ARE SHARKS ELECTRIC?

Not exactly. But they are excellent hunters—and electricity is one of their secrets

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Have you ever seen a shark attack its prey on TV? If you have, you may have noticed that its eyes appear to be closed.* So you may be wondering how the shark hits its target. If you are, then this article is for you.

Sharks attack using what's known as "electroreception" [ee-LECK-tro-ree-SEPP-shun]. This allows them to sense electricity in the water, which is produced by the muscles of any creature that moves. In other words, sharks are able to sense other animals' electromagnetic fields.

Sharks sense these fields through their "ampullae of Lorenzini," which are on their snouts. These look like little pores that are filled with a jelly-like substance that senses electricity and sends signals to the shark's brain. This lets the shark know where its prey is, even if it is buried in the sand.

Sharks aren't the only animals that can use electroreception. In fact, lots of animals use it. The duck-billed platypus, skates (the fish, not roller skates!) and rays are some examples of animals that use electroreception. Some small fish use electrical waves moving through their fins to "speak" to other fish.

Great White Shark

WAYNE LYNCH

Cool facts about animals and electricity

- All living creatures produce electricity
- The platypus and the Guiana dolphin are two mammals that use electroreception
- Electric eels use small pulses of electricity for navigation
- Sharks may be able to use electroreception to detect the earth's magnetic field and develop a sort of "map" of where they live

Cool facts about sharks

- Some sharks sense of smell is so good they could find one drop of blood in an Olympic-sized swimming pool
- Most sharks give birth to live young, but they are still considered fish
- Sharks can smell underwater
- The largest shark ever was the megalodon, which could grow to 20 metres long. It ate whales, obviously, and is now extinct
- Apparently, for every person bitten by a shark, many more people are bitten by New Yorkers. (Yes, we're talking about the people who live there.)

***SPECIAL NOTE**

To be exact, sharks can't close their eyes. They are covering their eyes with a membrane that is normally hidden. Some sharks don't have this membrane. So how do these sharks protect their eyes from damage? They roll their eyes into their sockets.