



MOON

Earth I



Diameter: 3475 km

Orbital period: 27 days 8 hours

You would weigh six times less than you do on Earth.

Discovered: Known since forever!

The Moon, our moon, is one of the largest natural satellites in the solar system. It was formed a long time ago by a huge impact between a planet the size of Mars and the young Earth. The Moon is slowly moving further away from Earth (3.8 cm per year!).



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PHOBOS

Mars I



Diameter: 22 km (0.6% of the Moon)

Orbital period: 7 hours 39 minutes

You would weigh 1700 times less than you do on Earth.

Discovered: 1877 (Asaph Hall)

Phobos is the largest moon of Mars. It orbits around the planet, but its trajectory is unstable. It will collide with the red planet one day, but it is also possible that it will disintegrate into a thin ring before then.



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DEIMOS

Mars II



Diameter: 12 km (0.3% of the Moon)

Orbital period: 1 day 6 hours

You would weigh 3827 times less than you do on Earth.

Discovered: 1877 (Asaph Hall)

Deimos is the smallest and furthest of Mars's moons. It has an irregular shape (not round). Its surface is very dark, a reddish-black colour. Deimos is potentially an asteroid that was captured by Mars's gravitational pull.



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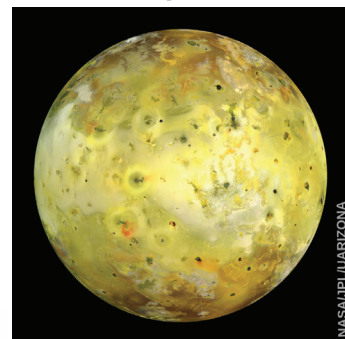
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IO

Jupiter I



Diameter: 3643 km (105% of the Moon)

Orbital period: 1 day 18 hours

You would weigh five times less than you do on Earth.

Discovered: 1610 (Galileo)

Io is one of Jupiter's four largest moons. It has the most active volcanoes of anywhere in the entire solar system. Some volcanoes (the dark patches on the photo) are so enormous that they even spew matter into space!



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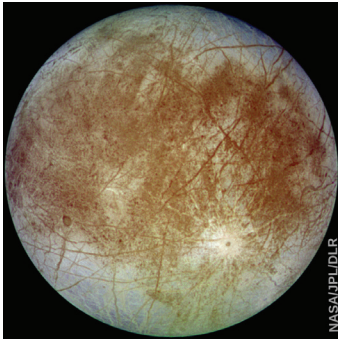
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EUROPA

Jupiter II



Diameter: 3122 km (90% of the Moon)
Orbital period: 3 days 13 hours
You would weigh seven times less than you do on Earth.
Discovered: 1610 (Galileo)

Europa is one of Jupiter's four largest moons. It has an ocean of liquid water underneath a thick layer of ice. We can see geysers on its surface where the water comes up. It is an interesting location in the search for extraterrestrial life in the solar system.



GANYMEDE

Jupiter III



Diameter: 5262 km (151% of the Moon)
Orbital period: 7 days 4 hours
You would weigh seven times less than you do on Earth.
Discovered: 1610 (Galileo)

Ganymede is one of Jupiter's four largest moons. It is the largest moon in the solar system. It is even bigger than Mercury! It probably has an ocean beneath its surface and appears to be the only moon with a magnetic field.



CALLISTO

Jupiter IV



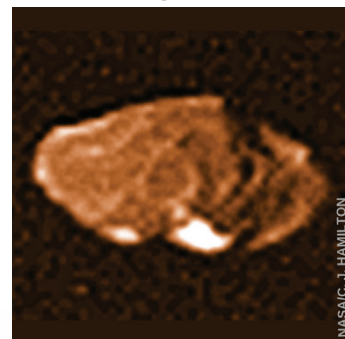
Diameter: 4821 km (139% of the Moon)
Orbital period: 16 days 17 hours
You would weigh eight times less than you do on Earth.
Discovered: 1610 (Galileo)

Callisto is one of Jupiter's four largest moons. It is also the third-largest moon in the solar system. Its surface is entirely covered in craters. It has a beautiful crater called Valhalla.



AMALTHEA

Jupiter V



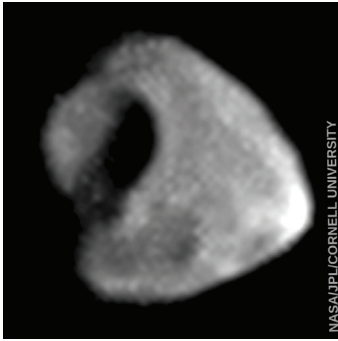
Diameter: 167 km (5% of the Moon)
Orbital period: 11 hours 57 minutes
You would weigh 495 times less than you do on Earth.
Discovered: 1892 (Edward Emerson Barnard)

Amalthea is one of Jupiter's smallest moons. It is shaped like an egg and its surface is a reddish colour. If an asteroid collides with the surface of Amalthea, the dust created is added to one of Jupiter's rings.



THEBE

Jupiter XIV



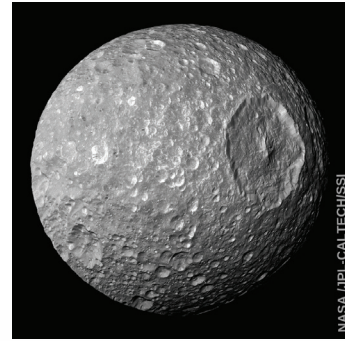
Diameter: 99 km (3% of the Moon)
Orbital period: 16 hours 12 minutes
You would weigh 238 times less than you do on Earth.
Discovered: 1979 (Voyager mission team)

Thebe is one of Jupiter's smaller moons and orbits relatively close to the planet. It was discovered by the Voyager 1 probe in 1979, but it was the Galileo probe that studied it best around 2000. It has a huge crater on its surface.



MIMAS

Saturn I



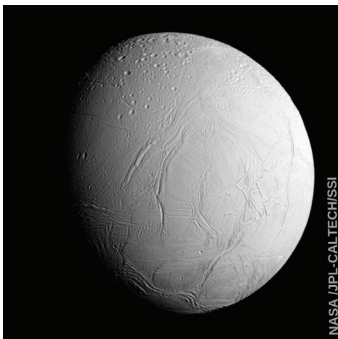
Diameter: 396 km (11% of the Moon)
Orbital period: 22 hours 36 minutes
You would weigh 154 times less than you do on Earth.
Discovered: 1789 (William Herschel)

Mimas is one of Saturn's moons and strangely looks a lot like the Death Star, the famous combat space station in the *Star Wars* series. It has a huge crater named Herschel. If Earth had a crater the same size, it would be as big as Australia!



ENCELADUS

Saturn II



Diameter: 504 km (15% of the Moon)
Orbital period: 1 day 9 hours
You would weigh 87 times less than you do on Earth.
Discovered: 1789 (William Herschel)

Enceladus is one of Saturn's small moons. Below its icy surface, there is liquid water that sometimes shoots up to the surface through ice volcanoes! The ocean on Enceladus may be home to life forms that are still unknown.



TETHYS

Saturn III



Diameter: 1066 km (31% of the Moon)
Orbital period: 1 day 21 hours
You would weigh 68 times less than you do on Earth.
Discovered: 1684 (Giovanni Cassini)

Tethys is one of Saturn's moons. It is a very special moon because it appears to be mainly composed of water ice. It seemingly contains only a very small amount of rocks. It has a large crater that is 400 km wide.



DIONE

Saturn IV



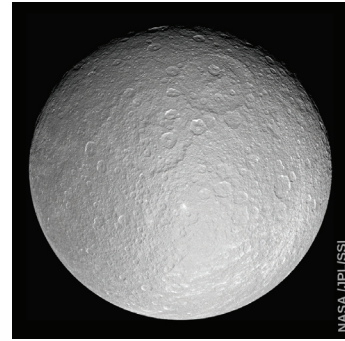
Diameter: 1123 km (32% of the Moon)
Orbital period: 2 days 18 hours
You would weigh 42 times less than you do on Earth.
Discovered: 1684 (Giovanni Cassini)

Dione is one of Saturn's small moons. It is one of the few moons in our solar system that shares its orbit with two other moons. The moon Helene is a little ahead of Dione in its orbit around Saturn, and Polydeuces is slightly behind.



RHEA

Saturn V



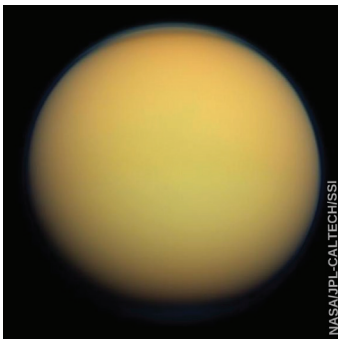
Diameter: 1529 km (44% of the Moon)
Orbital period: 4 days 12 hours
You would weigh 37 times less than you do on Earth.
Discovered: 1672 (Giovanni Cassini)

Rhea is Saturn's second-biggest moon. It is mainly composed of water ice. It is round and its surface is covered in craters. Its atmosphere is very thin and contains oxygen and carbon dioxide.



TITAN

Saturn VI



Diameter: 5149 km (148% of the Moon)
Orbital period: 15 days 22 hours
You would weigh seven times less than you do on Earth.
Discovered: 1655 (Christian Huygens)

Titan, the second-largest moon in the solar system, is also the only moon with a dense atmosphere. It is fascinating, because it contains lakes and rivers of liquid methane on its surface. We believe it might be home to extraterrestrial life.



HYPERION

Saturn VII



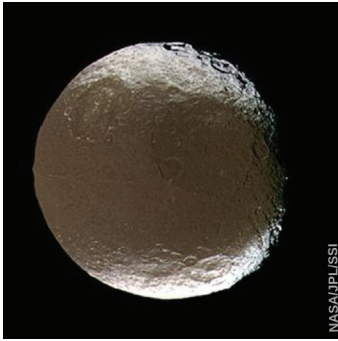
Diameter: 270 km (8% of the Moon)
Orbital period: 21 days 7 hours
You would weigh 480 times less than you do on Earth.
Discovered: 1848 (William C. Bond, George P. Bond, William Lassell)

Hyperion is one of Saturn's moons. Its surface appears spongy, but it is mainly composed of water ice. It has an impressive ridge located along the equator that towers more than 20 km above the surrounding plains.



IAPETUS

Saturn VIII



NASA/JPL/SSI

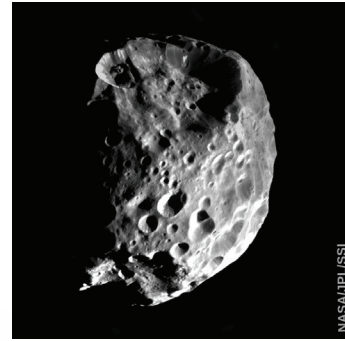
Diameter: 1471 km (42% of the Moon)
Orbital period: 79 days 8 hours
You would weigh 44 times less than you do on Earth.
Discovered: 1671 (Giovanni Cassini)

Iapetus is one of Saturn's moons. It has two colours: one very light area and one very dark area. The dark areas may be covered in dust from Phoebe, one of Saturn's other moons that has a very dark surface.



PHOEBE

Saturn IX



NASA/JPL/SSI

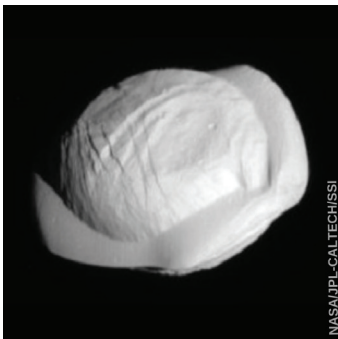
Diameter: 213 km (6% of the Moon)
Orbital period: 1 year 183 days
You would weigh 201 times less than you do on Earth.
Discovered: 1898 (William Henry Pickering)

Phoebe is one of Saturn's moons and is very far from its planet. Interesting fact: it orbits around Saturn in the opposite direction of the planet's rotation. Phoebe is potentially an asteroid that was captured by Saturn's gravitational pull.



PAN

Saturn XVIII



NASA/JPL-CALTECH/SSI

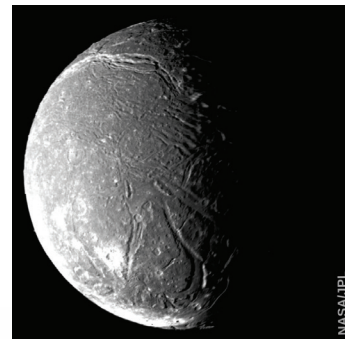
Diameter: 28 km (0.8% of the Moon)
Orbital period: 13 hours 48 minutes
You would weigh 5908 times less than you do on Earth.
Discovered: 1990 (Mark Showalter/Voyager 2)

Pan is one of Saturn's small moons with a very special shape. It looks like a ravioli! It is very close to Saturn and completes an orbit in about 14 hours. It is located inside one of Saturn's rings.



ARIEL

Uranus I



NASA/JPL

Diameter: 1158 km (33% of the Moon)
Orbital period: 2 days 12 hours
You would weigh 38 times less than you do on Earth.
Discovered: 1851 (William Lassell)

Ariel is one of Uranus's moons. It is composed of equal parts of water ice and rocks. There are ridges and canyons on its surface. Its name comes from a character in the play *The Tempest* by William Shakespeare.



TITANIA

Uranus III



Diameter: 1578 km (45% of the Moon)
Orbital period: 8 days 17 hours
You would weigh 27 times less than you do on Earth.
Discovered: 1787 (William Herschel)

Titania is Uranus's biggest moon. It is made of rocks and ice. It probably has a dense atmosphere composed of carbon dioxide. Its name comes from the comedy *A Midsummer Night's Dream* by William Shakespeare.



OBERON

Uranus IV



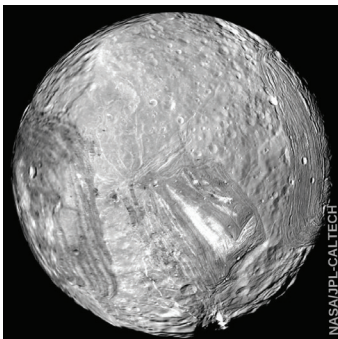
Diameter: 1523 km (44% of the Moon)
Orbital period: 13 days 11 hours
Discovered: 1787 (William Herschel)

Oberon is one of Uranus's biggest moons. Its surface is dark and slightly red. It is covered in craters and canyons. Its name comes from a character in the comedy *A Midsummer Night's Dream* by William Shakespeare.



MIRANDA

Uranus V



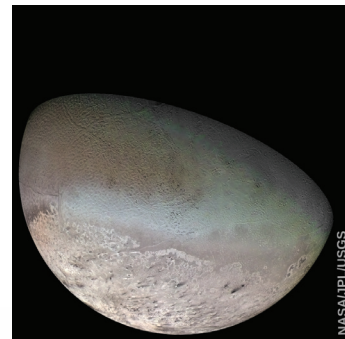
Diameter: 472 km (14% of the Moon)
Orbital period: 1 day 10 hours
You would weigh 124 times less than you do on Earth.
Discovered: 1948 (Gerard Kuiper)

Miranda is one of the smallest sphere-shaped moons. It is sometimes called the Frankenstein moon because it is covered in canyons that stretch out in every direction. Its name comes from a character in the play *The Tempest* by William Shakespeare.



TRITON

Neptune I



Diameter: 2707 km (78% of the Moon)
Orbital period: 5 days 21 hours
You would weigh 13 times less than you do on Earth.
Discovered: 1846 (William Lassell)

Titan is the largest moon of Neptune. It was probably formed very far in the solar system and was captured by the planet's gravitational pull. Interesting fact: it orbits around Neptune in the opposite direction of the planet's rotation.



PROTEUS

Neptune VIII



NASA/JPL

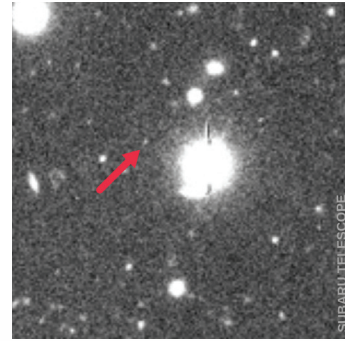
Diameter: 420 km (12% of the Moon)
Orbital period: 1 day 3 hours
You would weigh 129 times less than you do on Earth.
Discovered: 1989 (Voyager 2 team)

Proteus is one of Neptune's biggest moons, but it isn't exactly spherical. It is almost as dark as soot and reflects only a small amount of light. It has many craters, cliffs and valleys.



PSAMATHE

Neptune X



SUBARU TELESCOPE

Diameter: 40 km (1.2% of the Moon)
Orbital period: 1 year 362 days
You would weigh 1189 times less than you do on Earth.
Discovered: 2003 (Scott S. Sheppard team)

Psamathe is one of Neptune's small moons. It is so far from its planet that it takes 25 years to complete one orbit! It may have formed at the same time as another one of Neptune's moons, Neso, when a larger moon was broken up into fragments.



CHARON

Pluto I



NASA/DHU APL/SWRI

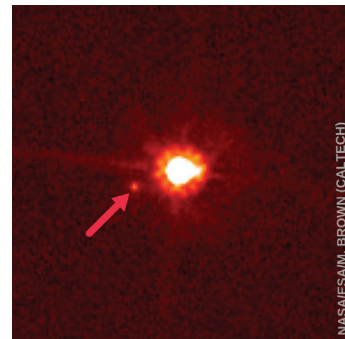
Diameter: 1207 km (35% of the Moon)
Orbital period: 6 days 9 hours
You would weigh 35 times less than you do on Earth.
Discovered: 1978 (James Christy)

Charon is the largest moon of the dwarf planet Pluto. It is so big that it could almost be considered a dwarf planet itself. There is a dark reddish area at the north pole of Charon known as Mordor.



DYSNOMIA

Eris I



NASA/ESA/M. BROWN (CALTECH)

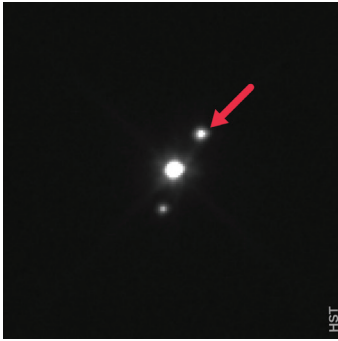
Diameter: 700 km (20% of the Moon)
Orbital period: 15 days 19 hours
Discovered: 2005 (Michael E. Brown team)

Dysnomia is a moon of the dwarf planet Eris. We do not know its exact shape, but it is probably spherical. It is possible that it was formed when an object from the Kuiper belt collided with Eris.



HI'IAKA

Haumea



Diameter: 320 km (9% of the Moon)
Orbital period: 49 days 11 hours
You would weigh 210 times less than you do on Earth.
Discovered: 2005 (Michael E. Brown team)

Hi'iaka is the largest moon of the dwarf planet Haumea. It was created when Haumea collided with a large object. It is one of the few moons in the solar system that does not have the same rotation and orbital period.



DACTYL

Ida I



Diameter: 1.4 km (0.04% of the Moon)
Orbital period: Unknown
Discovered: 1994 (Ann Harch and the Galileo team)

Dactyl is a teeny-tiny moon that orbits around the asteroid Ida. It is shaped like an egg, and its longest axis is less than 2 kilometres long! Its surface is covered in craters. Dactyl was the first moon to be discovered around an asteroid.

