Group Name: Solsteppers

Group Challenge: Planetary Tourism Office

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Our Project: Beyond The Earth Trip

Welcome to our first destination, the Moon. It's humanity's first step into the cosmos. Here, you'll see abandoned human colonies - our initial attempts at settling here. However, the harsh conditions forced us to abandon them. You'll also witness the landing site of Apollo 11, where humanity took its first steps on the lunar surface. In short, you're embarking on a historic journey on the Moon.

We thought of the Moon as a place primarily for mining rather than for extensive human settlements. The main reason is that making the Moon self-sustaining, like creating an atmosphere or suitable soil for farming, is much more challenging than it would be on Mars. So, we focused on the Moon as a potential mining resource.

However, we also acknowledged its importance to humanity and envisioned the Moon having many tourist attractions and preserved areas serving as museums.

Mars has always been a planet that humans have dreamt of settling on. With sufficient resources, it's possible to live in underground facilities on Mars. However, to truly make Mars self-sustaining and a place where humans can comfortably live on the surface, we need to overcome the challenge of recreating its atmosphere.

As suggested by our guidebook, by the year 2104, humanity was working to solve this problem. Facilities on Mars were dedicated to making this possible. They are striving to find a way to recreate the magnetic fields on Mars and thicken its atmosphere. Additionally, they are conducting research on designing bacteria through genetic engineering that can convert the oxygen within the abundant perchlorate ions on the planet into free oxygen. Furthermore, they need to produce plants capable of growing in Martian soil.

In conclusion, if these developments are successful, not only will they increase oxygen levels in the atmosphere, but they will also make the planet sustainable for humans through plants.

Mars also has a large settlement in the Valles Marineris canyon. This settlement is where the majority of Mars' population resides.

Our third destination, Europa, is one of humanity's greatest hopes in the search for extraterrestrial life. We brainstormed about what actions Earth's governments might take if we discovered life there. In the end, we decided to fund research facilities beneath the safer ice layer of Europa, rather than its highly radioactive upper layer. These facilities would focus on taxonomy studies, understanding the mechanisms of life formation, and exploring the unknown. Inspired by the legend of the underwater city of Atlantis, we named this project the "Atlantis Project." We believe that visiting these facilities should be an essential experience for every Earth citizen to witness groundbreaking research efforts firsthand. While doing this, we will also have the opportunity to see the Red Spot Region on Jupiter, of which Europa is a satellite.

Our final destination, the Titan Hotels, serves exclusively for tourism. The incredible capability of private companies to take humanity all the way to Saturn is awe-inspiring and provides us with the means to reach even further. Instead of placing the Titan Hotels on the surface with toxic methane gases, they decided to position them in orbit around the moon. This choice allows visitors to enjoy breathtaking views from these hotels.

Sources:

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Moon Picture: NASA/GSFC/ Arizona State University

Mars Picture: NASA/JPL-Caltech/USGS July 09, 2013

Terraformed Mars Picture in guidebook(Our Powerpoint File): NASA/JPL-Caltech 2019-09-06

Europa Picture: NASA/JPL/University of Arizona

Mars Magnetic Waves Picture: NASA/JPL-Caltech

Titan Picture: NASA/JPL-Caltech

Jupiter’s Red Dot : NASA/JPL-Caltech/SwRI/MSSS/Björn Jónsson

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