

Jupiter

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Why is in news? Jupiter's opposition to Earth on September 26 will be the closest it has come to our planet since 1969.

Jupiter is the fifth planet from the Sun and the largest in the Solar System.

It is a gas giant with a mass more than two and a half times that of all the other planets in the Solar System combined, but slightly less than one-thousandth the mass of the Sun.

Jupiter is the **third brightest natural object in the Earth's night sky** after the Moon and Venus.

Jupiter will be in opposition from the point of view of Earth on September 26. "Opposition" is when an astronomical object rises in the East as the Sun sets on the west.

In this case, Jupiter and the Sun will be on opposite sides of Earth. Jupiter's opposition with Earth happens once every 13 months but on September 26, opposition coincides with the time when Jupiter will be closest to Earth since 1969.

During this time, the gas giant will be approximately 590 million kilometres away from the Earth.

At its farthest, Jupiter is approximately **965 million kilometres** away from our planet.

Kobelski recommends a large telescope, around 4-inch or larger, to see the gas giant's Great Red Spot.

Filters in the green to the blue range will enhance the visibility of the red spot.

Scientists have detected a **total of 79 Jovian moons** but only about 53 moons.

The planet's **four largest moons—Io, Europa, Ganymede and Callisto**—are called Galilean satellites because Galileo discovered them in 1610.

On September 26, these Galillean satellites can also be observed, visible as bright dots on either side of the planet.

Jupiter's iconic Great Red Spot is a giant storm bigger than Earth that has raged for hundreds of years.

Jupiter is surrounded by dozens of moons. Jupiter also has several rings, but unlike the famous rings of Saturn, Jupiter's rings are very faint and **made of dust, not ice**.