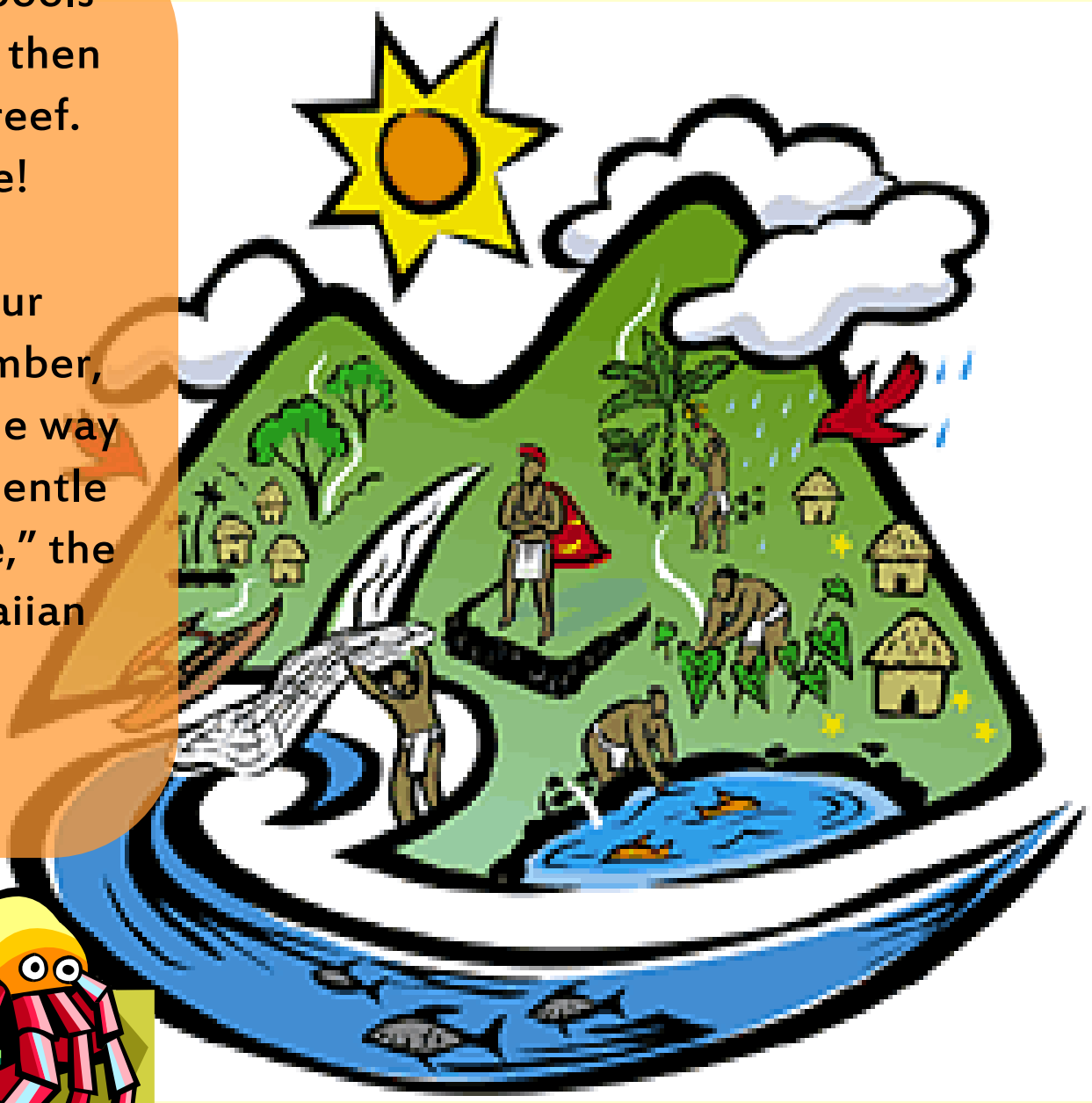
High intertidal zone

Middle intertidal zone

Low intertidal zone

Well kids, after the tide pools are some crashing waves, then deeper SURGE-SWEPT reef. That's too deep for me!

I hope you enjoyed your shoreline tour, and remember, we are all connected in one way or another, so please be gentle around the "Fragile Fringe," the delicate, but hardy Hawaiian Shoreline!



Henry the Happening Hermit crab is asking YOU to please don't let this happen to our beautiful Hawaiian shorelines...

It's up to you to preserve and keep our diverse shoreline habitats pristine for future generations.