mystery science

Grades K-5
Mini-Lesson: “What's the fastest winter sport?”

VIDEO TRANSCRIPT

VIDEO 1

Hey, it's Esther! I grew up in Illinois where it got really cold in the winter, and I loved it. You know why? Because of the snow. Snow means making snow people, sledding down hills, and having epic snowball fights, but probably not as epic as this one. Check this out. Two, one. Left hand after. You're looking at the biggest snowball fight ever. It happened in a place called Saskatoon, Canada, and over seven thousand people were part of it. Woah. Someone named Luke has a question about some of the things you can do during the winter. Let's give Luke a call now.

[Video Call]

- Hi, Esther.
- Hi, Luke.
- I have a question for you. What's the fastest winter sport?
- Oh, that's a great question.

There are so many winter sports. There are sports with skis and ice skates. There's even a winter sport with animals. This is a sport from Norway. It's called skijoring, which means ski driving. See those skiers? They're being pulled around a track and over jumps by horses. So cool. Now, skijoring is just one of the many speedy winter sports out there, but which one is the fastest? Before I go on, I'm curious. Which winter sport do you think is the fastest?

VIDEO 2

I'm not sure how you answered, but some of you might have mentioned ice skating. And that makes sense. You can go pretty fast on ice skates, especially when you're participating in a sport called speed skating. Speed skaters skate as fast as they can around a track made of slippery ice. And that slipperiness helps the skaters go fast, over thirty miles per hour fast, which is about as quick as a galloping horse. Okay, so we know that the slippery track is what helps them go really fast. But it's not quite fast enough to make speed skating the fastest winter sport. And part of the reason is the track. See how flat it is? If it was steeper, they definitely go faster. You might have noticed this if you've ridden a bike. You go faster when you're going downhill. The steeper the hill, the faster you'll go. And that goes for winter sports too. So it makes sense that the fastest winter sports are the ones that go downhill. Like this sport called bobsledding. Bobsledders race on slippery ice just like speed skating, but there's a big difference. Bobsled tracks go downhill, which makes them go way faster. A bobsled can fly down the track at more than ninety miles per hour. That's three times faster than a speed skater and faster than a car goes on the highway. But here's the thing. Something starts to happen when you're going super fast. Something bobsledders want to avoid. See how they're trying to stay low? It almost looks like they're trying to hide. But what are they hiding from? Let's go back to our bike ride and try to figure this out. When you're riding a bike downhill, you feel air blowing against your face, kind of like wind. That's because when you go fast, you smash into the air. Now, all that air pushing against you may feel refreshing, but it's actually slowing you down, which is no big deal if you're just riding a bike, but it's a huge deal to winter athletes like bobsledders. They're trying to go as fast as they can and they don't want all that air pushing against them and slowing them down.

So they try to get as low as possible. That way, most of that air will go over them and that speeds them up. Avoiding the air makes such a big difference that bobsledders practice in special wind tunnels with giant fans to try to figure out the best ways to keep air from slowing them down. So, bobsledders go super fast by riding on a slippery track, going downhill and avoiding extra air that can slow them down. But unfortunately, air isn't the only thing that can slow a bobsled down. See those turns? They can slow a sled down too, especially when they hit the sides of the track. And that's one of the reasons why bobsled racing isn't the fastest winter sport. Nope. There's another sport that's even faster. It's a sport on a slippery track that goes super steep downhill. A sport where racers try to duck from the air and a sport that has no turns. Check this out. You're watching a sport called speed skiing. See that icy hill? It's really slippery and steep, way steeper than a bobsled track. And get this, there are no turns to slow them down like in the other winter sports we talked about. Nope, they go straight down the hill. See how the skiers are ducking low just like the bobsledders? That keeps most of the air from slowing them down. Many speed skiers even wear special helmets and clothing that help them whip through the air. Speed skiers like this one have reached speeds of over one hundred and fifty miles per hour. That's more than twice the speed you drive on the highway, making it the fastest winter sport of all. It's even faster than the fastest roller coaster on Earth. Woah. So in summary, there are a lot of things that can make a winter sport fast, like slippery, icy tracks, avoiding the air that slows riders down, and going down steep hills without any turns, like in speed skiing, the fastest winter sport of all. That's all for this week's question. Thanks, Luke, for asking it.