mystery science

Grades K-5
Mini-Lesson: “Do sharks really want to eat people?”

VIDEO TRANSCRIPT

VIDEO 1

Hi, it's Doug! I have a friend in Florida, who told me something really interesting. She said that she loves going to the beach to collect these. Can you guess what they are? They're shark teeth. Sharks lose over 30,000 teeth in a lifetime, but for them, it’s no big deal. You see, while humans only have two rows of teeth, some sharks like this bull shark. Can have up to 14 rows of teeth. Whenever they lose a tooth, a new one just moves forward in its place. So cool! Someone named Melody has a question about sharks. Let's give Melody a call now.

[Video Call]

- Hi, Doug!

- Hi, Melody!

- I have a question for you. Do sharks really want to eat people?

- Ooh, that's a great question.

And I know the perfect person to answer it. Her name is Danni Washington, and she's an ocean expert. Let's give Danni a call now.

- Hey Doug, I hear you have a question for me.

I do. And it's a good one. Melody wants to know, do sharks really want to eat people?

- What a cool question. I love studying sharks. In fact, I just paid some sharks a visit. Yep, That's me diving off the coast of Mexico. And those are sharks and not just any sharks, they're bull sharks, some of the most dangerous sharks of all, but you know what? They pretty much left me alone. Now that might be surprising to some of you because most of the stories we read and movies we see about sharks can make them seem like these mean, scary, creatures that just want to attack everything in sight. But there I was swimming with them, and I'm still here to talk about it. Before I go on, I'm curious. What do you think? Do you think most sharks, if given a chance would try to eat a person?

VIDEO 2

Whether they realize it or not, swimmers are around sharks more than they think. Check it out. These surfers, see that shark swimming next to them? That's a great white and the surfers don't even know it's there. But guess what? The shark notices them and it doesn't even care. It's just letting them surf. There are sharks like this one all over, even close to shore. That's why shark experts think they're not at all interested in humans as food, and it makes sense. Think about the massive number of people who swim in the ocean every day. If sharks were interested in eating us as food, they would be biting people all the time, but they're not. Sharks hardly ever hurt humans. In fact, you have a higher chance of being hurt at a vending machine than you do being hurt by a shark. I'm serious! Okay. Now, I don't want you to think that sharks aren't dangerous at all and that you can just jump in the water and give 'em all big hugs. Oh no. When I swim with sharks, I have to be really careful and respectful of them because sharks do attack humans sometimes, but most of the time, they don't want to eat us at all. Okay, so wait a

second. If sharks aren't interested in eating us, then why do they bite people sometimes? It's a great question. Well, one idea shark experts came up with was, maybe, when sharks bite humans, they're just mistaking us for animals they do want to eat. For example, sharks love eating seals. So maybe sharks can't see very well in the water and they think we're seals. I mean, a surfer in a wetsuit does kinda look like a seal, right? So that would explain why shark attacks on people are so rare. It's not something sharks are doing on purpose, but shark experts have started to notice new clues and that's causing them to change their minds about sharks accidentally thinking we're food. Okay, one clue? Their amazing senses. Sharks, especially great white sharks like this one have amazing vision. In fact, they can see as well underwater as humans see above the water, and like cats, they can especially see well in the dark and in cloudy waters or at night. But even if sharks couldn't see at all, they still could find things in the water. You know why? Well, you can't see it here, but sharks have a long line of tiny holes running along the middle of their bodies. These holes feel movements in the water, so when a fish or a seal or a human is splashing, even a little bit, the shark can sense it and knows exactly where they are. Oh, and that's not all. Every time we move, our muscles send off a small electrical signal. Now, we can't feel these electrical signals at all, but sharks can. They can sense the electricity through small holes on their head. So, when a fish or a human is splashing around in the water and sending off electrical signals, they feel it and they know where it's coming from. Because of these amazing senses, shark experts are starting to think that sharks are just way too smart and good at hunting to confuse us with their prey, like seals. So some experts have a new theory or idea about why sharks might bite. Have you ever seen something interesting on the ground like a colorful rock or a shiny coin? You were probably curious, and if you're like me, you probably picked it up and looked at it. Like us, animals are so smart and they seem to want to explore their surroundings like us and find out more about the things around

them, and sharks are the same way. If they see something unfamiliar in the water, they want to find out what it is, just like us, but they don't have hands, so they have to check things out another way. See those teeth? Oh yeah. Sharks use those teeth like we use our hands. Their teeth are kind of like fingers. They even bend back like our fingers do. So a new idea that shark experts have is that maybe sharks bite people because they're just curious, yes. And when sharks are curious about something like a surfboard or a swimmer, they'll swim up to it, give it a nibble, and then just spit it out. Of course, those teeth are pretty sharp and sharks are really strong. So even one little nibble can do a lot of damage. Like, check out this surfboard. Huh, yikes! And look at this shark biting this boat. Okay, I know that looks kind of scary. So, should we avoid the ocean altogether and never, ever swim where there are sharks? No, not at all. The ocean is amazing and beautiful. Just think of all the experiences you would miss out if you avoided the ocean because of sharks, experiences like jumping over waves, or snorkeling, or even exploring coral reefs. Sharks don't want to eat us, but we do need to respect their environment, and we can do that by taking care of their home, the ocean, and learning skills like swimming and snorkeling, and scuba diving, and maybe even going with guides who are shark experts so we can learn from them. And who knows? Maybe one day, you'll become one of those shark experts yourself. That's all for this week's question. Thanks for asking Melody!