

# Script for Animal Adaptations

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I usually give this talk after I do the rock cycle talk. This talk is intended for use in Middle School classrooms when the visiting teacher brings in our own materials. The subject matter is focused on TAKS/TEKS requirements.

*Desired class response is given in italics. Bold text is instructions for you. Pictures indicated with >>> symbol.*

Paleontologists study the skeletons of ancient animals. Zoologists work with things that haven't been dead so long, but they also find the hard parts, bones and teeth, can tell them useful stuff. We are going to talk about animal adaptations and we are going to use teeth to do it.

Lets start with sharks. **Ask a teacher to pass around the bag of shark teeth and give ONE to each student to prevent students from fishing for a big tooth.** These teeth were collected by one of the Houston Gem and Mineral Society members and you can take this tooth home with you. It is yours.

Shark tooth on collection cards>>>>>

Notice these teeth are already glued on to collection cards. Don't take them off. We make these collection cards as defense from you mother. Yes. Mothers tend to throw away boxes of rocks, but a neatly labeled fossil is part of a collection. Pay attention. This may be the only thing keeping your Mom from throwing away your stuff. Try it.








You know what a shark looks like. This is a model of a Great White shark. >>>>>>  
Do sharks want to eat humans? *No*. They want to eat fish. Has anyone held a live fish? Slippery aren't they. That is why sharks have lots of pointy teeth - to hold on to fish







Lets look at a shark jaw. These are little sharks that are captured in the Philippines for food. They smell funny because this jaw has just been cut out of the shark and dried. Be careful. This shark is dead but his teeth can still make you bleed. Have your parents told you "Don't do nothing stupid!"? Well, this is the time for that. Look for the multiple rows of teeth. Sharks grow new teeth all the time and that is why we find so many. A tooth may last only 3 weeks before it is discarded.



Does anyone here eat shark? No? Does anyone eat at Long John Silvers Seafood House? Then you are

<p>eating shark.</p>	
<p>You can tell a lot about an animal by looking at its teeth. This is a puppet of a stingray. Would someone like to demonstrate it for me?</p> <p>Stingrays have a barb on the tail and if you step on a ray in the ocean, they can stick the barb into your leg. It hurts a lot because the barb is coated with poison.</p> <p>Lets look at the teeth.</p>	
<p>Sting ray teeth are flat because a ray eats things like oysters and mussels. &gt;&gt;&gt;&gt;</p> <p><b>Pass out the ray teeth, one to a student.</b></p> <p>You may take one of these teeth home, also.</p> <p>Does anyone eat oysters or mussels? I bet you eat them on the half shell. Well rays eat them IN the shell. They crunch up the shell and all. What would happen if a human tried to eat an oyster in the shell? <i>Break their teeth.</i></p>	
<p>This is the mouth of a ray. &gt;&gt;&gt;&gt;</p> <p>Note that the ray has blunt crushing teeth. There are parks like Seaworld that have encounter tanks where visitors can touch rays. They would not do that with sharks. Why? <i>Rays can only pinch you where as sharks can cut you with their teeth.</i></p>	
<p>Lets look at the mouth of some other critters. &gt;&gt;&gt;&gt;</p> <p>What kind of animal do you think this is? <i>Turtle.</i> Who has the smallest pinky finger in the class. Hold it up. Do you think this turtle could snip the finger off? <i>Yes.</i></p> <p>How does this animal cut when it does not have any teeth? <i>Sharp beak like a bird.</i></p>	
<p>Consider this animal. &gt;&gt;&gt;&gt;</p> <p>What does it look like to you? <i>Rat or Mouse.</i> It is a nutria from Louisiana and its common name is "water rat". What is rat-like about it? <i>Teeth.</i> Does anyone have a pet rat or mouse? Are they always chewing on things? They have to because these front teeth are continuously growing.</p>	

<p>Do any of you ride horses? Has one ever bitten you? Well these are horse teeth. They were found in the Brazos River and are about 50,000 years old.</p> <p>Were these horses meat or plant eaters? Why? <i>Grinding tooth.</i> A horse has to eat a lot of food because grass or hay has such low food value.</p> <p>I bet people are always saying that you eat like a horse, but if you did, you would spend 12 hours eating veggies instead of going to school.</p>	
<p>On the back of a buffalo head nickel is the picture of a buffalo. Well, 50,000 years ago, there were really big buffalo roaming around. Much bigger than the ones we have now. The teeth of these animals look like this. &gt;&gt;&gt;</p> <p>How are they similar to the horse tooth? <i>Same flat top for grinding.</i></p>	
<p>I also found a baby bison bone on the Brazos River. &gt;&gt;&gt;</p> <p>This bone looks a good deal like one of your arm bones. It has a hole in it where a nerve passes through and roughened spots where tendons and muscles attach.</p>	
<p>Just for fun, let me show you an elephant bone that I found on the Brazos River. Do you think that there are elephants roaming around on the Brazos River today? <i>No.</i> These are old elephants, mammoths or mastodons. This is a piece of a really big leg bone. The spongy part is on inside where red blood cells are made, just like in your leg. The white band is the strong part of the bone that supports the animal.</p>	
<p>That is my talk. Ask me some questions about how animals use teeth. <b>Usually there is no time for questions.</b></p>	