MYSTERY science

Grades K-5 Mini-Lesson: "Why do whales sing?"

VIDEO TRANSCRIPT

VIDEO 1

Hi, it's Danni! And I've been listening to some amazing music. This is Victory Brinker. You may have seen her on this popular TV talent show. Even though she's a kid, she's one of the best singers in the world. In fact, when she was just seven years old, she became the youngest professional opera singer ever. Yeah. Check out how she hits those high notes. Whoa! Someone named Lucy is curious about singing, but not the type of singing Victory, or you and I do. Let's give Lucy a call now.

[Video Call]

- Hi, Danni!
- Hi, Lucy!
- I have a question for you. Why do whales sing?
- Oh, that's a great question.

Whales love to make sounds. In fact, if there was a class of whales at your school they'd be the noisiest class of all. Sometimes they whistle like this. Or sometimes they might squeak like this. And listen to this Beluga whale, clicking. So cool. But making noises isn't all they do. Some whales do something really special—they sing. Let me show you. Here's a Beluga whale squeaking. And here's a Humpback singing. Can you tell the difference? It sounds a lot different



than just a squeak or a whistle, doesn't it? It almost sounds like music. We say a whale is singing when it makes different sounds and repeats those sounds over and over in a pattern. Kind of like when we repeat the same part of a song. Now, not all whales sing like that, only a few types. But the question is: Why? Why do some whales sing sometimes instead of just making sounds? Before we go on, I'm curious. What do you think? Why do you think whales sing?

VIDEO 2

Scientists have been curious about why whales sing for many years. They've stuck microphones in the water to record the whale songs and put tracking devices and recorders on whales to find out where they sing most. They've even put cameras on whales to see what they see, like right here. This is the view from a camera that is on an actual whale. You can see the whale swimming up to the surface. Over the years, these ocean experts have found a lot of clues about why whales might sing. Like, so far, they've only heard the male whale sing, and they sometimes sing when it's time to find a mate. Hmm. So, could it be that whales are singing to find a partner? Could be. Whale songs travel a really long way, over hundreds and hundreds of miles. That would be like you singing at your house and someone hearing you from another city. So singing would be a good way to attract the attention of a female partner that's really far away, right? But here's the thing. Scientists have watched what females do when they hear the songs from males. And most of the time, the female whales just kind of ignore them. In fact, they've noticed that it's usually only the male whales who pay attention to the whale songs and are curious as to where they're coming from. So the whole singing to find a partner thing might not be it. So, what else could it be? When trying to answer this guestion, it might be helpful to look at why other animals sing, like birds. Scientists have discovered that male birds, like the



nightingale, sometimes sing to protect their homes from other birds and animals. So could the whales be singing to protect their homes too? Maybe. Whales that live in the same area of the world sing almost exactly the same songs, so maybe that unique song is a whale's way of saying, "Stay away. This is our home, our fish to eat, our water." But scientists aren't totally sure about that idea either, and that's because they've noticed that when whales from one pod hear a whale from another pod sing, they're not scared away. Not at all. In fact, they're curious. Sometimes, they'll even swim up to the singing whale to see what's up and bump them a little and then just swim away. So singing doesn't really seem like a good way to keep other whales away, but it does seem like a good way to communicate with other whales in their pod. Think about it. We already know that whale songs travel super far in the water. And since whales from the same pod sing the same song, they'll recognize that song when someone from their family is singing, and that could be pretty helpful, especially during feeding time. Every year, humpback and blue whales have to travel thousands of miles to get to their feeding grounds, and they don't want to get separated from their pods along the way. So some scientists are beginning to think that since each group of whales has their own special song, singing is a way these whales communicate and keep track of each other during the trip. Kind of like saying, "Hey, Mom, I'm over here." That kind of makes sense. In fact, all these ideas do, which brings us back to our question. Why do whales sing? Well, there are a lot of possible answers. It could be that they're singing to find a partner, or maybe they're singing to communicate with each other when they're heading to their feeding grounds, or maybe they sing for all sorts of reasons, like you and I do. The truth is, whale songs are so complicated that scientists aren't totally sure. But they'll keep trying to figure it out, not just because they're curious about the answer but because they want to help. The ocean has become a really noisy place with super loud ship engines and underwater construction noises and even loud booms caused by companies trying to find oil on

MYSTERY science

the ocean floor. All that noise has been making it too loud for whales to hear each other's songs. This has caused some whales to become confused or even lost, but by learning all about why and where whales sing, we can help whales communicate by making sure ships don't go close to their feeding grounds and by only building or searching for oil where it won't interfere with their songs. That's all for this week's question. Thanks, Lucy, for asking it!

