

How are sharks unique?

We know sharks are in the same class as sting rays.... Chondrichthys
This means they have cartilaginous bones
Subclass: "The Elasmobranch"

RESPIRATION:

Since they do not have _____ most sharks need to move forward in order to breathe.

3 Main Methods of Respiration:

- Buccal Pumping
- Ram Ventilation
- Spiracles

Species that use buccal pumping:

Nurse Sharks

Carpet Sharks (wobbegongs)

Angelsharks

Skates and Rays

Species that have spiracles:

Rays

Skates

Sawsharks

Cat sharks

REPRODUCTION

Live Birth vs. Egg Layers

All sharks and rays have internal fertilization

From there, they are either oviparous (egg-laying) species and viviparous (live-bearing)

Oviparous (egg-laying) organisms release their fertilized eggs in structures called mermaid's purses that can latch onto coral, plants, or other structures

Viviparous (live-bearing) organisms allow their young to mature in womb until birth

THEY HAVE 7 SENSES!

Sharks use the senses of smell (chemoreception), sight, hearing, touch, taste, the lateral line system, and electroreception (ampullae of Lorenzini) for capturing prey.

The lateral line system, which all fishes possess, allows them to detect waves of pressure or mechanical disturbances in the water.

The ampullae of Lorenzini are receptors that can detect weak electric fields. This sense is unique to sharks and their relatives. Sharks primarily use this sense to locate cryptic prey which can not be detected by their other senses, such as stingrays buried in sand.

The stingray, like all living animals, emit weak electric fields produced by muscular contractions in the body. Sharks have the extra predatory advantage of being able to detect those fields at close range

Do sharks have eyelids?

Kinda?!

Some sharks have an eye cover called a nictitating membrane. This membrane is a thin, tough membrane or inner eyelid in the eye of many species of sharks. It covers the eye to protect it from damage, especially just prior to a feeding event where the prey may inflict damage while trying to protect itself.