mystery science

Grades K-5
Mini-Lesson: “Are aliens real?”

VIDEO TRANSCRIPT

VIDEO 1

Hi, it's Doug! Have you ever wondered what would it be like to see an alien creature from another planet? Well, there are some pretty alien-looking things right here on Earth. One of my favorites is this. It's called a California sea anemone. It looks like some kind of weird ocean plant, but it's not. As soon as you touch its sticky tentacles, it starts to close up around your fingers.

But someone named Ella has a question about actual alien life. Let's give her a call now.

[Video Call]
- Hi, Doug!
- Hi, Ella!
- I have a question for you. Are aliens real?
- That's a great question.

This is a question where I can just come right out and tell you the answer. Are aliens real? Nobody knows. At least not yet. But, even though it's not known whether aliens are real, that's not the end of it. There are so many interesting things to think about here.

First of all, think about what it is that might make you wonder about aliens. Maybe, like most people, you've seen aliens as characters in a movie or a show that you watch. But some people wonder about aliens because they've seen something strange in real life, something they felt they couldn't explain. Like, if someone notices a strange light flying in the sky, which doesn't quite seem like an airplane, they might wonder, could it be an alien?

This one turns out to have been a rocket launch by SpaceX. Or, imagine you saw these lights. You might think, whoa, what is that flying there? It turns out this is a special type of airplane, a B-2 stealth plane. When you see something surprising in the sky and you're not sure what it is, it is tempting to think, is this... could it be… aliens? There's almost always a more simple explanation, though.

But if there are alien beings from another planet somewhere out there, it's really exciting to think about! What would they look like? Would they have any advanced technology, and would they be nice to us?

Even though nobody knows whether aliens actually exist somewhere out there, there are scientists who are at least trying to find this out. SETI, or the Search for Extraterrestrial Intelligence, is the name of a group of scientists who use telescopes and other equipment to look and listen to the universe around us.

Their idea is that if there are aliens out there, they're probably living on planets that are so far away from us that they can't easily visit the Earth. So these scientists aren't looking around for alien spaceships. Instead, the scientists at SETI are assuming that any aliens out there might be trying to send us things like radio signals, or other ways to try to talk to us long distance.

So far though, the scientists at SETI have been looking and listening for over 35 years, and they've found no aliens. Which makes scientists wonder about a big question: If there are aliens out there, why haven't we found them yet? After all, if there's life on our planet, including intelligent life like us, couldn't there be intelligent life on other planets? What do you think?

VIDEO 2

I think it's tempting to assume that there must be alien life somewhere out there. But scientists know there are lots of different possibilities.

For example, maybe there are intelligent aliens out there who simply choose not to send messages to other planets, or maybe there's alien life out there, but it's just not intelligent life. For example, it could be that there's lots of alien life out there, but it's more something like alien plants and alien animals, rather than intelligent aliens that can talk to us.

Some scientists point out there's even the possibility that Earth might be the only planet with life. It's hard for us to know, and maybe only time will tell.

But what if we never find any alien life or never even find out? Would that be disappointing? Maybe. But personally, I don't think so.

I think the thing that gets so many of us excited about alien life is the idea of seeing something strange and new—something we never even imagined before. It turns out the very planet we all live on is full of strange and exciting things, new things that you've probably never seen. Even I, as a grown-up, am still being amazed by new things I never knew about.

So many different creatures that look like aliens, but live right here on Earth—and alien-looking places too.

That's all for this week's question. Thanks, Ella, for asking it!