Shark Anantomy

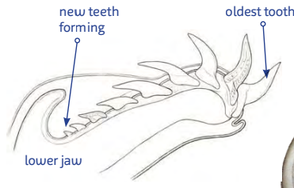
Skeleton
This is made of cartilage – just like human ears and nose. Cartilage is flexible and enables a shark to move quickly through the water. It is also light so keeps the shark buoyant.

Muscle
Sharks have two types of muscles that move the skeleton. Red muscle breaks down fat providing energy for long distance swimming. White muscle breaks down sugars, enabling the shark to make short fast sprints when catching prey or escaping danger.

Liver
A large oily liver provides a shark with neutral buoyancy, so it doesn't sink or float

Dorsal Fin
This keeps the shark steady and upright.

Jaws
The jaws are not attached to the skull, so a shark is able to quickly shoot its jaws forward to catch prey.



Teeth
Most sharks have several rows of teeth - as the front row wears down a new row moves in from behind to replace them, like a conveyor belt. Some sharks can lose 30,000 teeth in their lifetime!

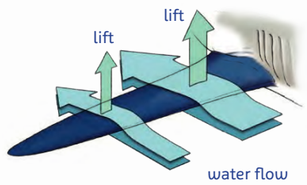
Caudal Fin
The tail is used to propel the shark forward through the water.

Pelvic Fin

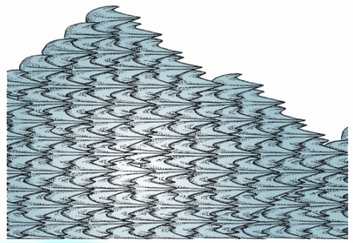
Spiral Valve
The spiral valve is part of the small intestine, its shape provides a greater surface area for digestion of food.

Stomach

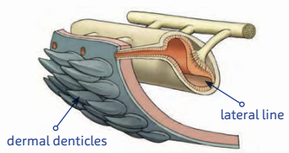
Pectoral Fin
Pectoral fins provide balance and are used to steer. They act like aeroplane wings, as water flows beneath them the shark is lifted up.



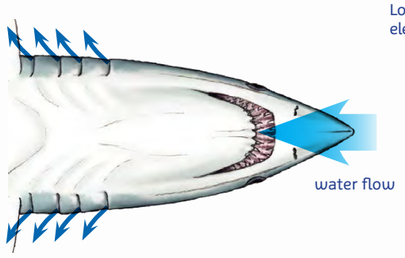
Skin
A sharks' skin feels like sandpaper. It's covered with millions of tiny teeth-like scales called denticles, which point backwards, helping the shark to swim faster by reducing water resistance.



Lateral Line
Sharks are very sensitive to touch and can even feel pressure differences in the water. This is due to the lateral line, which is made up of nerve endings under the skin that run from the head down along the body.



Gills
As a shark swims forward water enters its mouth and passes out through the gills. Oxygen in the water is absorbed into tiny blood vessels near the gills, which is then carried around the body.

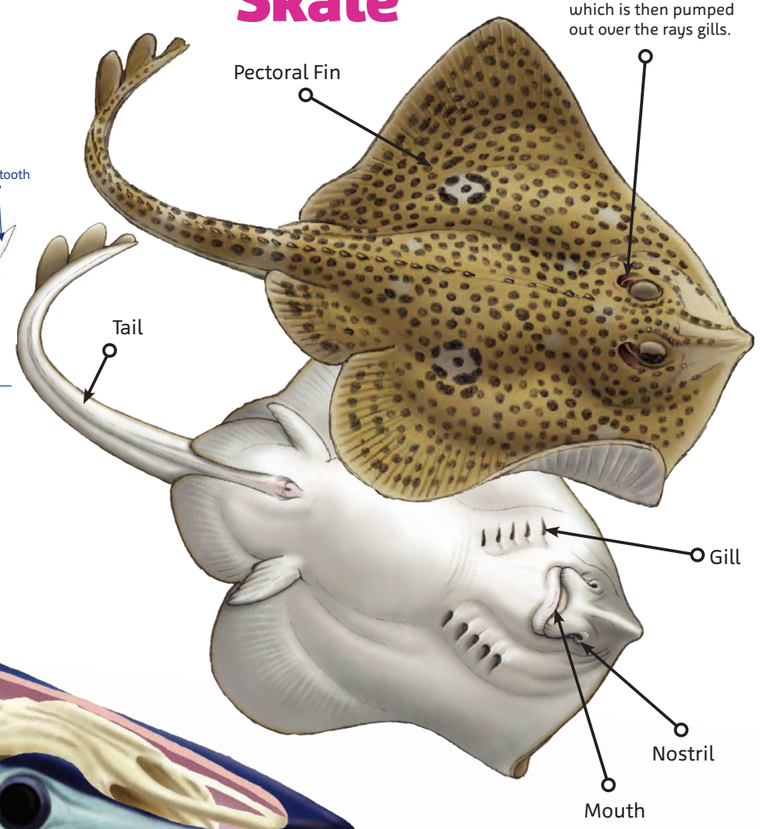


Ampullae of Lorenzini
A shark's snout is covered in small pores called 'ampullae of Lorenzini', these can detect tiny electrical currents in the water,

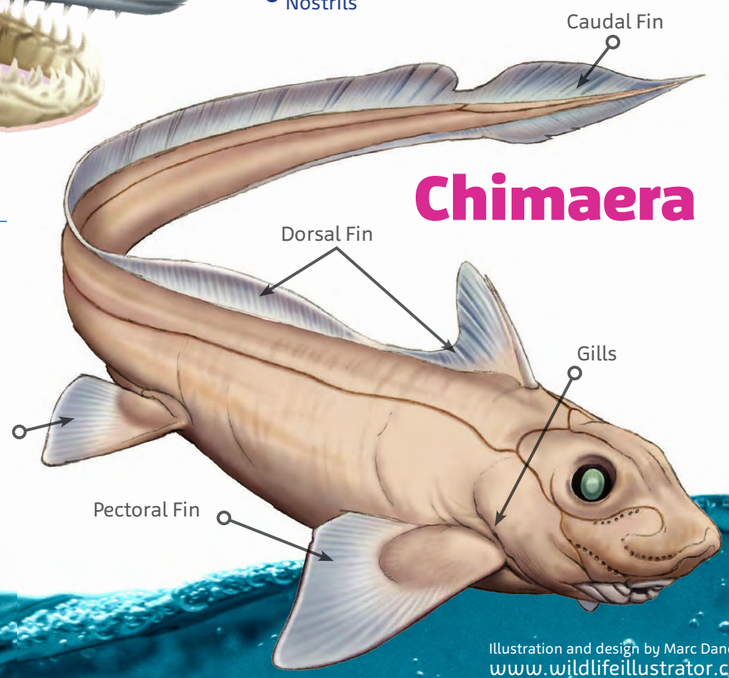
Nostrils

Skate

Spiracles
Spiracles behind the eyes draw water in, which is then pumped out over the rays gills.



Chimaera



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