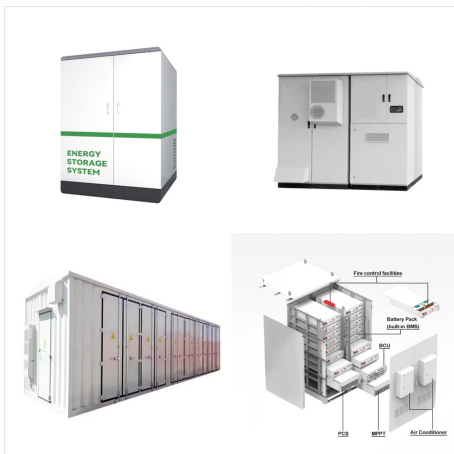




Study with Quizlet and memorize flashcards containing terms like Where is our solar system located within the Milky Way Galaxy? -at the far edge of the galaxy's visible disk -very near the center of the galaxy -in the halo of the galaxy -roughly halfway between the center and the edge of the visible disk of the galaxy, A galaxy is _____. -a system consisting of one or a few stars ???



It takes the sun (and our solar system) roughly 200-250 million years to orbit once around the Milky Way. In this orbit, we (and the rest of the Solar System) are traveling at a velocity of about 155 miles/sec (250 km/sec). To reach the center of the Milky Way Galaxy starting from the Earth, aim toward the constellation Sagittarius.



The Sun is located in the Milky Way galaxy in a spiral arm called the Orion Spur that extends outward from the Sagittarius arm. bringing with it the planets, asteroids, comets, and other objects in our solar system. Our solar system is moving with an average velocity of 450,000 miles per hour (720,000 kilometers per hour). But even at this

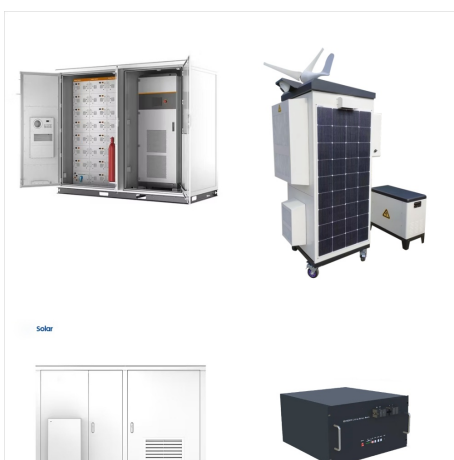
OUR SOLAR SYSTEM LOCATION IN MILKY WAY



Obviously our solar system lies very close to the galaxy's equator. Figure 1. Polar view of the Milky Way Galaxy showing the location of the Solar System. As to our distance from the center of the galaxy, the best guess is that we are 26,000 to 28,000 light years from the center.



The Milky Way consists of a bar-shaped core region surrounded by a warped disk of gas, dust and stars. The mass distribution within the Milky Way closely resembles the type Sbc in the Hubble classification, which represents spiral galaxies with relatively loosely wound arms. Astronomers first began to conjecture that the Milky Way is a barred spiral galaxy, rather than an ordinary



The Milky Way is our galactic home, part of the story of how we came to be. Astronomers have learned that it's a large spiral galaxy, similar to many others, but also different in ways that reflect its unique history. Living inside the Milky Way gives us a close-up view of its structure and contents, which we can't do for other galaxies. At the same time, this perspective makes it

OUR SOLAR SYSTEM LOCATION IN MILKY WAY



The Milky Way is approximately 100,000 light-years in diameter. Our solar system is 26,000 light-years from the center of the Galaxy. All objects in the Galaxy revolve around the Galaxy's center. It takes 250 million years for our Sun (and the Earth with it) to make one revolution around the center of the Milky Way.



Laniakea contains more than 100,000 galaxies, stretches 500 million light years across, and looks something like this (the Milky Way is just a speck located on one of its fringes on the right)



As for our solar system, the Sun is located in the Orion Arm of the Milky Way. It is approximately 27,000 light-years from the galactic center. The Sun, planets, and all other objects in the solar system are part of the Milky Way. It is composed of gas, dust, and billions of stars. Each of these stars likely has its own planetary systems

OUR SOLAR SYSTEM LOCATION IN MILKY WAY



Our solar system???which includes the sun, Earth, and seven other planets???is part of this galaxy, called ??? you guessed it ??? the Milky Way. The Milky Way contains hundreds of billions of stars like our sun. (And like our sun, most of these stars have at least one planet orbiting them.) Earth is located about halfway between the center of



The Sun is located in the Milky Way galaxy in a spiral arm called the Orion Spur that extends outward from the Sagittarius arm. Sun orbits the center of the Milky Way, bringing with it the planets, asteroids, comets, and other objects in our solar system. Our solar system is moving with an average velocity of 450,000 miles per hour (720,000



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 LOCATION IN MILKY WAY



? Milky Way Galaxy - Structure, Dynamics, Stars:
The first reliable measurement of the size of the Galaxy was made in 1917 by American astronomer Harlow Shapley. He arrived at his size determination by establishing the spatial distribution of globular clusters. Shapley found that, instead of a relatively small system with the Sun near its centre, as had previously been ???



"There is no short answer to this question, because astronomers have followed many lines of evidence to determine the location of the solar system in the Milky Way. But some of the general



Our Sun is currently in such a location, just outside a spiral arm named the Orion Arm. They are planets that have been thrown out of their solar system. The Milky Way is rotating in a clockwise direction. The Milky Way is surrounded by more than 150 ancient groups of stars, some of which are among the oldest in the universe.

OUR SOLAR SYSTEM LOCATION IN MILKY WAY



The planetary system we call home is located in an outer spiral arm of the Milky Way galaxy. Our solar system consists of our star, the Sun, and everything bound to it by gravity ??? the planets ???



4. Meet Me in the Milky Way. Our solar system is in one of the Milky Way galaxy's spiral arms called the Orion Spur. 5. A Long Way Around. Our solar system takes about 230 million years to orbit the galactic center. 6. Spiraling Through ???

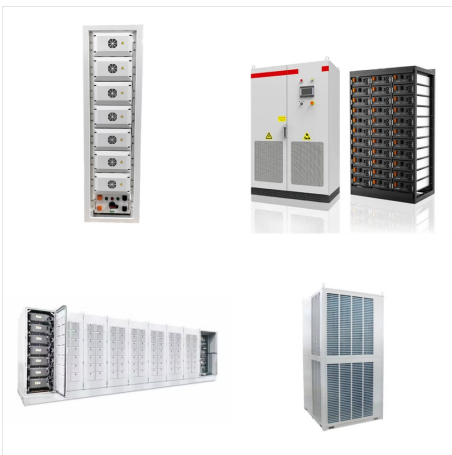


The essential modern picture is that our solar system is located on the inner edge of a spiral arm, about 25,000 light-years from the center of the galaxy, which is in the direction

OUR SOLAR SYSTEM LOCATION IN MILKY WAY



Our Galaxy Facts. Our solar system is located in the Orion Arm of the Milky Way galaxy's spiral arm; The Milky Way galaxy is approximately 100,000 light-years in diameter; It takes our solar system approximately 230 million years to complete one orbit around the rotational center of ???



Our Solar System is about 25,000 light years away from the center of our galaxy ??? we live in the suburbs of our galaxy. Just as the Earth goes around the Sun, the Sun goes around the center of the Milky Way. Only three galaxies outside our own Milky Way Galaxy can be seen without a telescope, and appear as fuzzy patches in the sky with



The Sun is located in the Milky Way galaxy in a spiral arm called the Orion Spur that extends outward from the Sagittarius arm. Sun orbits the center of the Milky Way, bringing with it the planets, asteroids, comets, and other objects in ???

OUR SOLAR SYSTEM LOCATION IN MILKY WAY



Our solar system, containing the Sun and the planets, is about 2/3 of the way out from the center of the Galaxy. The solar system travels in an orbit around the center of the Galaxy, at a velocity (i.e. speed) of a few hundred kilometers per second, completing one orbit around the center of the Milky Way about every 230 million years.



The yellow circle in the picture shows the orbital path of our solar system as it travels around the center of the Milky Way. The red dot, located just above the "r" in the "arm" associated with the ???



The Solar System. Our Immediate Neighborhood. The solar system is a gravitationally bound system consisting of the Sun, eight planets, numerous moons, asteroids, comets, and other celestial bodies. Our solar system also orbits around the Milky Way's center, moving at about 230 kilometers per second.

OUR SOLAR SYSTEM LOCATION IN MILKY WAY



The Solar System's Precise Location Within the Milky Way Galaxy. Our solar system resides on the inner edge of the Orion Arm, also known as the Orion Spur, a minor arm of the Milky Way. This location is approximately 26,000 to 27,000 light-years from the Galactic Center, nestled between the major Sagittarius and Perseus arms.