mystery science

Grades K-5
Mini-Lesson: “What's the slimiest animal?”

VIDEO TRANSCRIPT

VIDEO 1

Hey, it's Esther. Once, out in the woods, my friends and I found something weird. Check it out. It's like a jiggly blob of slime. I wonder if you can guess what it is. Here's a hint. We left the blob at the edge of a pond because the tiny things inside will grow into slimy animals like this. It's a salamander, and that slimy blob is a bunch of salamander eggs. Someone named Avani is curious about other slimy creatures. Let's give Avani a call now.

[Video Call]

- Hi, Esther!

- Hey, Avani!

- I have a question for you. What's the slimiest animal?

- That's a great question.

Before we look at some slimy animals, let's start with slime. Slime has been really popular. Maybe you've played with slime or mixed up ingredients to make slime. There are so many different kinds. Slime like this, and this, or this. Besides playing with slime, maybe you've touched other things that felt slimy, like mud or jelly. Maybe you've even touched a slimy animal, like this salamander. I'm curious about what that was like. How would you describe the way something slimy feels?

VIDEO 2

Slime can be kind of hard to describe. Some slime might feel slippery and squishy, or sticky and stretchy, or oozy and drippy and kind of wet. Animals can be slimy in different ways too. So let's check out a few, and you can decide which is the slimiest. But first, there are some animals you may want to disqualify. Some animals, like lizards and snakes, get called slimy when they're really not. Their scales might feel smooth and slippery, but they're typically very dry. Then there are animals like jellyfish. Up close, this jellyfish is slippery, squishy, and jiggly. It's almost like its entire body is slime, but I'm not sure that counts as the slimiest animal. When scientists talk about slime, they often focus on something that animals make. Like, see the wet, shiny trail left behind by this slug? That’s slime made inside the slug's body that then oozes out. This slug also makes slime that covers its body. That's why it looks shiny and wet. It's wearing a layer of slime. Earthworms are also covered in slime from head to tail, and so is a snail's soft body. In the ocean, animals called moray eels wear slime too. So much slime that it can change how some look. It's hard to tell, but this one's bright color actually comes from a thick layer of yellow slime that covers its dark body. If you're wondering why these animals are so slimy, take a look at how they move. See how this snail moves across the ground or how this moray eel wiggles through tight spaces? Slippery slime helps them slide along and protect their bodies from scratches. Slime also helps these animals and others stay healthy. Many frogs and salamanders wear a suit of slime that helps block germs and infections. Slime keeps their skin moist too, so they don't dry out. Wearing slime all the time is how these animals survive. Other animals, like this cushion star, rely on slime in special occasions. Right now, it doesn't look that slimy. But check this out. When a cushion star thinks it's being attacked, it oozes out slime. A scientist gently lifted one to show what happens. That's a whole lot of slime. This hagfish does something

similar. It makes extra slime to keep other animals away, including sharks. When a shark tries to bite a hagfish, it gets a mouthful of this instead. That's hagfish slime. When it mixes with seawater, hagfish slime expands and spreads out like a net of goopy gel. Thanks to that combo of seawater and slime, a hagfish like this can create more than a gallon of goo. That's like a milk jug full, and then some. So, in summary, animals can be slimy in different ways, and it's tricky to say which is the slimiest of all. Some animals, like slugs, salamanders, and moray eels, are constantly covered in slime, which can help them move or stay healthy and moist. Maybe they should win the award for slimiest suit. Then there are animals like cushion stars and hagfish that make extra slime to keep danger away. Maybe they should win for slimiest self-defense. And these aren't the only slimy animals. There are more to discover…including you! Ever get a runny nose? That goopy stuff is called mucus. Mucus is a science word for certain slimy substances made by living things, like snail mucus or cushion star mucus. Yep. Mucus is basically slime. In fact, inside your body right now, your throat, lungs, and stomach are all making slime. It sounds gross, but that slime is important. Slimy mucus helps your body work properly. You may not make as much as some creatures, but humans deserve an honorable mention in the slime awards. Many different animals need slime to survive. So, which do you think is the slimiest? That's all for this week's question. Thanks, Avani, for asking it.