



# Shark Teeth Adaptations



Both animals and plants are well suited to survive and reproduce because they can adapt or change over time in beneficial ways to new conditions and surroundings. When a genetic change occurs that helps a plant or animal species to survive, this change is called an adaptation. An adaptation may involve an external feature of an animal such as camouflage or thick fur. Adaptations can also involve behaviors such as hibernation or migration. In any case, adaptations help both plant and animal species to survive in a very competitive environment.

One of the most highly adapted groups of animals on the planet is sharks. Among other features, their teeth are super important to their survival. Shark teeth come in variety of shapes and sizes depending on what kind of prey the shark is adapted to hunt. Some shark species have wide, wedge-shaped teeth with jagged edges that are designed for catching and tearing apart prey. Other shark species have thin, sharp teeth that are designed to catch and hold on to slippery fish. The teeth are a highly adapted external feature that helps the sharks to survive in a tough world. In general, the teeth from a single type (species) of shark are the same shape. They usually vary only in size. The shape of the teeth of each species is distinct and can be used to identify the species.



Sharks normally have several rows of teeth in their mouth and, when one tooth breaks off, another moves forward to take its place. As a result, they often go through thousands of teeth in a lifetime. The size of a shark tooth can also be used to calculate the approximate size of the shark. By measuring the length of the tooth in inches and multiplying by 10, you can obtain the estimated length of the shark in feet. Cool huh.

**In this exploration**, your job is to closely observe your collection of shark teeth fossils. Each of you should look carefully at each tooth and note how similar and different they look from each other. After observing each tooth, you should then separate them into groups based on some feature (characteristic) that you think is important. Along with shark teeth, your example may contain fragments of manta ray crusher plate, sting ray barbs, and even a shark vertebrae.