

Sea Lions

Morinos

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Teacher's Book



Sea lion facts

There are 7 species of sea lions worldwide, all of which belong to the pinniped group and, in turn, to the marine mammals.

Sea lions have an elongated body, and their short limbs evolved into flippers. They are very well adapted to marine life and are very good swimmers.

Their fur is not very dense, ranging from dark brown to dark grey depending on the species. Under the skin, they have a thick layer of blubber that provides warmth and buoyancy.

Unlike seals, sea lions have visible ears and can walk on land by pointing their hind limbs forward.

Sea lions are carnivores, and their main food source is fish.

They are gregarious and are found forming numerous colonies on cliffs, coasts and even piers.

Males are territorial and fiercely compete for females.

They form harems of about 15 females each, and mate between May and June, when the males return to land and begin calling for females.

Each female has only one pup, which she takes care of for almost a year. During their first months of life, the pups are very vulnerable, so they are kept in groups called *nurseries*. When their mothers return from foraging, they recognise their pups through their sense of smell and vocalisations. The pup grows at a fast pace and, after two weeks, it is ready to enter the water, where the mother teaches it to swim and hunt. However, its main source of food will continue to be its mother's milk, which is very rich in fat, until it becomes independent from its mother.

The species we have at Loro Parque and Siam Park is the California sea lion (*Zalophus californianus*), which is found along the Pacific coast of the United States, from Vancouver to Baja California, Mexico.



Captive Breeding

At Loro Parque and Siam Park we have 13 sea lions, 5 males and 8 females. They are easy to train, as they are very intelligent and get on very well with the humans working with them.

We have been very successful in breeding them and every year new sea lion pups are born at our facility after a gestation period of 11 months. They weigh about 6 kg at birth and are suckled by their mothers, usually until they are 6-12 months old.

Conservation status

In the early 20th century, the California sea lion population was on the verge of extinction due to indiscriminate hunting for their fur and blubber.

Today, hunting is illegal, so their populations have recovered to such an extent that they are growing in numbers in some areas and have no conservation problems.

However, they are not protected from all threats. They are prone to certain diseases, such as pneumonia. In addition, the young are very vulnerable.

Direct conflict with fishermen, entanglement in nets and ropes, poisoning, or ingestion of plastic bags or other pollutants are also quite common. Climatic factors such as "El Niño" lead to the death by starvation of thousands of specimens, as they lack nutrients and do not have enough food to eat.

Although the conservation status of the California sea lion is not a cause for concern, other species, such as the Galapagos sea lion or the Australian sea lion, are threatened and their populations are much smaller.

Interesting Facts

They are called sea lions because the males' sound is reminiscent of a lion's roar. In addition, the males of some species have a lot of hair around their necks that resembles a mane.

Sea lions are very agile in the water. When they dive (up to 1,300m deep), they lower their heart rate so that they can stay underwater for an average of 8 to 20 minutes before rising to the surface to breathe.

All females give birth synchronously at the same time of the year, thanks to the mechanism of delayed embryo implantation.

Sea lion flippers are highly vascularised and have no blubber layer, allowing them to regulate their temperature according to their needs (thermoregulation).

Marine mammals have evolved from land mammals. In the case of sea lions, their closest terrestrial relatives are bears.



Animal factsheet (Least concern)

California sea lion (*Zalophus californianus*)

Kingdom: *Animalia*

Phylum: *Chordata*

Class: *Mammalia*

Order: *Pinniped*

Family: *Otariidae*

Genus: *Zalophus*

Species: *Zalophus californianus*

Size: males 2 to 2.5m; females 1.5 to 2m.

Weight: adult male 300 to 400kg; females 80 to 120kg.

Gestation: 11 months (a single pup with few exceptions).

Maximum age: 18 years (25-30 in captivity).

Distribution: along the coast from Vancouver to Baja California.

A DAY IN THE LIFE OF A ZOOKEEPER



Hello boys and girls! I am one of the sea lion keepers at Loro Parque and Siam Park.

The first thing my colleagues and I do every morning when we get to work is to make sure that none of them have been injured during the night, as they can get hurt playing or fighting (especially during breeding season, when they tend to be more aggressive).

Once we have checked that they are all well, we start to select and prepare their daily meals. They eat fish, like squid and cuttlefish, as they are carnivorous animals. They are very clever animals, so they know that we are going to feed them and sometimes they chase us around the kitchen. What fun!

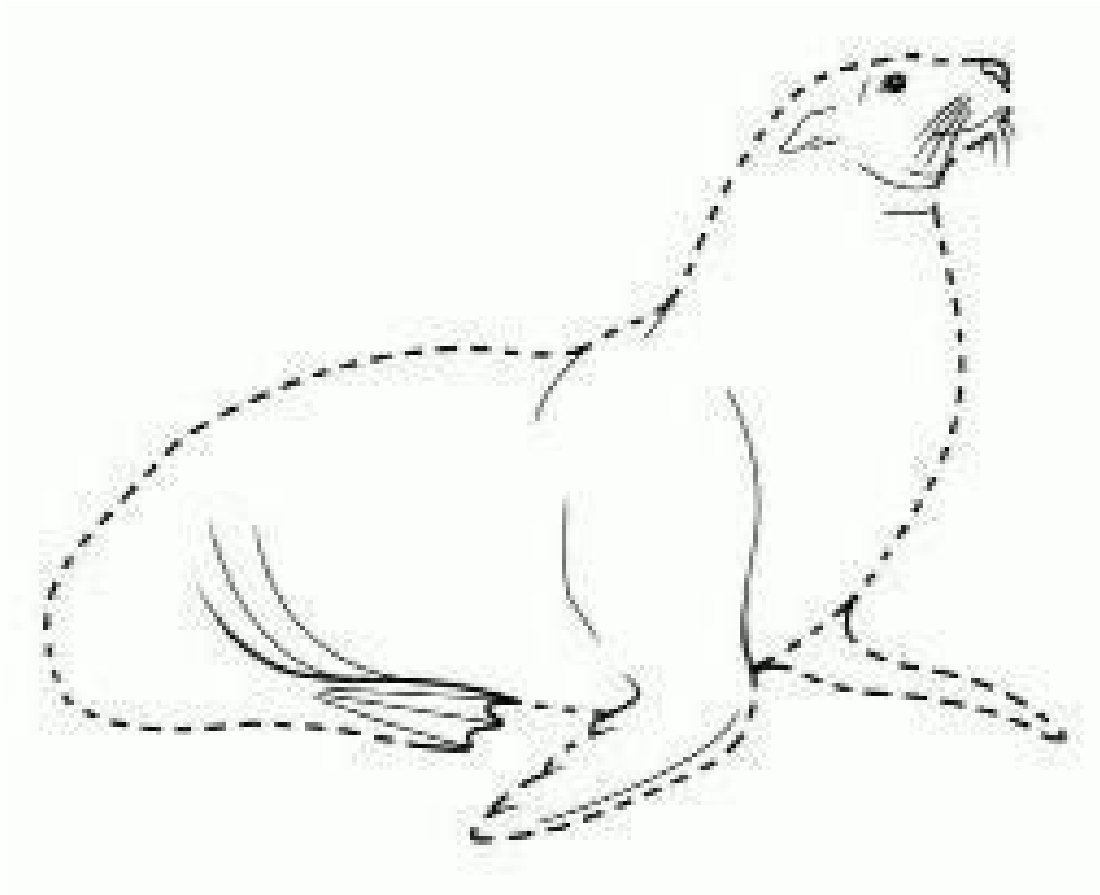
We change their food so that they don't get bored of always eating the same thing. We feed them 4 times a day, and the fish they like the most is herring, although we also usually give them capelin, mackerel, and sprats.

Males are much bigger than females and they are the boss. They are very playful and, when not performing, they spend the day swimming or sunbathing.

Did you know that sea lions can sleep both in and out of the water?

PRESCHOOL ACTIVITIES

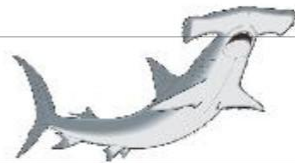
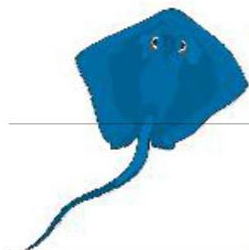
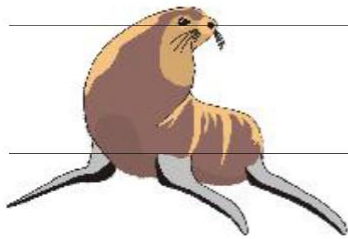
Connect the dots and then colour in. Which animal is it?



Circle the sea lion's favourite food.

What do I like to eat?

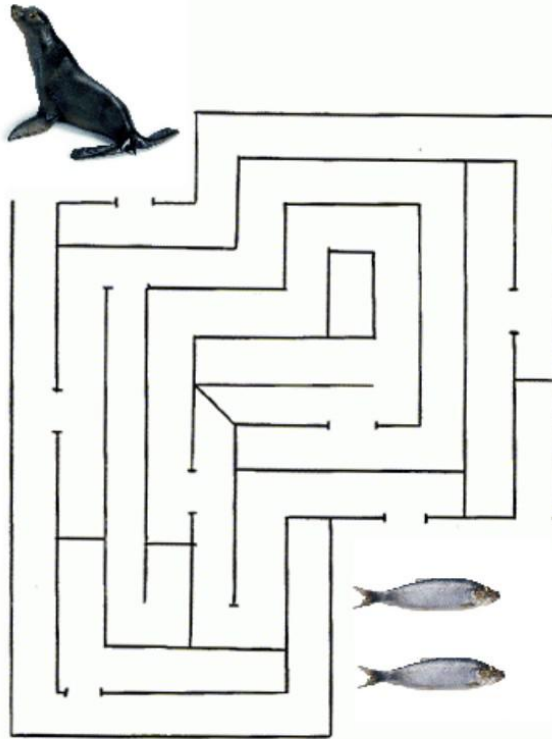
¿Qué me gusta comer?



PRIMARY SCHOOL ACTIVITIES (1ST AND 2ND CYCLE)

What does the sea lion eat? Help him get to his food.

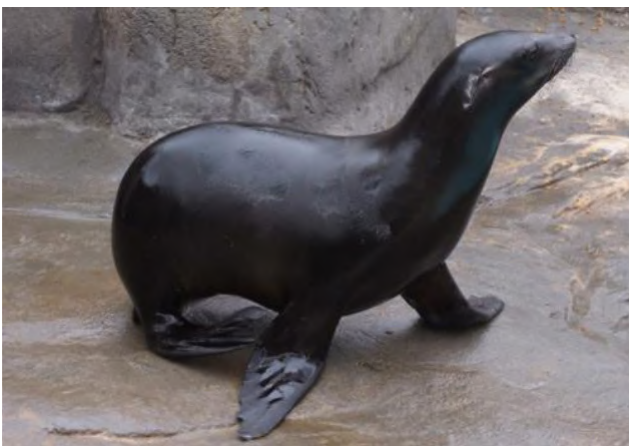
The sea lion eats



Hello! I'm Simbad, one of Loro Parque's sea lions. Many people think I'm a seal, but we are different animals. Can you tell the difference between a seal and a sea lion?

If you look closely, sea lions have little ears on either side of our heads, while seals do not. Also, we walk better on land, because our flippers are bigger, and we can lean on them to walk. Seals, on the other hand, can't, so they crawl on land.

Look at the pictures below and identify whether it is a seal or a sea lion.



PRIMARY SCHOOL ACTIVITIES (3rd CYCLE)

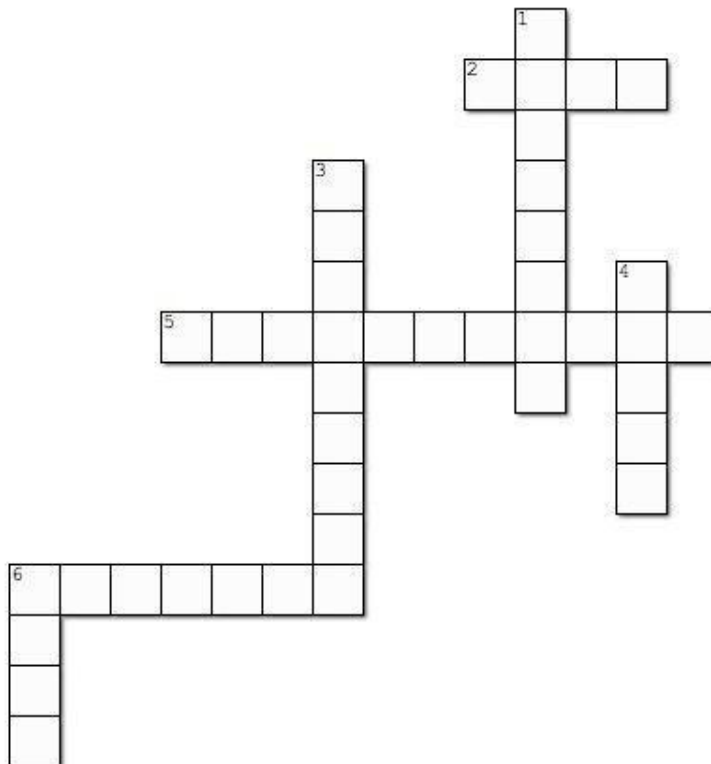
Read the following text and solve the crossword puzzle

Sea lions are mammals. They live part of their lives in the water and part of their lives on land. When they live on land, they form large groups called colonies.

Their mating season begins in May, just after the females have given birth to their pups. The males return to land and fiercely fight for females against other males. They are very territorial. Eventually, each male gets his group of females, known as a harem - so many brides for one male!

The males then return to the sea and the females stay behind to look after their young, which they leave in "nurseries" while they forage for food.

In a few weeks, the young are ready to go into the water and, after a year, they are separated from their mothers - they grow up so fast!



HORIZONTAL

2. The month in which the sea lions' mating season begins.
5. Male defending a territory.
6. A large group of animals.

VERTICAL

1. An animal with hair, born from its mother's womb and fed on its mother's milk at birth.
3. A place where the young wait while their mothers forage for food.
4. Name of a group of females with a male.
6. Baby of an animal.

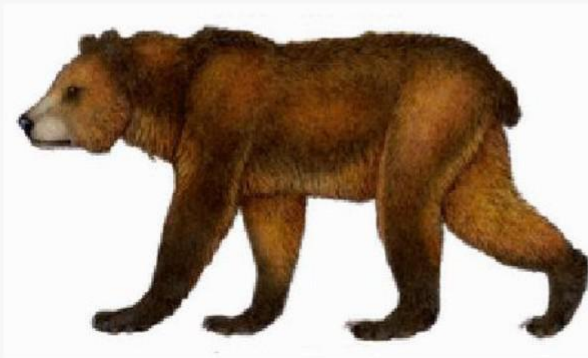
SECONDARY SCHOOL ACTIVITIES

Read the following text and reflect on it

Originally, all mammals lived on land. At some point in evolutionary history, some mammals started to return to the aquatic environment. Scientific studies indicate that, in the case of sea lions (as far-fetched as it may seem), their ancestor was probably a bear (although not as we know them today).

To live in this new environment, there had to be modifications to the bear ancestor's body over time. These modifications are called **ADAPTATIONS** and occur due to **NATURAL SELECTION**.

Compare the two pictures, what modifications were made to the bear's body so that it could live in the water? In other words, what adaptations do sea lions have for aquatic life?



The Origin of Species

Charles Darwin (1809-1882) was an English naturalist who argued that all similar living things evolve over time from a common ancestor through natural selection, which is based on three principles:

- Variability: there must be variation (shape, size, behaviour...) among individuals in a population.
- Inheritance: related individuals are more similar to each other and pass on their characteristics to their descendants.
- Struggle for existence: some variations are more successful than others and produce more offspring.

