

Teacher's Guide for Odyssey™: *Swimming with the Sharks*

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Lions of the Sea (6-10)

Reading for Understanding

1. What do sharks prefer to eat? *Marine mammals*
2. How can a seal escape a shark's attack? *It can turn in small circles close to the shark's flank until the shark gets tired and gives up*
3. What is the White Shark Café? *An area halfway between California and Hawaii where great white sharks from California and Mexico gather*
4. How do scientists tag sharks? *They dart tags into sharks or they capture sharks, attach the tags, and then release them*
5. Why do scientists want to tag sharks? *To keep track of where the sharks travel, to show a shark's speed, to record water temperatures*
6. Why do people kill great white sharks? *For body parts, for food, for fun, by accident*
7. How long have great white sharks been on Earth? *65 million years*

Map Activity

Use a blank map of the world. With the information in this article (p. 8, 9) or the internet, map the location of the White Shark Café along with these other locations: Pacific Ocean, North and South America, Asia, California, and Hawaii.

Megalodon and the Cryptozoologists (11-13)

Reading for Understanding

1. What does megalodon mean? *Large tooth*
2. What is an alpha predator? *An animal at the top of a food chain that has no predators of its own*
3. Describe megalodon's teeth. *6 inches long, weigh half a pound each, serrated edges, triangular shape*
4. What do cryptozoologists study? *"hidden animals," they look for legendary or extinct animals that might be alive today*

Diagram Activity

Make a large Venn diagram. Using information from this article, compare and contrast megalodon and megamouth.

Rockin' with the Sharks (14-17)

Reading for Understanding

1. What is unique about the fossils at Bear Gulch? *The soft tissue and hard tissue were both preserved*
2. How are ancient sharks different from modern sharks? *Some grew antlers, some grew fins on their necks, and some looked like eels*
3. What makes sharks one of Earth's most successful creatures? *They have been able to adapt to different catastrophes that caused many other creatures to die*

Swimming with the Sharks (18-22)

Reading for Understanding

1. Describe the Greenland shark. *500 pounds, 12 feet long, moves slowly, dark body*
2. How do divers attract sharks? *With dead fish formed into a frozen ball that they drag in the water behind a boat*
3. What are some potential risks of more and more people swimming with sharks? *Sharks will visit coastal waters more often, sharks will become more comfortable around people, sharks may change their natural feeding behavior*

Writing Activity

You've read about Greg Skomal's experiences diving with sharks. Now imagine it's your turn to dive with sharks. Using your five senses as a starting point, describe what you think the experience would be like—what would you see, smell, taste, hear, feel? After brainstorming, write a descriptive account of your shark dive.

The Shark Family Tree (23-25)

Group Activity

Choose a shark from the chart. Research the shark—where does it live? What does it eat? How does it get food? What does it look like? Any other interesting details? Using your research, create a poster that includes facts and pictures. Present your poster to the class.

Shark Attack (26-28)

Discussion

In this article, you read about the risk factors for a shark attack. You also read that sharks are more threatened by people than people are threatened by sharks. How can you help

educate others about the danger people pose to sharks? What responsibility do people have to protect sharks?

GOT Sharks? (34-36)

Reading for Understanding

1. How are the sharks who live in the Giant Ocean Tank fed? *Divers use a pole to pass food to sharks twice a day*
2. Where do the sharks living in GOT come from? *Other aquariums or commercial fishermen who accidentally catch sharks*
3. What are the sharks' favorite fish? *Mackerel and herring*
4. About how many sharks are killed by people every year? *40 million*

Culminating Activity

In this issue, you've learned about different kinds of sharks and their importance in a healthy ecosystem. You've also learned how their existence is threatened by people. Using information you've read here, along with outside sources, work with a partner to create an advertising campaign to educate the public about the true nature of sharks and how people must change their habits in order to ensure sharks' survival. You will need to come up with a catchy slogan. You may want to consider creating a flyer or poster. Will you write a skit to perform with friends? Will you make a commercial for television or radio? Present your advertising campaign to your classmates.