Mars:

The Red Planet

Are you considering visiting the planet Mars? This survival guide will explain everything you need to know in order to survive in this hostile environment.

Mars: A View From Earth

In the Earth's Northern hemisphere, it is often possible to see Mars in the night sky, where it reflects the sun's light, giving it the appearance of a large bright star. At a distance of approximately 140 million miles from Earth, it is our planet's closest stellar and can be reached in only 18 months by a standard space rocket. Due to Mars' atmosphere mostly consisting of carbon dioxide, poisonous to humans at its natural levels, to be habitable oxygen biomes need to be installed.

Appearance

Mars is renowned for its dusty deserts, sprawling across much of its surface but a closer look reveals a far more intricate picture. Its tanned-red dusty complexion is a result of the rusting of rocks, which have been spread across the surface by fierce galactic winds. A closer look reveals complex river systems that were previously on the planet, which leads scientists to suggest that a wide range of vegetation used to thrive. Mars is home to the largest volcano in the solar system, Olympus Mons, which is three times taller than Mount Everest. When wearing a space suit with an oxygen mask, humans can explore the planet. This has led to a thriving industry in mining precious metals and minerals required for vital medical equipment on Earth.

Life on Mars

Much speculation has been made about the nature of lifeforms residing on Mars. Recent discoveries indicate that unique and incredible creatures reside, even in a hostile environment. Burrowed deep beneath the surface, Aquates have been discovered. These coral-like creatures are believed to gain energy to grow and reproduce from carbon dioxide that seeps through tiny tunnels that form in the dusty surface. Although Aquates have beautiful, vividly-coloured bodies, their skin is extremely poisonous so extreme care is in order if they are encountered.

What to wear

A high-quality radiation suit with oxygen hood is needed on Mars. Gravity-enhancing soles in the suit are also required in order to cope with the high-strength rays from the sun, the noxious atmosphere and the anti-gravitational pull.

Because the sun's rays are 1000 times stronger on Mars than on Earth, humans are at high risk of disease and even death if they do not protect themselves. In order for the radiation suit to deflect the rays, it must be made out of reflective material. The NASA suit is currently a popular choice with Mars visitors.

Owing to the fact that there is little oxygen in the Martian atmosphere, the oxygen hood must deliver at least 45 litres of oxygen per hour. This enables humans to perform most activities without becoming weak. Without it, people would not be able to survive.

Space suit for Mars

Biome with crops for human consumption on Mars.