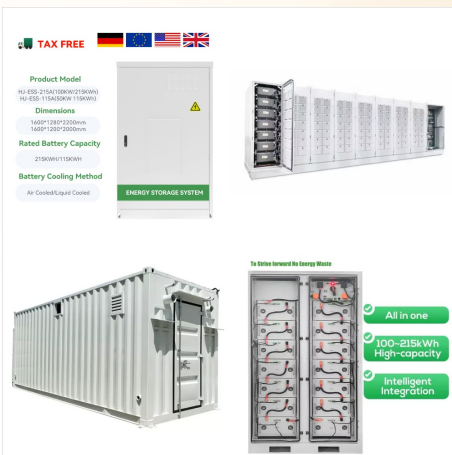




That includes the whole Solar system which is also orbiting around the center of a galaxy with other Solar systems and stars. 15. The Solar system is part of a galaxy. Just like the Sun and planets form a group called the Solar system, many Solar systems along with stars and other objects also form larger neighborhoods called galaxies.



Review your understanding of the solar system in this free article aligned to NGSS standards. If you're seeing this message, it means we're having trouble loading external resources on our website. If you're behind a web filter, please make sure that the domains \*.kastatic and \*.kasandbox are unblocked. Explore. Browse By Standards;



Features of the solar system. The solar system is unique in the cosmos due to a number of distinctive features that differentiate it from other star systems and celestial objects in the universe. These features include: The central star of the solar system, the Sun, is a yellow dwarf star of spectral type G2V.



The solar system has eight planets: Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus, and Neptune. There are five officially recognized dwarf planets in our solar system: Ceres, Pluto, Haumea, Makemake, and Eris. Get the Facts.



Parts of the Solar System Star round objectmade ofburning gasThe sun is a star. It is the largest object in the solar system. Planet large, round objectorbts a star, suchas the sunMercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus, and Neptune are planets. Moon large, round objectdoesn't orbitthe sunorbts a planet, such as Earth Asteroid small, rocky objectorbts the sunfound ???



The sun is by far the largest object in our solar system, containing 99.8% of the solar system's mass. It sheds most of the heat and light that makes life possible on Earth and possibly elsewhere.



The planets of our Solar System are listed based on their distance from the Sun. There are, of course, the dwarf planets Ceres, Pluto, Haumea, Makemake, and Eris; however, they are in a different class. Among the dwarf planets, Pluto was listed as a planet the longest. This all changed in 2006 when the Astronomical Union ??? IAU ??? finally



The hottest part of the Sun is its core, 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). Our solar system is moving with an average velocity of 450,000 miles per hour (720,000 kilometers per hour). But even at this speed, it



Planetary Systems Our solar system consists of the Sun, whose gravity keeps everything from flying apart, eight planets, hundreds of moons, and billions of smaller bodies ??? from comets and asteroids to meteoroids and tiny bits of ice and rock. Similarly, exoplanetary systems are groups of non-stellar objects circling stars other than the Sun, and [???



Learn about the sun and the planets, dwarf planets, moons, asteroids, comets, and other objects that orbit our star. Discover how they formed, what they are made of, and how they interact with each other ???



The Solar System is the Sun and all the objects that travel around it. The Sun is orbited by planets, asteroids, comets and other things.. Planets and dwarf planets of the Solar System. Compared with each other, the sizes are correct, but the distances are not. The Solar System is about 4.568 billion years old. [1] The Sun formed by gravity in a large molecular cloud.



The solar system consists of the Sun; the eight official planets, at least three "dwarf planets", 130+ satellites and a large number of small bodies the comets (small icy bodies) which come and go from the inner parts of the solar system in highly elongated orbits and at random orientations to the ecliptic; and the many small icy bodies

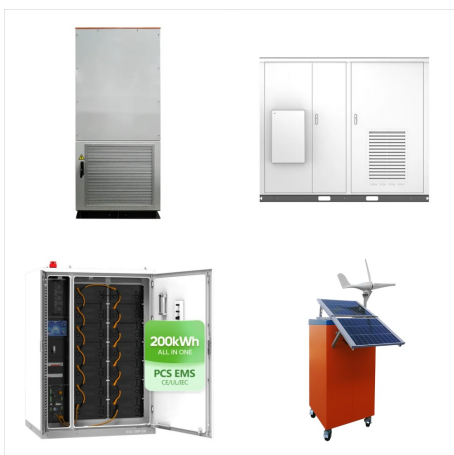




Our home galaxy is called the Milky Way. It's a spiral galaxy with a disk of stars spanning more than 100,000 light-years. Earth is located along one of the galaxy's spiral arms, about halfway from the center. Our solar system takes about 240 million years to orbit the Milky Way just once.



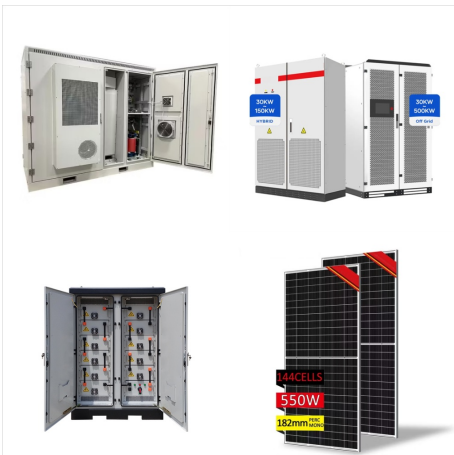
Our solar system consists of a star, the Sun, eight planets, 146 moons, a slew of comets, asteroids, space rocks, ice, and numerous dwarf planets, including Pluto. Saturn, Uranus, and Neptune are the eight planets. Satellites. These are objects that orbit planets and are therefore part of the solar system. The Moon is the Earth's natural



Transcript (English) - [Narrator] Our solar system is one of over 500 known solar systems in the entire Milky Way galaxy. The solar system came into being about 4.5 billion years ago when a cloud of interstellar gas and dust collapsed, resulting in a solar nebula, a swirling disc of material that collided to form the solar system.



The various parts of the electromagnetic spectrum are differentiated by their wavelengths ??? radio wavelengths can be kilometers long and gamma ray wavelengths The Sun is our very own star, at the center of our solar system. The Sun is scientifically designated as a yellow dwarf (because of its place on the HR diagram<sup>1</sup>). However, our Sun



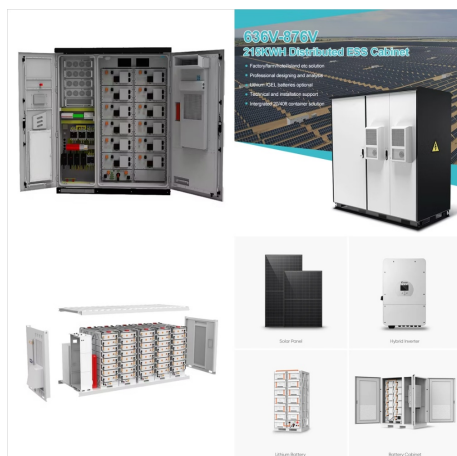
Our solar system is made up of a star???the Sun???eight planets, 146 moons, a bunch of comets, asteroids and space rocks, ice, and several dwarf planets, such as Pluto. The eight planets are Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus, and Neptune. Mercury is closest to the Sun. Neptune is the farthest.



The solar system consists of an average star we call the Sun, its "bubble" the heliosphere, which is made of the particles and magnetic field emanating from the Sun - the interplanetary medium - and objects that orbit the Sun: from as close as the planet Mercury all the way out to comets almost a light-year away. A light year is the distance light travels in a year, moving at about ???



? The biggest planet in our solar system . explore;  
What Is the Weather Like on Other Planets? Each  
of the planets in our solar system experiences its  
own unique weather. explore; Is There Ice on Other  
Planets? Yes, there is ice beyond Earth! In fact, ice  
can be found on several planets and moons in our  
solar system.



Our solar system is one of the many star systems in  
the Milky Way galaxy. It is part of the multiple star  
system of Alpha Centaurus. Solar System Profile.  
Age: 4.6 Billion Years: Number of Planets: 8:  
Number of Dwarf Planets: 5: Number of Moons: 219  
+ (known as of Nov 2021) Number of Asteroids:  
Over 1.113,527 + (known as of Nov 2021) Number



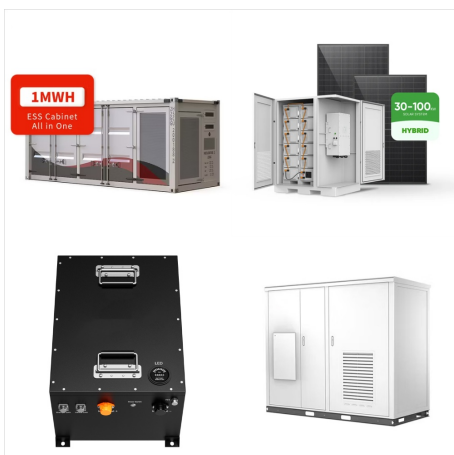
solar system to scale The eight planets of the solar  
system and Pluto, in a montage of images scaled to  
show the approximate sizes of the bodies relative to  
one another. Outward from the Sun, which is  
represented to scale by the yellow segment at the  
extreme left, are the four rocky terrestrial planets  
(Mercury, Venus, Earth, and Mars), the four  
hydrogen-rich giant planets ???



Our solar system is a wondrous place. Countless worlds lie spread across billions of kilometers of space, each dragged around the galaxy by our Sun like an elaborate clockwork.. The smaller, inner planets are rocky, and at least one has life on it. The giant outer planets are shrouded in gas and ice; miniature solar systems in their own right that boast intricate rings ???



Solar System Formation. The solar system is located in one of the spiral arms of the Milky Way galaxy. It was born about 4.5 billion years ago when a cloud of interstellar gas and dust collapsed. Most of the material was pulled toward a central point: nearly all of the solar system's mass???99.8%???is in the Sun.



In our imaginations, let us build a scale model of the solar system, adopting a scale factor of 1 billion (10<sup>9</sup>)???that is, reducing the actual solar system by dividing every dimension by a factor of 10<sup>9</sup>. Earth, then, has a diameter of 1.3 ???





The hottest part of the Sun is its core, 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). Our solar system is moving with an ???