Built for the Bite

How shark bodies and jaws work together during a hunt

ZOO.7.4 "Describe how the body and jaw design of sharks make them adept predators."

NAME _____ DATE _____

1 READ AND MARK

Read it twice

YOUR JOB Underline body and fin features that help a shark chase prey, and circle jaw and tooth features that help it capture or eat prey. Draw an arrow from each feature you mark to the words that explain how it helps.

A Shark Closes In

1 A school of fish flashes past a shark near a reef. To close the gap, the shark must move through water without wasting much energy. Its narrow, streamlined body reduces drag, the force of water pushing against a moving animal. Powerful muscles sweep its tail from side to side, creating forward thrust. In many sharks, the upper lobe of the tail is longer than the lower lobe. This uneven tail helps drive the shark forward and upward. Together, the body shape and tail let a shark approach prey quickly enough to attempt a strike.

2 A fast approach is not enough if the fish changes direction. A shark's pectoral fins, which extend from its sides, provide lift and help it control its path. Its other fins help keep the body stable, so it can aim instead of rolling uncontrollably. A shark's skeleton is made of cartilage rather than bone. Cartilage can bend, and the shark's body can flex as it turns toward moving prey. The tail supplies thrust while the fins and flexible body help the shark adjust its course. These features turn speed into a more precise chase.

3 As the shark reaches a fish, its jaws do a different job from its fins. In many sharks, the upper jaw can move forward from beneath the skull, helping the mouth reach and seize prey. Rows of teeth line the jaws, and new teeth replace teeth that fall out or wear down. Tooth shapes vary with diet: narrow, pointed teeth can grip slippery fish, while broad, serrated teeth can cut chunks from larger prey. The jaws bring food within reach, the teeth hold or cut it, and replacement teeth keep the biting tools ready for later hunts.

2 ANSWER WITH EVIDENCE

Use the passage

1. How do the shark's body shape and tail work together to help it close the gap with prey?

2. A fish changes direction during a chase. How can the shark's fins and flexible body help it stay on course?

3. How can a shark's moving upper jaw help it capture prey that its mouth has not yet reached?

4. How do pointed and serrated teeth help sharks eat different kinds of prey?

3 YOUR TURN

Your own words

A slippery fish veers sharply just before a shark reaches it. In four or five sentences, trace how at least two body or fin features and two jaw or tooth features could help the shark catch the fish.

ANSWER KEY

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PART 1 · READ AND MARK

Underline body and fin features that help a shark chase prey, and circle jaw and tooth features that help it capture or eat prey. Draw an arrow from each feature you mark to the words that explain how it helps. Accept any marking that follows this job and points at the right text.

PART 2 · ANSWERS

#	QUESTION	ANSWER
1	How do the shark's body shape and tail work together to help it close the gap with prey?	**The streamlined body reduces drag, while the tail creates thrust that drives the shark forward.**
2	A fish changes direction during a chase. How can the shark's fins and flexible body help it stay on course?	**The pectoral fins help control its path, other fins keep it stable, and its flexible body helps it turn toward the fish.**
3	How can a shark's moving upper jaw help it capture prey that its mouth has not yet reached?	**In many sharks, the upper jaw moves forward, helping the mouth reach and seize the prey.**
4	How do pointed and serrated teeth help sharks eat different kinds of prey?	**Pointed teeth can grip slippery fish, while broad, serrated teeth can cut chunks from larger prey.**

PART 3 · YOUR TURN (SAMPLE ANSWER)

The shark's powerful tail pushes it toward the fish as its streamlined body reduces drag. When the fish veers, the pectoral fins help the shark control its path. As the fish slips near its mouth, the upper jaw moves forward to help the shark reach it. Pointed teeth grip the slippery fish so it cannot easily escape.

Accept accurate explanations that connect each named feature to a hunting advantage. For the open task, look for a sequence that applies at least two body or fin features and two jaw or tooth features to the fish's sudden turn.