

Planetary Order: 1st planet from the sun

Planet Size: 4,880 Kilometers

Rotation Time (Earth Days): 59

Orbit Time (Earth Years): .241

Orbit Time (Earth Days): 88

MERCURY

How much would you weigh on this planet if you weighed 100 pounds on Earth? 38 lbs

Distance from the Sun (1AU = 150,000,000km)

Kilometers: 60 million AU's: .4

Number of Moons: None Major Moons: None

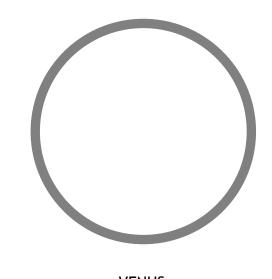
Planet named for: Roman god of speed

Mean Temperature: -183°/427°C

Surface Description:

Mercury is covered with craters. It looks like our moon. There is no water. It has cliffs and valleys.

- Mercury is an extreme planet: smallest, densest, oldest surface
- Least explored
- The temperature can change more than 1,000°F/530°C between night and day
- Mercury travels around the sun 167,400kph/104,000mph



Planetary Order: 2nd planet from the sun

Planet Size: 12,103 Kilometers

Rotation Time (Earth Days): 243

Orbit Time (Earth Years): .615

Orbit Time (Earth Days): 225

VENUS

How much would you weigh on this planet if you weighed 100 pounds on Earth? 91 lbs

Distance from the Sun (1AU = 150,000,000km)

AU's: .7 Kilometers: 108 million

Number of Moons: None Major Moons: None

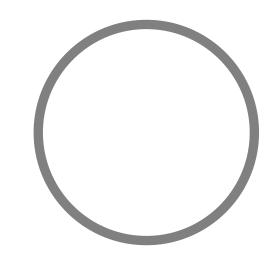
Planet named for: Roman goddess of love and beauty

Mean Temperature: 457°/482°C

Surface Description:

Venus has no ocean. It's covered by thick, rapidly spinning clouds. The surface is hot, poisonous, and mostly made up of carbon dioxide.

- The greenhouse effect is out of control. It can get up to almost 900°F (482°C)
- The atmosphere is so heavy, it feels like you are deep in the ocean
- Venus spins backwards, so the sun rises in the west and sets in the east
- A school day would last 4 months on Venus



Planetary Order: 3rd planet from the sun

Planet Size: 12,756 Kilometers

Rotation Time (Earth Days): 1

Orbit Time (Earth Years): 1

Orbit Time (Earth Days): 365

EARTH

How much would you weigh on this planet if you weighed 100 pounds on Earth? 100 lbs

Distance from the Sun (1AU = 150,000,000km)

AU's: 1 Kilometers: 150 million

Number of Moons: 1 Major Moons: Moon

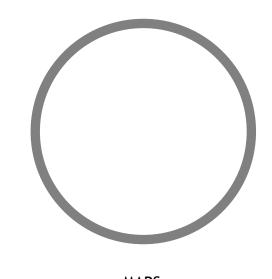
Planet named for: The Earth has hundreds of different names in different languages

Mean Temperature: 150°C/20°C

Surface Description:

Most of our planet is covered with water. Air, water, land and life combine forces to create a constantly changing world.

- The fifth largest planet in our solar system
- Earth has one moon. It's the brightest and most familiar object in our night sky
- The four seasons are a result of Earth's axis of rotation being tilted more than 23°
- The only planet that has liquid water on the surface



Planetary Order: 4th planet from the sun

Planet Size: 6794 Kilometers

Rotation Time (Earth Days): 1.02

Orbit Time (Earth Years): 1.88

Orbit Time (Earth Days): 686

MARS

How much would you weigh on this planet if you weighed 100 pounds on Earth? 38 lbs

Distance from the Sun (1AU = 150,000,000km) AU's: 1.5 Kilometers: 228

Number of Moons: 2 Major Moons: Phobos and Deimos

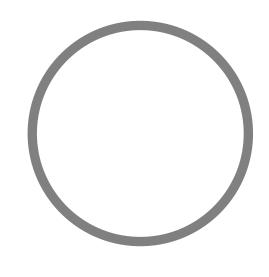
Planet named for: Roman god of war

Mean Temperature: -87°C/-5°C

Surface Description:

A small rocky body thought to be very Earth-like. Dust storms create giant dunes, wind streaks and wind-carved features.

- Mars, like Earth, has polar ice caps, volcanoes. canyons and four seasons
- Olympus Mons is the big volcano 4x bigger than any on Earth
- Periodically, great dust storms engulf the entire planet
- Known as the red planet
- One of the brightest objects in the sky



Planetary Order: 5th planet from the sun

Planet Size: 142,984 Kilometers

Rotation Time (Earth Days): .41

Orbit Time (Earth Years): 12

Orbit Time (Earth Days): 4,330

JUPITER

How much would you weigh on this planet if you weighed 100 pounds on Earth? 236 lbs

Distance from the Sun (1AU = 150,000,000km)

AU's: 5.2 Kilometers: 778 million

Number of Moons: 63 Major Moons: Callisto, Europa, Io and Ganymede

(Ganymede is the largest moon in our solar system)

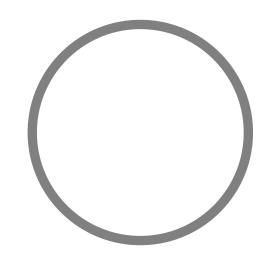
Planet named for: The King of Roman gods

Mean Temperature: -150°

Surface Description:

The planet with the big red spot, Jupiter is a giant ball of gas and liquid with little, if any solid surface. Instead, the planet's surface is composed of dense red, brown, yellow, and white clouds.

- The four largest moons were discovered by Galileo Galilei in 1610
- Jupiter has three rings, but very hard to see
- Jupiter rotates faster than any other planet
- More that 1,300 Earth's could fit in Jupiter



Planetary Order: 6th planet from the sun

Planet Size: 120,536 Kilometers

Rotation Time (Earth Days): .44

Orbit Time (Earth Years): 29.46

Orbit Time (Earth Days): 10,748

SATURN

How much would you weigh on this planet if you weighed 100 pounds on Earth? 91 lbs

Distance from the Sun (1AU = 150,000,000km)

AU's: 9.5 Kilometers: 1,426,725,400

Number of Moons: 52 Major Moons: Titan, Rhea, lapetus, Phoebe

(Titan is the 2nd largest moon in our solar system)

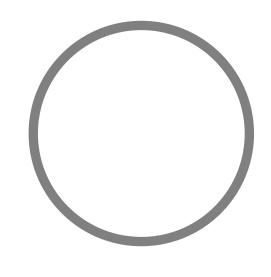
Planet named for: Roman god of agriculture

Mean Temperature: -180°C

Surface Description:

The rings are made up of billions of particles of ice and rock. Saturn has clouds, stripes and storms like Jupiter, but they are harder to see. The clouds we see are yellow and white.

- The rings are believed to be pieces of comet, asteroids, or shattered moons
- The winds on Saturn are 10x faster than our hurricanes
- Saturn is the second largest in our solar system



Planetary Order: 7th planet from the sun

Planet Size: 57,118 Kilometers

Rotation Time (Earth Days): .72

Orbit Time (Earth Years): 83.75

Orbit Time (Earth Days): 30,685

URANUS

How much would you weigh on this planet if you weighed 100 pounds on Earth? 89 lbs

Distance from the Sun (1AU = 150,000,000km)

AU's: 19.2 Kilometers: 2.4 billion

Number of Moons: 27 Major Moons: Oberon & Titania were discovered first,

then Ariel and Umbriel.

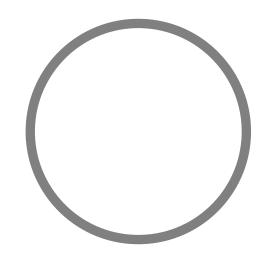
Planet named for: A Roman god who was father of the Titans

Mean Temperature: -197°C

Surface Description:

It has no solid surface. Uranus gets its blue, green color from methane gas.

- Uranus' moons are unique in being named for Shakespearean characters, along with a couple from the works of Alexander Pope
- First planet found with the aid of a telescope in 1781
- A spacecraft would be crushed in its clouds
- Seasons last more than 20 years because it's tilted on its side



Planetary Order: 8th planet from the sun

Planet Size: 49,532 Kilometers

Rotation Time (Earth Days): .67

Orbit Time (Earth Years): 163.72

Orbit Time (Earth Days): 60,189

NEPTUNE

How much would you weigh on this planet if you weighed 100 pounds on Earth? 110 lbs

Distance from the Sun (1AU = 150,000,000km)

AU's: 30.1 Kilometers: 4.5 billion

Number of Moons: 13 Major Moons: Triton

(which rotates in the opposite direction of the planet)

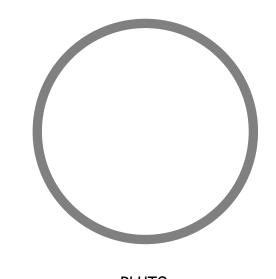
Planet named for: The Roman god of the sea

Mean Temperature: -200°C

Surface Description:

Neptune gets its blue color from a layer of methane gas above the clouds. Methane absorbs red light, so only blue shows up when we look at it.

- Crosses orbit with Pluto
- The first planet located through mathematical predictions
- The most windy planet in our solar system, 20x faster than our hurricanes
- The 4th largest planet
- In the year 2011, Neptune will complete one orbit of the sun since it was discovered in 1846



Planetary Order: 9th planet from the sun

Planet Size: 2,274 Kilometers

Rotation Time (Earth Days): 6.39

Orbit Time (Earth Years): 248

Orbit Time (Earth Days): 90,465

PLUTO

How much would you weigh on this planet if you weighed 100 pounds on Earth? 81 lbs

Distance from the Sun (1AU = 150,000,000km)

AU's: 39.5 Kilometers: 5,906,380,000

Number of Moons: 3 Major Moons: Charon, Hydra, Nix

Planet named for: Roman god of the underworld

Mean Temperature: -233°C

Surface Description:

We can only guess what Pluto's surface looks like. It is so far away, even powerful telescope pictures are fuzzy. It's probably covered with frost.

- From Pluto, our sun would look like a very bright star
- There is no air to breathe
- Pluto has a very large moon named Charon
- It takes two hours for light to reach Pluto
- Pluto is now called a "dwarf" planet