

Sharks have been around since before the dinosaurs - nearly 400m years! One of the main reasons for this is their amazing anatomy which makes them an Apex predator which is certainly built to hunt...

Shark's bodies are perfectly streamlined to help them move quickly through the water. The short fin mako shark is the fastest shark, reaching speeds of up to 80km an hour!

A shark's skeleton is extremely light and flexible. This is because it is made of cartilage, not bone - just like the stuff in your ears and in the end of your nose.

The fins help the shark move efficiently. The dorsal (top) and ventral (bottom) fins help the shark keep balance as it swims, the pectoral fins at the side allow it to change direction and the caudal fin (or tail) propels the shark, giving it speed for the chase.

The Ampullae of Lorenzini enables the shark to detect the slightest movement, vibration, or electrical impulse in the water, from the smallest of prey. This is an amazing sensory organ found on the shark's snout which comprises large pores filled with a gel like substance and lots of nerve endings. The nerve endings are connected directly to the brain, enabling rapid response and maximum hunting ability.

The lateral line is a line of pores found in all fish. It runs all the way along the mid-section of the body, connecting to the spinal cord then brain. It senses tiny vibrations in the water nearby, alerting the shark to potential prey and predators. It's made up of a row of small pores that run all the way from the snout to the tail. Surrounding water flows through these pores and special sensory cells sense any pressure changes.

WHY WE NEED SHARKS

As APEX predators, sharks sit at the top of the food chain and help maintain a healthy balance of life in the sea and a healthy ocean. By controlling numbers of large and mid-sized predators, they allow smaller fish to thrive and ensure a healthy ecosystem with a diverse range of species and competitors.

Habitats such as coral reef often depend on smaller fish to keep them clean and healthy. Without their fishy caretakers, reefs would die off too. No sharks, no habitat, no fish - no fishing industry and no tourism!

WHAT CAN A DO TO HELP SHARKS?

- Educate yourself and your friends
- Don't buy fish marked 'flake' - it's shark
- Share your love of sharks on social media



Ampullae of Lorenzini



Lateral Line



EDUCATE - INSPIRE - PROTECT