

# Stingray

Did you know stingrays are related to sharks? Stingrays are a group of ray fish that are **cartilaginous**, just like sharks. This means they have skeletons made of cartilage instead of bones. They also have jaws, paired fins, paired nostrils, and a heart with a series of chambers. Stingrays get their name from the barbed stingers on their tails that they use for self-defense. Only a few members of the ray family don't have stingers. They are manta rays and, surprisingly, porcupine rays.

Stingrays live in tropical and subtropical water near the coast all over the world. Some can live in deeper parts of the ocean if it is warm enough. There are also stingrays that live in freshwater rivers like the Niger and stingrays that live in Nigeria and Cameroon. Because of their flat bodies, stingrays can **agitate** (move back and forth) the sand until they are covered by it to hide. With eyes that poke up above their body, they can peek up to see if the coast, quite literally, is clear. The only problem with eyes on the top of their bodies is that their mouth is on the bottom, so they cannot see what they are trying to eat!

Stingrays have a strong **olfactory perception**, or

sense of smell, like sharks. They smell for their prey of mollusks, crustaceans, and small fish. Once they have a bite, it is back into the sand with only tail and eyes peeking out to make sure no predator is looking in turn eat them!

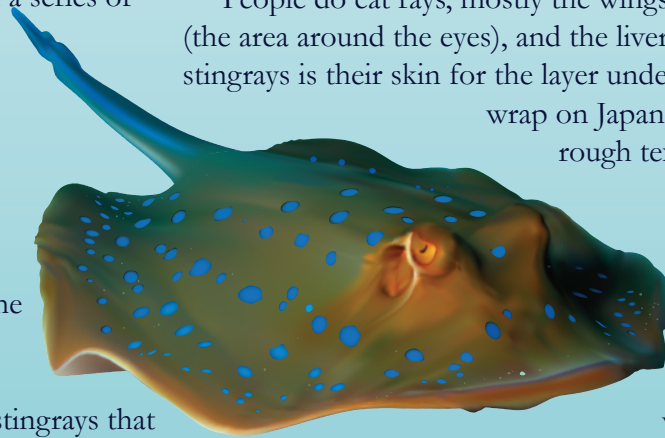
People do eat rays, mostly the wings, or flaps, cheeks (the area around the eyes), and the liver. Another use of stingrays is their skin for the layer under the leather

wrap on Japanese swords. The rough texture of the ray's

skin keeps the leather from sliding on the handle of the sword.

Stingrays won't usually

attack people and many people like to swim with the curious creatures. If you are swimming in coastal waters where rays live, it is a good idea to watch where you step or to use something to scare them away before you walk on the ocean floor. A stepped-on ray will use its stinger to say, "Excuse me, but please get off!" The venom is not deadly, but hurts more than getting stepped on!



1. **New terms:** See how these three terms are used in the text, and write a definition next to each one.

**cartilaginous**

**agitate**

**olfactory perception**

2. Where do stingrays live? \_\_\_\_\_

3. Stingrays are related to sharks.

**True or False?**

4. Stingray's mouths are on top of their bodies.

**True or False?**

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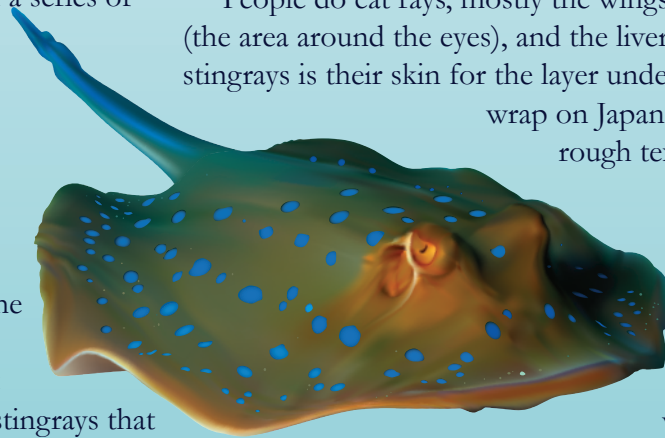
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1. **New terms:** See how these three terms are used in the text, and write a definition next to each one.

**cartilaginous**    an animal with a skeleton made of cartilage instead of bones

**agitate**        to shake or disturb

**olfactory perception**    sense of smell

2. Where do stingrays live? in coastal tropical or subtropical water all over the world

3. Stingrays are related to sharks.

True or False?

4. Stingray's mouths are on top of their bodies.

True or False?