

Seal

The true scientific name for seal is “**pinniped**,” which is Latin for “fin-footed mammals.” Seals have sleek, barrel-shaped bodies that help them slip along ice or smooth rocks and swim quickly. They spend time both on the land and in the sea, but stay very close to the water’s edge while on land.

Seals without external ears are called true seals, or phocids. They prefer the water and cannot move very well on land. Phocids have more tail-like back flippers and more streamlined snouts, which help them swim in wavy body motions. They also use their tails to communicate by slapping the water with their back flippers.

Eared seals (also called walking seals or otariids) have back flippers that can turn upside down and are shaped more like feet. They can get around better on land than earless seals, but are still faster in the water than they are walking. They swim with their front flippers. Sea lions and fur seals are two species of eared seals. They have snouts more like dogs and communicate in vocal “barks.” The California sea lion is usually the species used in circus tricks.

Pinnipeds live in both warm and cold climates near and in the ocean. In cold climates, a thick layer of blubber, or fat, under their skin helps keep them warm.

The more fat an animal has, the easier it is for it to float, so the blubber helps seals surface after diving in the water. Some seals also have fur to keep warm. When blood moves toward the outer part of an animal’s body, it lets heat off. Seals in cold climates have **circulatory systems** (the part of animals that blood flows through) that keep their blood more internal to avoid heat loss. Seals that live in warm climates do the opposite. They wave their flippers and go in the cooler water, which also helps bring their blood to the surface to release extra heat in their bodies.

Seals also have **adaptations**, specialized ways to live in their environment, that help them see well both on land and underwater. A clear membrane covers and protects their eyes while open underwater. Their nostrils also close on their own and they can hold their breath for almost two hours while diving underwater. Seals’ blood flow only goes to their sense organs and nervous system while they are underwater. This lets them feel less pain and fatigue than other animals while swimming. Once they resurface, seals need time to normalize their body functions. Seals hunt underwater for fish, shellfish, squid, penguins, and other small marine creatures. Orcas and sharks hunt seals as do polar bears in the arctic.

1. **New terms:** See how these three terms are used in the text, and write a definition next to each one.

pinniped the scientific term for seal

circulatory system the part of an animal that blood flows through

adaptations specialized ways something works to live in an environment

2. How do phocids communicate? What about otariids? phocids slap the water with their back flippers, otariids use vocal “barks”

3. Seals can run very fast.

True or **False?**

4. Seals have a membrane that covers their eyes when underwater.

True or False?