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View of completed model



Lunar Globe

The Moon is the most familiar celestial body to us. Since ancient times, the Moon has exerted a powerful influence on our lives. In ancient Japan, a month was defined by the cycle of the Moon as it waxed and waned. This lunar calendar is still in use in Japan as the basis for an older, traditional calendar.

Although the Moon is such a familiar feature in our lives, much about it remains unknown.

In 2007, Japan launched Selene (also known as Kaguya, after a princess from Japanese legend who traveled to the Moon), its first lunar orbiter. Other countries launched their own lunar probes soon thereafter. Through such explorations, we are finding solutions to the hitherto unsolved mysteries of the Moon.

These efforts will eventually make the Moon an even more familiar object.

Use the Canon Creative Park lunar globe to learn more about the Moon. You can learn the names and locations of various craters and inspect the craters by actually looking up at the Moon.

Editor

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Born in Tokyo in 1953; graduated from the Faculty of Science, Tohoku University; Master's degree (in volcanic geology) from the Graduate School of Science at the University of Tokyo; now a photographer and science writer; focuses on promoting science and scientific education through photography and writing on various subjects, from volcances to astronomy.

* This model was designed for Papercraft and may differ from the original in some respects.

Parts list (pattern) : Fourteen A4 sheets (No. 1 to No. 14)

■ No. of Parts : 15

* Build the model by carefully reading the Assembly Instructions, in the parts sheet page order.









Canon

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Lid of the upper half base





Back side of the Moon/lower half



Front side of the Moon/lower half Mare Fecunditatis Furnerius

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Lower half base





Lid of the lower half base





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Stand 1





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Stand 2





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Stand 3



Moon Story 1



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How far is the Moon from the Earth?

The Moon is the closest celestial body to our planet Earth. How far is the Moon from the Earth? The average distance between the Earth and the Moon is about 384,400 km. The Earth has a diameter of 12,800 km. This means that as many as 30 Earths could be placed between the two heavenly bodies. Even light takes about 1.3 seconds to cover this distance. A jet plane (850 km/h) would take 18 and a half days, while a Shinkansen bullet train or an F1 race car (300 km/h) would take about 53 days. It would take humans about 10 years and 10 months to travel this distance on foot. The Moon is very far away! You can get a feel for the actual distance between the Earth and the Moon

with our paper craft globe, one of the Canon Creative Park kits.

How was the Moon formed?

There are three major theories to explain where the Moon came from, known as the parent-child, brother, and capture theories. The parent-child theory proposes that the Moon split off from the newborn Earth. The brother theory proposes that the Moon and the Earth formed independently around the same time. The capture theory proposes that the Moon veered close to the Earth and was captured by the Earth's gravitational field. Another theory, the Giant Impactor Theory, emerged in the mid-1970s. According to this theory, just after the birth of the Earth about 4.5 billion years ago, a planet the size of Mars struck the Earth. Fragments from the collision then repeatedly collided and combined while orbiting the Earth, eventually forming another heavenly body - the Moon. This is the theory most widely accepted at this time.

Moon Story 2



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Is it really possible to build a base on the Moon?

The first human landing on the Moon occurred in July 1969. Apollo 11 commander Neil Armstrong took man's first step in the *Mare Tranquillitatis*, or the Sea of Tranquility. The lunar orbiter Selene (Kaguya) was launched in 2007. If further advances are made in the study of the Moon through such exploration missions, lunar base construction, which is currently being discussed, will follow. If constructed, a lunar base will help us learn more about the structures of heavenly bodies, including the Earth. Since the Moon is a better place for astronomical observations than the Earth, a station on the Moon would permit various advances in such observations. Also promising is the potential for minerals and other resources on the Moon. The time for lunar base construction is approaching. The Moon will soon be even more familiar to us.

Why doesn't the Moon show its rear surface to the Earth?

When viewed from the Earth, we always see the same side of the Moon. Why do we never see the other side? This is because of a perfect match between the Moon's orbital period around the Earth and its own rotational period. During a one-week period, in which it travels 90 degrees around the Earth, the Moon also rotates 90 degrees. That is why the Moon always shows just its front face to the Earth. A notable feature of the back side of the Moon is that it has fewer seas than the front side. Lunar seas are low areas on the Moon. Seen from the Earth with the naked eye, they appear as dark patches. While about 30 percent of the surface of the front side is sea, on the other hemisphere, seas account for only about two percent of the surface.