

## **Solar System Planet and Dwarf Planet Fact Sheet**

The planets and dwarf planets are listed in their order from the Sun.

### **Mercury**

The smallest planet in the Solar System.

The closest planet to the Sun.

Revolves the fastest around the Sun.

It is 1,000 degrees Fahrenheit hotter on its daytime side than on its nighttime side.

### **Venus**

The hottest planet. Average temperature: 864 F. Hotter than your oven at home. It is covered in clouds of sulfuric acid. It rains sulfuric acid on Venus which comes down as virga and does not reach the surface of the planet. Its atmosphere is mostly carbon dioxide (CO<sub>2</sub>).

It has thousands of volcanoes. Most are dormant. But some might be active. Scientists are not sure.

It rotates around its axis slower than it revolves around the Sun. That means that its day is longer than its year! This rotation is the slowest in the Solar System.

It rotates clockwise when viewed from its north pole. This is called retrograde rotation. All the other planets – except Uranus – rotate counterclockwise.

### **Earth**

Lots of water! Mountains! Active volcanoes! Hurricanes! Earthquakes! Life! Us!

### **Mars**

It is sometimes called the "red planet" because it is covered in iron oxide -- a substance that is the same as rust on our planet.

It has the highest volcano -- Olympus Mons -- in the Solar System. It is not an active volcano.

It has a canyon -- Valles Marineris -- that is as wide as the United States.

It once had rivers, lakes and oceans of water. Scientists are trying to find out what happened to all this water and if there ever was (or still is!) life on Mars.

It sometimes has dust storms that cover the entire planet.

It has two moons: Phobos and Deimos.

### **Ceres**

A dwarf planet located in the asteroid belt.

It used to be -- and sometimes still is -- called an asteroid.

It is 588 miles in diameter -- about as far as from Stockton to Mexico.

It has large amounts of water ice underneath its surface.

## **Jupiter**

The largest planet.

It rotates the fastest of all the planets.

It has a ring around it.

It is not solid. It is made mostly of hydrogen and helium. Its famous "red spot" is a storm larger than Earth.

It has 79 moons. Its largest and most famous moons are Europa, Ganymede, Callisto, and Io -- the Galilean moons.

Io has active volcanoes. Europa has liquid water under its icy surface.

## **Saturn**

Like Jupiter, it is not solid and is made mostly of hydrogen and helium.

Its famous rings are made of water ice -- just like the ice in your refrigerators at home. Some of these chunks of ice are only as big as your fist. Some are as big as your house!

Saturn has 82 moons. Its most famous moon is Titan which has rivers and lakes and oceans. But the liquid in these rivers, lakes and oceans is not water! It is methane and ethane. (Methane gas is the same as the gas in your stoves and water heaters at home.)

## **Uranus**

Its atmosphere is made mostly of hydrogen and helium

It has the most sharply inclined axis to its orbit (98 degrees) of any planet in the Solar System.

Like Venus, it rotates clockwise when viewed from its north pole. This is called retrograde rotation.

It has faint rings around it. But you can't see them with a telescope -- like Saturn. We only discovered these rings when we sent the Voyager spacecraft there.

## **Neptune**

Like Uranus, its atmosphere is made mostly of hydrogen and helium.

It is the coldest planet.

It also has a faint ring discovered by Voyager.

It has storms that come and go and appear as dark spots on the surface of its atmosphere.

It was discovered not with telescopes but by the use of mathematics.

## **Pluto**

A dwarf planet located in the Kuiper Belt.

It is made mostly of ice -- as all objects in the Kuiper Belt are.

It is a little bit smaller than Earth's moon.

It has five moons orbiting it. Its largest moon is Charon.

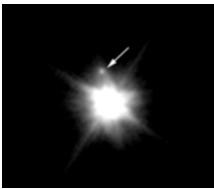
**Haumea** (pronounced: how-may-uh)



Photo by the Keck Observatory in Hawaii

A dwarf planet in the Kuiper Belt.  
It is shaped like an egg.  
It has two moons and a faint ring around it.

**Makemake** (pronounced: mah-key-mah-key)



Hubble Space Telescope photo

A dwarf planet in the Kuiper Belt.  
It has one moon.

**Eris** (pronounced: air-iss)



Hubble Space Telescope photo

A dwarf planet located far away on the outer edge of the Kuiper Belt.  
It is about the same size as Pluto.  
It has one moon.