# NEIGHBORS ΙΝ ТНЕ SOLAR S Y S T E M U R 0

# "SOMEWHERE, SOMETHING INCREDIBLE IS WAITING TO BE KNOWN." CARL SAGAN

it. But even so, it holds a stunning array of planets that are diverse and intriguing. enthralled with the bodies in our solar system that we call home. Information and These planets are our celestial neighbors. We learn their names from early in education is the key to progress and without it, we may never see the other side grade school, we study their chemical makeups and moons, and some of us even bemoan their lack of habitablity. Many of us may not be so familiar with ago on his television show, Cosmos: "Somewhere, something incredible is waiting just how diverse they really are and how they compare to one another in thrilling and immense ways. With the graphs below, you will find that Jupiter is the king among planets, that Mars might be considered our most popular planet (but not in the way you might expect) and that our own solar system holds curiosities and awe-inspiring facts you may have never seen before.

The universe is a vast space, and our solar system is but a tiny speck of dust within It is the hope with this poster that you will become both more informed and of our own corner of the galaxy. As Carl Sagan so eloquently mused decades to be known."

#### S I Z E S ΤΟ S C A L E

### MERCURY

Mercury is the smallest of the eight planets in our Solar System. It is also the closest to the sun. Mercury got its name from the fast-moving messenger Greek God, due to its fast pace around the Sun. The surface of Mercury looks like Earth's moon. It is covered with holes formed from the impact of asteroids and other objects over time. Mercury has no atmosphere and is inhospitable to any potential life due to its extreme temperatures and chemical makeup.



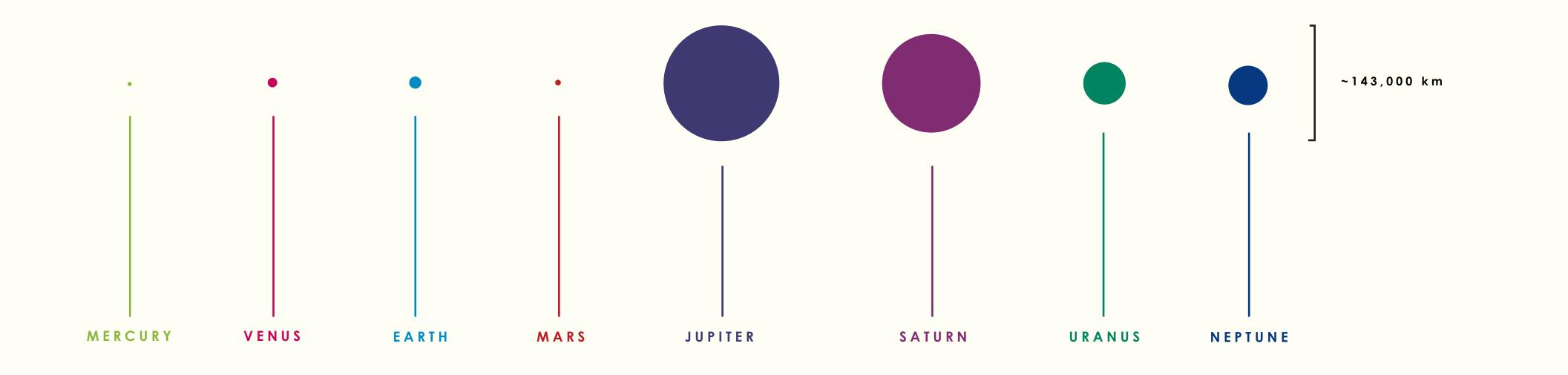
## VENUS

Venus is the second planet from the Sun, orbiting it every 224.7 Earth days. It has no natural satellite. It is named after the Roman goddess of love and beauty. After the Moon, it is the brightest natural object in the night sky, reaching an apparent magnitude of -4.6, bright enough to cast shadows. Venus is a terrestrial planet and is sometimes called Earth's "sister planet" because of their similar size, mass, proximity to the Sun and bulk composition, though little else about its surface would be inviting to life on Earth. It has the densest atmosphere of the four terrestrial planets,



EARTH

Earth is the third planet from the Sun, the densest planet in the Solar System, the largest of the Solar System's four terrestrial planets, and the only astronomical object known to harbor life. The earliest evidene of life on Earth can be traced back to at t 3.5 billion



CHEMICAL M A K E U P



# that have ever existed on Earth are now extinct, despite the planet still being inhabited by 8.7 million species currently. **8.7**<sup>m</sup> 0 KNOWN ΜΟΟΝ RINGS SPECIES

MARS

Mars, a planet about 1/6th the size of our Earth, is more than 142 million miles from the Sun. Mars is known as the Red Planet, due to the red color of its surface from the iron in its soil. Mars has two small moons, Phobos and Deimos. Mars is a terrestrial planet with a thin atmosphere, having surface features reminiscent of Earth such as volcanoes, valleys, deserts, and polar ice caps of Earth.



JUPITER

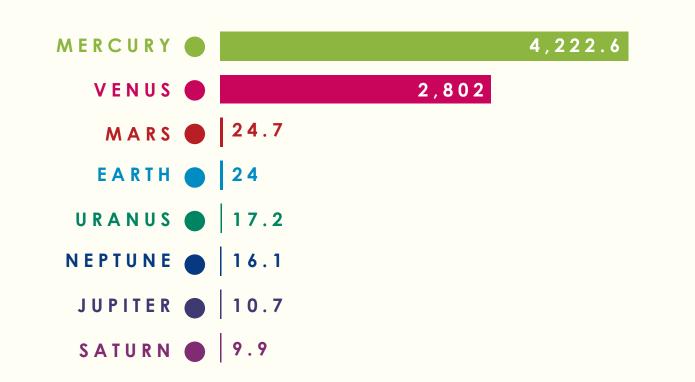
Jupiter, a planet named for the king of the Gods, is the largest in our Solar System. It is a "gas giant "with a mass one-thousandth that of the Sun, but two and a half times that of all the other planets in the Solar System combined! On average, this planet is the third-brightest object in the night sky after the Moon and Venus. Jupiter has been reached by robotic spacecraft sent from Earth, most notably during the early Pioneer and Voyager flyby missions and later by the Galileo orbiter.



MOONS ΜΙΣΣΙΟΝΣ RINGS

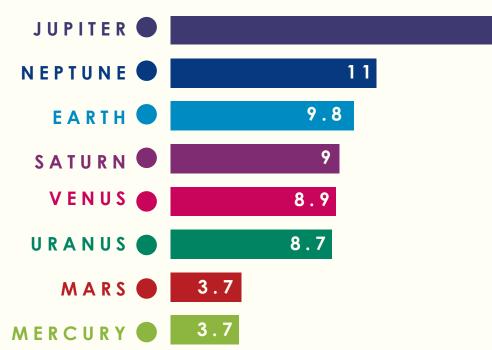
#### ТНЕ C O M P A R E S P E C S

LENGTH OF DAY (hours)

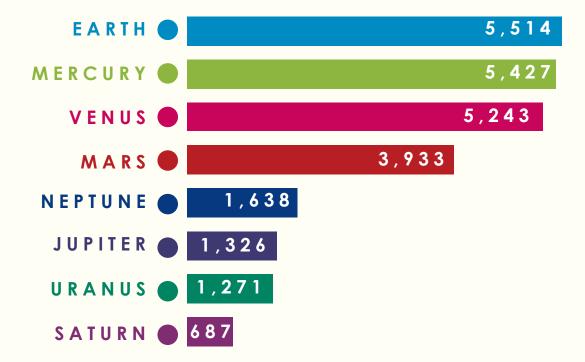


# $GRAVITY (m/s^2)$

23.1



# DENSITY (kg/vm<sup>3</sup>)



### SATURN

Adorned with thousands of beautiful ringlets, Saturn is unique among the planets. All four gas giant planets have rings --made of chunks of ice and rock -- but none are as spectacular or as complicated as Saturn's. Like the other gas giants, Saturn is mostly a massive ball of hydrogen and helium.

### 5 62 7 RINGS

MOONS MISSIONS

URANUS

Uranus is the only giant planet whose equator is nearly at right angles to its orbit, which many astronomers agree could be due to a collision with an Earth-sized object that caused the tilt. This planet is nearly a twin in size to its neigher, Neptune.

13 27 RINGS MISSION MOONS

## NEPTUNE

Dark, cold and whipped by supersonic winds, Neptune is the last of the hydrogen and helium gas giants in our solar system. More than 30 times as far from the sun as Earth, the planet takes almost 165 Earth years to orbit our sun. In 2011 Neptune



