

Where is Earth's Moon?

Today, we are learning all about Earth's Moon. Where is it? Our Moon is 229,730 miles (369,714 km) from Earth. It's the closest object to our planet in the solar system and it's our only moon. It's also the fifth-largest moon in the solar system.

Do all planets have moons?

Of the terrestrial (rocky) planets of the inner solar system, neither Mercury nor Venus have any moons at all, Earth has one and Mars has its two small moons. In the outer solar system, the gas giants Jupiter and Saturn and the ice giants Uranus and Neptune have dozens of moons.

How many moons does Earth have?

Quick Facts: Earth has just one moon- a rocky, cratered place, roughly a quarter the size of Earth and an average of 238,855 miles away. The Moon can be seen with the naked eye most nights as it traces its 27-day orbit around our planet.

What is a planetary moon?

Moons - also called natural satellites- come in many shapes, sizes and types. They are generally solid bodies, and few have atmospheres. Most planetary moons probably formed out of the discs of gas and dust circulating around planets in the early solar system.

Do planetary moons have atmospheres?

They are generally solid bodies, and few have atmospheres. Most planetary moons probably formed out of the discs of gas and dust circulating around planets in the early solar system. There are hundreds of moons in our solar system - even asteroids have been found to have small companion moons.

What do we know about the Moon?

We know that the Moon has almost no atmosphere and only about one-sixth of Earth's gravity. We even know that there is quite a bit of frozen water tucked away in craters near the Moon's poles. There is no wind or air on the Moon to help "erase" craters, so the surface is covered with the remains of old and new impacts.

IS THE MOON PART OF OUR SOLAR SYSTEM



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The terrestrial planets in our Solar System are Mercury, Venus, Earth, and Mars. These planets reside in the inner part of our Solar System, closest to the Sun. The terrestrial planets are smaller in diameter and less massive than the gas giants. Table 1.5 Some of the Moons in Our Solar System*
MOON PARENT PLANET DIAMETER (EARTH)
(KM) MASS

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OverviewPhysical characteristicsNames and etymologyNatural historyEarth???Moon systemPosition and appearanceHistory of exploration and human presenceHuman presence

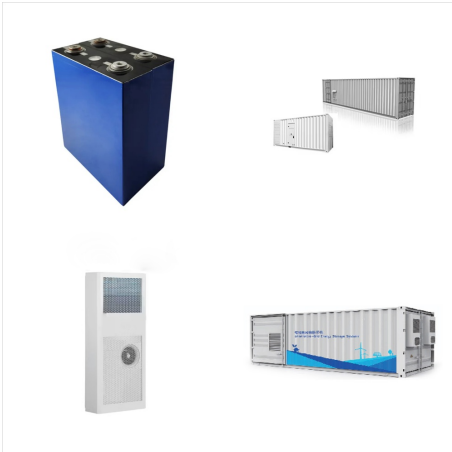


Exploring the Moon. The Moon the only natural object beyond Earth that humans have visited. In 1969, the astronaut Neil Armstrong became the first person on the Moon. He travelled to the Moon as part of the Apollo 11 mission. 12 astronauts, including Neil, walked on the Moon during the Apollo missions.. Test your knowledge of Moon exploration with our Apollo Missions quiz.

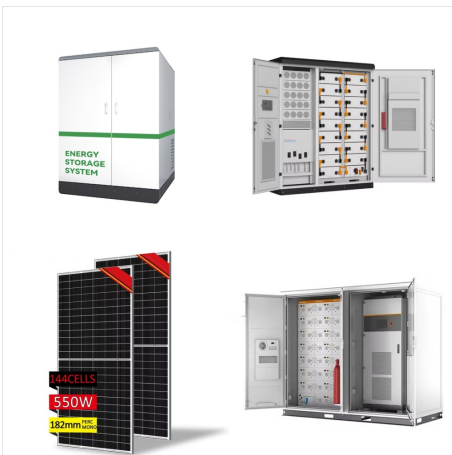


While astronomers have discovered thousands of other worlds orbiting distant stars, our best knowledge about planets, moons, and life comes from one place. The Solar System provides the only known example of a habitable planet, the only star we can observe close-up, and the only worlds we can visit with space probes. Solar System research is essential for understanding ???

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This tilt causes our yearly cycle of seasons. During part of the year, the northern hemisphere is tilted toward the Sun, and the southern hemisphere is tilted away. the Moon is the fifth largest moon in our solar system (after Ganymede, Titan, Callisto, and Io). The Moon is an average of 238,855 miles (384,400 kilometers) away from Earth



Our Solar System; Explore This Section Lunar Phases and Eclipses. We always see the same side of the Moon, because as Earth's natural satellite revolves around our planet, the Moon rotates, causing the same side to always face us. Most of the time, our view of the Moon looks toward part of the sunlit side and part of the dark side at the



The dwarf planets of our solar system are exciting proof of how much we are learning about our solar system. With the discovery of many new objects in our solar system, in 2006, astronomers refined the definition of a planet. Their subsequent reclassification of Pluto to the new category dwarf planet stirred up a great deal of controversy.

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Our scientists and far-ranging robots explore the wild frontiers of our solar system. where temperatures top 27 million °F (15 million °C). The part of the Sun we call its surface ??? the photosphere ??? is a relatively cool 10,000 °F (5,500 °C). but during total solar eclipses, when the Moon covers the photosphere, the chromosphere

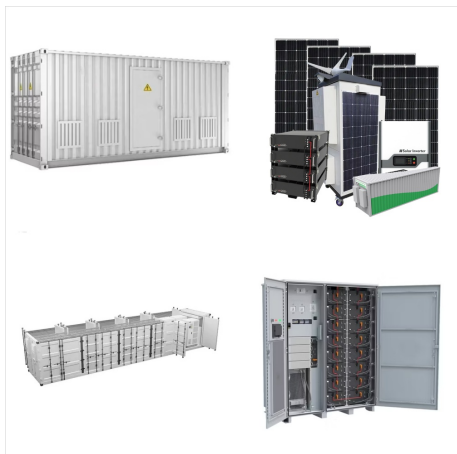


? Solar system - Planets, Moons, Orbits: The eight planets can be divided into two distinct categories on the basis of their densities (mass per unit volume). The four inner, or terrestrial, planets???Mercury, Venus, Earth, and ???



We have even discovered other places in our solar system that might be able to support some kind of life. Figure 7.2 Astronauts on the Moon. Often, the Moon is also discussed as a part of this group, bringing the total of terrestrial objects ???

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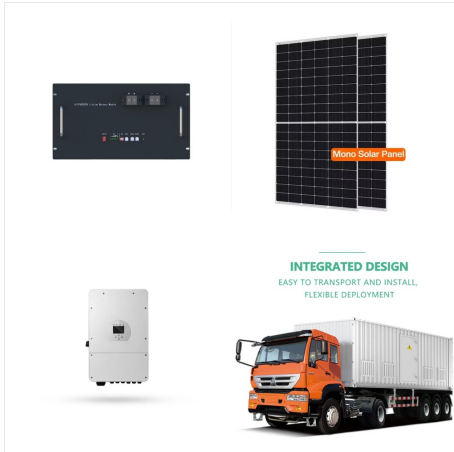


The sun is at the center of the solar system and is its largest object, accounting for approximately 99.8% of the solar system's mass, according to the University of California, San Diego. The sun



? Although many questions remain about its composition, structure, and history, it has become clear that the Moon holds keys to understanding the origin of Earth and the solar system.

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How the Moon Got Its Name Our Moon shares a name with all moons simply because people didn't know other moons existed until Galileo Galilei discovered four moons orbiting Jupiter in 1610. In Latin, the Moon was called Luna, which is the main adjective for all things Moon-related: lunar. Earth's Moon records evidence of our solar system's

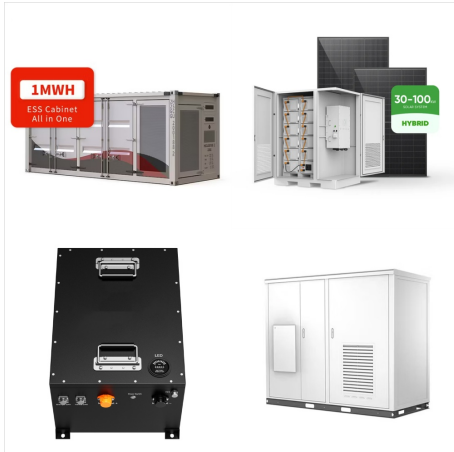


The most cratered planet of the solar system is Mercury. Some believe that Saturn and Jupiter came close once and thus provoked the Great Flood on Earth. Every 15 years, the rings of Saturn briefly disappear from view ???



As we keep moving out into the solar system, we come to Saturn ??? the sixth planet from the Sun and the second largest planet in our solar system. Saturn orbits the Sun from an average distance of 886 million miles (1.4 billion kilometers).

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Several theories about our Moon's formation vie for dominance, but almost all share that point in common: near the time of the solar system's formation, about 4.5 billion years ago, something ??? perhaps a single object the size of Mars, perhaps a series of objects ??? crashed into the young Earth and flung enough molten and vaporized debris into space to create the Moon.



We have even discovered other places in our solar system that might be able to support some kind of life. Figure 7.2 Astronauts on the Moon. Often, the Moon is also discussed as a part of this group, bringing the total of terrestrial objects to five. (We generally call Earth's satellite "the Moon," with a capital M, and the other



This moon system might have formed by a collision between Pluto and another similar-sized body early in the history of the solar system. Charon, the biggest of Pluto's moons, is about half the size of Pluto itself, making it the largest satellite relative to the planet it orbits in our solar system.

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The Moon is by size and mass the fifth largest natural satellite of the Solar System, categorizable as one of its planetary-mass moons, making it a satellite planet under the geophysical definitions of the term. [17] It is smaller than Mercury and considerably larger than the largest dwarf planet of the Solar System, Pluto.



Mars, the red planet, is the seventh largest planet in our solar system. Mars is about half the width of Earth, and has an equatorial diameter of about 4,221 miles (6,792 kilometers). Mars is the fourth planet from the Sun, orbiting at an average distance of 141.6 million miles (227.9 million kilometers).

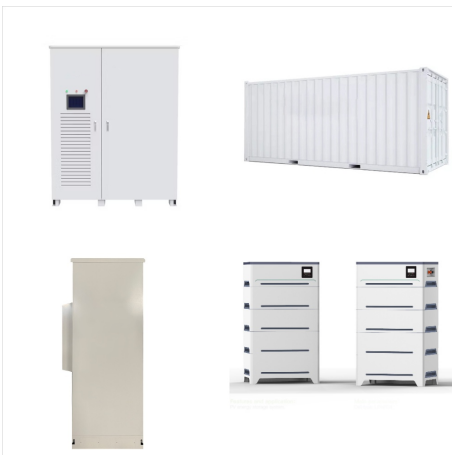


This ongoing stream of charged, energetic particles is called the solar wind. It carries the Sun's magnetic field far away from the center of our Solar System, beyond the orbits of Neptune and Pluto. As it races through the Solar System at hundreds of kilometers per second, the solar wind erodes the atmospheres of planets like Venus and Mars

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Today, we know that our solar system is just one tiny part of the universe as a whole. Neither Earth nor the Sun are at the center of the universe. However, the heliocentric model accurately describes the solar system. In our modern view of the solar system, the Sun is at the center, with the planets moving in elliptical orbits around the Sun.



Pluto is a dwarf planet located in a distant region of our solar system beyond Neptune known as the Kuiper Belt. Pluto was long considered our ninth planet, but the International Astronomical Union reclassified Pluto as a dwarf planet in 2006. NASA's New Horizons was the first spacecraft to explore Pluto up close, flying by in 2015. Pluto was discovered in 1930 by astronomer Clyde ???



Our scientists and far-ranging robots explore the wild frontiers of our solar system. The changing illumination is why, from our perspective, the Moon goes through phases. During a "full moon," the hemisphere of the Moon we can see from Earth is fully illuminated by the Sun. And a "new moon" occurs when the far side of the Moon has full

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In our entire solar system, the only object that shines with its own light is the Sun. That light always beams onto Earth and Moon from the direction of the Sun, illuminating half of our planet in its orbit and reflecting off the surface of the Moon to create moonlight. Sometimes the entire face of the Moon glows brightly.