



# Solar System Award

At the centre of our Solar System is the Sun. It's gravity holds 8 planets in it's orbit as well as other space objects. The Solar System is 4.6 billion years old.

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**1** got his/her **FIRST** certificate!!!



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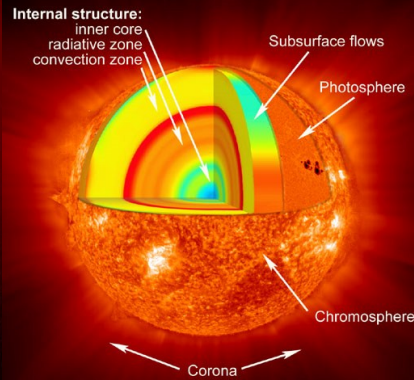
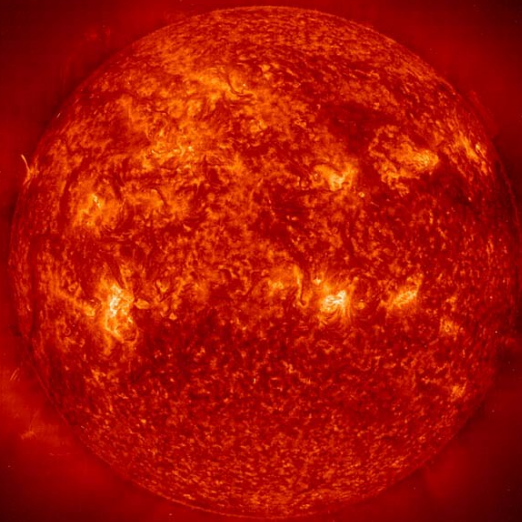
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# The Sun Award

The Sun is about 1.4 million km wide, 109 times bigger than the Earth. It is mainly made from hydrogen gas that burns to 5500°C.



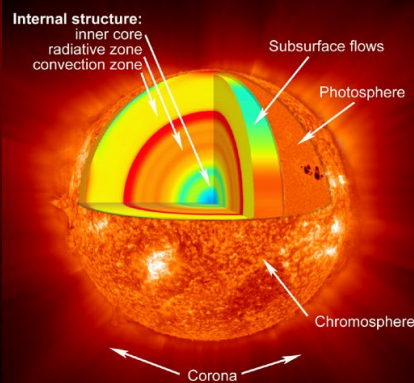
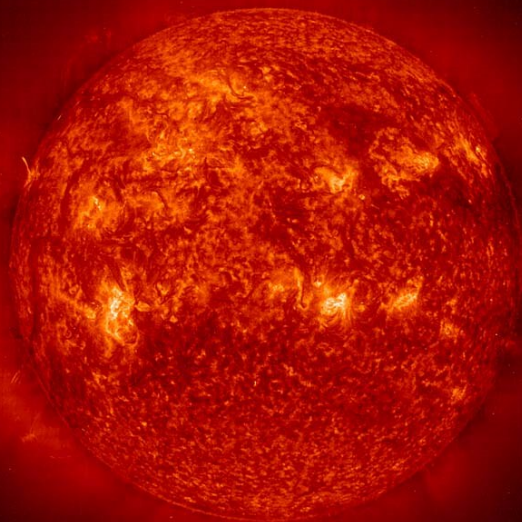
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**2** Got his/her **SECOND** certificate!!!



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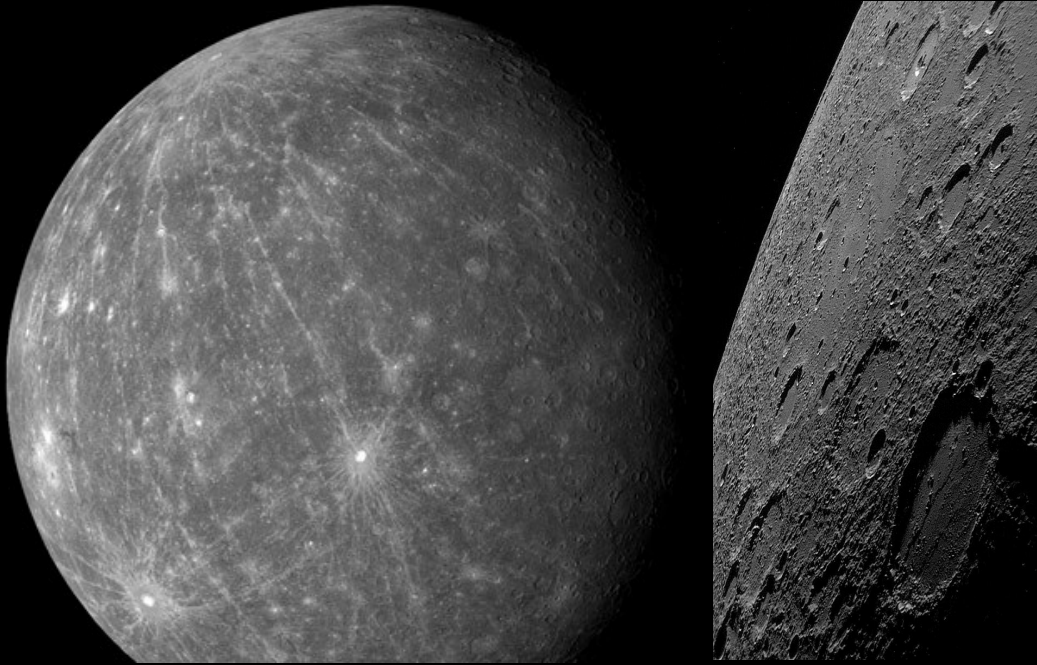
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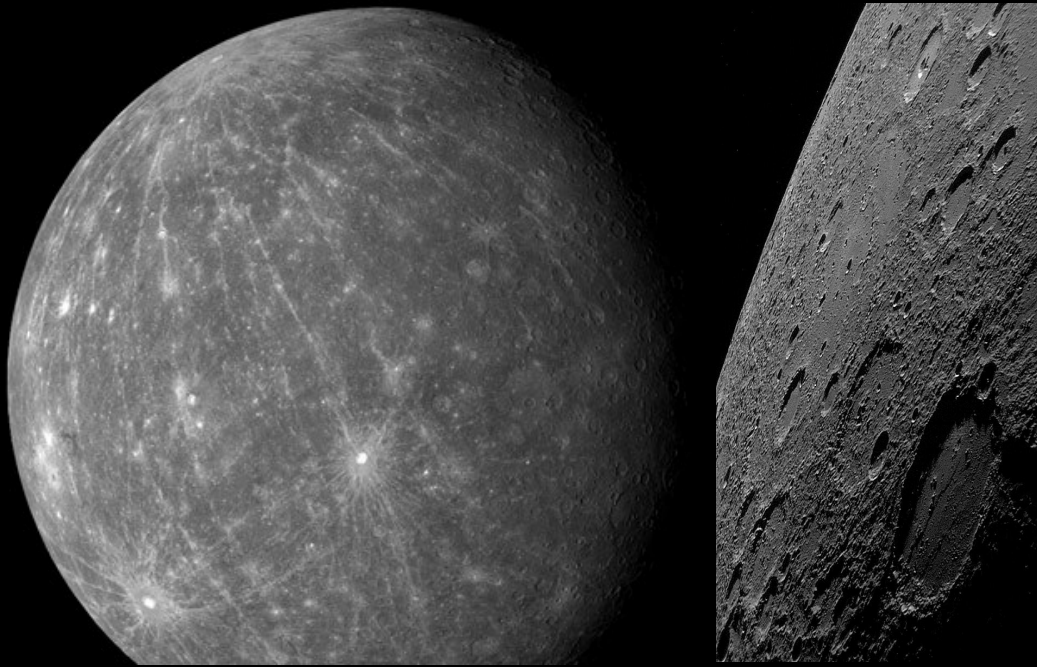


# Mercury Award

Moons	0
Diameter	3,000 miles
Distance from Sun	35 mil miles
Time to Orbit Sun	88 days

Closest planet to the Sun and so can be very hot. It is solid all the way through. Named after the messenger god of the Romans.

**3** got his/her **THIRD** certificate!!!



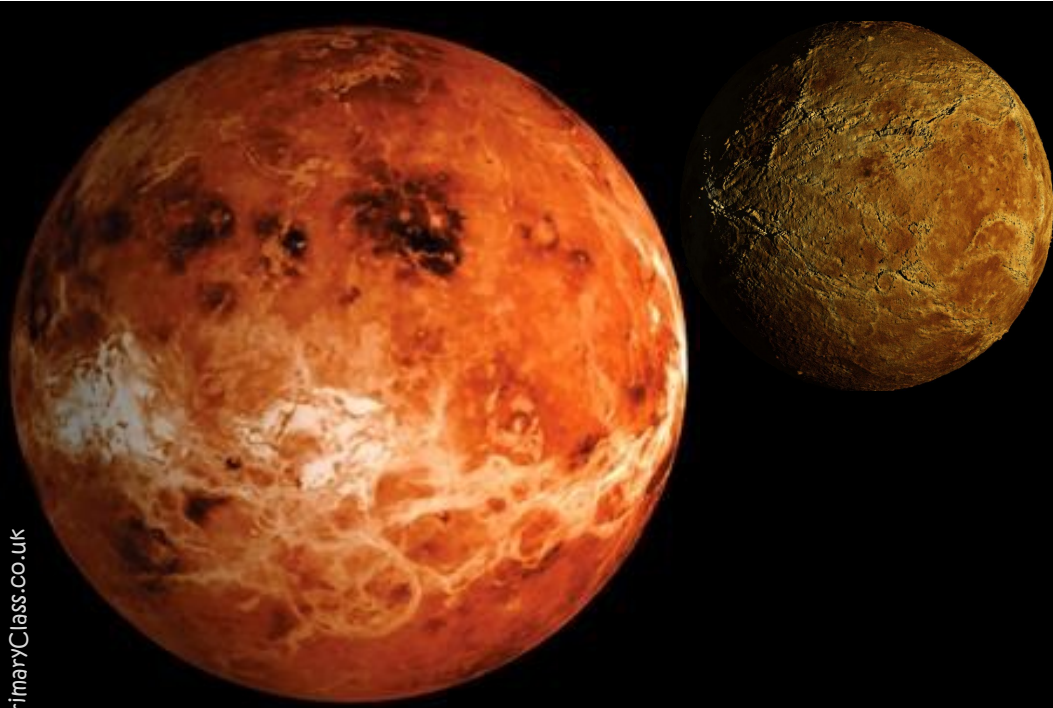
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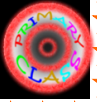


# Venus Award

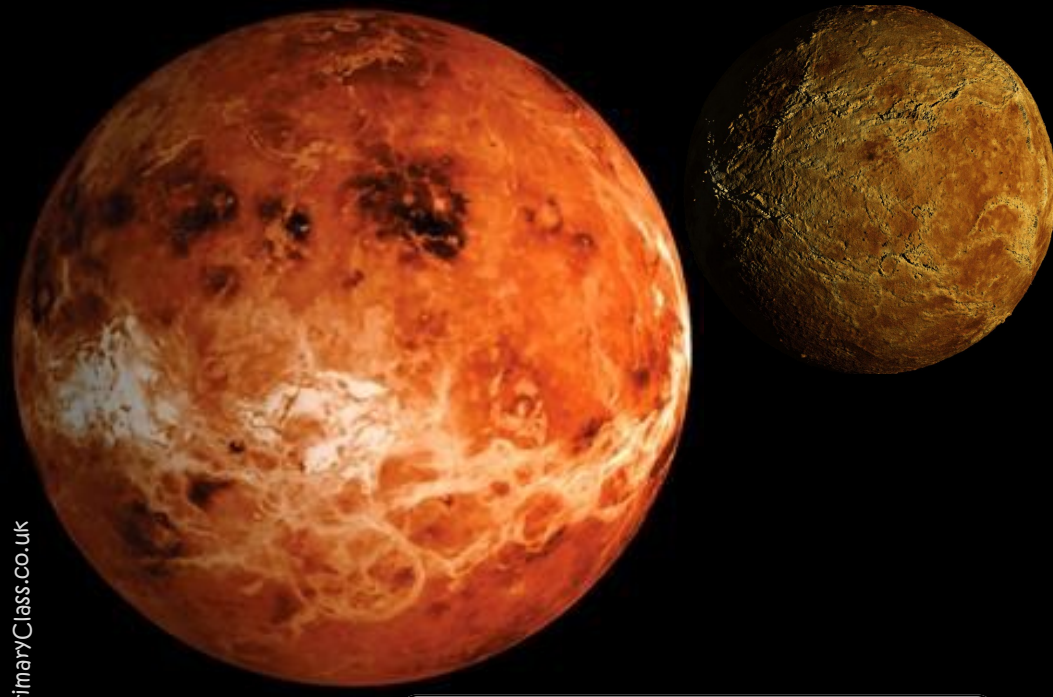
Moons	0
Diameter	7,500 miles
Distance from Sun	67 mil miles
Time to Orbit Sun	225 days

Named after Roman goddess of love. It is mostly solid, but has liquid centre like Earth. It is also very very hot.

**4** Got his/her **FOURTH** certificate!!!



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Moons	0
Diameter	7,500 miles
Distance from Sun	67 mil miles
Time to Orbit Sun	225 days

Named after Roman goddess of love. It is mostly solid, but has liquid centre like Earth. It is also very very hot as it has some atmosphere to trap the heat.

**4** Got his/her **FOURTH** certificate!!!



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# Earth Award

Moons	1
Diameter	8,000 miles
Distance from Sun	93 mil miles
Time to Orbit Sun	365.3 days

Our planet has just the right temperature, air/atmosphere and weather to support lots of life.

**5** got his/her **FIFTH** certificate!!!



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# The Moon Award

Moons	-
Diameter	2,160 miles
Distance from Earth	240,000 miles
Time to Orbit Earth	28 days

Our moon is now almost certainly solid all the way through. The craters on the surface are caused by meteorites and comets that have hit the surface. The dark areas are old molten rock (lava).

**6** got his/her **SIXTH** certificate!!!



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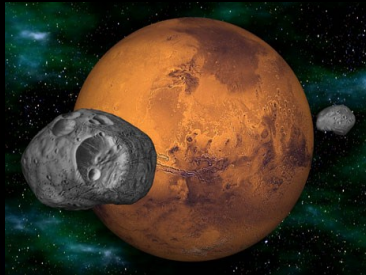
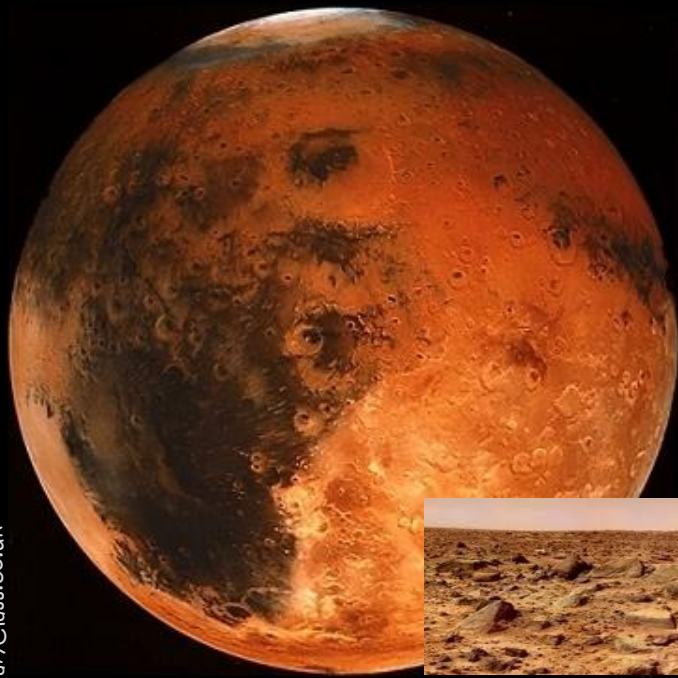
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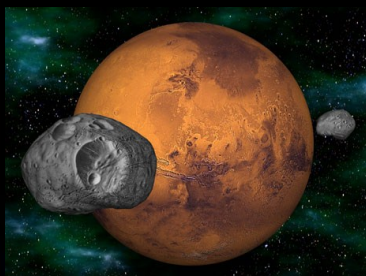
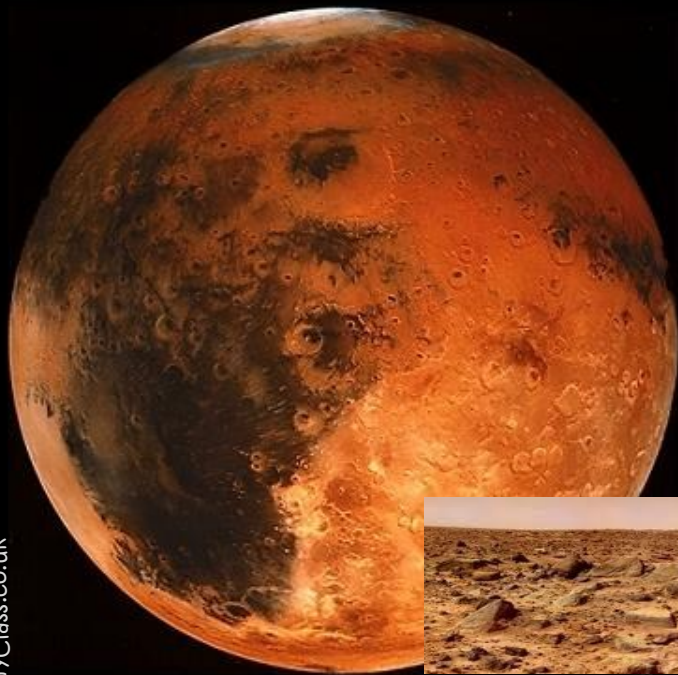
# Mars Award

Moons	2
Diameter	4,200 miles
Distance from Sun	142 million miles
Time to Orbit Sun	687 days

Named after the Roman god of war and farming. Mars probably once had water and is the nearest planet that we might one day live on. However, it has little atmosphere (air) left.

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**7** got his/her **SEVENTH** certificate!!!



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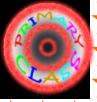
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# Asteroid Belt Award

There are hundreds of thousands of asteroids between Mars and Jupiter. Asteroids are mostly metal or rock. They are not big enough to be planets or make enough gravity to become round. Ceres is the largest known asteroid and is counted as a 'dwarf planet'.

**8** got his/her **EIGHTH** certificate!!!



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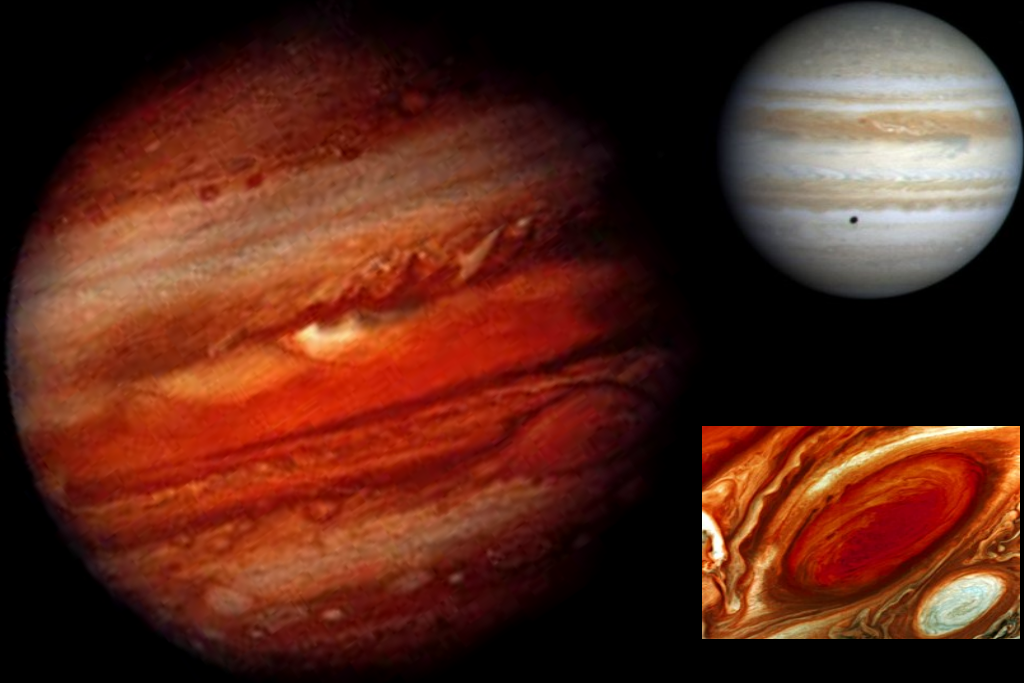
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# Jupiter Award

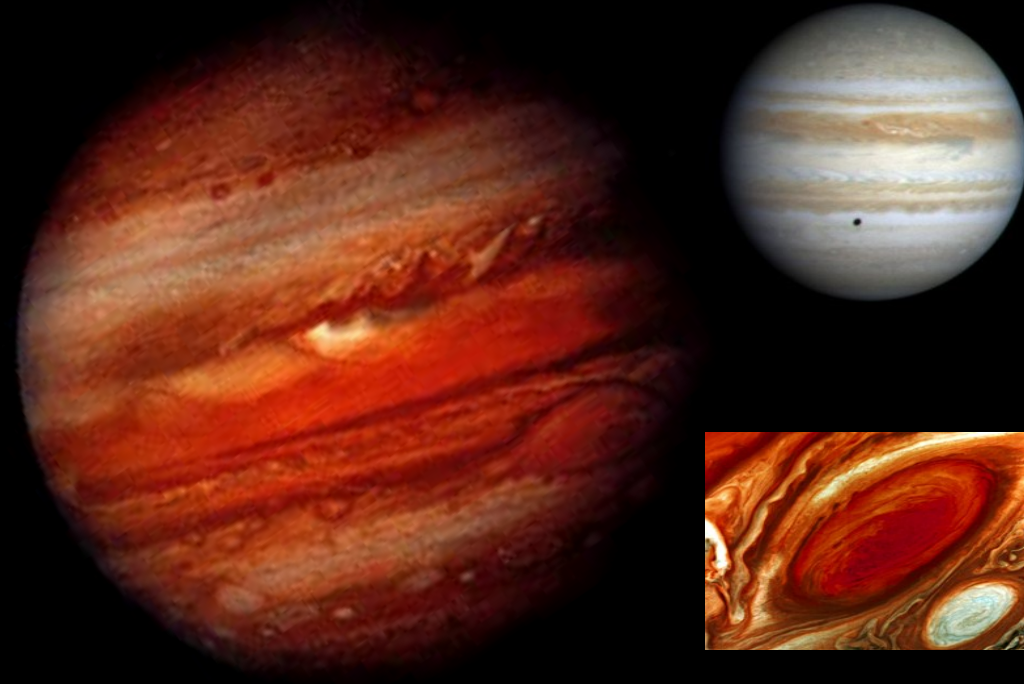
Moons	63+
Diameter	89,000 miles
Distance from Sun	485 million miles
Time to Orbit Sun	4330 days

The largest planet in the Solar System. It's surface is mainly gas but has a large water/hydrogen liquid ocean. It's massive red spot is a storm lasting for over 300 years.

**I got his/her NINTH certificate!!!**



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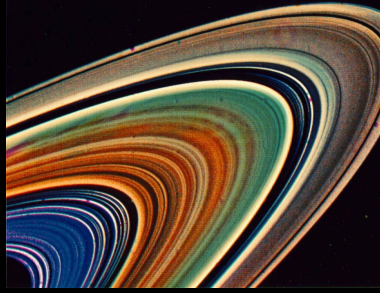
**I got his/her NINTH certificate!!!**



# Saturn Award

Moons	34
Diameter	75,000 miles
Distance from Sun	890 million miles
Time to Orbit Sun	10,800 days

Saturn is the second largest planet. It is mostly methane gas on the surface, but this turns into a chemical liquid ocean. It's famous rings are mainly made from dust, rock and ice.



**10** got his/her **TENTH** certificate!!!

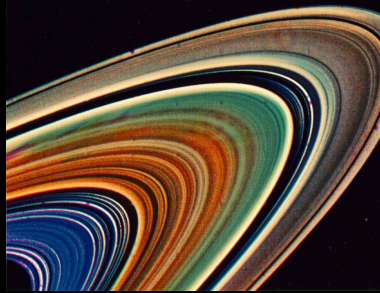


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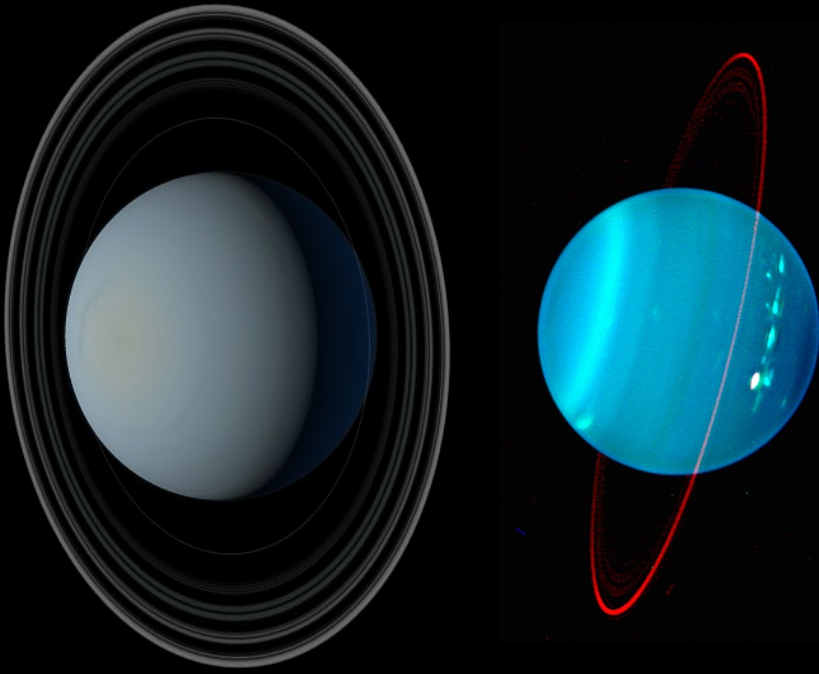
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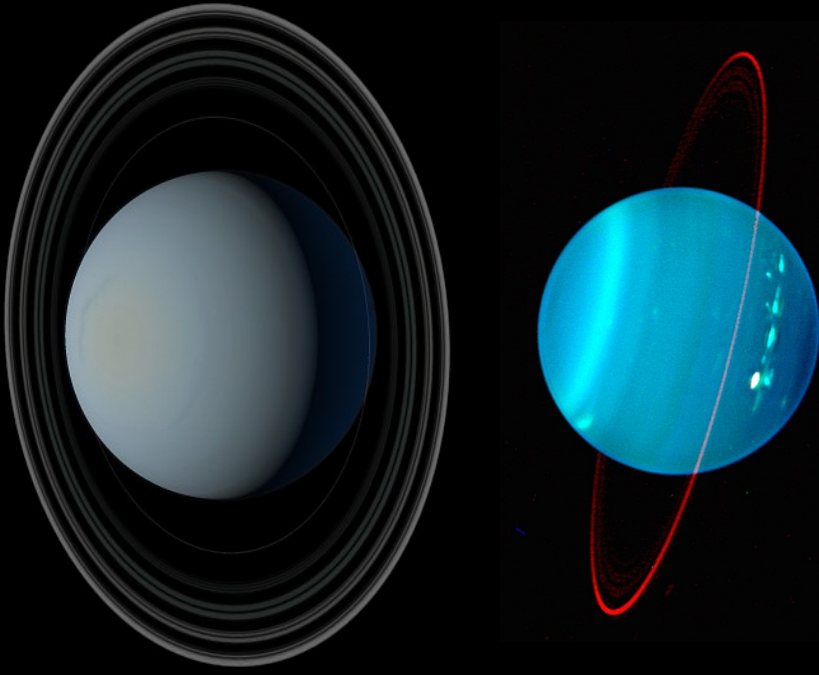


# Uranus Award

Moons	27
Diameter	31,800 miles
Distance from Sun	1,800 million miles
Time to Orbit Sun	31,000 days

Thought to have once been hit by a large object, making it spin on its side. It has a rocky centre, and may have a watery ocean on the surface. The white dots in the infrared photo are clouds.

**11** Got his/her **ELEVENTH** certificate!!!



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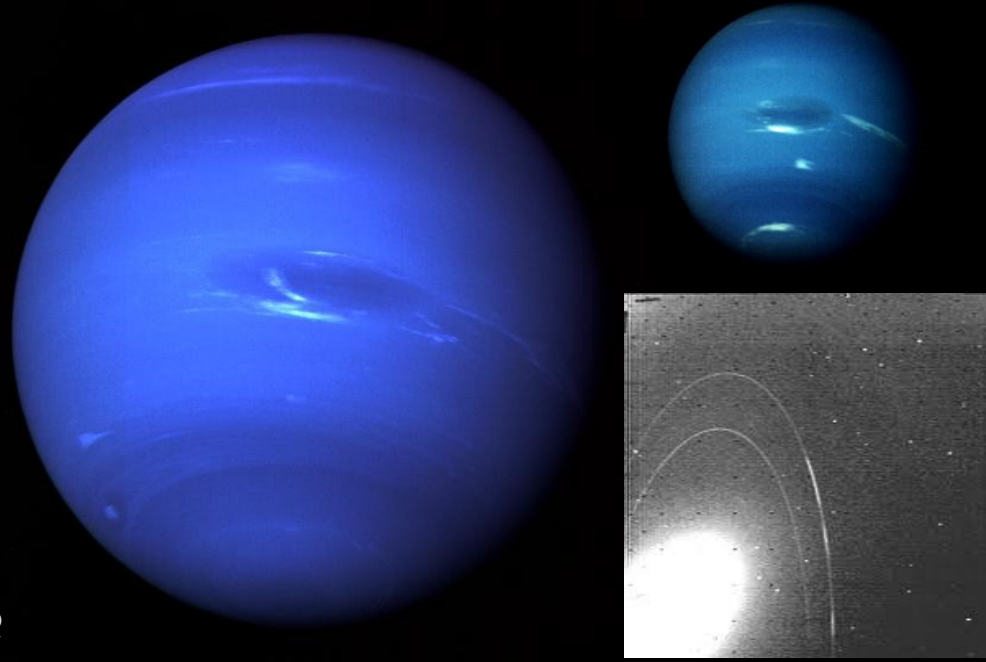
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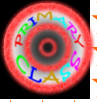


# Neptune Award

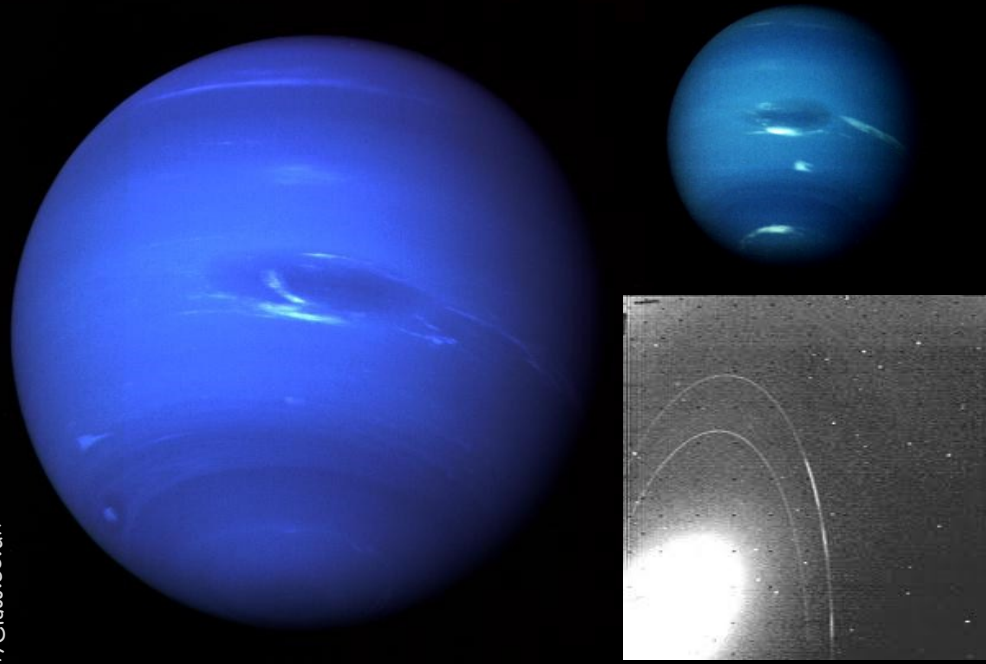
Moons	13+
Diameter	31,000 miles
Distance from Sun	2,800 million miles
Time to Orbit Sun	60,000 days

Named after the god of water because of its blue colour. Neptune has large storms like Jupiter and has 6 rings. As it is far away, it is difficult to know much about it.

**12** got his/her **TWELTH** certificate!!!



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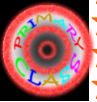


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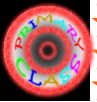


# Pluto Award

Moons	3
Diameter	1,485 miles
Distance from Sun	3,600 million miles
Time to Orbit Sun	90,500 days

Of Pluto's 3 moons, Charon is the largest and almost the same size of Pluto. Some people consider Pluto too small to be a full planet, so sometimes call it a dwarf planet.

**13** got his/her **THIRTEENTH** certificate!!!



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# Meteorite Award

Meteorites are pieces of space rock that reach our atmosphere. Mostly they burn as they go through our air at high speed (25,000 mph). These are sometimes called shooting stars. Some make it to the ground and we can study them to learn about space. Many scientists think a large meteorite hitting Earth may have started the end for the dinosaurs.

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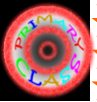
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# Comet Award

Comets come from the edge of the Solar System. They are made mainly of ice and dust. When they come closer to the sun, the ice melts and it is possible to see a tail like feature. A famous comet is Halley. It is about 9 miles in diameter, and loses about 6 metres of ice and dust when it comes near the Sun. The next time it will be near Earth will be 2061.

**15** got his/her **FIFTEENTH** certificate!!!



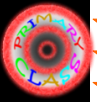
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# Stars Award

Stars are basically other Suns. Most of the ones we can see are much larger than our Sun. Some stars can be up to 200 times bigger than our own. The largest are called Super Giants. The smallest are Red Dwarfs. These can be 100 times smaller than our Sun. Their colours are different depending on their temperature, blue ones are the hottest, but do not last very long.

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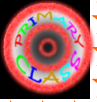
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# Galaxy Award

Galaxies are collections of stars. They can form in 3 different shapes and can have anything from 100 million to 400 billion stars. The shapes are spiral, elliptical or irregular. Our own galaxy is called the Milky Way. This is part of a group of 30 galaxies.

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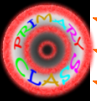
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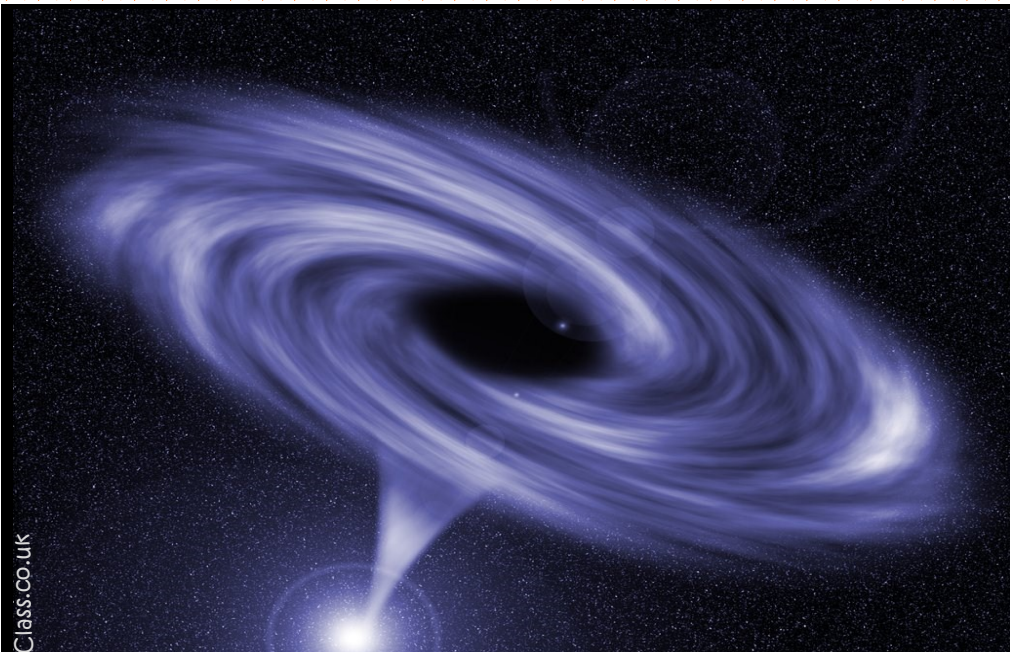
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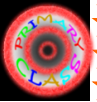
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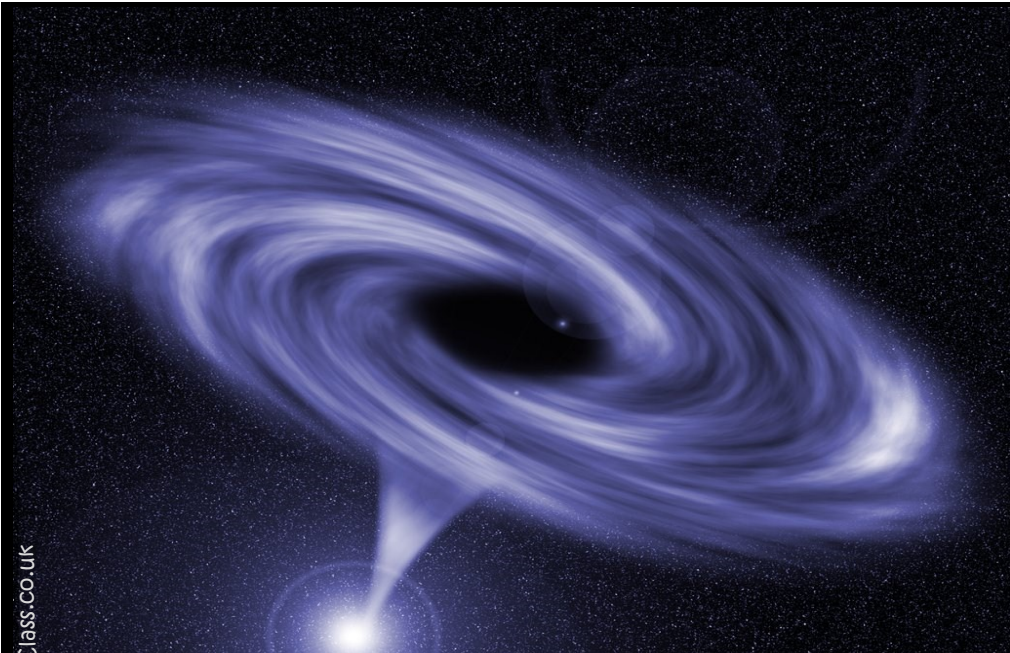
# Black Hole Award

Black Holes are caused by stars which have run out of gas. After burning all their fuel, they begin to shrink, and shrink and shrink. Their gravity gets stronger as this happens, and it can pull in anything around it. If something gets pulled in, it is impossible to get out.

**18** got his/her **EIGHTEENTH** certificate!!!



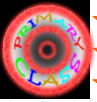
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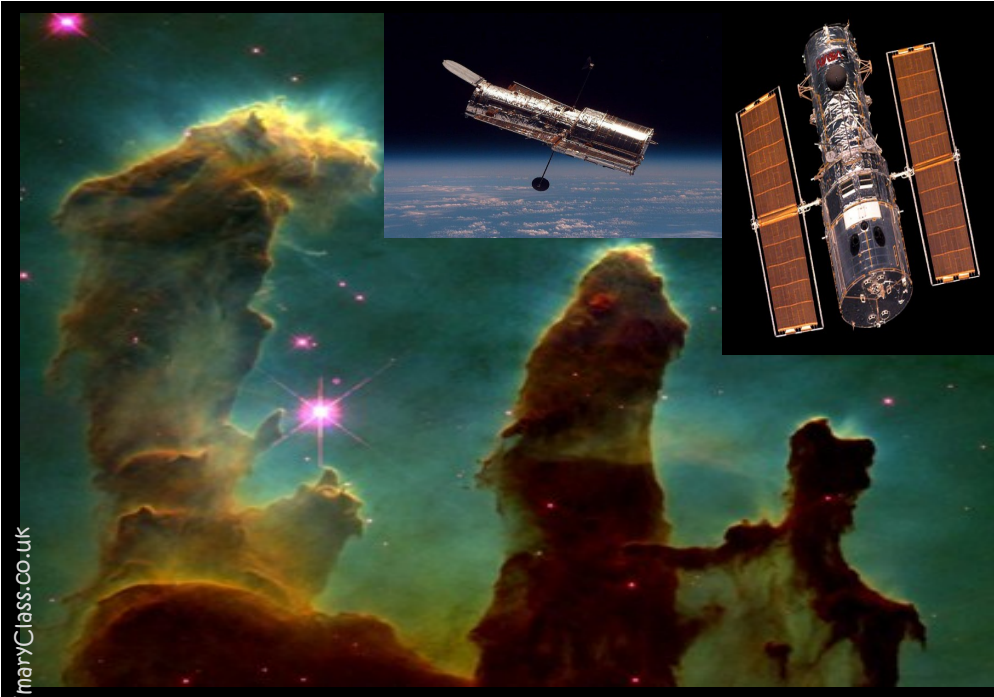
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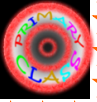
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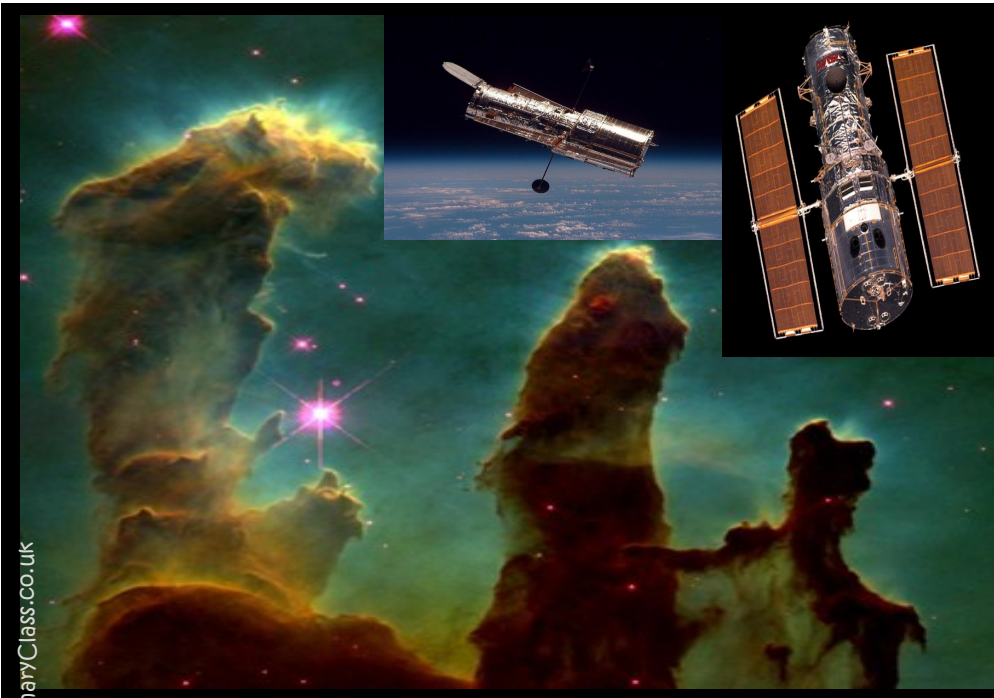
# Hubble Award

The Hubble Telescope sits in the Earth's orbit about 350 miles above the surface. It does not have to look through clouds or the atmosphere so is able to give fantastic pictures of space. It is powered by the sun and moves at 5 miles per second. It was due to end its work in 2010. It has taken many fantastic pictures, and searched for black holes, nebulas, other planets and many more space objects.

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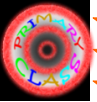
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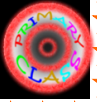


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# Big Bang Award

The Big Bang is a theory that explains how the universe began. Scientists think that it started 14 billion years ago from nothing. When the explosion happened, the universe began to get bigger and bigger. It is still growing now. Some particles crashed into each other creating gas and eventually stars. From the stars came more explosions and then planets. Nobody is sure what happened before the explosion, or how it will end.

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