Task1 – Week5

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The reading and the lecture are both about the possibility of human presence on other planets. The author of the reading believes that there are no conditions for human presence. The lecturer cast doubt on the claim made in the article. He thinks that it is possible by establishing a base like a balloon instead of staying on its surface.

First of all, the author claims that atmospheric pressure at Venus’ surface is approximately 90 times greater than the pressure at Earth’s surface. She believes anything that lands on Venus will likely crush. This point challenged by the lecturer. She says that 50 kilometers above the level of air pressure is equal to the pressure on the ground we live on. Furthermore, she points out there would be no danger of the station getting crushed.

Secondly, the author states that while there is not water and oxygen on Venus, these might be supplied from Earth to Venus. He argues the idea of guarantee a regular supply would defeat the purpose of establishing a permanent base on Venus due to lack of use in long distances. The lecturer rebuts this. He suggests Venus atmosphere contains dioxide and sulfuric acid. There are chemical process to make water and oxygen by these compounds. She elaborates on this by mentioning that the water and the oxygen that are necessary for human living could be produced through chemical materials so it would not be necessary to import them.

Finally, the author mentions that very little sunlight reaches the planet’s surface. He is of the opinion that about 60 percent of the sunlight that hits Venus is reflected back into space by the thick clouds that fill the atmosphere. There is not enough light to use solar power cells so human could not get electricity to power their machines. The lecturer, on the other hand, states that clouds above that station are not very thick, so there is a significant amount of sunlight. He puts forth the idea that the clouds reflect sunlight so solar power cells could collect mix of direct sunlight from above and the sunlight reflected by the clouds below. Through this idea human could have enough solar power cells to get electricity.