

# Seal or Sea Lion?

A Compare and Contrast Book  
by Cathleen McConnell



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A Compare and Contrast Book

## A note for parents and caregivers

Seals and sea lions look very similar and it's sometimes difficult to tell which is which. Both of these marine mammals swim with flippers and can be found in oceans all over the world. One has visible ear flaps while the others' ears have no external flaps. One swooshes through the water using their back flippers and the other uses their front flippers to swim. On land, one bounces along and the other can "walk" on their flippers. Learn about the similarities and differences between these marine mammals in this latest addition to the Compare and Contrast Series!

Arbordale Publishing offers so much more than a picture book. We open the door for children to explore the facts behind a story they love.

The *For Creative Minds* includes

- Thinking it Through - Adaptations
- Fun Facts
- Seal or Sea Lion? Identification
- Positive Reinforcement Training

Thanks to the education team at The Marine Mammal Center for verifying the accuracy of the information in this book.

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Helping young children develop critical thinking skills is a gift they'll have for life. The book you are holding can help you to help them do just that.

Before reading the book, ask the child(ren) how they think these animals are alike or different. That helps you to understand what they already know or if they have any misconceptions.

After reading, go back through the book together looking at photos to find and discuss things. Ask verbal children to describe or explain what they see. Even young, non-verbal children can find and point to things. For example, have children find or point to:

- visible ear flaps
- flippers (shapes & sizes, visible claws)
- nostrils (open or closed?)
- whiskers (a type of hair)

Ask the child(ren) children to describe one new thing they learned or found most interesting.

Discussion questions:

- These animals spend most of their time at sea. Why do you think there are so many photos of them on land?
- These animals are mammals, just like us. What are some things humans and seals/sea lions have in common?
- Whiskers are important adaptations for seals and sea lions. What are some other animals that have whiskers?

Do the "For Creative Minds" activities in the back of the book with them.

**Cathleen McConnell** loves all animals—especially those that live in the ocean. Having the opportunity to share her excitement for marine life with visitors is what inspired her to pursue a career in zoo and aquarium education. Currently, as part of her job with the Conservation Engagement team at the Point Defiance Zoo & Aquarium, Cathleen runs all kinds of family programs including day camps and "Zoo Snooze" overnight experiences. Over the years she has taught countless children about the wonders of wildlife when they have visited on field trips, or as part of an outreach program at their school. In addition to writing curriculum for teachers, Cathleen has also written *Otters: River or Sea? A Compare and Contrast Book* for Arbordale. She hopes the books will get kids excited to learn more about animals and how each is uniquely adapted to survive in their natural environment. Cathleen lives in Washington state with her three cats and three guinea pigs. When she can, she also fosters kittens for the local animal shelter.



Cathleen McConnell

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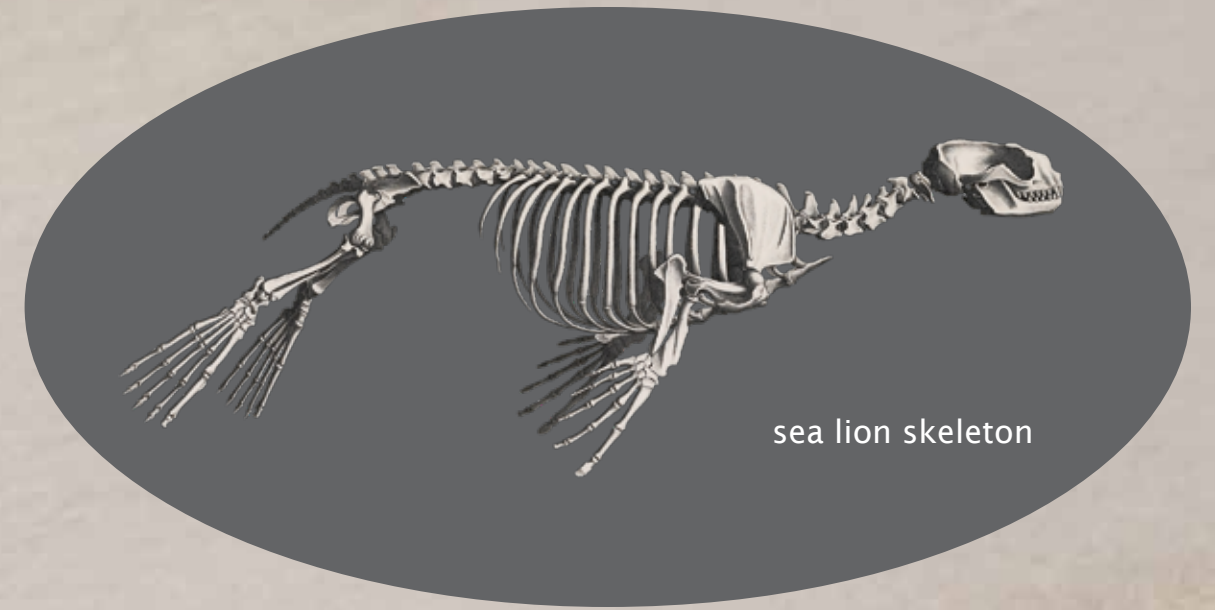
by Cathleen McConnell



Seals and sea lions are mammals. So are we! Like us, they are warm blooded, have hair, and feed their babies milk.

They both belong to a group of marine mammals called pinnipeds. The word pinniped means fin, feather, or flipper-footed. The feather refers to the way they use flippers like wings in the water.

They all have flippers! Their flippers have the same set of bones that we have in our hands and feet.



bearded seal



All pinnipeds (and most other marine mammals such as whales) have blubber, a special layer of fat that keeps them warm. Some are bigger and more blubbery than others.

northern fur seal



harbor seal



elephant seal pup



adult male elephant seal



They can open and close their nostrils!

Like us, pinnipeds breathe air using their lungs. When they come to the water's surface or are on land, they use special muscles to open their nostrils to breathe.

Unlike us, a pinniped's nostrils are closed when they are relaxed. That's especially important when they have to hold their breath while swimming or diving for food.



leopard seal



Weddell seal



Australian sea lion



harbor seal



gray seal

Whiskers are a special kind of hair. Having whiskers is like having fingers on your face!

Sometimes the best way to find a meal is by hunting in the dark. Whiskers allow seals and sea lions to feel a tasty fish swimming by or to sense that there may be a dangerous predator in the area.



bearded seal



Galapagos sea lion pup



California sea lion



northern fur seal



cape fur seal

# For Creative Minds

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## Thinking it Through



Looking at this sea lion's face, can you describe what features it has in common with your face?  
Which direction do your nostrils face? What about a seal's nostrils? Why do you think a seal is different from us in that way?

Both seals and sea lions have flippers to help them swim through the water. Have you ever used flippers to help you swim? If so, did it help?

What would you use to help you see underwater?

How would you keep water out of your nose when swimming?

How do you breathe while swimming?

How would you describe the body shape of a seal or sea lion?  
How does this body shape help them live in the ocean?

When a seal grunts or makes any sound towards another seal, what do you think are some things they might be trying to communicate?

In the past, people hunted seals and sea lions for their fur—which is why some eared seals are called fur seals. After hundreds of years of hunting, some species were in danger of becoming extinct.

In 1972 the United States government passed the Marine Mammal Protection Act. This act includes laws to protect marine mammals from being hunted, captured, hurt, or harassed.

What are some things you can do to help seals and sea lions?

What kind of career do you think you would need to have to help people understand that some animals need special protection?



## Fun Facts



Elephant seals can hold their breath for two hours and can dive as deep as 5,000 feet or 1,500 meters!

*How long can you hold your breath?*

When a seal sleeps vertically in the water it is called "bottling."

*Why do you think this behavior is called that?*



On land, earless seals look like they are doing a "banana pose."

*What does the shape of this pose remind you of?*



A mother New Zealand fur seal can find her pup on a crowded beach by their "bark" and smell.

*Would someone recognize your voice in a crowd?*



Baby harp seals have white fur for two-to-three weeks before changing to silver-gray fur.

On land, sea lions often use a "yoga pose." It's nice to have a good stretch.



Baikal seals are the only seals that live in freshwater.

They are found in Lake Baikal in Siberia, Russia.



Adult male hooded seals have a red "hood" in their nose that they can blow up like a balloon. This is one way they can attract a female.

## Eared Seal or Earless Sea Lion? Identification

Using what you learned in this book, see if you can identify which are “earless” or “true” seals and which are “eared” sea lions?



Answers: 1-seal (earless); 2-sea lion (eared), 3-seal (earless), 4-seal (earless), 5-seal (earless), 6-seal (earless), 7-seal (earless), 8-sea lion (eared), 9-seal (earless)

## Positive Reinforcement Training

Seals and sea lions are very smart and love to learn. Training them is not just for fun. When in a zoo, or aquarium, they need to be able to open their mouth to have their teeth brushed or to lie still when the veterinarian comes for an exam.

Have you ever helped to train a dog to sit or lie down? It takes a lot of time and patience to train an animal to do a specific behavior. Humans might use words and hand signals to help train animals.

During a training session, a seal or sea lion may be asked to do a variety of behaviors. When they’ve done a behavior correctly, they receive a tasty fish or squid. This is called positive reinforcement. Positive reinforcement could also be their trainer excitedly saying, “good job!” Everyone likes to know that they are doing things well.

Do you ever get positive reinforcement for good behavior? What and why?

Which of these images show positive reinforcement training and which shows why the animal has been trained?



Answers: 1-training; 2-why; 3-training; 4-could be either; 5-could be either; 6-training



Thanks to the education team at The Marine Mammal Center for verifying the accuracy of the information in this book.

Thanks to The Marine Mammal Center and their photographers for the use of their photos showing seal and sea lion rescue, rehabilitation, and release:

- Chris Deimier: going home
- Bill Hunnewell: trapped in fishing net, cutting off fish net, tube feeding
- Ingrid Overgard: check-up time
- Lesley Simms: hauling up
- Brian Simuro: to the rescue, running to ocean

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The dual-language read-along is available online at [www.fathomreads.com](http://www.fathomreads.com)

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