

# Oceans

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Parents and teachers: Please read the fact sheets about marine animals aloud to encourage children to learn more exciting facts about these precious animals.

# When I Grow Up

**When I grow up, I want to be  
something very interesting.  
The job I'll do will help a lot of people,  
and I'll like the work that I do.  
Each day will be adventurous,  
and I'll strive to learn a lot.  
Then I'll share what I know  
and my knowledge will grow.  
It's the perfect, perfect job!**

*When my family goes on vacation in the summertime, we usually go to the beach. I really like to go scuba diving and look at life underneath the ocean. I think I want to be a marine biologist when I grow up. Besides studying whales, dolphins, or the great white shark, I want to discover new medicines to treat human diseases. I also want to help the endangered animals of the ocean, like the gentle manatee and the large sea turtles.*

Now science is important,  
so I'll study hard when learning about biology.  
Experiments in chemistry will  
help me learn to develop good hypotheses.  
Then I'll read and I'll read  
and I'll read some more,  
and I'll share just what I learn,  
'cause when I grow up I want to  
be something very interesting.  
**(Chorus)**

**Yes, I'll share what I know  
and my knowledge will grow.  
It's the perfect, perfect job!  
The perfect, perfect job!**



# Adventures By The Ocean

I see the brilliant ocean.  
I smell the gentle breeze.  
I'm looking for adventure,  
so I gather all my things.  
I think I'll take a fish net,  
a bucket, and some tools.  
For off I go collecting, so  
I'll wear old tennis shoes.

**Adventures by the ocean with crabs and fish and snails.  
I search for little creatures. Who knows what I'll unveil!  
I use a magnifying glass to see in great detail  
each creature that I gently scoop and put inside my pail.**

A shovel will be needed,  
and a smaller net to find  
the crabs that will be hiding  
close by the ocean tide.  
I'll bring a plastic jar to gather  
water and small plants.  
I'll take it home to look  
under my microscope's clear glass.

**(Chorus)**



# I Need A Sponge To Take A Bath

I need a sponge to take a bath. It holds the water well,  
for holes and tunnels fill with water as it starts to swell.  
Would you believe it was alive? It once lived in the sea.  
A sponge it is an animal, a marine biologist told me.

*It's true. Although most bath sponges are made in factories today, sponges are found in the ocean. A sponge is the soft skeleton of an animal, but sponges are very different from other animals. A sponge does not move about to find food, but depends on the surrounding water to provide food and oxygen for it to live.*

A sponge it stays in the same place. It doesn't move around.  
Through holes, the sponge gets food as water then surrounds.  
Pumping tiny plants and oxygen, the sponge gets all it needs;  
and ocean sponges help to keep the water nice and clean.

*Actually, the sponge is like a filter. Through holes called **pores**, the water is pumped into the sponge leaving behind tiny plants, animals, and oxygen that the sponge needs to survive.*

Now crabs and shrimp and little fish they do like to hide,  
for sponges make safe places, and good homes they do provide.  
They come in different colors. You wouldn't believe the size,  
for some sponges are so big that a person could fit inside.  
So when I start to take a bath, I take a sponge with me,  
remembering the animal that once lived in the sea.  
I squeeze the tiny skeleton and dunk it in the tub  
and sing my favorite little song, a-rub-a-dub-a-dub!

**(Chorus)**



# Save The Sea Turtles

They live in parts of the ocean where the water is not cold.  
They cannot hide their heads inside their shells, I am told.  
Their flippers help them dive and swim. They're really quite a sight.  
These large reptiles will lay their eggs on the shore at night.

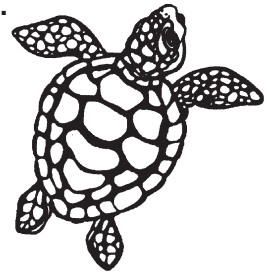


The mother crawls on the beach to find the perfect place,  
and digs a hole for her eggs. She wants them to be safe.  
And then she'll lay a hundred eggs and hide them in the sand.  
When the babies hatch, they pop out and race across the land.

*Baby sea turtles hatch after about 10 weeks. They seem to instinctively know to race across the land toward the ocean. They usually hatch at night so they won't be eaten by predators.*

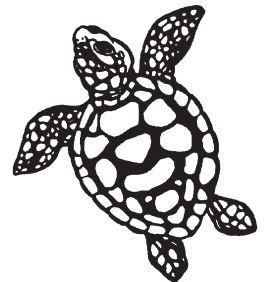
**Save the sea turtles. Don't destroy their homes.  
With pollution and garbage, they won't be safe to roam.  
And don't buy any products made from their precious shells.  
Let's protect these animals and keep them safe and well.**

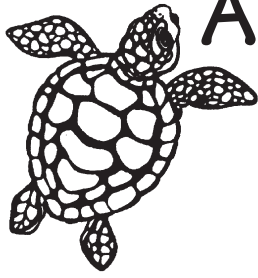
The leatherback sea turtle is the largest of its kind.  
It can weigh 350 pounds, a masterful design.  
You wouldn't believe what it eats. It only eats one dish.  
The leatherback sea turtles prefer only jellyfish.



Marine turtles are endangered so we must beware  
of how to help these animals. Their lives we need to spare.  
Let's keep our beaches litter free and without bright lights,  
so when mothers go to lay their eggs they'll know that it is night.

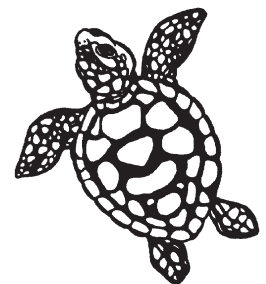
**(Chorus 2x)**





# Amazing Sea Turtles

- Scientists think that there are seven species of sea turtles: flatback, green, hawksbill, leatherback, loggerhead, Kemp's ridley, and olive ridley.
- The loggerhead is a very large turtle that can be found nesting in large numbers in the United States. They are **carnivorous**, which means they eat other animals.
- Sea turtles spend most of their time in water. They like water that is warm.
- Sea turtles can not hide their heads inside their shells like land and fresh water turtles do. There is no room for their head inside the shell because of the large shoulder muscles that help control their front flippers.
- When the female turtle is ready to lay her eggs, she crawls on shore to find a safe place. She will use her hind flippers to dig a hole in the sand. There she will lay over 100 eggs. The eggs are white and look almost like golf balls. Then she will cover up the eggs with sand and return to the water.
- After about 10 weeks, the babies will hatch. They hatch at night when it is cool and when predators will be least likely to eat them. They automatically know to race toward the water after they pop out of the nest.
- Sea turtles are endangered animals. This means that they need to be protected from becoming extinct. If an animal becomes extinct, it is gone forever. We can help protect sea turtles by not buying any products made from their shells and by keeping our beaches litter free.



# Manatees Are Lovable Huge Things

Have you ever seen the gentle manatee?

It's not a whale, but a mammal with curiosity.

With two front flippers to help it move, it glides close to the shore,  
for in warm water manatees like to play and explore.

Manatees like only plants. They're vegetarians.

Eating soft wet grasses, manatees will eat a ton.

Their grinding teeth will wear out, but new teeth will take their place.

For the manatee eats constantly. What a pudgy face.

**For they are manatees,  
lovable huge things.  
Gentle-looking, massive-looking,  
giant eating machines.  
Their pudgy-looking faces,  
their unusual physique,  
makes me want to smack a kiss  
on their pudgy cheeks.**

Manatees are gentle. They won't hurt anything,  
but boats and barges are the manatees' worst enemy.

When wetlands are destroyed because of pollutant chemicals,  
they lose their feeding ground because they wash into canals.

Only twelve hundred manatees are left today.

We must protect and save the homes where they like to stay.

If we're all responsible and help the manatees,  
they'll be around and multiply. This I will guarantee.

**(Chorus)**





# All About Manatees

- \* Manatees are marine mammals that can live in saltwater or freshwater. They look like huge seals without hind limbs. Surprisingly, their closest relative is the elephant.
- \* Manatees have two small flippers and a paddle-shaped tail. They are very gentle in nature. They are also very curious.
- \* Manatees like warm water that is over 68 degrees Fahrenheit. Although manatees have a thick layer of blubber to protect them from the cold, if the water temperature becomes too cold, the manatees will not survive.
- \* Manatees are vegetarians, eating mostly sea or fresh water grasses, though some manatees are known to swallow crabs, snails, or other small animals that are attached to the grasses that they eat. Manatees will spend 6–8 hours each day eating. An adult manatee will eat over 200 pounds of grasses each day.
- \* Because manatees spend so much time eating each day, their teeth wear down. This is not a problem, however, because new teeth are constantly being formed in the back of their mouths. The new teeth move forward just like a conveyor belt, replacing the old teeth in the front.
- \* There are approximately 1,200 manatees living today. Manatees are an endangered species. People are thought to be their worst enemy because boats and barges that speed through manatee feeding grounds injure or kill manatees every year. Pollution and chemical dumping in sea grass beds endanger manatees also.



# Male Sea Horses Do Amazing Things

What is the little creature with the monkey-like tail, clinging to the weeds looking fragile and frail? It has a kangaroo pouch and a long, cute snout. It swims standing up as it looks about.

**It is a  
sea horse, sea horse  
swimming in the sea,  
changing colors to protect itself  
from its enemies.**

**The male sea horse—  
he does an amazing thing—  
he carries and delivers all the babies!**

It really is a fish, though you would never guess, for most fish qualities it does not possess. Though it has fins to help it swim around, it's not a good swimmer, scientists have found.

**(Chorus)**

Now the sea horse can be red, yellow, white, or green, depending on the color of its surroundings. It camouflages well so it won't be seen, and confuses even its toughest enemy.

**(Chorus)**



# It's The Dolphin Symphony

Listen to the clicks and whistles; it is perfect harmony.  
Listen to the orchestra; it's the dolphin symphony.  
They seem to have a special language that is all their own.  
They communicate with special noises and with high-pitched tones.

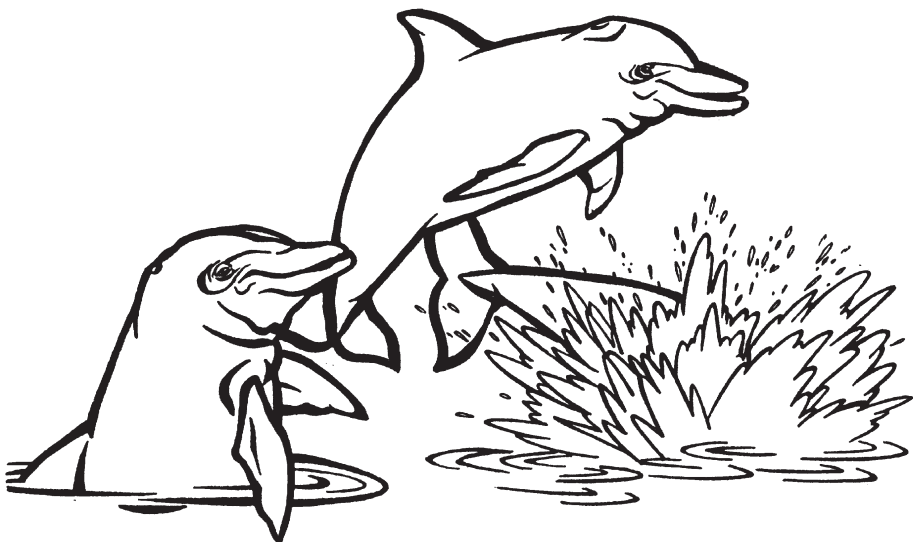
It's called echolocation. It is how a dolphin sees.  
It makes special noises in order to see things.  
The sounds will bounce off objects, then the dolphin knows  
just where to find a tasty fish or a hiding squid below.

**Graceful dolphin jumping in the air,  
playing, turning, spinning, whirling—to none you do compare.  
You're friendly and real lovable. You have a sweet smile.  
Oh, graceful dolphin, you sure have magnificent style.**

The dolphin is a friendly mammal living in the deep blue sea.  
They swim in groups in order to catch themselves some tasty meat.  
The dolphin is a small "toothed whale," so it likes good meals  
of squid and shrimp and crabs and fish and even tasty eels.

Dolphins make good mothers, for they keep their babies close.  
If a calf wanders off too far, she'll prod it with her nose.  
They often live in families to help raise the little ones,  
for dolphins enjoy company and having lots of fun.

**(Chorus 2x)**



# The Wondrous Dolphin

- ◆ Dolphins are mammals. They are actually “toothed whales” that breathe air and nurse their young. They have a streamlined body well suited for swimming. They have a blowhole on top of their head for breathing. Dolphins have two flippers, a dorsal fin, and a strong tail with two flukes.
- ◆ There are 33 known species of dolphins. Dolphins are meat eaters. They often hunt in groups, working together to capture schools of fish. They like to eat tuna, squid, clams, eels, octopus, shrimp, and many other fish.
- ◆ Dolphins have a special language. They communicate with clicks, whistles, and high-pitched noises. They use echolocation to find objects underwater. In **echolocation**, sound waves are sent underwater, striking objects and bouncing back to the dolphin. Thus, the dolphin knows where objects are located.
- ◆ Female dolphins make great mothers. When a female gives birth, other female dolphins will often help. They will push the newborn calf to the surface for air. Often, female dolphins form nurseries to take care of the little dolphins.
- ◆ Dolphins are in danger. Pollution that is dumped into the ocean has caused some dolphins to die from disease. Millions have been killed because of commercial fishing. Dolphins are often accidentally caught in huge gill nets from commercial fishing companies. Another threat to dolphins is overfishing because if there are not enough fish for the dolphins to eat, they will starve.
- ◆ The United States and other countries have passed laws to prevent dolphins and other endangered species from becoming extinct, but there are still at least 11 species of dolphins that are at risk.

# They're Really Blubbery

They belong to a special group.  
They are called *pennipeds*,  
it means "flipper feet,"  
and they're not underfed.  
Their blubber keeps them warm,  
for the water is ice cold.  
They have long, strong tusks,  
which are teeth, I am told.

**Who is this animal with whiskers on its face?**  
**Who is this animal, a well-known heavyweight?**  
**A walrus with ivory tusks. A walrus, yes, indeed,**  
**with flipper feet and wrinkly skin. They're really blubbery!**

Now, walruses they live in herds.  
They like to snuggle close.  
A mother will kiss her calf  
right on its little nose.  
The mother cow will teach her young  
when it's time to eat.  
They'll dive down deep and find a clam,  
an appetizing treat.

**(Chorus 2x)**



# Blue Whale, Blue Whale

Blue whales are enormous—the largest animals known. Some grow as long as 100 feet when they are full grown, and most are said to weigh more than the biggest dinosaurs. So they confidently swim around, for they have few predators.

**Blue whale, blue whale swimming in the sea,  
catching all the little krill with your special baleen.  
Blue whale, blue whale, you eat tons each day,  
for you need to feed your little calf before you two can play.**

They're warm-blooded mammals that spend their lives at sea. They come to the surface, for whales need air to breathe. Shrimp-like creatures known as krill this whale likes to eat, for blue whales have baleen because they don't have any teeth.

*Blue whales are baleen whales. This means that they do not have any teeth with which to eat. They have something called baleen on both sides of their upper jaw. Baleen acts like a strainer. Whales will suck water and krill into their mouths, shut their mouths, and then push the water out with their tongues, then the whales will eat the krill.*

When a little calf is born, you won't believe its size. Weighing over 5 tons, this newborn's quite a prize. Depending on the mother for milk and nourishment, the calf will gain 200 pounds each day, a wonderment!

**(Chorus)**



# Facts About Blue Whales

- ◆ Blue whales are mammals that live in the ocean. They are the largest living mammals. An adult blue whale can be over 100 feet long and weigh approximately 180 tons. They may be the largest animal that ever lived.
- ◆ **Krill** are tiny shrimp-like creatures that live in the water. A blue whale will eat many tons of krill each day.
- ◆ Blue whales are baleen whales. This means that they do not have any teeth. They have baleen on both sides of their upper jaw. **Baleen** is a horny fiber that is used like a strainer. Whales will suck water and krill into their mouths, shut their mouths, and then push the water out with their tongues. Then, the whales will eat the krill.
- ◆ Blue whales live in the Atlantic, North Atlantic, and North Pacific Oceans. They like to migrate to warmer waters in the winter, but they return home in the spring.
- ◆ Blue whales are good mothers. They nurse and take care of their calves. Often, a group of females will have a special nursery where their babies will stay until they are grown.
- ◆ A newborn blue whale can weigh as much as 5 tons. More surprising is that the baby will gain 200 pounds and grow two inches each day. What an appetite!
- ◆ Blue whales are an endangered species, too. Only an estimated 5,000 exist today.



# Label The Whale

Use the code to label the parts of the blue whale. Then, draw a line from the label to the correct part on the picture.

4 15 18 19 1 12 6 9 14

2 1 12 5 5 14



5 25 5

5 1 18

6 12 21 11 5 19

6 12 9 16 16 5 18 19

1. a	14. n
2. b	15. o
3. c	16. p
4. d	17. q
5. e	18. r
6. f	19. s
7. g	20. t
8. h	21. u
9. i	22. v
10. j	23. w
11. k	24. x
12. l	25. y
13. m	26. z



# Shy Octopus

You might think I'm scary, but I'm really very shy.  
I have a boneless body, on which I do rely.  
I hide in rocky caves or a cozy little den,  
and wait for a tasty crab to quickly apprehend.  
I'm known for my tentacles. I have eight arms in all  
with hundreds of suction cups. I really have a ball.  
I use my arms to cling to things. I use my arms to catch  
lobsters and crabs which I quickly try to snatch.

**Shy octopus, that really is so true.  
I change colors depending on my mood.  
And if I sense real danger, I have a special tool.  
I spray an ink-like liquid, for the enemy I fool.**

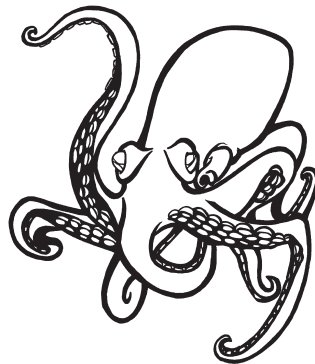
I'm really quite a swimmer. Like a rocket I will dart  
in any direction. With grace I will depart.  
But when it's time to lay my eggs I'll no longer roam,  
for I'll string my eggs along the walls of my cozy home.  
I'll clean the water and I'll wait. My eggs I must protect,  
for predators would like my eggs—to that I do object.  
And so I'll wait until they hatch. On me they do rely.  
And then it's time for me to go, and so I say goodbye.

**(Chorus)**



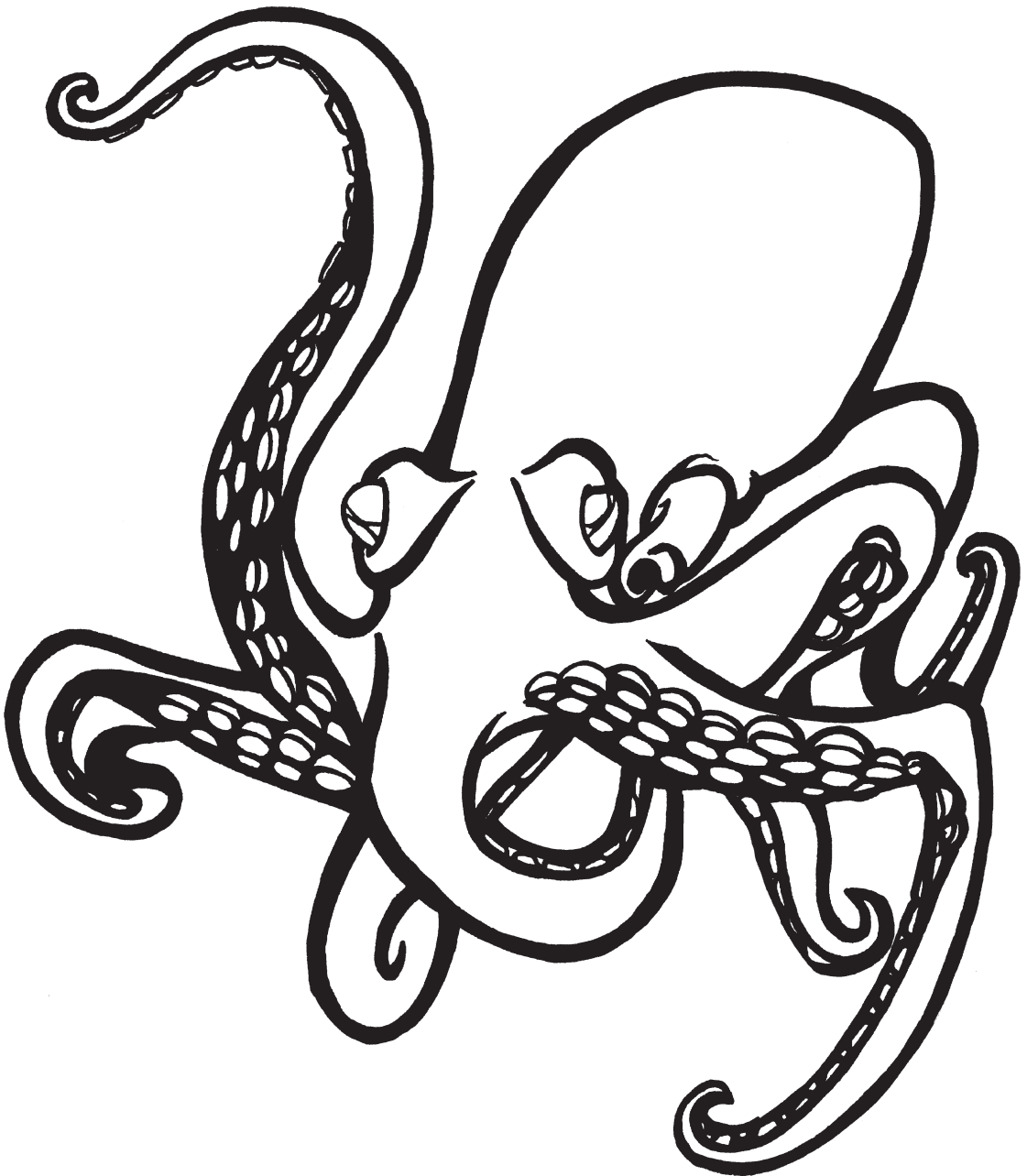
# More About Octopuses

- \* People often think of octopuses as scary creatures, but octopuses are actually quite shy. They like to live alone in reef crevices, caves, and even in human pollution, such as tin cans.
- \* An octopus has a soft body with eight arms called **tentacles**. Each tentacle has over 200 suction cups on it. The octopus uses the suction cups to cling to rocky surfaces and to catch tasty meals.
- \* Octopuses are skillful swimmers. The octopus will make its mantle swell up with water in order to swim forward. The **mantle** is a special pouch that surrounds the octopus's head. Then the octopus will push the water out of the mantle through a tube called a **siphon**. This enables the octopus to swim very fast.
- \* An octopus has a unique way of defending itself. If the octopus senses danger, it will shoot out an ink-like liquid to confuse the predator. Because the liquid smells like the octopus, the predator will attack the blob of black liquid, and the octopus will quickly swim away.
- \* When it is time for the female octopus to lay her eggs, she will search for a safe place. Then she will lay more than 200,000 eggs. Once she has laid the eggs, she strings them together and hangs them in her den. Each string is about four inches long. She will protect the eggs and clean the water around them. After about 4 to 6 weeks the eggs will hatch. Then the female octopus will die and the babies will take care of themselves.



# Color The Octopus

An octopus can change its color to match its surroundings; this is called **camouflage**. An octopus can be red, green, purple, black, striped, or have dots of color. It can even be two different colors on each side of its body. Use your imagination and color the octopus below.



# I'm The Great White Shark

I may not be very popular. You may be afraid of me.  
I'm known for attacking things with my razor-sharp teeth.  
I do not have any bones. I am made of cartilage.  
I guess if you met me it wouldn't be a privilege.

**(Chorus 1:)**

**I'm the great white shark, with lots and lots of teeth.  
I'm good at hearing, good at sensing, good at finding things.  
I swiftly swim, find my prey, then I will attack;  
for friendly manners is the one thing I admit I lack.**

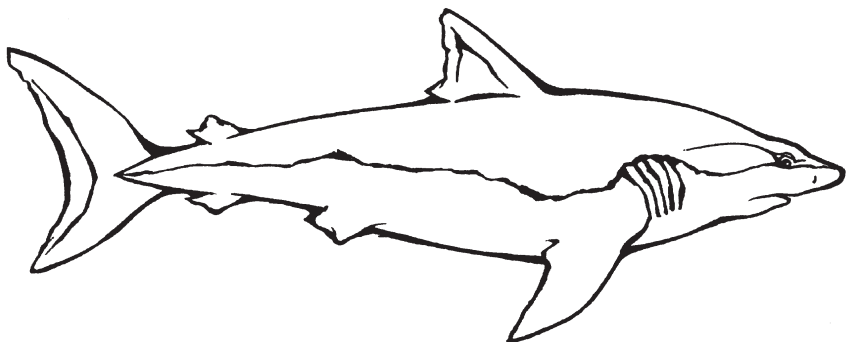
I swim along the shoreline and I find so many fish.  
And seals and squids and sea lions all make a tasty dish.  
I know you do not realize that I keep the ocean clean,  
for I eat the dead and dying fish. They make a great cuisine.

**(Chorus 1)**

My baby sharks are born in quite an unusual way,  
for the eggs I keep inside myself until they hatch one day,  
and then the babies are born live and ready for some food.  
I don't need to help, for their own food they will pursue.

**(Chorus 2:)**

**For I'm the great white shark, with lots and lots of teeth.  
But remember, there are plenty of good things about me.  
I'm used for cancer research and I keep the waters clean  
by eating all the dead and dying fish—a great cuisine.**



# Write A Shark Poem

Write a poem about your favorite shark.

Line 1: Shark's name

Line 2: Three words or short phrases that describe the shark

Line 3: Two verbs ending in "ing"

Line 4: Another name for the shark

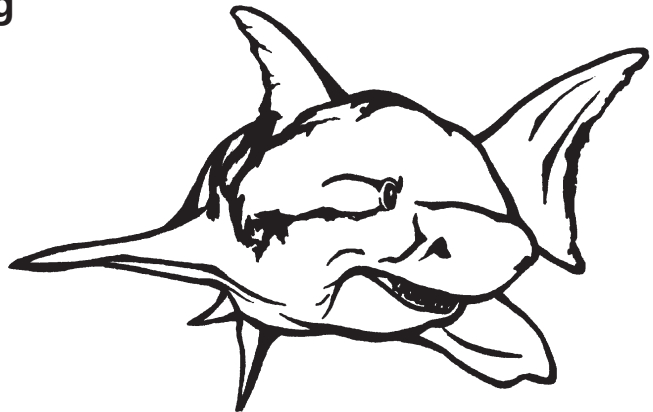
Example:

**Great White**

**Meat-eater, Triangular Teeth, Hungry**

**Swimming, Searching**

**Fierce Hunter**



Write your own poem.

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# Sea Otter, Won't You Play With Me?

You'll find them swimming on their backs.  
Their whiskers look so sweet.  
There's mother and there's baby,  
and they're looking for a treat.  
They swim among the beds of kelp  
found close to the shore,  
and search for clams and sea urchins,  
for these they do adore.

**Friendly sea otter,  
won't you come and play with me?  
Let's swim and dive and explore  
in the shallow sea.  
I'll brush your fur and stroke your head.  
Will you be my friend?  
Friendly sea otter,  
won't you come and play with me?**

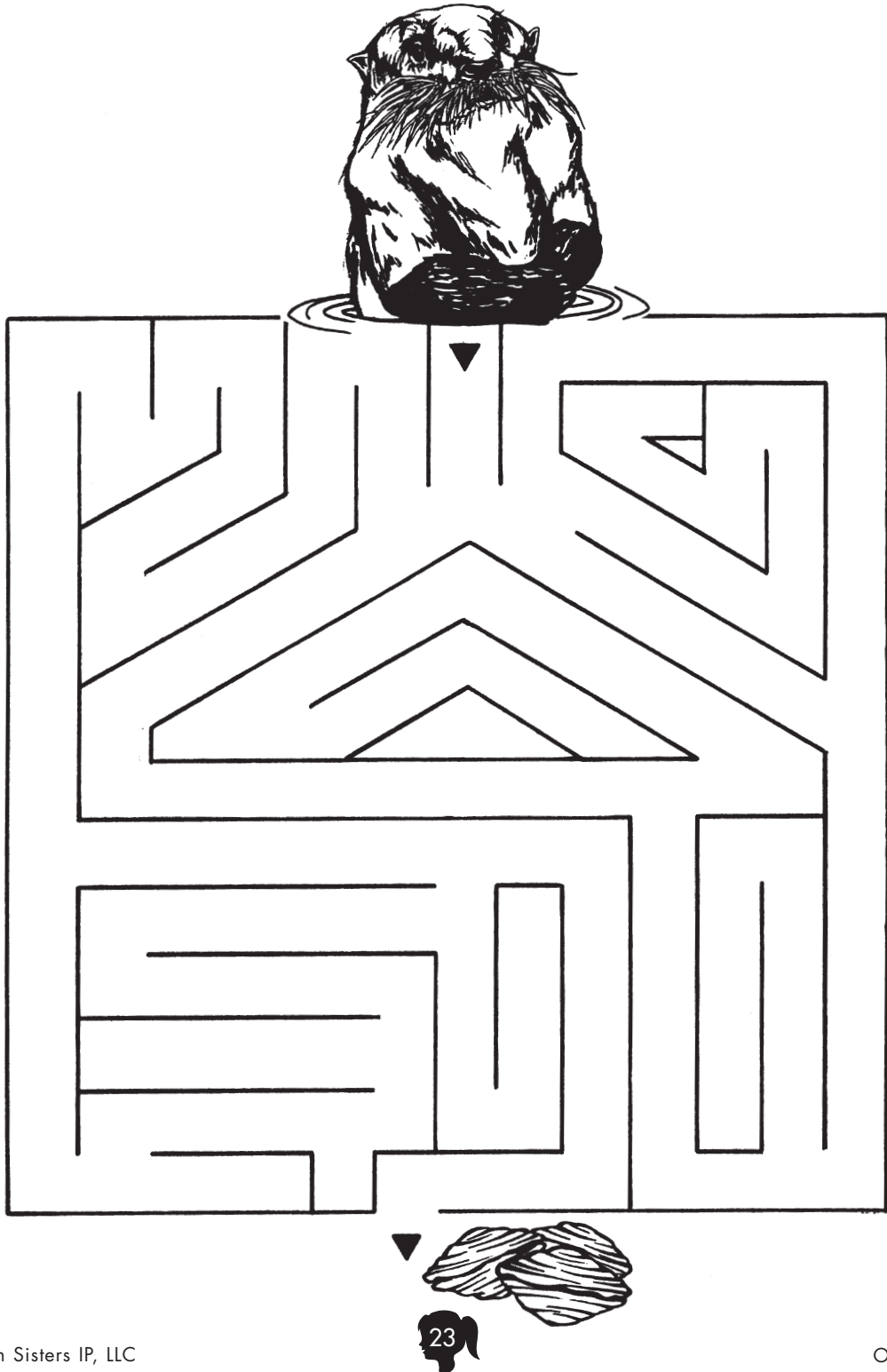
Now, a sea otter paddles  
with her webbed hind feet,  
grooming her thick fur  
and keeping it neat.  
So air will trap inside the fur  
to keep her nice and dry.  
She likes to stay warm, so  
on her fur she will rely.

**(Chorus 2x)**



# Help The Sea Otter Find The Clams

Draw a line through the maze to help this sea otter find the clams.



# You Can Be A Marine Biologist

Dear Friends:

My name is Dr. Steve Weeks. I am a marine biologist. I study fish and shrimp to better understand nature. I study these animals in their natural habitats and in the laboratory to understand how they live and reproduce. I try to understand why certain animals develop in certain ways and how the habitats in which they live might influence their development.

My studies have taken me to many interesting places. I have studied sand crabs off the coast of California, and fish in Jamaica and Mexico. Being a marine biologist is fun, because I love the ocean and enjoy finding out more about the animals that live in aquatic habitats.

I decided that I wanted to be a marine biologist when I was very young. When I was in the first grade, we went to an aquarium in San Diego, and I became very interested in marine life.

I am very happy that I decided to pursue a job as a marine biologist. I enjoy teaching students about biology, and I love learning new things about fish and shrimp. If you are interested in marine or freshwater organisms, I suggest that you think about becoming a marine biologist too!

Sincerely,  
Dr. Steve Weeks

