A photograph of a pond with several turtles. The water is green and murky. The turtles are of various sizes and are partially submerged. The background shows some green foliage and a dirt bank.

# Turtles, Tortoises and Terrapins

## Discussion Questions:

- 1) What is the difference between a turtle, a tortoise and a terrapin?
- 2) What features do they have in common?
- 3) What types of environments do they inhabit?
- 4) How do these reptiles protect themselves against predators?
- 5) How is a sea turtle different to a turtle that lives in a river?

# Turtles, Tortoises and Terrapins

Turtles, tortoises and terrapins have hard shells that protect them from predators. They breathe air, are cold blooded and lay eggs.

Turtles have flippers and spend most of their time living in water. They have a streamlined shape for swimming. Turtles do not retract their heads into their shells.

Tortoises have round stumpy feet for walking on land. They spend their life living on land. Tortoises can completely retract their heads into their shells.

Terrapins live in water and on land. They have webbed toes and can be found living near streams, rivers and lakes. Most terrapins fold their necks into their shells sideways.

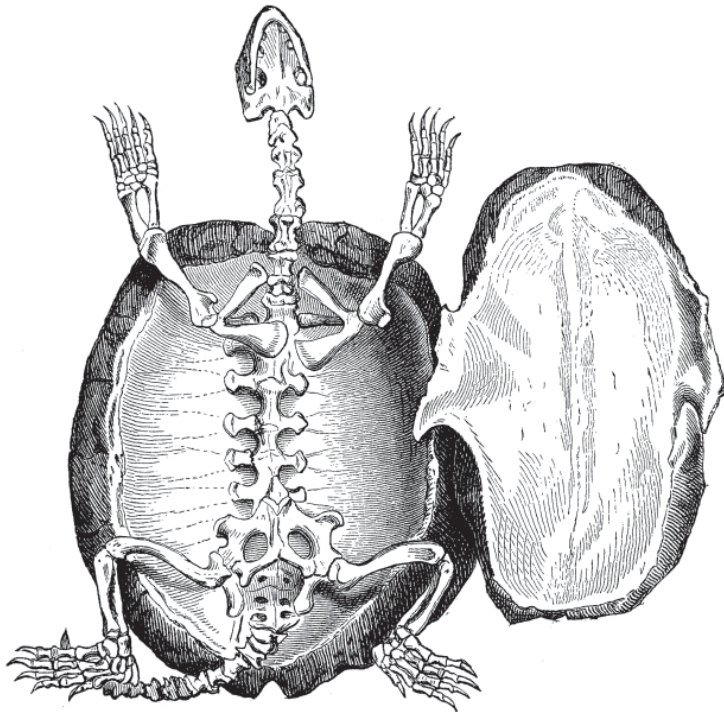


# Anatomy

Turtles, tortoises and terrapins all have a hard protective shell that protects them from predators.

The turtles shell is made up of two halves that are connected by a bony bridge. The upper half of the shell is called the carapace. It is made up of bony parts and numerous interlocking parts called skutes. The bottom half of the shell is called the plastron. It is also made up of bones and skutes and is quite flat.

The skeleton of the turtle is attached to the shell. A turtle cannot crawl out of its shell, but most turtles and tortoises can draw their head and limbs into their shells for protection. Sea turtles are an exception. They have flippers instead of feet and they cannot retract their head or flippers into their shells.



## How do turtles and tortoises protect themselves?

Turtles and Tortoises protect themselves by pulling their heads and limbs inside (or part of the way inside) their hard shell.



Tortoises spend their life on land, therefore they have feet well adapted to walking on land.





## What is the largest species of tortoise?

The giant tortoise is the largest species of tortoise. An adult tortoise can weigh about 250 kg (550 pounds).

There are two species of giant tortoises. These are isolated populations and are only found on the Galapagos Islands in the Pacific Ocean, near Ecuador, and on the Aldabra group of islands in the Indian Ocean.

They are slow moving individuals who enjoy sleeping for many hours a day. They are herbivores and have a strong bony jaw that they use to rip out vegetation.

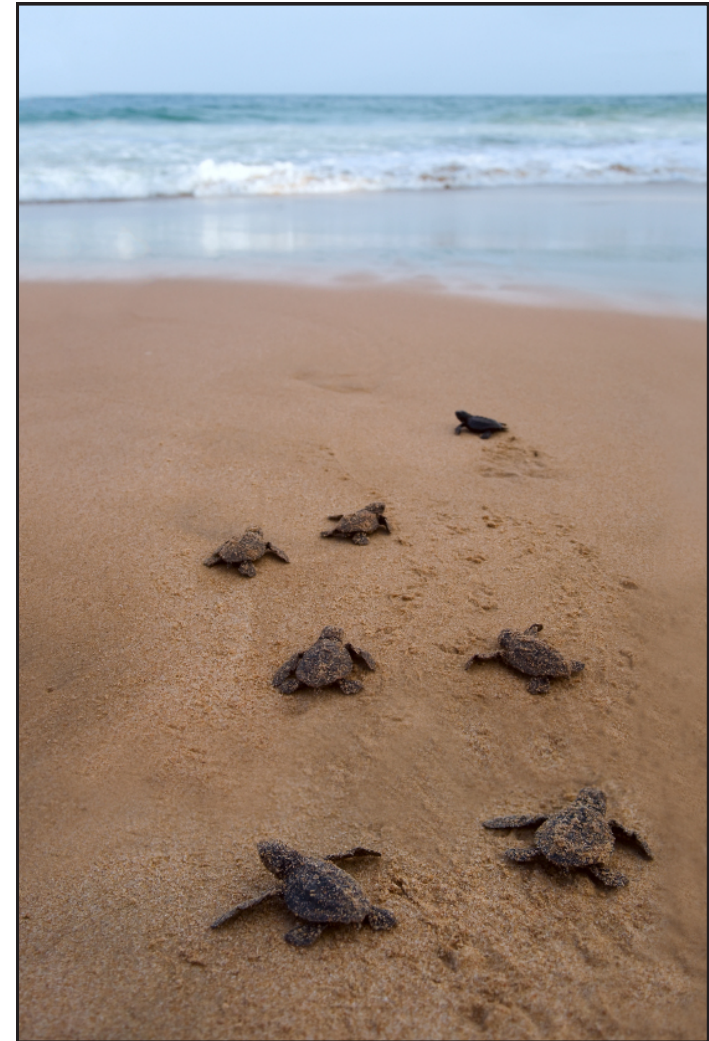
Giant tortoises are slow growing. They reach maturity at about 20-25 years in the wild and has a life expectancy of over 100 years. (They can live longer in captivity.)

Giant tortoises have no predators in their natural environments, except humans who have used them as a source of food. The population of these creatures have drastically reduced over the last few hundred years and they are now considered endangered.



# Sea Turtles

Sea turtles spend most of their life out at sea. Females only return to shore to lay eggs. They drag themselves up onto the beach with their flippers to find a place to nest. The following pictures show a loggerhead turtle using her flippers to cover the eggs she has laid in the sand. The eggs incubate in the warm sand for about 80 days before the hatchlings crawl out of their shells and head for open water. Those that survive to maturity will return to the same beach to lay their own eggs.





There are 7 species of sea turtles. They inhabit oceans and seas all over the world, except for the cold waters of the polar regions. They have flippers which help them glide through the water and their hard shells offer them protection against predators. Sea turtles can hold their breath under water for an extended period of time.



# Why don't all turtles have flippers?

Turtles that inhabit rivers and swamps spend part of their time in water and part on land. This is why they don't have flippers, as they need feet to be able to move around easily on the land.





## Dangers for turtles and tortoises

Turtles can die if they get stuck on their backs. Young turtles can overheat quickly in direct sunlight if they get stuck on their backs.

Many turtles use their limbs to rock themselves from side to side in an effort to flip themselves back over. However, having short legs can make this a difficult task.

The greatest danger for sea turtles are fishing nets. If a sea turtle becomes entangled in a fishing net it won't be able to surface to breathe properly and will drown.

