TPO 40 Integrated Task

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The author of the reading argues that there is no possibility for human life on Venus because of severe circumstances. On the other hand, the lecturer insists that despite all difficulties on Venus, it is reasonable for humans to be present there by establishing a float station like a balloon 50 kilometers higher than Venus' surface.

First of all, the reading passage states that the pressure at Venus’ surface is higher than the pressure at Earth’s surface, so the spaceship cannot endure this pressure and is crushed. The lecturer states that the pressure of Venus’ atmosphere at this height is approximately equal to the Earth’s surface, so the spacecraft is not hurt.

Secondly, the reading says that Venus' atmosphere has little amount of oxygen and water vapor and it mostly contains other substances like carbon dioxide, nitrogen, and sulfuric acid. However, the professor states that we can design a chemical process to combine other gases and create water and oxygen which is required for human presence.

Finally, the passage mentions that there is a thick layer around Venus which prevents 60 percent of the sunlight to touch the planet’s surface and it is reflected back to the space so humans could not provide enough electricity for their usage. The lecturer points out that 50 kilometers above the surface, we are higher than this thick compact layer. As a result, we can use both the light is directly emits from the sun and which is obtained from the reflection of the dense layer of carbon dioxide and generate more electricity.