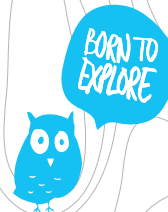


JUNIOR RANGERS



LET'S GO BEACHCOMBING!

AMAZING TREASURES SUCH AS MYSTERIOUS SKELETONS, EGG CASES, SEAWEED AND SHELLS WASH UP EVERY DAY ON VICTORIA'S BEACHES. THESE TREASURES GIVE US INTERESTING CLUES ABOUT WHAT LIVES BENEATH THE WAVES.

Searching for these treasures on the beach is called beachcombing and can be done anywhere along Victoria's coast. Fresh seaweed is washed up every day along the daily tide line and along the high tide mark you can find plants and animals that have been there for a bit longer.

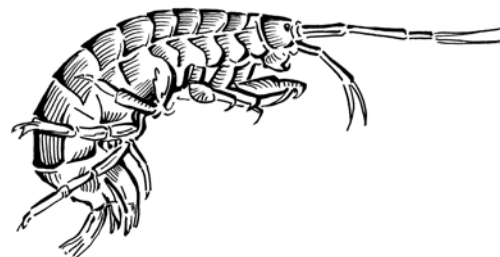
Before you start:

For your safety, always visit the beach at low tide and with an adult. Never touch sharp objects or larger animals like birds, jellyfish and fish. Wear a hat, long-sleeved shirt and sunscreen.

Remember to take photos and have fun, take your rubbish home and leave all the creatures, seaweeds and shells where they are.

HOPPING CRITTERS

Lift up some seaweed on the high tide mark at the top of the beach that has been there for a while. Can you see tiny critters hopping around like fleas? Can you guess what they are and what they are doing?



*See answer below left.

TAKE A WALK ALONG THE HIGH TIDE MARK AND SEE IF YOU CAN FIND SOME OF THESE AMAZING TREASURES. TICK OFF WHAT YOU FIND ON THIS SHEET AND COLOUR THE PICTURES.

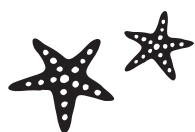
Moon Snail egg mass

Many people get Moon Snail eggs confused with Jellyfish. These jelly like objects are actually Moon Snail egg masses – which are three or four times bigger than themselves. Hold an egg mass to the light. The hundreds of small dots are tiny snail embryos.



Swim bladder

Lots of fish have a swim bladder which they can adjust to help them float. This one belongs to the Globe Fish or puffer fish.



*Answer These animals are called sand hoppers and are feeding on dead seaweed. Sand hoppers are crustaceans; they are the smaller 'cousins' of crabs. They hop by flexing their stomach and spend much of their time buried in the sand to escape the dryness and heat of the day.

LET'S GO BEACHCOMBING!



Feather

Feathers do many jobs for birds. Soft down keeps them warm, wing feathers allow flight and tail feathers are used for steering.



Purple Sea Urchin

Sea Urchins have spines when alive, which help protect them from predators. They have hundreds of tube feet to move around with and a mouth on the underside of their body. Sea Urchins use their five teeth to feed on algae.



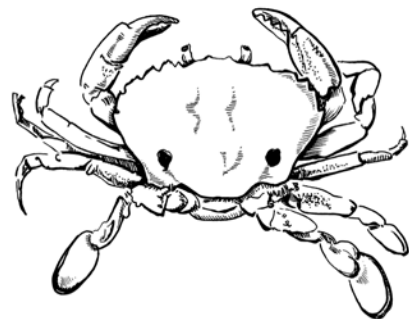
Cat Shark egg

This is one of the coolest things to find on the beach. It looks like seaweed, feels like seaweed, but is in fact a shark egg! Cat Sharks are small sharks that produce egg cases that look like purses. The long, coiled tassels at one end of the egg helps the sharks tangle their eggs into sea weed.



Surf Crab

Surf Crabs have flattened legs that look like paddles. They use these to dig backwards and bury themselves rapidly into the sand when disturbed.



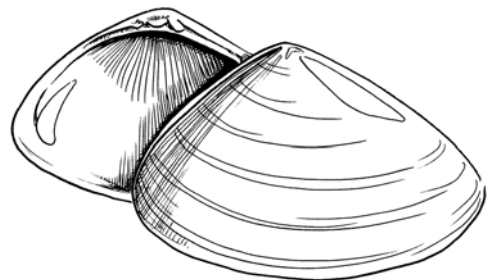
Port Jackson Shark egg

After a female Port Jackson Shark lays her eggs; she uses her mouth to wedge them into a rock crevice. The young sharks hatch after ten to twelve months.



Pipi

The Pipi lives a few centimetres beneath the surface and uses its foot to burrow into the sand.



LET'S GO BEACHCOMBING!



Short-tailed Shearwater or Mutton Bird skull

Each year millions of Short-tailed Shearwaters travel from their feeding grounds in the northern hemisphere to their breeding grounds in Australia. A one way trip is 10,000 km and takes the birds up to six weeks. After the exhausting trip, some shearwaters get caught in storms and wash up dead on our beaches.



Potbelly Seahorse

After a female seahorse lays her eggs, the males protect the eggs in their pouch until they hatch.



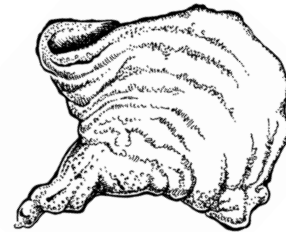
Globe Fish

This amazing fish can expand or 'puff' up to twice its original size to scare away predators.



Sponge

Sponges are brightly coloured when alive, but when you find them on the beach, they have usually lost their colour. The bright colour of a sponge signals 'danger' to other animals as a sponge's skeleton is made up of glasslike 'spicules' or spines. Anything that tries to eat it will end up with a mouthful of 'glass'.



Mangrove seed

Mangrove plants drop seeds which are carried by the tides and wash up all along the coast. If the seed gets carried into shallow water where mangroves can grow, roots are quickly sent out to take hold in the soil to help grow another mangrove.



Blue Blubber Jellyfish

The Blue Blubber Jellyfish has tentacles with stinging cells which it uses to capture crustaceans and other plankton.



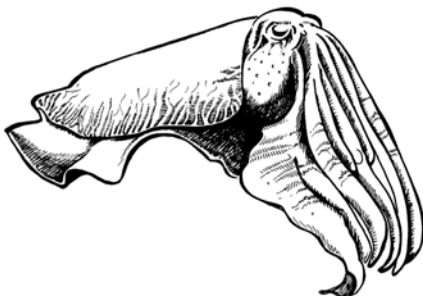
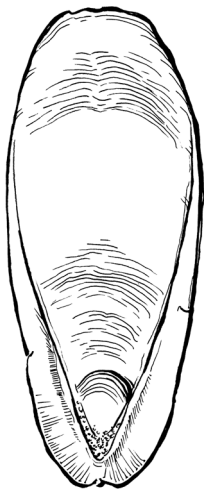
LET'S GO BEACHCOMBING!



CUTTLEFISH BONE

Live Cuttlefish actually look a lot different to what many people think. They are related to and look a lot like squid and octopus. Their bones provide support for their body and help them float. When you find a cuttlebone have a look for marks. Who do you think made these marks?

****See answer below left of page**



****Answer** Dolphins, sharks and seals eat cuttlefish and leave teeth marks behind on the cuttle's bone. If teeth punctures can be seen in regular rows, they have probably been made by dolphins or seals. If the marks are all over it, a bird may have pecked at the cuttlefish after it died.

CARNIVORE OR HERBIVORE?

PICK UP TWO SNAILS ON THE BEACH AND LOOK AT THE OPENING OF THEIR SHELLS. CAN YOU TELL IF THEY EAT MEAT AND ARE CARNIVORES, OR THEY EAT PLANTS AND ARE HERBIVORES?



Warrener Snail

If the opening of a shell is round and looks like a salad bowl, more than likely it is a herbivore and eats 'the salad of the sea' (algae).

Dog Winkle

If the opening of a shell has a small groove like a gravy boat, more than likely it is a carnivore and eats other snails. Carnivore snails use a tongue known as their 'radula' to drill a hole into another snail's shell. Once the hole is drilled, they eat the animal inside.

SEE IF YOU CAN FIND A SHELL ON THE BEACH WITH A TINY HOLE DRILLED INTO IT. NOW YOU KNOW IT HAS BEEN EATEN BY A 'KILLER SNAIL'!

