

# Animal skeletons

All animals have skeletons of one sort or another. Mammals, birds, reptiles, amphibians and fish have bony skeletons. These skeletons come in all shapes and sizes, but they also share common features.

Look at these skeletons and see how they differ from each other.

Why do you think they look this way?

Can you spot any similarities between them?

The museum holds hundreds of skeletons - of fish, amphibians, reptiles, birds and mammals.



The tuna has no arms or legs, but you can see fins and a tail. It has a long flexible spine for swimming.



The frog has well developed back legs, modified hip bones and a reduced spine which allows it to jump and land easily.



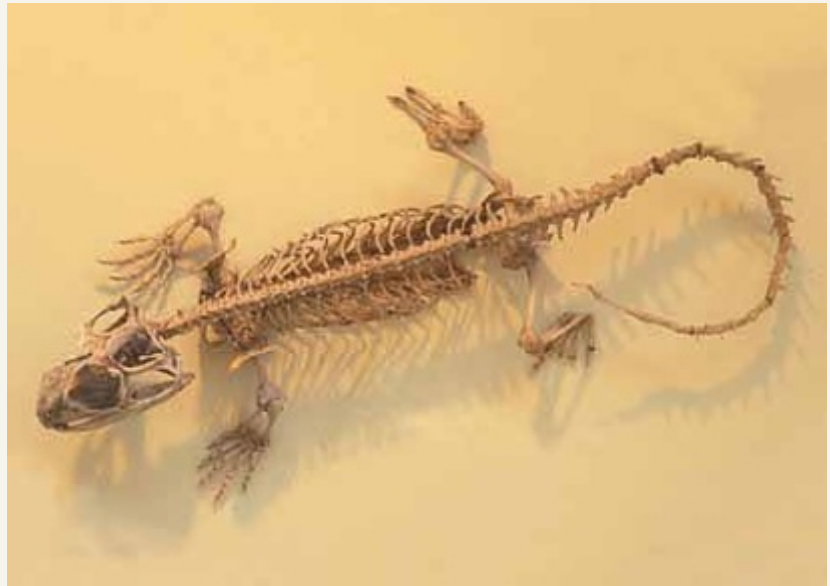
The tortoise's vertebrae (back bones) and ribs are fused and modified to form its shell.



Snakes have no arms or legs, but they can have up to five hundred vertebrae in their flexible spine.



Tuataras look like lizards, but are not related to them. Like all reptiles, tuataras hold their legs out to the side of their body.



Crocodiles have large jaws, sharp teeth and very strong skulls - their powerful bite helps them hunt .



The pelican is a sea bird that catches fish in its massive bill. Like all birds that fly, they have large wing bones.



The moa is an extinct flightless bird that looked like an ostrich. It is also the only known wingless bird, but it could run on its long legs.



The giraffe has long legs and a very long neck to reach to the tops of trees and find the best leaves.



The tiger is a big cat which has a flexible spine that allows it to pounce on its prey, and sharp canine teeth to bite with.



Like all other mammals, the pig has legs that it holds beneath its body. Is this different to reptiles like the tuatara?



This bull has horns. These horns have a bony core, and are covered with keratin - your hair and fingernails are made of keratin.



A male deer uses its antlers to fight other deer. Each year the antlers fall off and the animal has to grow a new set.



Dolphins are mammals adapted to life in the sea. Their front legs are modified into flippers, they have no back legs.



Whales also live in the sea. This whale has no teeth, it uses a 'sieve' called baleen to filter its food from the water.



# Test yourself!

Look at the pictures of the skeletons in the Museum -  
can you fill in the blanks?

The Museum holds hundreds of skeletons - you can see the five groups of vertebrates, f\_ \_h, amph\_bi\_ ns, r\_pt\_les, b\_ \_ds and m\_mm\_ls.

The tuna skeleton has no arms or l\_gs, but you can see its f\_ns and ta\_l. It has a long flexible spine for swi\_ \_ing.

The frog has well developed b\_ \_k legs, modified hip b\_ n\_ s and a shortened spine allowing it to j\_ \_p and land easily.

The tortoise's vertebrae (b\_ \_k b\_ n\_ s) and ribs are fused and modified to form its sh\_ \_l.

Snakes have no a\_ms or l\_gs, but they can have up to five h\_ndr\_d vertebrae in their flexible spi\_e.

Tuataras look like l\_za\_ds, but are not related to them. Like all r\_pt\_les, tuataras hold their l\_gs out to the side of their body.

Crocodiles have large j\_ws, sharp t\_ \_th and very strong sk\_ \_ls - their powerful bite helps them h\_ nt.

The pelican is a sea b\_ \_d that catches fish in its massive b\_ll, like all birds that f\_y, they have large w\_ \_g bones.

The moa is an extinct flightless b\_ \_d that looked like an o\_tr\_ich. It had no w\_ \_gs, but could run on its long l\_gs.

The giraffe has lo\_g legs and a very long n\_ \_k to reach to the tops of tr\_ \_s and find the best le\_v\_s.

The tiger is a big c\_t which has a flexible sp\_ne allowing it to pounce on its prey, and sharp c\_n\_ne teeth to bite with.

Like all other m\_mm\_ls, the pig has legs that it holds beneath its body. Is this different to r\_pt\_les like the tuatara? YES or NO \_\_\_\_\_

This bull has horns. These horns have a bony core, and are covered with keratin - your h\_ir and f\_ng\_rn\_ils are made of keratin.

A male deer uses its a\_tl\_rs to fight other deer. Each year the antlers fall off and the d\_ \_r has to grow a new set.

Dolphins are mammals adapted to life in the s\_a. Their front legs are modified into fli\_ \_ers, they have no back l\_gs.

Whales also live in the s\_a. This whale has no t\_e\_h, it uses a special 'sieve' called baleen to filter its f\_ \_d from the water.