



THE GREAT WHITE Shark

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Sharks

Sharks are a kind of fish that are different from other fish mostly because sharks have cartilage instead of bones. Many people fear sharks because they are thought to be violent man-eaters. In reality, out of the hundreds of species of sharks that still exist today, only four species (the great white shark, the bull shark, the tiger shark, and the oceanic whitetip shark) have been involved in unprovoked attacks on humans. Most species of sharks pose no threat to humans because of their size and hunting preferences.

Even though not all sharks hunt large prey, they all share a body structure that is well suited for killing. Shark bodies are very sleek and sharks can generally swim faster than most other sea creatures. The jaws of almost every shark are placed perfectly for gripping, biting, and ripping at their prey. Sharks live in every sea, and can be found at depths ranging from 2,000 meters down all the way up to the ocean's surface. Some species of sharks can even live in freshwater environments, such as lakes and rivers.

The Great White Shark

The great white shark is the most famous species of shark because it is one of the deadliest predators in the ocean. It is also the shark that has attacked and killed most humans. The great white became popular to most people as the subject of the *Jaws* movies.



The Shark Awakens

Just before dawn, a great white shark glides slowly through the ocean. The great white does not sleep. Instead of sleeping, it swims very slowly. This way, it uses less energy. Like all sharks, the great white must move constantly to keep water moving through its gills. If the great white stops moving, it will not be able to breathe and will die. As the sun rises, the deadliest predator in the ocean becomes active again.

The great white shark is one of the most fearsome creatures on the planet. Thanks to books and movies like Peter Benchley's *Jaws*, and Steven Spielberg's movie adaptation of it, the great white shark is one of the most popular predators as well. Humans are not the preferred prey of great whites, so they are not as dangerous to people as movies and books make them seem. However, they are responsible for the majority of shark attacks on humans.

Great whites can grow up to six meters long, and can weigh as much as 2,240 kilograms. They can live to be at least 30 years old. As a species, they are very old. Based on fossils, great white sharks evolved into the sharks they are today about 65 million years ago. This makes the species about as old as the last living dinosaurs. The oldest shark fossil ever found is about 409 million years old. This means that sharks existed about 200 million years before the dinosaurs.

Great whites are named after the color of their skin. They have gray backs, but the lower half of their bodies is very white. Their coloration gives them a bit of camouflage against their environment. When viewed from above, their gray backs slightly blend in with the rest of the ocean. When a great white is seen from below, its white underside matches the sunlight to some degree.

Great whites have been observed hunting at all times during both day and night. The active and restful periods of great white sharks are most likely determined by the habits of their prey. If the shark's prey is active during the day, the great white will probably be active as well. The same probably applies if prey is active at night.





Great white sharks usually hunt alone. Sometimes a group of great whites can be found hunting in the same area, but this doesn't mean the sharks are being sociable. It is much more likely that the area is simply home to a large amount of prey and the great whites do not mind sharing it. Occasionally, great whites feed together on very large carcasses, such as those of dead whales. The only time great whites seek out other great whites is when it is time to mate.

Mating does not last long, however, and the sharks return to being alone. Mother sharks do not remain with their offspring after they are born.

Despite being at the top of the food chain, great white sharks are not invincible. They have to worry about the presence of other large predators, such as killer whales. Killer whales eat many of the same animals that sharks do. On rare occasions, killer whales will attack and eat great white sharks.

Sharks have great senses, which allow them to find prey, predators, and mates from far away. Their sense of smell lets them know about the presence of food or danger. This sense is so important that two thirds of their brain is attached to it.

Right now the great white shark can smell another predator. However, the shark's sense of smell also tells it that the predator is far away. Nevertheless, the shark will have to be cautious today.

Great white sharks can smell a drop of blood in 100 liters of water. So, if an animal is bleeding in the ocean, the great white will be able to smell it from very far away.

Great white sharks give birth to live young called pups. Each pup is between 1.2 - 1.7 meters long when born.

For teachers' inspection ONLY

(pp. 4-5)

bone (n) = one of the hard parts which form the skeleton

fear (v) = to be afraid of

violent (adj) = cruel

man-eater (n) = a creature eating humans

species (n) = a kind; a type

be involved in (phr) = to take part in

unprovoked (adj) = unmotivated

pose a threat (phr) = to cause danger

hunt (v) = to chase

prey (n) = an animal hunted for food

well suited (adj) = appropriate

sleek (adj) = smooth; glossy

jaws (pl n) = the mouth of a dangerous animal

grip (v) = to hold tightly

bite (v) = to cut with your teeth

rip (v) = to tear

range (v) = to vary

surface (n) = the flat top layer of sth

freshwater environment (phr) = a place that contains water which is not salty

deadly (adj) = extremely dangerous

predator (n) = animal that kills and eats other animals

attack (v) = to try to hurt

subject (n) = a topic

1 a) Which of the following are true about sharks?

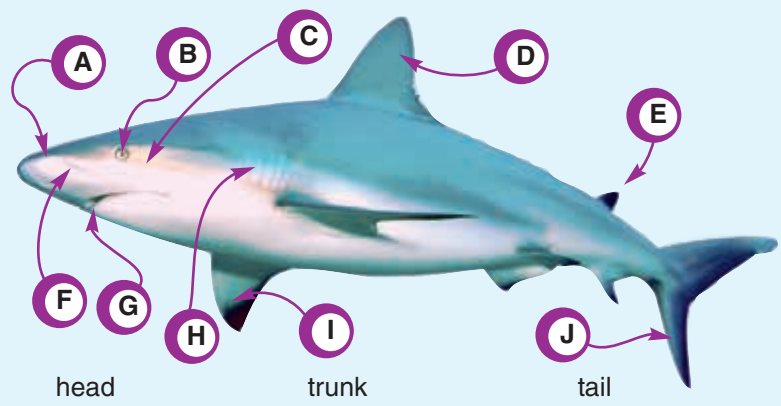
- 1 Sharks aren't exactly the same as other fish.
- 2 Sharks are wrongly thought to be violent man-eaters.
- 3 They don't swim very fast.
- 4 They only live in warm waters.
- 5 Some species live in lakes and rivers.
- 6 Great white sharks live in the open sea.

b)  Listen, read and check.

2 Read the text and choose the best answer from A, B, C or D.

- 1 How do sharks differ from other fish?
 - A They have muscle and skin.
 - B They have gills instead of lungs.
 - C They have cartilage instead of bones.
 - D They have fins instead of arms.
- 2 Which kinds of sharks are man-eaters?
 - A The great white shark.
 - C The tiger shark.
 - B The bull shark.
 - D All of the above.
- 3 Where do sharks live?
 - A They only live in the Atlantic Ocean.
 - B They only live in the Arctic Ocean.
 - C They live in every sea and, in some cases, lakes and rivers.
 - D They only live in lakes and rivers.
- 4 What is the great white shark famous for?
 - A for being one of the deadliest predators in the ocean
 - C for being extinct
 - B for being gentle
 - D for being small
- 5 Which movie is based on the great white shark?
 - A *Predator*
 - C *Ocean's 11*
 - B *Jaws*
 - D *Free Willy*

3 Match the numbers to the letters.



1	eye
2	spiracle
3	first dorsal fin
4	nostril
5	gills
6	mouth
7	pectoral fin
8	caudal fin
9	snout
10	second dorsal fin

4 Use the words in the list to complete the fact file:
cartilage, predators, jaws, prey, hunt, sleek.

1 Great white sharks are; they eat other sharks and seals.

2 They have a body that allows them to move fast in the water.

3 They have wide teeth in their upper and lower

4 Sharks use their teeth to hold their in place while they cut into it.

5 They usually alone looking for food.

6 They don't have bones; their skeleton is made of

5 Add these words and phrases to the right group according to their meaning: *bite, rip, range, grip, unprovoked, pose a threat.*

- 1 differ, vary, ...
- 2 cut, chew, ...
- 3 not caused, unmotivated, ...
- 4 grasp, hold, ...
- 5 pull apart, tear, ...
- 6 increase the risk of, cause danger, ...

After-Reading activities

6 Fill in: *well suited, deadly, species, pose, range.*

- 1 Only four of sharks are man-eaters.
- 2 Most sharks no threat to humans.
- 3 All sharks' body structures are for killing.
- 4 Sharks live at depths that from 2,000 meters down, all the way up to the ocean's surface.
- 5 The great white shark is a ocean species.

7 Write three things that impressed you the most about sharks.

Review

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Listening Activities

1  Listen to a dialogue about sharks. For questions 1-4 choose the correct answer A, B, C or D.

- 1 What are the speakers mainly discussing?
 - A ways that great white sharks die
 - B why great whites prefer to eat mammals
 - C places where great whites hunt seals
 - D why seals store their energy as blubber
- 2 Why does the man say: "Do you know how some sharks can't stop swimming or else they'll suffocate?"
 - A to establish how much the woman knows about the subject
 - B to introduce an explanation of how sharks breathe
 - C to ask about how previous information relates to the current subject
 - D to check whether the woman understood his previous statement
- 3 According to the man, what is blubber?
 - A something seals eat
 - B something that kills sharks
 - C a body organ where fat is stored
 - D a form of fat in mammals
- 4 How does the woman respond when she learns that sharks eat blubber?
 - A positively
 - B with revulsion
 - C skepticism
 - D angrily

2  Listen to a lecture about sharks. For questions 1-4 choose the correct answer A, B, C or D.

- 1 What is the main topic of the lecture?
 - A whether or not sharks sleep
 - B how sharks differ from fish
 - C new discoveries about sharks
 - D how fish and sharks breathe
- 2 Why does the teacher say: "Does anybody know whether sharks sleep?"
 - A to review previous information the students have studied
 - B to find out specific information about the subject
 - C to introduce the question she will attempt to answer
 - D to present a possible topic to write a paper on
- 3 Why does the teacher mention the inactive state that fish enter?
 - A to prove a popular idea about sharks wrong
 - B to contrast ways that animals rest
 - C to compare fish and shark behavior
 - D to introduce a theory about sharks
- 4 According to the professor, what has never been scientifically proven?
 - A that sharks sleep in caves.
 - B that divers have found sharks in a sleep-like state.
 - C that sharks enter a sleep-like state.
 - D that sharks enter caves.



Myths & Legends

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Pre-Reading activities

1 a) Which of the following are *T* (true) or *M* (myths)?

- 1 The sand tiger shark cannot get sick.
- 2 The basking shark is a source of myths about sea monsters.
- 3 The whale shark cannot die.

b) Listen, read and check.

The Whale Shark ...

... was considered a deity in Vietnam. Fishermen would pray to the whale shark to help them catch many fish. They would also take bones of whale sharks that would wash ashore and give them a sacred burial in temples. The Vietnamese word for the whale shark translates to "Lord fish".



The Basking Shark ...

... is one source of the sea monster legends. When a basking shark dies, its body begins to decompose. The gills of the basking shark are the first thing to rot away, and this leaves the body with the appearance of having a long, thin neck. At that point, the body resembles a plesiosaur: a long, extinct animal that appeared to be a "sea monster".

The Sand Tiger Shark ...

... is often thought to be incapable of getting sick. Many people believe that sharks cannot get cancer. In fact, some companies sell shark liver oil and shark cartilage in capsules and promote it as a "cure" for cancer in humans. However, researchers have been discovering cancerous tumors in the mouths of sand tiger sharks for more than one hundred years! Taking shark liver oil or cartilage capsules does not cure cancer, and may in fact do more harm than good.



The Common Thresher Shark ...

... is believed to coordinate attacks on whales with swordfish. According to this myth, a thresher shark distracts a whale so the swordfish can attack the whale with its long, sharp bill. This myth likely began with fishermen mistaking an orca dorsal fin for that of the thresher shark. Thresher sharks do not attack whales, but orcas do.

Word Bank

deity (n) = a god or goddess

pray (v) = to address a deity

ashore (adv) = on land (from the sea)

sacred (adj) = holy; religious

burial (n) = the act of placing sb/sth into the ground

sea monster (n) = a fictional creature living in the sea

legend (n) = a very old story

decompose (v) = to rot; to decay

rot away (phr v) = to decay; to break down

resemble (v) = to look like

plesiosaur (n) = a type of extinct animal

incapable (adj) = not able

cancer (n) = a type of a disease

promote (v) = to advertise

cartilage (n) = a strong substance found around your joints, in your nose or in your ears

capsule (n) = a pill

cure (n) = therapy

tumor (n) = a mass of diseased cells in sb's body

coordinate (v) = to arrange

swordfish (n) = a large fish with a long, upper jaw

distract (v) = to draw sb's attention away from sth

bill (n) = the beak

mistake for (phr v) = to identify wrongly

orca (n) = a toothed, black and white whale

While-Reading activities

2 Choose the correct answer A, B, C or D.

- 1 The is an extinct animal resembling a sea monster.

A basking shark C thresher shark
B orca D plesiosaur

- 2 There is a myth that attack whales with swordfish.

A basking sharks C thresher sharks
B orcas D plesiosaurs

- 3 The sand tiger shark has been found to have cancerous in its mouth.

A tumors C deities
B serpents D myths

- 4 Whale shark bones were taken to temples for

A scared burial C sacred burial
B sacred bail D scared bail

3 Fill in the gaps with: *decomposing, cartilage, pray, bill, incapable*.

- Fishermen would to "Lord fish" to help them.
- A basking shark resembles a sea monster.
- Some people believe taking shark capsules can cure cancer.
- The sand tiger shark is of breathing with its stomach.
- A swordfish has a long sharp

After-Reading activities

4 Match the following phrases to make sentences.

- When a basking shark dies, ...
- Thresher sharks and swordfish ...
- The sand tiger shark sometimes ...
- Whale sharks were once ...

- ... grows tumors in its mouth.
- ... its gills rot away first.
- ... worshipped as deities.
- ... do not hunt whales together.

Reading in Context I

Pre-Reading activities

1 Read the title of the text. Mark the sentences *T* (true) or *F* (false).

- 1 A young man was attacked by a bull shark.
- 2 The boy didn't know about the shark warnings.
- 3 A swimmer took the boy to hospital.

2  Listen, read and check.

Shark savors surfer's shoulder; boy loses limb

By James Martinez

A young man was attacked by a shark while surfing at a local beach yesterday, according to officials.

The beaches near Wollongong have been closed since Tuesday, when a bull shark was spotted by a local fisherman.

Bull sharks are known for their extremely aggressive behavior and attack humans more often than any other shark.

In response to the fisherman's warning, beaches within city limits were closed until further notice.

Still, Chad Rockatansky, 19, woke up and went surfing Saturday morning. Rockatansky had heard the shark warnings, but ignored them. "I figured I'd be safe if I was careful," said Rockatansky.

Rockatansky said that he didn't see anybody at the beach and thought it would be a good time to surf because there weren't any crowds. He had been surfing for

about 15 minutes when he was attacked.

"I was paddling out to catch a wave, when all of a sudden this shark head came out of the water right near my face," said Rockatansky, "I screamed and the shark bit into my shoulder."

The shark's bite severed Rockatansky's arm, but he still managed to reach the shore before losing consciousness.

"I just started paddling as hard as I could with my other arm," said Rockatansky, "Then, when I reached the beach I started screaming."

Susan Jackman saw Rockatansky. "I was driving past the beach when I saw the boy bleeding all over the sand."

Jackman said that she dragged Rockatansky to her car and drove him to a nearby hospital.

At the hospital, Hugh Gibson, chief surgeon of Wollongong Hospital, stated that the doctors performed surgery for about two hours. "Rockatansky is currently in a stable condition and is expected to make a full recovery despite the loss of his arm," Gibson says.

Word Bank

savor (v) = to eat

limb (n) = an arm or leg

in response to (phr) = in answer to

warning (n) = sth that informs you of a possible problem or danger

city limits (phr) = the edge of a city

notice (n) = an announcement

ignore (v) = to not pay attention to

figure (v) = to think; to expect

crowd (n) = a large group of people

paddle (v) = to move through water

sever (v) = to cut off

lose consciousness (phr) = to not be aware of what is happening around you

bleed (v) = to lose blood

drag (v) = to pull along the ground

perform surgery (phr) = to operate on

chief surgeon (phr) = the surgeon in charge of all surgeons in a hospital

currently (adv) = at present

in a stable condition (phr) = in a state of health that is not expected to get worse

make a full recovery (phr) = to be healthy again

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While-Reading activities

3 Read the article and choose the best answer from A or B.

- 1 Where did the attack take place?
A At a beach near Wollongong.
B At a hospital near Wollongong.
- 2 Why were the beaches closed?
A A killer whale had been spotted by a fisherman.
B A bull shark had been spotted by a fisherman.
- 3 What made Chad decide to go surfing?
A He wanted to fight a shark.
B He didn't think he'd be attacked by a shark.
- 4 Where did the shark bite him?
A on the legs B on the shoulder
- 5 How did Chad escape?
A He was rescued by a lifeguard.
B He paddled to shore with his good arm.
- 6 What state was Chad in when Susan saw him?
A He was stable and in good condition.
B He was bleeding all over the sand.
- 7 What did she do when she saw him?
A She dragged him to her car and drove him to a nearby hospital.
B She left him on the beach.
- 8 How long did the surgery last?
A For about two hours.
B For about twelve hours.
- 9 What condition is Chad in according to the doctors?
A He is in critical condition.
B He is in stable condition.
- 10 What is the author's purpose in writing this text?
A to punish surfers
B to inform the reader

4 Fill in the blanks with the following words: *performed, notice, stable, lose, limits.*

- 1 The beaches will remain closed until further
- 2 You must keep within the city
- 3 Chad didn't consciousness despite his loss of blood.
- 4 Surgeons surgery and saved Chad.
- 5 Chad is in a condition.

5 Choose the best word.

- 1 Chad **ignored/figured/savored/noticed** it would be safe to swim near the coast.
- 2 Susan Jackman **performed/figured/dragged/noticed** Chad to her car from the beach.

6 Put the following events in the correct order according to how they happened.

- A ☐ Chad went surfing.
- B ☐ Susan drove Chad to the hospital.
- C ☐ A shark bit into Chad's shoulder.
- D ☐ Doctors operated on Chad.
- E ☐ Chad swam to the shore.
- F ☐ Susan saw Chad bleeding.
- G ☐ Chad started screaming.

After-Reading activities

7 Think of another title for the article.

8 Who is responsible for the loss of Rockatansky's arm?

- A Chad Rockatansky; he ignored the shark warnings and beach closures.
- B Susan Jackman; she should have warned Rockatansky about swimming there.

Amazing facts

Did you know?

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Sharks don't have

1)
for sound production;
they only make sounds
when moving in the water
and when using their
teeth and

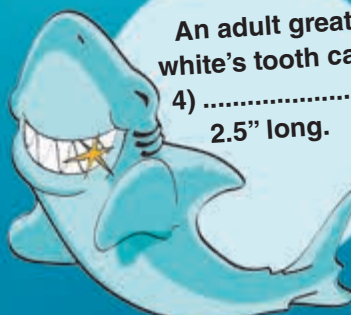
2)

Great white sharks live along
the coasts of all

3) but
Antarctica.

An adult great
white's tooth can

4)
2.5" long.



A female great white is
5) for 11 months. The
fertilized eggs 6) inside
her. The unborn baby sharks eat
each other to survive. Only 7-9 shark
7) survive to be born.

Female great whites
9) to live
young called pups. Each
pup is between 1.2 – 1.7
meters long when born.

Great white sharks have
8) which
can weigh up to 24% of
their entire weight.

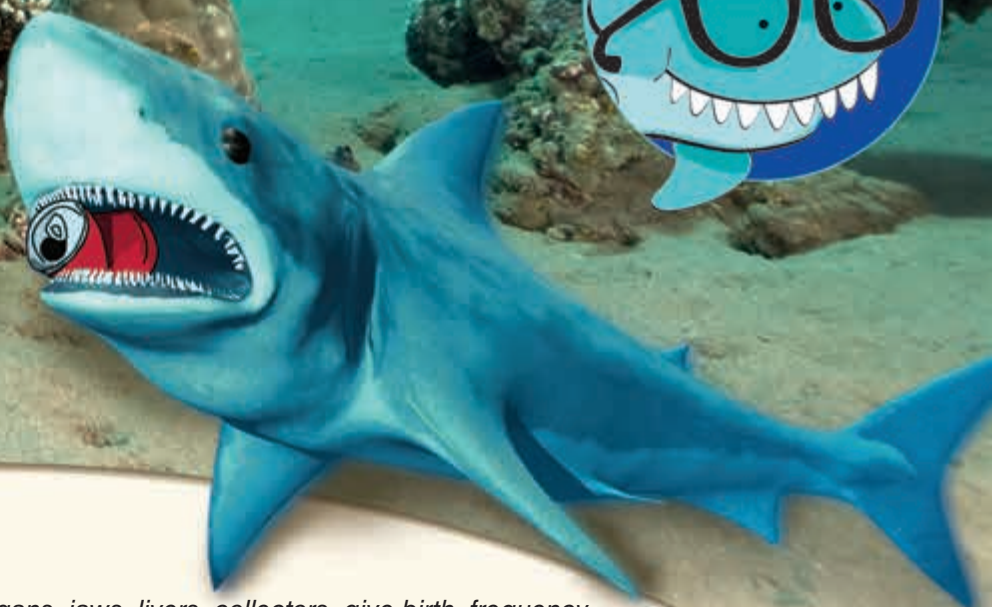
Sharks have 12)
inside their throat and mouth
which help them identify food
before 13) it.

Sharks are very
sensitive to low
11)
sounds.

Sharks see
perfectly in day
or night.



Great white sharks
are the garbage
10) of the sea; they
eat everything and in this way they
help keep oceans clean.



1 Fill in: continents, measure, organs, jaws, livers, collectors, give birth, frequency, pregnant, hatch, taste buds, pups, swallowing.

2 ICT In groups collect more facts about sharks. Prepare a Yes/No quiz.