### **MYSTERY** science

### **Grades K-5**

Mini-Lesson: "How do they make imaginary movie characters look so real?"

# VIDEO TRANSCRIPT

Hi, it's Jay! Have you ever seen clips from a really old monster movie like "The Mummy" or "The Werewolf?" Oh, and check out this one. Recognize him? It's Frankenstein. Even if you haven't seen these monsters in the movies, you've probably seen people dress up like them or decorate their houses with them. In fact, make-believe movie creatures like these are so famous that sometimes it's easy to forget that they're just pretend. And that's what makes them so fun to watch. Someone named Jasmine is curious about the imaginary characters we see in the movies. Let's give Jasmine a call now.

#### [Video Call]

- Hi. Jav!
- Hi, Jasmine!
- I have a question for you. How do they make imaginary movie characters so real?
- Ooh, that's a great question.

Movies are full of all sorts of make-believe characters, like Falkor the Dragon from "NeverEnding Story," Kermit the Frog from the Muppet movies, and even space aliens like Groot from "Guardians of the Galaxy." It's amazing how people can take pretend characters they think up in their heads and make them come alive on a movie screen. How do they even do that?

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Before I move on, I'm curious, how do you think moviemakers make imaginary characters look so real? Now would be a good time to pause the video and discuss. Okay, you ready? I'm not sure what you answered, but some of you may have said they use costumes, and you're right. Just like you might put on makeup or dress up in a costume, so did the actors in those really old monster movies, like the actor who played Frankenstein. It took movie makers four hours every morning to put on Frankenstein's makeup and two hours to take it off each night. Oh, and get this. Sometimes the actor would sleep in his Frankenstein makeup so he didn't have to put it all on again the next day. Good idea. Now, Frankenstein was pretty small compared to some of the bigger monsters, like Godzilla. But don't worry. Godzilla was just an actor in a costume rampaging around a miniature model of Tokyo, Japan. The tiny buildings make Godzilla look huge. Oh, and since the costume was partly made out of concrete, the stuff they make sidewalks out of, it was really heavy. So heavy that the actor could barely walk in it. Costumes are still used in movies today and they've gotten a lot better, like the realistic-looking animal costumes in the "Chronicles of Narnia" movies. And Aunt Marge from "Harry Potter and the Prisoner of Azkaban." She wore a special inflatable costume that took a whole team of people to build. Pretty cool. Now even though the costumes used in movies today look pretty real, they aren't always the best choice when it comes to making a make-believe character come to life. That's what the makers of a movie called "ET" thought. They wanted to make their friendly alien character look as real as possible, but a costume wouldn't really work. ET was just too small and he had such a skinny neck and long skinny arms. A person wouldn't fit in there. So instead they decided to use a puppet. ET looked so lifelike that the seven-year-old who acted in the movie actually thought he was a real alien when she first met him. Puppets are a great way to make imaginary characters look real, and you've probably seen them in shows like "The Mandalorian" and movies like "Jurassic World." But here's the thing, puppets aren't always easy

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to use. Like what if a dinosaur has to chase someone? Think about it. It would be really hard to do that without seeing the puppeteers controlling them. And what if a character had to cry, or get mad, or laugh? Characters in movies have to move and have expressions in order to seem real, and that can be hard to do with a puppet. So moviemakers started looking for other tools to help them create, like computers. You're looking at "The Hulk." Okay, I take that back. It's actually the actor who played the Hulk in "Avengers: Endgame." Regular puppeteers can make real-life puppets move with things like strings or sticks. But do you see that strange suit that actor's wearing? It's sending all of the actor's real-life movements into a computer. Now instead of controlling the Hulk with strings or sticks, he can control a computer model of the Hulk just by moving his body. It's kind of like if a creature you made with clay copied whatever you did in real life. If you raised your arm, so would your creature. If you ran, it would too. Wouldn't that be cool? Special suits like these can even copy an actor's expressions and the way they move their mouths. Whoa! Imaginary creatures have come such a long way, from Frankenstein's green makeup and Godzilla's rubber reptile costume to realistic alien puppets and characters created with the help of computers. It's amazing how movie makers have figured out ways to take their ideas in their heads and make them come alive on screen. That's all for this week's question. Thanks, Jasmine, for asking it!

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