mystery science

Grades K-5
Mini-Lesson: “Who invented ice skates?”

VIDEO TRANSCRIPT

VIDEO 1

Hi, it's Jay! I grew up in Wisconsin and in the wintertime it would get really cold but me and my friends didn't mind because winter meant snow. We'd build snow forts and have snowball fights. We'd sled down the hill across the street from my house. There's just so many fun things you can do in the winter. Someone named Ray is curious about another fun thing to do in the winter. Let's give Ray a call now.

[Video Call]

- Hi, Jay!

- Hi, Ray!

- I have a question for you. Who invented ice skates?

- Ooh, that's a great question.

Ice skating is so much fun. You put on your skates, head to an ice rink or pond and off you go, zooming across the ice. But you can do a lot more than just zoom. You can jump, and twist, and do all sorts of tricks. Like Starr Andrews, she's one of the best figure skaters in the world. Doing jumps and tricks on ice skates is a sport called figure skating, but figure skating isn't the only

thing you can do on skates. You can do a lot more. Before I go on, I'm curious what are some other things you can do on ice skates?

VIDEO 2

I'm not sure what you answered, but some of you may have said you can play sports like hockey or speed skating. And you're right. A lot of people play sports on skates. But do you know what? Ice skates weren't invented to play sports. They were invented to solve a problem. You're looking at a country called Finland and though we're not totally sure, we think that this is the area where some of the first ice skates were invented. See all the lakes? Finland has over 187,000 lakes. Whoa, that's a lot! People use lakes for all sorts of different things. You can fish in them and you can get water from them. But thousands of years ago, lakes could also be a problem, especially in the winter when the water would freeze. See, in the summer, you could take a boat across the lake to go hunting. or visit other villages, or meet with friends. But in the winter, that was kind of hard to do. Sure, you could try to walk across the frozen lakes but have you ever tried to walk on ice? It's really slippery and really difficult to walk on. You could slip and hurt yourself. So instead, people had to walk all the way around frozen lakes to get to the other side and that could take a really long time, longer than going across. We're not sure exactly who it was but the people around this area decided to try something. What if they put something on the bottom of their shoes so that they could slide across the ice? They probably tried a lot of things but one thing that worked pretty well was bones. That's right, bones. They drilled holes into animal bones and tied them to the bottom of their shoes with leather straps. Kind of like what you see here. The bones they used were flat and oily which meant they were really slippery so they could slide across the ice really well. In fact, they slid too well in all different

directions which made it kind of hard to move forward or turn without falling down. So skaters had to use a stick to push forward and turn. Skates like these help people who lived in the area of Finland a long time ago, take shortcuts across lakes instead of going all the way around them. This saved a lot of time and energy, and over time, people in cold places all over the world started using them. Places like the Netherlands. See all the canals? The Netherlands has a lot of them and guess what happens in the winter? That's right. They freeze. The people who lived here a long time ago started ice skating on those frozen canals to get around, kind of like we use freeways but instead of cars, they would use skates. Pretty cool. Now, bone skates were good and people used them for thousands of years but you may have noticed that our skates today aren't made out of bones anymore, and there's a good reason for that. Remember how it was hard to go forward or turn with bone skates so you had to use a stick to push off and keep your balance? Well, we're not sure exactly when but after thousands of years, the people thought of a way to make their ice skates easier to control. Instead of using bones for the blades, they started making the blades out of metal. They'd attach the metal to wooden blocks like this. The metal skates were a lot easier to control but they didn't stop there. After a while, some skaters started sharpening their blades so they could slide more easily over the ice than bone skates did. These sharp meadow blades worked great. So great, you didn't need a stick to push off and turn anymore. Like the ice skates we're used to today. You could just push off with your legs. So cool! Over hundreds of years, people figured out more and more ways to make ice skates better. They figured out how to attach the blades to a boot with screws so you didn't have to strap them onto your shoes anymore. And have you ever seen one of these? It's called a toe pick. Toe picks were added to the tip of some ice skates to help skaters stop and do tricks like this. Who knows what ice skates will look like in the future? Will they have motors like these? I hope so. So in summary, the first ice skates were invented thousands of years ago when people

started strapping animal bones to their shoes to help them get around in the winter. But ice skates have come a long way since then. From sharp metal blades that slide easily over the ice to skates with toe picks that let you do tricks. That's all for this week's question. Thanks, Ray, for asking it!