

Your Shortcut to... The Space Race

This is a Squiz Kids podcast (do doo doo doo) - your fresh take on what's happening in the world around you

Space. Ever since ancient times, humans have been gazing up at the sky and dreaming about what might be up there. And in the last century, we've been competing against each other like crazy to get there. This is your Space Race Squiz Kids Shortcut—the podcast where we dive into the who, what, when, where, why and how of the big news stories. I'm Amanda Bower.

And I'm Bryce Corbett

Bryce, some of the most popular Squiz Kids Today stories are about space. We've reported on rovers exploring Mars; the Deep Space telescope... and of course we've had our eyes on the billionaires getting into space exploration.

Well, today we're going to take you through why it's been called a "space race" for almost 100 years; where that race is going now; and who is involved.

Listen carefully - there's a Squiz at the end!

Now Bryce, I love a good rhyme, but "Space Race" also happens to be true... ever since scientists thought it was possible for humans to leave the planet, there really has been intense competition between countries to be the first to do it.

That's right - since the first rocket ship test flight went up into the sky 70 odd years ago, it's been a race between countries to get there first. And maybe that's not so surprising, considering that the early technology for space exploration was developed during and after a war.

Yep, during World War II, the Germans invented a type of missile that could travel MUCH further than earlier rockets .. it was created to travel over long distances so it could be used against countries a long way away. But if you pointed it straight up instead... it was basically the first ever space rocket. Once the war was over, the countries that beat Germany wanted to get their hands on the technology pronto - especially America and the Soviet Union, which was the name back then for Russia and a group of other countries that Russia was controlling.

Why especially the Americans and Russians?

Well, the two of them both wanted to come out of World War II as the global power. They both felt that their system of government and way of life was the best - and they each thought that the other was a real threat to the world. For almost 50 years after World War II ended, America and Russia were in what was called a "Cold War"—they weren't actually fighting and shooting each other, but they were competing to be the most powerful in just about every way.

The Squiz Kids are too young to have experienced it, of course, but it was pretty intense. America and Russia were both trying to influence politics all over the world - and even in space.

Exactly. They both went to extraordinary lengths to get the German scientists who had developed these missiles to move to their country and work on their space program. And the USA scored early in the space race by taking those long-range rockets, pointing them towards space instead of at another country - and firing them into the upper atmosphere...

But then in 1957, Russia streaked ahead when it launched the world's first satellite, Sputnik.

That's right, and the Americans took it pretty hard. And this is when the space race really kicked off, with the lead changing multiple times as rockets got more and more advanced. The real game changer, though, was the Americans' Apollo program, which had the goal of getting humans on the moon.

In many ways, that first space race was over once Neil Armstrong and his crew landed a rocket on the moon in July 1969, and said those famous words as he jumped off the ladder onto the surface of the moon "That's one small step for a man, one giant leap for mankind...."

That's right. Basically, America won the race. And in the 1990s, the countries of the world became more collaborative - that means working together - in space. Russia and the US, along with three other countries, launched the International Space Station 22 years ago, to orbit the Earth, provide a home for astronauts from many countries, and a base for scientific experiments. There's a link in your episode notes to explore the ISS some more.

But now there's a new space race? Where's it going?

Well, Bryce, the Moon is SO 1969. Today, there are two main races. The first one is all about Mars.

Oh yes, 2020 was a big year for Mars missions... because as they say, 'the planets aligned'

They did... once every 26 months there is a small window where Earth and Mars come closer together ... which allows for the quickest and most efficient journey between the two.

There were three countries that jumped on board. The United Arab Emirates launched the Hope mission, which plans to stay in a wide orbit to study Mars' weather and climate systems... the US is up there with Percy - more on him in a bit... and just as China has become more powerful down here on earth, it's also pushed into space.

That's right. China's Mars exploration mission is called Tianwen-1 and it landed successfully in 2021. It's there to study its surface and search for water ice and liquid water that may be linked with signs of life....

That's similar to what Percy is doing, right?

That's right, the American's Perseverance rover - Percy for short - landed three months before China's Mars mission did ... so the US won that particular race... and has been busy snapping pictures, analysing rocks, and basically doing ground work for future human missions to Mars.

And because it's a space race, China also wants to land humans on Mars in 2033.

Amanda, we talked about there being two races... who's involved in the other one?

While the race to Mars has so far been primarily between governments, the second race is between private citizens... really, really, REALLY rich ones.

That's right - there are a few ultra rich people getting in on this race, but three have been the loudest.

Exactly - we've talked about them on Squiz Kids Today in the past. The first one to get into the race was Jeff Bezos, the founder of Amazon, who started Blue Origin in 2000. His idea is to build a permanent base on the moon, build space colonies, and apparently eventually have 1 trillion people living and working in space.

And probably get Amazon deliveries to their space homes, too, I would suspect. The next billionaire to join the race was Tesla's Elon Musk, who started Space X in 2002.

He calls himself the Emperor of Mars... emperor is another word for emperor. His very ambitious plan is to establish a city on the red planet that can sustain itself - no need for those Amazon deliveries - and then use Mars as a base to further explore the solar system...

And there's a third billionaire in the game ... Virgin's Richard Branson. He established Virgin Galactic in 2004, and he won a leg of the latest race by being the first person to launch himself in a spaceship he owned himself... pipping Jeff Bezos at the post. Richard Branson doesn't particularly want to go to the moon, or Mars, though - he just wants to get into the space tourism game.

Meaning that instead of going on holidays to, say, the Gold Coast, you go into space?

Exactly. Just a quick trip up and down and right now it'll cost you anywhere between a quarter of a million dollars and twenty million dollars. A titch more than a trip to the Gold Coast.

And experts do think that over the next few years the cost will drop, and it could one day be affordable for regular people, like you and me, Bryce to take a trip into space.

Now we wouldn't be good journalists if we didn't mention that there has been some criticism about how these ultra rich people are choosing to spend their money.

That's right, some people wish that instead of looking to explore space, these ultra-wealthy people would use their money to help solve some of the many problems we have here on our own planet.

The counter argument is that science is being conducted by SpaceX, Virgin Galactic, and Blue Origin... and that plenty of discoveries made in space have benefited us down here on earth. Check out your classroom resources for more on that.

What do you think, Bryce? Would you take a holiday up to space?

Huh? Huh? Would ya?

I think I'll go somewhere with a nice beach instead.

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

- 1.) Which country developed the world's earliest space rocket? (Germany)
- 2.) What's the cute nickname for the American rover currently on Mars? (Percy)
- 3.) What title has Elon Musk given himself over Mars? (Imperator, or Emperor)

That's all we have time for today. Thanks for joining us as we explored the who, what, where, when, why and how of the Space Race. Now get out there... and have a most excellent day. Over and out.