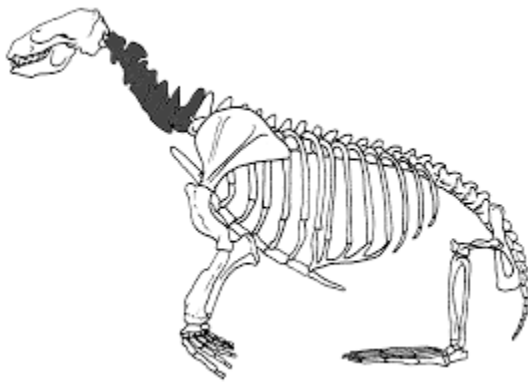
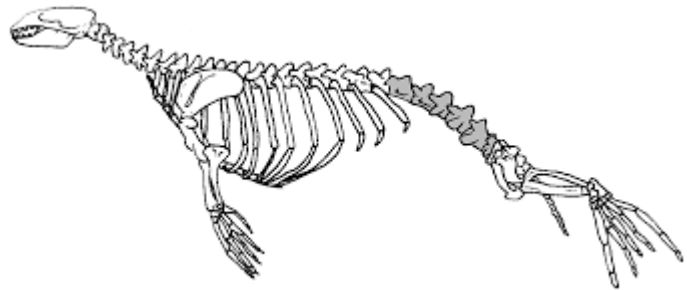


Sea Lion and Seal Anatomy

Sea lions and seals are closely related marine mammals that are part of the group of animals known as pinnipeds, meaning flipper-footed animals. Many people confuse them with each other, however one of the easy ways to distinguish between them is by understanding how each move on land. Sea lions are much more adept at walking than seals. Much of this is due to how their skeleton articulates and their posture on land.



Sea lion skeleton



Seal skeleton

Using the skeletons pictured above, find two similarities and two differences between them.

Similarities:

1. _____
2. _____

Differences:

1. _____
2. _____

As an aid, use the pictures below to better understand how each stand when on land.



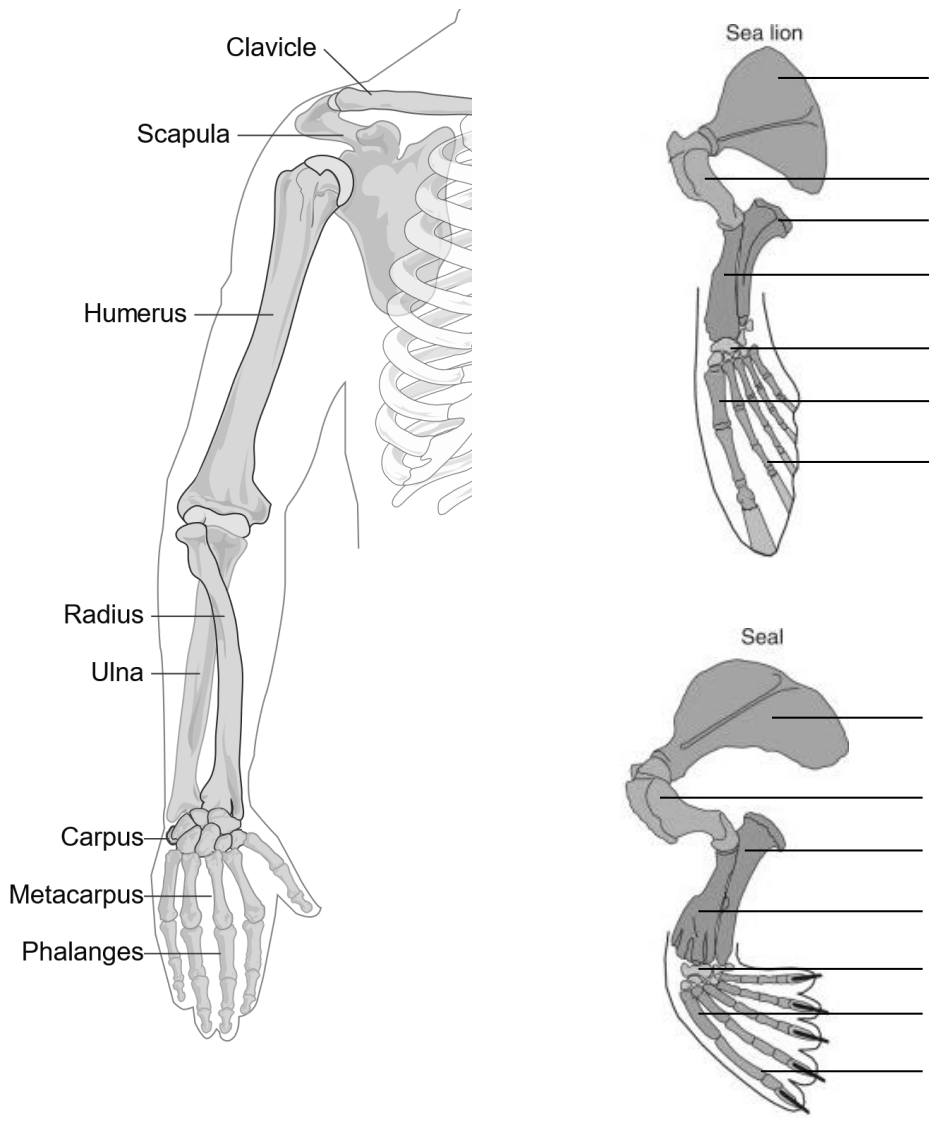
Sea lion



Seal

Evidence indicates that seals and sea lions evolved from terrestrial bear and weasel-like ancestors. This helps to explain why they retain features that allow movement on land. One of the most-studied parts of their body is their forelimb, or front flippers. There are obvious similarities between close relatives like seals and sea lions, but you may be surprised by the similarities we see between these pinnipeds and humans.

Using the image of the human arm skeleton, label the same bones in each of the sea lion and seal limbs. *Note that the clavicle is not present in the sea lion and seal anatomy images.*



The above comparison of the limbs illustrates just one example of similarities seen between all vertebrates. Even though humans do not use arms to move as often as pinnipeds, we still have similar anatomy due to a common ancestor that lived millions of years ago. Scientists study these characteristics to better understand adaptations and how animals survive on Earth.