

Sharks

Sharks are powerful fish. There are 400 types of sharks in the world. Most sharks live in the ocean, although some sharks live in lakes and rivers and are called freshwater sharks. Sharks differ from other fish because they do not have a skeleton made of bones. Instead they have a skeleton made of **cartilage** a lighter elastic material. This cartilage helps them bend and twist in the water. Many people fear sharks, but they do not often attack humans.

A shark has to spend most of its time hunting for **prey**. It has to be very fast. Some kinds can swim at speeds up to 40 miles per hour. A shark can come upon a seal or other prey on the surface from below and grab it. To help it detect prey, a shark has an amazing sense of **smell** (10,000 times better than humans). It also can **hear** a sound one mile away, feel **vibrations** made by a prey from 330 feet away and can **see** very well, even in the deep dark bottom of the ocean.

A shark does not chew its food. It bites off big pieces and swallows them whole. It has many rows of teeth. It is always losing some and replacing them. A shark may use up more than 10,000 teeth in its life. Different sharks have different kinds of teeth. Each kind is right for the food that a shark eats. Long, spiky teeth are good for catching. Flat teeth are good for grinding. **Serrated** teeth (like the edge of a knife) are good for ripping. A shark usually eats alone because if a big group of sharks attacks a single prey, one shark might bite another in the confusion.

A shark has to keep moving all the time or it will drown. It moves even when asleep. Its powerful tail helps it move forward, and its **fins** keep them on course. As it swims through the water, the water flows through its mouth and over its **gills**. The gills collect **oxygen** for the shark to breathe. Then the water flows out through gill slits on either side of its head.

Most shark babies grow inside their mothers and are born after about 10-12 months. Babies are called **pups**. Lemon sharks may have as many as 17 pups at a time. Some sharks, like the cloudy cat shark, lay eggs in cases on the

ocean floor. Inside the egg case, a shark **embryo** feeds on the yolk of the egg. It cracks out of the egg and swims away from its mother fully grown.

Whale sharks are the world's largest living fish. The great white shark is the world's largest **predatory** fish. The pygmy shark is one of the tiniest sharks. It is under 9 inches long. The shortfin mako is the fastest shark in the world. The three deadliest or most dangerous to humans are the white, tiger and bull sharks.

Sharks are disappearing from the world's oceans. Scientists are trying to find ways to prevent that from happening. In order to learn more about sharks and their habits, scientists safely catch them in a plastic sling, measure them, take a blood sample for **DNA** and attach a tag to the base of a fin. This tag can send out a sound which can be picked up by an underwater microphone. Records of sightings are kept in logbooks around the world.

In summary, there are about 400 kinds of sharks in the world. They are the world's most powerful fish. However, unlike fish, sharks don't have a skeleton made of bone, but of cartilage. The cartilage allows them to bend and twist as they swim. Most sharks live in the ocean, although a few kinds live in freshwater.

Write the letter a, b or c in the space provided to give the correct response to each question.

4. The word prey as used in the passage means

a. Hunter b. Food c. Predator

5. Which shark is under 9 inches long?

a. Great White b. Lemon c. Pygmy

6. What is the largest predatory shark?

a. Great Whale b. Great White c. Whale Shark

7. Cartilage makes the sharks body...

a. Bend and Flip b. Bend and Bony c. Bend and Twist

8. What are baby sharks called?

a. Sharklets b. Pups c. Cubs

9. Flat teeth are good for?

a. Tearing b. Ripping c. Grinding

10. A shark has to always move, if not it will

a. Fall asleep b. Not get food c. Drown

11. Which shark feeds on the embryo of the egg?

a. Lemon b. Tiger c. Cloudy cat

12. What keeps the shark on course?

a. Tail b. Fins c. Gills

13. Shark skeletons are made of

a. Cartilage b. Bones c. Teeth

14. A shark's eating habit will see it doing what?

a. Chewing its food b. Sharing food c. Swallowing big pieces

15. The three deadliest sharks to humans are the Great White, Bull and....

a. Shortfin Mako b. Lemon c. Tiger

Write T for True or F for False in the space provided for each statement

16. Sharks are the world's most powerful mammal.

17. Most sharks live in fresh water and a few in the ocean.

18. The ocean is seeing an increase in shark population

19. Powerful tails allow sharks to move forward.

20. Most sharks are born from eggs laid by their mothers.