

SHARKS PPT

by Bilal Karsifi

Today we will learn about;

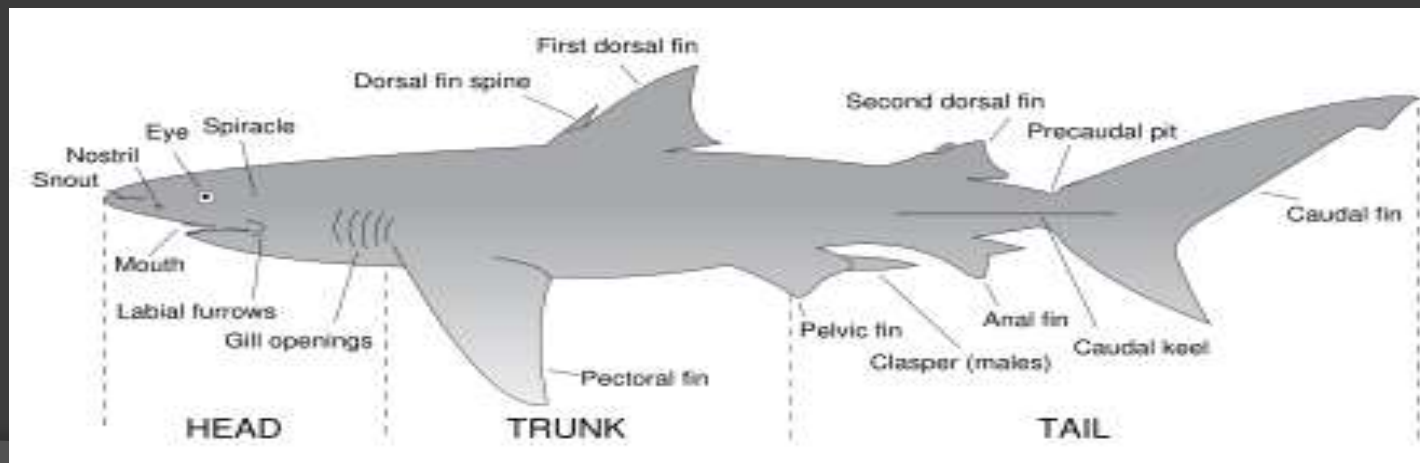
- What is a shark?
- Skeleton
- Respiration
- Sharks characteristics and facts
- Shark Attacks
- Shark fin soup



What is a shark?

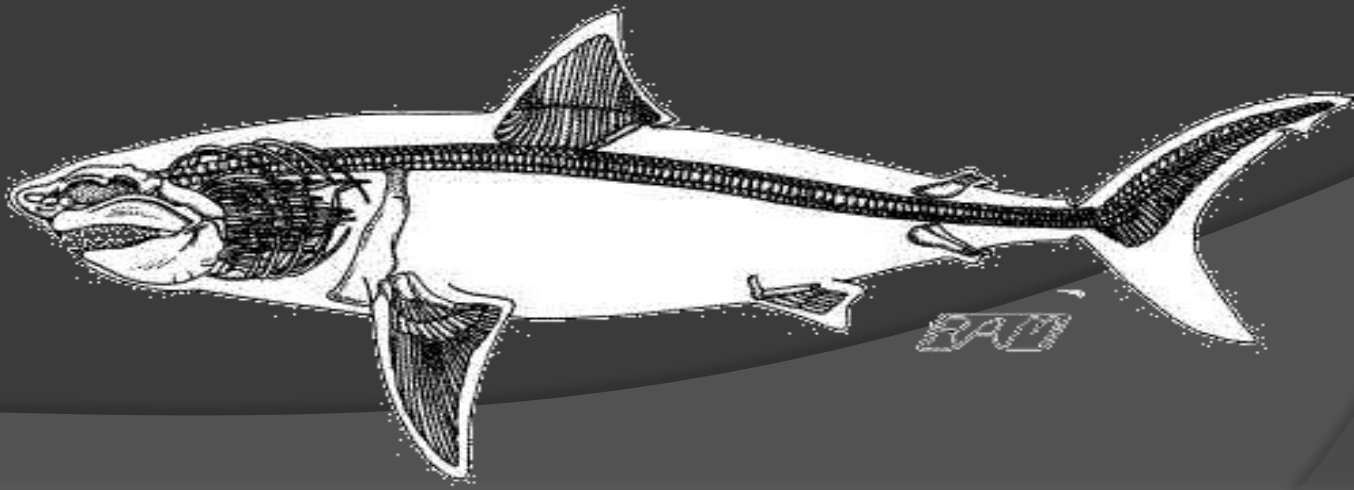


❖ Sharks are fish with a full cartilaginous skeleton. They respire with the use of five to seven gill slits. Sharks have a covering of dermal denticles to protect their skin from damage and parasites; they also have replaceable teeth



Skeleton

❖ The skeleton of a shark is very different from bony fishes. Sharks and their relatives, skates and rays, have skeletons made from rubbery cartilage, which is very light and flexible. But the cartilage in older sharks can sometimes be partly calcified, making it harder and more bone-like. Because sharks do not have rib cages, they can easily be crushed under their own weight on land.



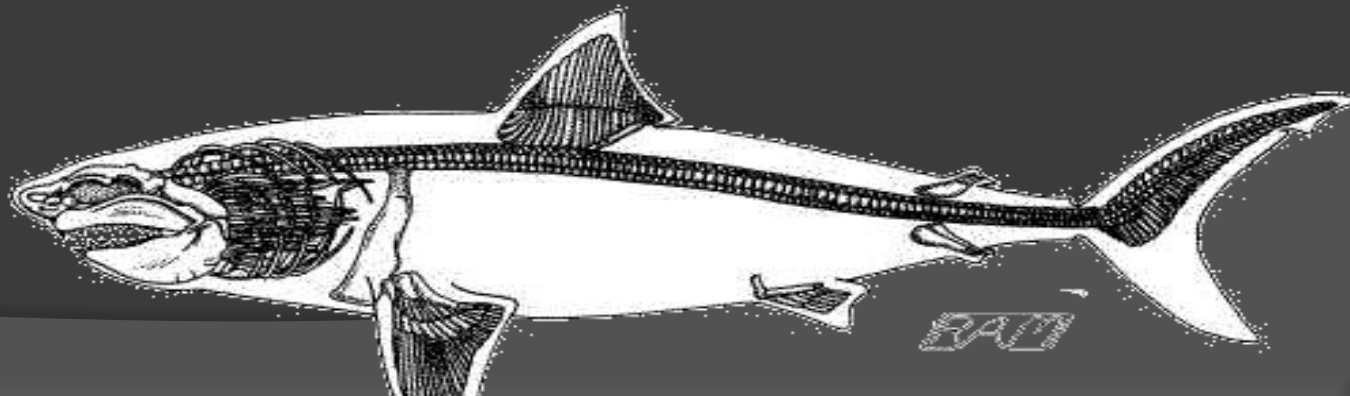
Skeleton

□ Skeletons are made of cartilage, a fibrous tissue, which is light and half as dense as bone tissue-

❖ -Lighter structure makes it easier for a shark to move and support its weight.

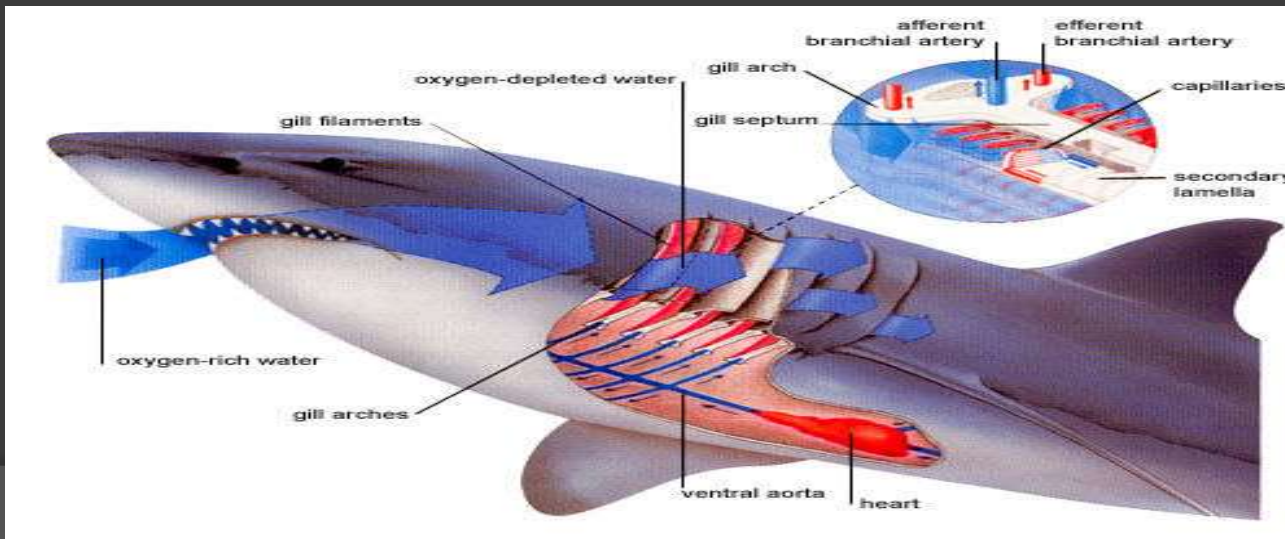
❖ -sharks have no ribs not needed because much of their weight is supported by the water.

❖ -Muscles are attached directly to the collagen matrix which makes up the skin and outer shell of the body, allows skin to act as an external skeleton making swimming motions much more efficient for the shark.



Respiration

❖ Like other fish, sharks extract oxygen from seawater as it passes over their gills. Unlike other fish Shark gill slits are not covered, but are in a row behind its head. Some sharks have a modified slit called a spiracle located just behind the eye, which is used in respiration. While moving, water passes through the mouth of the shark and over the gills -- this process is known as "ram ventilation".



Respiration

❖ Sharks need to keep moving forward to breathe.

Q. What happens when they sleep?



Ans. When they sleep, some sharks pump water over their gills to ensure a constant supply of oxygenated water, but others lack this ability. In the latter case, these sharks must continuously swim to breathe. Stopping would mean death due to a lack of oxygen.



“ I think a relationship is like a shark. It has to constantly move forward or it dies.”
~ Woody Allen

**SOMETIMES YOU JUST HAVE TO KEEP
MOVING FORWARD**

NO SERIOUSLY, YOU'RE SUFFOCATING

Sharks characteristics and facts

- Sharks are believed to have developed approximately 350 million years ago
- Due to their advanced evolutionary state, they have remained virtually unchanged for the past 70 million years.
- Large sharks generally cruise at a speed of 1.5 mph
- Great white sharks are believed to swim at a top speed between 40 to 50 mph
- The Shortfin Mako is thought to be the fastest shark, calculated top speeds have ranged anywhere from 30 mph to around 70mph



Shark Attacks

- Threat of Sharks
- When, Where and why they attack
- How to reduce risks of being attacked

- About 80% of shark attack victims survive.
- Most often the shark carries out an exploratory attack.
- 17 fatalities are recorded as having being caused by shark attacks in 2011, out of 118 recorded attacks.







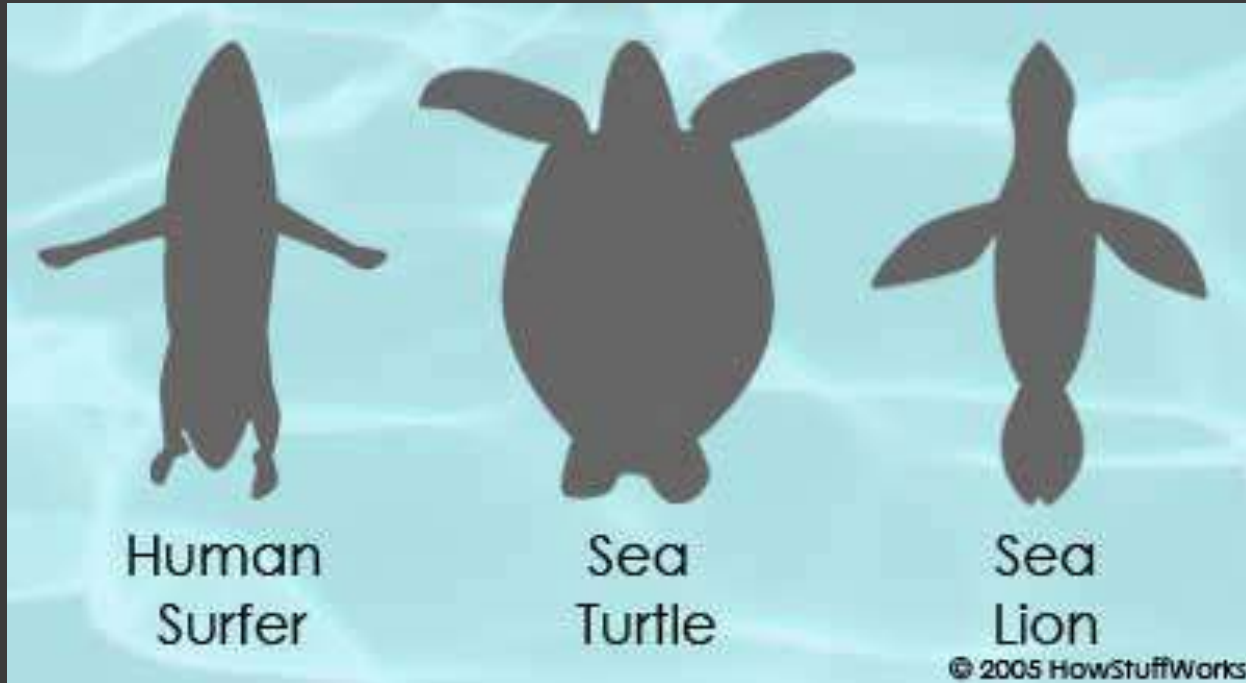
OH MY GOD

It's a Shark.

When, Where and why they attack

- Most attacks occur in warm and shallow waters near resorts.
- Statistics are only recorded in affluent countries.
- A lot of sharks feed of bigger prey such as sea lion, a human on a surf board or floating at the surface water can be mistaken for one.
- Most attacks are “hit and run” attacks.
- Less common are “Bump and run” and “sneak” attacks which more often than not end up in fatalities.

WHY



Most common sharks to attack



Bull shark



White tip Shark



Great White Shark



Tiger Shark

How to reduce risks of being attacked

- ✓ Stay in groups, sharks usually attack an animal that is alone.
- ✓ Do not go in the water during night time hours, sharks have a competitive advantage then and are more likely to attack.
- ✓ Use caution when near sandbars.
- ✓ Avoid uneven tanning and bright colored clothing, sharks see color contrast well.

Shark Fin Soup



- **Shark fin soup** (or **shark's fin soup**) is a popular soup item of Chinese cuisine usually served at special occasions such as weddings and banquets, or as a luxury item in Chinese culture.

- The soup originated centuries ago during the Ming Dynasty. Demand for the soup has increased as income levels of Chinese communities worldwide have risen. International concerns over the sustainability and welfare of sharks have impacted consumption and availability of the soup.

- In shark fin soup, the fins themselves are virtually tasteless. The taste comes from the soup, while the fins are valued for their texture.



❖ When they are fished, their fins are cut off while they're still alive, and then 90% of their body is disposed again in the ocean, since sharks cannot breathe unless they swim forward, they die of suffocation.





The End

This Presentation was done by
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Credits go to the wonderful
creatures of nature, Sharks.

Thank you.