

Moon Charon



Picture (Charon):

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[https://en.wikipedia.org/wiki/Charon_\(moon\)#/media/File:Charon_in_True_Color_-_High-Res.jpg](https://en.wikipedia.org/wiki/Charon_(moon)#/media/File:Charon_in_True_Color_-_High-Res.jpg)

The moon is named after the ferryman Charon from Greek mythology, who brings the deceased across the dead river Styx into the realm of the god of the dead Hades (Roman: Pluto). Due to the small difference in mass between Charon and Pluto, similar conditions result as with the earth and its moon. Both orbit the common centre of gravity, which is about 1,200 km above the surface of Pluto. The tidal forces between the two are nearly 20 times stronger than in the Earth-Moon system. Charon performs a bound rotation and always shows the same side to Pluto. It is composed of about 55-60% rock and 40-45% water ice. Cryovolcanoes have been discovered on Charon, bringing crystalline water ice and ammonium hydroxide to the surface. The ice deposits are very young (age less than 30,000 years), because the ice is still in crystalline form. The surface colour of Charon is grey. Its reddish polar region is striking.

Important data of Charon:

Semi-major axis:	19,571.4 km
Periapsis – Apoapsis:	19,570.0 km – 19,572.8 km
Eccentricity:	0,000070
Inclinations:	0.001° (Pluto's equator); 119.591° (Pluto's orbit); 112.783° (ecliptic)
Sidereal orbit period:	6.39 d
Average orbital speed:	0.22 km/s
Mean diameter:	1,208.0 km
Mass:	about 0.00027 Earth masses ($1.59 \cdot 10^{21}$ kg)

Mean density:	1.65 g/cm ³
Sidereal rotation period:	6.39 days
Inclination of axis:	0.000°
Surface gravity:	0.28 m/s ²
Escape velocity:	604 m/s
Surface temperature:	-210 °C (63 K)

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