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JACQUELINE HOWARD PRESENTS: A DAY ON MARS

0:12-0:44 For as long as humans have been on Earth, we've been looking up at Mars in the night sky. Since then, we've studied the red planet with telescopes and satellites. We've driven vehicles on its surface. We've even detected possible signs of ancient life on the planet. And now, some scientists say we'll eventually live on Mars. But what would a day on the red planet look like?

THE RED
PLANET

Hey everyone, Jacqueline Howard here. If we took a trip to Mars, what would it be like once we land and settle there? That's not a farfetched thought.

0:44-1:21 The Planetary Society, a non-profit organization here in the U.S., claims that it will be pretty easy for NASA to send astronauts to Mars by 2039. The

HUMANS ON MARS?

European Space Agency and Russia have been mulling over plans for a manned mission to Mars. And there's even a private effort called Mars One, to set up a human colony on the red planet by 2027.

But what would it really be like to live on Mars? Wilder than you might imagine. Here are five freaky facts about living a Martian life, that will leave you at a loss for words.

You could jump as high as a kangaroo and lift heavy things you'd never have a chance of picking up on Earth. And that's because there's not as much gravity weighing you down on Mars as there is on Earth. The gravity on Mars is only about 38 percent of that on Earth.

So that means that you and everything else around you would weigh about a third of your Earth weight. So if you weighed 100 pounds on Earth, you'd probably weigh around 38 pounds on Mars. And if you could jump 3.3 feet high on Earth, you could jump nine feet on Mars.

Yikes, things were starting to seem too good to be true. NASA scientists just recently discovered that space flights lasting longer than six months can cause eye problems in astronauts, like blurry vision. And a trip to Mars would take about five to ten months, depending on the speed of your launch and the alignment of Earth and Mars of course.

So, some doctors worry that a trip to the red planet could have negative effects on your vision.

1:21-2:01

SUPERPOWERS!

2:01-2:53

MESSES UP
YOUR EYESIGHT

Researchers still aren't quite sure what causes these vision problems, but some scientists pose that reduced gravity during space flight can cause fluids in your upper body to move across cell membranes and blood vessels differently than they would on Earth, and that's what could impact your eye structure and weaken your vision.

2:53-3:54

LIVING
UNDERGROUND

Because living on the surface would be treacherous. Mars barely has an atmosphere, which leaves us vulnerable to the sun's ultra-violet radiation, beaming down on the planet. Whereas on Earth, we have an ozone layer that acts as a natural SPF to protect us from the sun's radiation and space radiation, whereas Mars doesn't seem to have a magnetic field. In fact, some scientists say that the planet ceased to create a magnetic field around four billion years ago, and that's not all.

The little atmosphere on Mars, which is 95 percent carbon dioxide, allows for winds to whip up powerful dust storms, and the planet experiences conditions that are inhospitable and super chilly temperatures. Sure, Mars tilts on its axis much like Earth, so it has seasons like we do, but the global average on Mars is -80 degrees Fahrenheit. Brrr!

3:54-4:37

NO PHONING
HOME

Feeling like calling Mom to tell her about your day on Mars? Forget about it. The radio communications would experience a four to 20 minute delay, which depends on the distance Mars is from Earth as the planets orbit the sun. Mars and Earth orbit the sun at different speeds, which is why a year on Earth is 365 days, but a year on Mars is 687 days.

So the closest possible distance between Earth and Mars along their orbits would be 34 million miles, but the farthest apart they could get would be 250 million miles.

Meet Phobos and Deimos. They are two small moons that orbit Mars. But as you look up at night, they'd appear very different in the sky than our moon. In fact, they would sort of dance in the sky, as Phobos orbits Mars three times a day, whereas Deimos takes 30 hours to complete one orbit. That means living on the red planet would be beautiful, but still bizarre.

Is there anything else about visiting Mars that has you scratching your head? Let me know your thoughts.

4:37-5:12

TWO MOONS
AT NIGHT