Your Shortcut to The Moon

Some cultures say a man lives up there, others a rabbit, it's so big it keeps Earth steady... but it's slowly drifting away from us every single year, and countries around the world are racing to get back there. This is your Squiz Kids Shortcut to The Moon — the podcast where we dive into the who, what, when, where, why, and how of the big news stories. I'm Christie Kijurina.

And I'm Bryce Corbett.

Bryce... what are you doing? Why are you sliding backwards across the studio?

I'm just practising my moonwalk. Not the astronaut kind... the Michael Jackson kind. Check it out... smooth as low gravity!

You look like you're trying to escape a very slow-moving shopping trolley.

Thank you. That is exactly the vibe I was going for. Today, we're exploring why humans are so fascinated by the Moon, how the Moon affects life on Earth, and what the future holds for humans and the Moon. So grab your space helmet, steady your landing ladder... and let's blast off!

Listen carefully. There's a S'Quiz at the end.

WHY

So, why are humans so fascinated by the Moon? I mean, we've been staring at it for... basically forever.

I mean... it is the biggest, brightest thing in the night sky. Kind of hard to ignore.

Exactly... and because it changes shape so predictably, lots of cultures created stories to explain what they saw. Here in Australia, every Aboriginal nation has its own knowledge, stories and teachings about the Moon. There isn't just one story, there are hundreds.

And cultures all over the world have their own versions...like the Man in the Moon! Or the Rabbit in the Moon — which I swear is all you can see once someone points out the ears.... and of course, my favourite, that the Moon is made of cheese, which I still think deserves investigating... you know, for science.

Hmmm..And then there's the myth that full moons make people go a bit... wild.

Ah yes, the "full moon = chaos" theory. Parents everywhere are nodding right now.

There's actually no scientific evidence that full moons change human behaviour. People used to think it did because full moons made the night brighter. Before streetlights, that

meant more people out and about, which meant more unusual things happening on nights with a bright Moon.

So it wasn't the Moon making people weird…It was people being weird while the Moon happened to be full.

Pretty much. But all these stories show how deeply the Moon has captured human imagination. From science to stories to calendars and ceremonies.

Okay, so humans love the Moon because it's big, bright, mysterious and great for storytelling. But does it actually do anything? Or is it just floating up there looking pretty?

HOW

So, how does the moon affect the Earth? Short answer? The Moon has a huge effect. Starting with tides.

Ah yes, the Moon's pulling the oceans around like a giant cosmic magnet.

Pretty much. The Moon's gravity pulls the water towards it, giving us high tide. Without the Moon, tides would be tiny and lots of ocean animals wouldn't survive.

So rockpools, crabs, penguins and turtles surfing in on the tide… all thanks to the Moon?

Exactly. It also keeps Earth steady. Without the Moon, our planet would be all wobbly like a dodgy spinning top, and our seasons would go haywire. It also gives off enough light at night for animals to use. Moths navigate by it, some birds migrate with it, and corals spawn based on the Moon's cycle.

So a full moon is basically nature's big "Now!" or "This Way!" signal. But how did the Moon get there in the first place?

Great question, Bryce! About 4.5 billion years ago, a Mars-sized object smashed into early Earth, and the debris clumped together to form the Moon.

Wow. The Moon is basically recycled Earth leftovers.

And it's drifting away from us by about four centimetres a year. We know that because astronauts left reflectors on the surface, and scientists bounce lasers off them.

Very cool. Very science-y. Also… great proof we actually went there. Those reflectors are one of the reasons we know the Moon landings weren't faked. You can't bounce a laser off a movie set.

No, you can't.

Alright! So the Moon shapes our tides, our seasons, and heaps of animal behaviour…But what about humans going back there? What's next for us and the Moon?

WHAT

To understand the future, let's rewind quickly to the past. In the 1960s and 70s, the United States and the Soviet Union were racing to get to the Moon first. The US won with the Apollo missions, and humans last walked on the Moon in 1972.

Fifty-plus years ago! So… why go back now?

Lots of reasons: We've found water ice in dark craters. The Moon helps us learn about the early solar system. And it's the perfect practice ground for getting humans to Mars.

Kinda like a lunar training camp! The new American program is called Artemis… named after Apollo's twin sister. Artemis I flew around the Moon without humans. Artemis II will take astronauts around it probably early next year, and in 2027 or 2028 Artemis III aims to land the first woman and the first person of colour on the Moon.

And other countries are right in the mix too. India with Chandrayaan, China with the Chang'e (CHUNG EWR) missions, Japan's SLIM lander, and even private companies like SpaceX are trying to get there.

So… who actually owns the Moon? Could I just go and build a house up there?

That could be challenging. No one actually owns it, but the 1967 Outer Space Treaty says countries aren't allowed to claim the Moon, and it has to be used peacefully. There's still lots of debate about mining and resources, the rules are still being decided.

Okay, what about living there? Could we have Moon towns? Moon shops? Moon footy?

Maybe one day, but it won't be easy. There's no breathable air, temperatures swing from boiling to freezing, and the Moon's dust is sharp like tiny glass shards. Scientists think early bases will have to be underground or inside protective habitats, with robots doing most of the work.

So we're not quite ready for Moon footy yet. But it definitely does feel closer than ever.

THE S'QUIZ

This is the part of the podcast where you get to test how well you've been listening…

1. What natural phenomenon on Earth is mainly caused by the Moon's gravity? (Tides)

2 . True or false: The Moon is slowly drifting away from Earth by about four centimetres each year. (True)

3 . What is the name of the US space program aiming to return humans to the Moon?

A) Artemis

B) Apollo

C) Aphrodite

That's all we have time for today. Thanks for joining us as we explored the who, what, how, where, when, and why of The Moon

Now get out there, and have a most excellent day!

Over and out.