

# [The dark side of the moon](https://assignbuster.com/the-dark-side-of-the-moon/)

The Dark side of the Moon

It is cold, dark, and it has never touched before. The landing was a complete success. It has never been done before. China has completed one of the most challenging obstacles to space exploration: landing on the far side of the moon.

China has become the first country to arrive on the opposite face of the moon. The far side of the moon is also known as the dark side of the moon because humans were unable to see this side of it until spacecrafts were sent into outer space to take pictures. On January 3rd of 2019, China sent up two rovers called the Chang’e 4 and Yutu 2. They landed near the southern section of the Von Kármàn. Yutu 2 has more freedom than the other rover to explore and although it landed the same day as Chang’e 4 it was put to rest for the long lunar day, which last up to about 14 earth days, to avoid overheating, and successfully awoke on January 10th. These rovers are complete with many tools. It has sensors that will help maneuver it through the rough, rocky terrain. There are many other appliances on the rover that will dig and grab the 4 million old rocks as samples. To help the rover to know where to dig, there is a ground penetrating radar to see where the ground is soft so nothing gets broken. The rovers will collect as many samples as they can so scientist can unravel what is inside of them. They are also covered in many cameras that have taken pictures of this mysterious land to send back to Earth, but being on the other side of the moon makes it complicated for scientist to communicate with Chang’e 4 and Yutu 2.

Due to the the rising curve of the moon, there were complications receiving radio waves to retrieve images of the lunar’s unseen surface from both rovers Chang’e 4 and Yutu 2. To solve this problem, China sent a satellite, called Queqiao, up to orbit the moon so that the images from the rover could be redirected to it and then sent to China’s receivers. Queqiao was sent to orbit the moon in may of 2018 to which it can communicate to earth. Not only does this satellite help China receive pictures and with communication, but it helps control both of the rovers and makes sure that they are well maintained while doing its work.

Landing on the unseen side of the moon is one of the greatest advancements for the exploration of the moon since the first lunar landing. Many countries have previously tried to do what China has done, but, failed. Countries that have tried landing rovers on the dark side of the moon did not have the technology to complete the mission, but today, with all of our technology advancements many things are possible. Other nations can soon follow in China’s foot steps and help progress in the journey of space exploration.

As of this year, only 5 percent of the moon has been explored since the first successful landing of a lunar rover on November 17, 1970. Over the months coming up, China’s scientist will be studying the dark side of the moon to better understand the structure and formation of earth’s moon. China is now a “ major player the first rank of space powers,” according to Michael Nuefeld, a curator in the Space History Department (CSMonitor. com). China is just one contestant in the space exploration runs. They have previously been dominated by the United States and the former Soviet Union. Japan has also been planning several missions to space. China has come to see space exploration as a way to be seen as a global leader; the Chinese have been trying to make it clear that they are a major power in the space affairs.

To this day the US is still the dominant competitor in the space race and does not allow collaboration with China National Space Administration because of the risk of insight to US military information. Without the assistance from any other country China has taken on space exploration as a place to show their own technological powers. When the original space race was going on the the Soviets had plans on the dark side of the moon but did not have the technology and tools to do so. The United States did not have that on their minds and was not worried about landing and exploring the far side of the moon. The Chinese have sent eleven astronauts into space for an increased amount of time and for technical feats. They have also sent up two space labs and lunar landing missions can be happening very soon.

With China completing the challenging mission of landing a rover on the far side of the moon not only have they been the first ones to do it; they have also solved the issue of not being able to communicate with the rovers by sending a satellite to orbit the moon beforehand. With this major achievement, China may be able to discover new ways of how the universe was created. The landings have been able to send pictures back to earth of what the dark side looks likes. There will be samples that have and that will be collected for the scientist back on earth to analyse and look at. The landing of the rover has been one of the greatest advancements since the first lunar landing in 1970. The Chinese are not done yet, they have sent up two space labs and have been testing their new technological equipment. There is a very strong chance that soon China will have their very own people in the moon’s surface. With China being the first country land on the dark side of the moon they will have the opportunity to learn many things that can help other countries explore the never-ending depths of space.

## Works Cited

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