

Key to Sorting the Solar System Cards

Object	Description	Size (km)	Picture Credits
Barringer Crater	Also known as Meteor Crater, it is located in Arizona, USA. Created by the impact of a meteorite about 50,000 years ago, this crater was formed before humans inhabited the Americas.	1.2	B.P. Snowder
Ceres	Ceres is the largest object in the Asteroid Belt. The International Astronomical Union classifies Ceres as a Dwarf Planet. It is the target of the Dawn spacecraft in 2015.	950	NASA, ESA, J. Parker (SwRI) et al.
Earth	Earth is the third planet from the Sun and is the fifth largest planet in the Solar System. About 71% of Earth's surface is water, the remainder consists of land.	12,650	Taken from Apollo 17 in 1972, credit NASA
Earth's moon	The moon is the fifth largest satellite in the Solar System. It is the only celestial body on which humans have landed. Although it appears bright in the sky, it is actually as dark as coal.	3,500	NASA/JPL/USGS
Eris	Eris is a Dwarf Planet with a moon called Dysnomia. It is more massive than Pluto and orbits the Sun three times farther. It was discovered in 2005 and caused a stir after initially being described as the 10th planet.	2,600	NASA/ESA/M. Brown
Eros	Eros was the first near-Earth asteroid discovered. It is also one of the largest. The probe NEAR Shoemaker landed on this asteroid in 2001. Eros orbits between Earth and Jupiter, crossing Mars's orbit.	34	NASA/JPL/JHUAPL
Gaspra	Gaspra is an asteroid that orbits the inner edge of the main Asteroid Belt. The Galileo spacecraft flew by Gaspra on its way to Jupiter.	18	NASA/JPL/USGS
Hale-Bopp	Hale-Bopp was one of the brightest and most widely viewed comets of the 20th century. It came into the inner Solar System in 1997 and has an orbital period of over 4,000 years.	1,000,000	E. Kolmhofer, H. Raab; Johannes-Kepler-Observatory
Hoba	The Hoba meteorite is the largest known meteorite on Earth. It landed here about 80,000 years ago in what is now Namibia. Hoba weighs over 60 tons and is the most massive piece of naturally-occurring iron on Earth's surface.	0.003	Patrick Giraud
Iapetus	Iapetus is the third largest moon of Saturn. It has an equatorial ridge that makes it look a bit like a walnut, as well as a light and a dark side. Astronomers think that the dark side is covered with a thin layer of residue from the icy surface sublimating.	1,500	NASA/JPL/Space Science Institute
Ida and Dactyl	Ida is a main belt asteroid and the first asteroid found to have a moon, Dactyl. It was imaged by the Galileo spacecraft on its way to Jupiter.	15	NASA/JPL
Itokawa	Asteroid Itokawa crosses the orbits of both Mars and Earth. It is a rubble pile of rocks. In 2005, the Hayabusa probe landed on Itokawa to collect samples.	0.5	ISAS, JAXA
Jupiter	Jupiter is the largest planet in the Solar System, more massive than all the other planets combined. This gas giant has been explored by many spacecraft, notably the Galileo orbiter. It has four large moons and dozens of smaller moons.	70,000	NASA/JPL/University of Arizona

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Mars	Mars is the fourth planet from the Sun. Iron oxide gives it a reddish appearance. It has polar ice caps and a very thin atmosphere. Two tiny moons might be captured asteroids.	6,800	NASA
Meteor	Small pieces of asteroids or comets collide with Earth's atmosphere to create meteors. The compressed air in front of the rock heats up, causing it to glow and leave a trail of ionized gas.	0.00001	Chuck Hunt
Meteorite	Most meteorites are pieces of the Asteroid Belt that land on Earth's surface. Over 90% of meteorites are considered stony meteorites. About 5% are iron meteorites. Both types contain a significant amount of iron.	0.001	Dr. Svend Buhl www.meteorite-recon.com
Phobos	Phobos is the largest moon of Mars, but still quite small. It is likely a captured asteroid and will break up and crash into Mars in the next 40 million years.	11	NASA/JPL- Caltech/University of Arizona
Pluto and Charon	Pluto is the 2nd largest dwarf planet in the Solar System (after Eris). It has a large moon Charon and two smaller moons, Nix and Hydra. Pluto and Charon are sometimes treated as a binary system since their center of gravity is between the two.	2,300	ESA/ESO/NASA
Saturn	Saturn is the second largest planet in the Solar System. It is made of gas and has very thin icy rings. It also has dozens of moons. The Cassini-Huygens spacecraft has been orbiting Saturn since 2004.	120,000	NASA/JPL/Space Science Institute
Shoemaker-Levy 9	Comet Shoemaker-Levy 9 provided the first direct observation of the collision of extraterrestrial solar system objects. It broke into many fragments, called the "String of Pearls," and impacted Jupiter in 1994.	1	NASA/HST
Sun	The Sun is the star at the center of our Solar System, about 150 million km from Earth. It contains 99.9% of all the mass in our Solar System. It travels once around the Milky Way Galaxy in about 250 million years.	1,400,000	ESA/NASA/SOHO
Titan	Titan is the largest moon of Saturn, comprising 96% of the mass of all Saturn's moons combined. It is a cold world with a thick nitrogen atmosphere and liquid methane lakes on its surface. The Huygens probe landed on its surface in 2005 and took pictures of icy conditions.	5,150	NASA/JPL/Space Science Institute NASA/JPL-
Victoria Crater	This impact crater near the equator of Mars was visited by the Mars Exploration Rover <i>Opportunity</i> . The scalloped edges of the crater are caused by erosion. Although Mars has very little atmosphere, it does have dust storms.	0.75	Caltech/University of Arizona/Cornell/Ohio State University
Wild 2	Comet Wild 2 is officially named 81P/Wild. It once orbited beyond Jupiter but got too close to the giant planet in 1974 and was tugged into a smaller orbit between Jupiter and Mars. The Stardust sample return mission took pictures and captured some of the comet's coma in 2004.	4	NASA/JPL-Caltech