

SHARK



The six-gill shark, approximately 8 feet long. Image courtesy of Harbor Branch Oceanographic Institute.

Sharks are fish, and have skeletons but no bones. Their skeleton is made of cartilage (like in our nose). They also do not have scales as most fish do. Sharks can be very big, like the enormous 40-foot-long whale shark, or small like some sharks that are 1-3 feet in length. Scientists think that most sharks live to be around 20-30 years, while some are thought to live around 100 years. One thing that is still unknown about sharks is how they sleep; it is thought that they do not sleep!

Sharks can have several rows of teeth in their mouth. When one tooth breaks off, another tooth moves forward to replace it. Teeth are always being replaced. A shark can lose many thousands of teeth over a lifetime! The shark has different kinds of teeth in its mouth; some are very sharp and thin and others are more flat for crushing shellfish.

Sharks are great hunters. They are "top" predators (hunt for other animals to eat) and are at the "top" of their food chain so they are called "apex predators." That means they have few natural predators, and they feed on many species below them on the food chain.

Even when the water is not clear, or when it is dark, sharks can easily locate their prey because they have:

- many rows of teeth that are replaced throughout their life
- sensitive smell (scientists think sharks can smell from even $\frac{1}{4}$ of a mile away!)
- good eyesight that allows them to see even when there is not much light in the water
- organs on the side of the body that can sense movement in the water (called a "lateral line"). The lateral line also can help a shark know where it is in the currents.
- fins, skin and a tail that are made for strong, fast swimming.

Sharks are very active hunters, and eat primarily fish, although the great white shark will also hunt seals, sea lions and other marine mammals. Some sharks eat animals that move on the sea floor such as crabs, and others will even hunt for dead animals. Most sharks are predators, but the whale shark is not an active predator even though it is huge. It feeds by swimming with its mouth open to collect plankton and small fish.

Sharks look tough and scary, but rarely do they bite humans. Actually, humans do the most damage to sharks. People fish for them for sport and for food in some cultures. Another problem for sharks is that they get caught in many types of fishing gear. We have to be careful with sharks because they have only a few babies at a time. They grow slowly and sometimes take up to 18 years to become an adult shark!