

Would you want to be the first human on Mars?

It would be an incredible, historic adventure, but there would be risks along the way.

The furthest distance a

record was set by NASA's

Apollo 13 crew in

April 1970.

ince 1961, more than 500 people travelled to space. Only eight have sailed out of view of planet Earth into the deep darkness beyond the Moon, and none have yet completed the 35-million-mile trip to Mars. That is all expected to change in the 2030s, when NASA, the US space agency, hopes to send humans to the Red Planet. That person might well be someone who is currently still at school. Would you like it to be you?

Astronauts have often tried to describe the wonder of Earth seen from space. Buzz Aldrin, the second man on the Moon, said Earth looks like "a brilliant jewel in the black velvet sky", and fellow astronaut Ron Garan called it a "stunning, fragile oasis".

Imagine how Earth must look from Mars. You'd be able to see other planets and their moons too, not to mention the stars. During your time on the Red Planet you'd be able to visit the volcano Olympus Mons, which is the tallest mountain in the entire solar system, or Valles Marineris – a valley spanning the

same distance as from Los Angeles to New York, in the US. If you wanted, you could even travel to our nearest neighbour's enormous polar ice caps.

Not only that, but you would be making history, as Neil Armstrong did in 1969 when he became the first person to set foot on the Moon. Armstrong and his fellow moonwalkers left a plaque that reads: "Here men from the planet Earth first set foot upon the moon July 1969 A.D. We came in peace for all mankind." They made history, and the plaque is still

However, life on Mars would not be easy. With gravity that is 37.5% of that on Earth, it would be

difficult to go for an evening stroll – at least until you got used to weighing so little that you could feel your organs floating inside you. You would have to relearn how to walk, for a start. You'd also have to contend with the frequent dust human has ever been from storms on Mars, which tinge the Earth is 248,655 miles. This sky with an orange glow.

Plus, the flight to Mars takes at least six months. That's a whole year for a return trip – if such a thing is even possible – and you'd almost certainly

suffer with headaches resulting from a lack of oxygen in the atmosphere. You'd have to wear disposable clothes because there would be no washing machine, and eat freeze-dried food that tastes of nothing.

If you wanted to call home, you'd have to be prepared to wait a while for every response. It takes several minutes for messages to reach Earth from Mars. Being so isolated with the same small crew day in, day out could be very bad for your mind. Some experts wonder if the hardship would be simply too

There are other dangers too. Unlike Earth, Mars does not have a magnetic field or a thick atmosphere to ward off harmful radiation from space. Ruthan Lewis, who works for NASA, says that on Mars, "You're constantly being bombarded by some amount of radiation." Radiation is when particles pass through the skin and damages cells, and it increases the risk of diseases such as cancer. This is why NASA's experts are working hard on building a programme that is safe for the astronauts.

You might discover the first extraterrestrial life in the universe, but you'd be making a huge personal sacrifice. So, do you think it's worth it? Would you want to make history as the first person on Mars?

A MISSION TO MARS

FOR Your research could solve the secrets of the universe

- Going to Mars is the way to answer one of the most important questions to humankind: has life existed elsewhere?
- Mars is a beautiful planet, full of wonder. You would be the first person to see its sights for yourself.
- Of course there are risks but the space agency NASA is working very hard to minimise those risks so that astronauts who do go to Mars are kept as safe as possible.
- Any remaining dangers would be worth it. You would make history, just like the first people to walk on the Moon did 50 years ago, and you would forever be remembered as a brave explorer.



AGAINST It's a long and lonely journey – with plenty of dangers



- The flight to Mars takes at least six months. Not only would the journey be dull and uncomfortable, it could also be bad for your mental health.
- The radiation on Mars is dangerous. Once you'd arrived you would be exposed to high doses of damaging particles that could make you very sick, and could lead to a fatal disease.
- Life on Mars wouldn't be easy. You'd have headaches, wear disposable clothes and eat freeze-dried foods.
- It could be very lonely. If you fell out with your crew, there would be nobody else to talk to.

LAST MONTH'S POLL

Last month, we asked you whether you thought that uncontacted tribes should be left alone Here's how you voted.

WHO WON?



YOUR OPINION COUNTS

"I think they should be left alone if they want to be, but if they want a bit of contact with the world then we should give them some. I think we just need to respect them and their choices." PopJam user

"No, I don't think we should leave them alone because they can help us look after the planet." PopJam User

Would you want to be the first person to set foot on Mars? Tell us what you think by voting FOR or AGAINST in our poll at sciencenature.theweekjunior.co.uk/poll

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