

Grades K-5

Mini-Lesson: “What’s the smallest animal on Earth?”

VIDEO TRANSCRIPT

VIDEO 1

Hey, it's Esther! Want to see something cool? You're looking at one of the world's smallest drones. It's called the Picolissimo, and it would definitely fit in your pocket. It's the size of a quarter. Whoa. Someone named Brady is curious about something else that's really small, something that's actually alive. Let's give Brady a call now.

[Video Call]

- Hi, Esther.
- Hey, Brady.
- I have a question for you. What is the smallest animal on Earth?
- Oh, that's a great question.

A lot of animals are really small. These animals are small, but that's because they're all babies. But when scientists try to answer this question, they're looking at which animal is the smallest when they're all grown up. Can you think of any animals that fit that description? Before I go on, I'm curious. What do you think is the smallest animal on Earth?

VIDEO 2

Believe it or not, this isn't an easy question to answer. There are just so many animals in the world to choose from. And a lot of them are pretty tiny when they're all grown up. Like this one, this is a Tasmanian pygmy possum. Pretty small, right? Pygmy possums like this one are smaller than the crayons you use at school. And remember, that's when they're all grown up. Being tiny is a good thing because it helps them hide from predators and lets them navigate through the forest in Australia where they live. The Tasmanian pygmy possum is the smallest possum in the world, but guess what? We can go even smaller than that. See this animal? It's an Etruscan shrew, one of the smallest land animals by weight in the world, It only weighs one and a half grams. That's about the weight of a paperclip or a raisin. Incredible. Now if we're only thinking of fuzzy animals, the kind that have arms and legs to help them walk around, then the etruscan shrew might win the prize for smallest animal on Earth. But wait a second. Not all animals look like that. In fact, some of the tiniest animals on Earth might not be what you expected. Like, have you ever seen one of these? Zooplankton live in the ocean, and they're really small. Only a little bigger than the tip of your pencil. And though it doesn't look like an animal, it is. Like all animals, zooplankton have to find food to eat because they can't make their own food like plants can. But they can't easily move on their own like a lot of animals. They have to use the ocean currents to float around and find food. Like zooplankton, there are a ton of tiny creatures that people might not recognize as animals at first. Like insects. Yep. Insects are animals too, and they're some of the tiniest creatures of all. And you find them in the most unexpected places. I once rescued a cat from someone's garage, and when I looked at its fur, it looked pretty normal. But then I looked closely and I saw something moving. Fleas. Fleas are so

tiny. I couldn't believe how small they were. If I hadn't looked closely, I would have never found them. Fleas are so small that they can sneak into hard-to-get places to find food or hide, like in another animal's fur. But one of the smallest insects of all is even smaller than a flea. It's called a fairyfly. And it's so tiny that it can fit on the tip of a needle. The fairyfly is one of the smallest flying creatures on Earth. But even though it can fly, it sometimes chooses not to. Instead, it likes to hitch a ride on the back of a butterfly to get around. And it's so small that the butterfly doesn't even notice. Okay. The fairyfly is definitely one of the smallest animals on Earth, but to find the smallest animal of all, we'll need to look under a microscope. See those dots moving around?

Those are actually animals called *Myxobolus shekel*. It's a relative of jellyfish, and it's so small that if you put one thousand of them end to end, the line would only be as big as a paperclip. Wow. Many scientists think the *Myxobolus shekel* is the smallest animal on Earth for now. But there are so many tiny animals out there that it's possible that a new and even smaller animal will be discovered in the near future. Pretty cool. So, in summary, the smallest animals on Earth aren't just the fuzzy ones with arms, eyes, and legs to get around like the Tasmanian pygmy possum, or the Etruscan shrew. The world's tiniest animals don't look like that at all. Like zooplankton in the ocean, or insects like fleas and fairy flies. And the smallest animal on Earth, at least for now, the *Myxobolus shekel* that you can only see under a microscope. That's all for this week's question. Thanks, Brady, for asking it.