



### Extreme Space Facts

www.nasa.gov

## 16 eXtreme space facts!



Better stick with a rubber ducky

Saturn is the only planet in our solar system that is less dense than water. It could float in a bathtub if anybody could build a bathtub big enough.

#### Fastest

True to its namesake (the speedy messenger of ancient Roman gods), Mercury is the fastest planet in our solar system. It zips around our Sun at an average of 172,000 kilometers per hour (107,000 miles per hour) — about 65,000 kph (40,000 mph) faster than Earth. A year on Mercury is equal to 88 Earth days.

#### **Biggest and smallest!**

Ceres is the largest, most massive body in the main asteroid belt between Mars and Jupiter, totaling about a third of the total mass of the entire belt. But Ceres is the smallest of the dwarf planets, which include Pluto and Eris, and the only dwarf planet that resides in the asteroid belt.



# Forget the socks, bring a hat

If you could stand at the Martian equator, the temperature at your feet would be like a warm spring day, but at your head it would be freezing cold!

#### Chill out!

Craters at the Moon's south pole may be the frostiest locale in the entire solar system. In the permanently shadowed crater floors, "daytime" temperatures may never rise above minus 238 degrees Celsius (minus 397 degrees Fahrenheit).

#### Windiest

Neptune's winds are the fastest in the solar system, reaching 2,575 kilometers per hour (1,600 miles per hour)! Neptune's giant, spinning storms could swallow the whole Earth.

### Tiny, very tiny

The radio signal that a spacecraft uses to contact Earth has no more power than a refrigerator light bulb. And by the time

the signal has traveled across space, the signal is only onebillionth of one-billionth of one watt!

#### Big, way big

To detect those tiny signals from space, the Deep Space Network uses dish antennas with diameters of up to 70 meters

(230 feet). That's almost as big as a football field.

#### Not much!

If you could lump together all the thousands of known asteroids in our solar system, their total mass wouldn't even equal 10 percent of the mass of Earth's Moon.

#### It's a small world after all

More than 1,300 Earths would fit into Jupiter's vast sphere.

#### Easy does it

A Venus day is approximately 243 Earth days long. The bad news is we would have to wait up to three Earth years for a weekend. That's because a day on Venus is longer than its year!



#### Air Martian!

The gravity on Mars is approximately one-third that on Earth. Yes, chances are you'd be able to dunk the basketball on a Martian court.

#### Pizza?

Jupiter's moon lo is the most volcanically active body in our solar system. The moon's bizarre, blotted yellowish surface looks like a pepperoni pizza!

#### Skating, anyone?

If you ice skate, how about Europa? Europa is one of the four largest moons of Jupiter. It's a little smaller than Earth's Moon. Europa is covered in ice, including some smooth ice! A 3-foot (about 1 meter) Axel jump on this moon would take you 22 feet (more than 6 meters) high, with the same landing speed as on Earth.

#### **Grandest Canyon**

The largest canyon system in the solar system is Valles Marineris on Mars. It's more than 4,000 kilometers (3,000 miles) long — enough to stretch from California to New York. It is nine times as long and four times as deep as Earth's Grand Canyon!

#### **Sizzling Venus**

The average temperature on Venus is more than 480 degrees Celsius (about 900 degrees Fahrenheit) — hotter than a selfcleaning oven.



# To learn many more cool facts about the solar system, visit:

solarsystem.nasa.gov

