

# [Building a moon base](https://assignbuster.com/building-a-moon-base/)

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Have you ever looked at the moon and wished you could live there? Well, maybe you can. Scientists are considering building a permanent base on the moon. People should build a base on the moon because of the research opportunities, such as moon specific research, gravity research, and farther space exploration.

The creation of the moon is one of the many mysteries about it. However, people can learn about the moon by going there. When being interviewed for an article on moon colonization, planetary scientist Christopher Mckay says, “ Despite being our nearest celestial neighbor, the moon harbors many mysteries, including how it formed” (Fecht). By building a moon base, scientists can more fully go after these mysteries for the same reason there are not as many mysteries about Earth as there were 800 years ago. This is because people had time to explore and discover. Another mystery of the moon is the chemical properties of the moon.

The chemical properties of the moon are largely unknown. In an article answering about what the moon is made of, Anne Marie Helmenstein, Ph. D., says that “ Scientists have samples from the surface or crust of the Moon, but the composition of the inner layers is a mystery.” Building a base on the moon could get people closer to it and maybe drill into the interior with a drill permanently installed to the base on the moon But even more important are the features of the moon.

The moon has many features, but most are unknown. Another thing Christopher Mckay says is that “ From a lunar research base, scientists could potentially explore the moon’s lava tube caves, look for signs of geologic activity, and investigate hints of ice found in the dark craters of the lunar poles” (Fecht). People can learn more about these features by building a moonbase to get closer to them people could send out rovers to go on exploration missions. The construction of different structures would be easier in the moons lower gravity. Ken Murphy, an advocate for going to the moon, argues that “ Extensible towers at the poles will allow the placement of solar cells or films in constant sunlight.” This is harder on earth than on the moon, thus another reason to colonize it.

The moons lower gravity makes constructing things easier. But could people actually live there? A base on the moon could help scientists figure out the effects of prolonged exposure to the environment of outer space. Mckay says, “ Building a lunar base could help us learn more about the effects of disrupted circadian rhythms, Isolation, and high doses of radiation” (Fecht). These are all important to know if anyone’s planning to live in space anytime soon. It could also help cure diseases on earth, and prevent people from dying upon returning to earth because of the stress of Earths gravity and atmosphere.

But, what about the long-term space exploration? Asteroids may have potential mining benefits. The deep space industries say that “ Asteroid resources include all the same materials planets are made of,” and that they provide “ an abundant supply” of “ what we need in space.” The moon can be a good starting point or checkpoint. The asteroids may have useful metals on them such as iron, silicon, or even gold. But Mars is different. The colonization of Mars is ambitious, and if people try to jump in with no prior knowledge, something will go very very wrong.

Christopher Mckay says in the same interview, “ A lunar research base would give NASA expertise in engineering, operating life-support systems, sustainable energy sources, supplying food, recycling water, and troubleshooting, while the base is just a three-day trip away in case something goes wrong.” A moon base could help practice for Mars because as Mars is 3 months away, if the colonists run out of food or water, that’s a problem. SETI, meanwhile, is in trouble now. A SETI base on the dark side of the moon could help find aliens easier. It would block out the interference from earth.

Claudio Maccone, writer of the cellular origin and detecting life in extreme habitats book series, says, “ from the Lunar Farside, one can detect radio frequencies lower than 15 MHz (i. e. wavelengths longer than 20 m) impossible to detect from the Earth because of the blocking effect of the Earth’s ionosphere.” This is a good reason to go to the moon, a faster way to find ET, and finding out if aliens are out there is something everybody wants to know. But anybody could also just go and meet them. A moon base would be the first step in becoming an interplanetary species.

As the planetary scientist, Christopher Mckay put it, “ In order to be flying spaceships to other worlds and becoming an interplanetary species, we need to start somewhere, and the moon is the perfect place.” All the more reason to expand humanity’s influence. By colonizing the moon. The moon could launch ships to Mars, Jupiter’s moons, and then other solar systems. So what does this all mean? In conclusion, scientists should build a base on the moon because of the research opportunities.

These are moon research, gravity research, and further space exploration. And finally, if you do go to the moon, build a pool. Works Cited “ The Deep Space Approach.” Asteroid Mining, Deep Space Industries. “ Helium-3 Mining on the Moon.” ESA, ESA.

Murphy, Ken. Out of the Cradle, Ken Murphy, 14 June 2008. Fecht, Sarah. “ Six Reasons NASA Should Build a Research Base on the Moon.” National Geographic, National Geographic Society, 21 Dec. 2013.