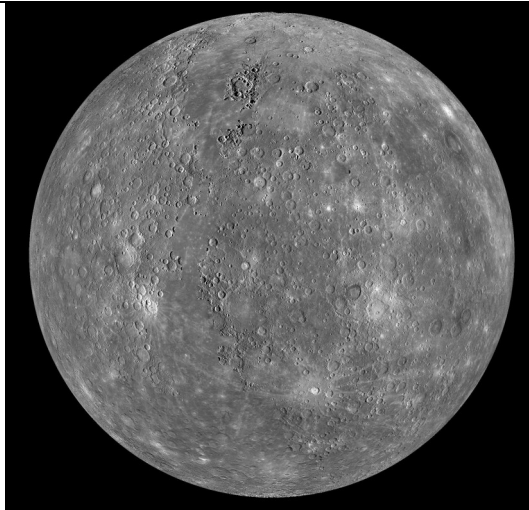


**Sun**



**Mercury**



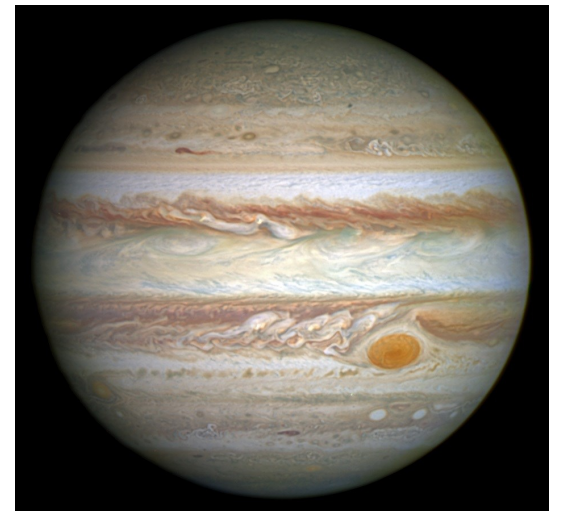
**Venus**



**Earth**



**Mars**



**Jupiter**

Venus is the hottest planet in our solar system. The thick clouds on Venus hold the heat in.

The sun's lights reflect off Venus's clouds making it look like the brightest star in the night sky.

Venus is the closest planet to Earth.

Most of Venus is covered in lava and volcanos.

Venus spins clockwise, the opposite direction to Earth.

Venus spins slower than Earth.

Jupiter is the biggest planet in our solar system.

Jupiter has a huge storm that's been blowing for hundreds of years called the Great Red Spot.

Jupiter spins very fast which makes it look striped from the clouds being pulled into bands.

Jupiter is a big ball of gas and does not have a solid surface.

Jupiter has at least 63 moons. Four are called **Europa**, **Callisto**, **Io** and **Ganymede**.

Mercury is the planet closest to the sun. It is the smallest of all the big planets.

During the day on Mercury it gets very hot and at night it is very cold.

It takes only 88 days for Mercury to go around the sun.

Mars is the most like Earth of all the planets.

Mars has huge volcanoes.

Mars has two small, funny shaped moons called **Phobos** and **Deimos**.

Scientists think there may have been flowing rivers on Mars long ago but they're gone now.

Scientists have sent up robots called rovers to roll across Mars taking pictures and studying the planet.

The sun is a star. It is the closest star to Earth.

The sun is very hot. Its warmth and light keep plants and animals alive on Earth.

The sun is about 93 million miles away from Earth.

The sun is at the center of our solar system. The planets in our solar system travel around the sun. It takes 1 year or 365 days for the Earth to go around the sun.

Most of the Earth is covered with oceans.

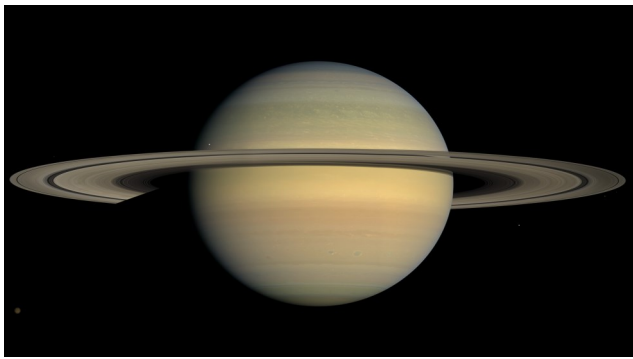
Earth is the 5th largest planet.

Earth has 1 moon.

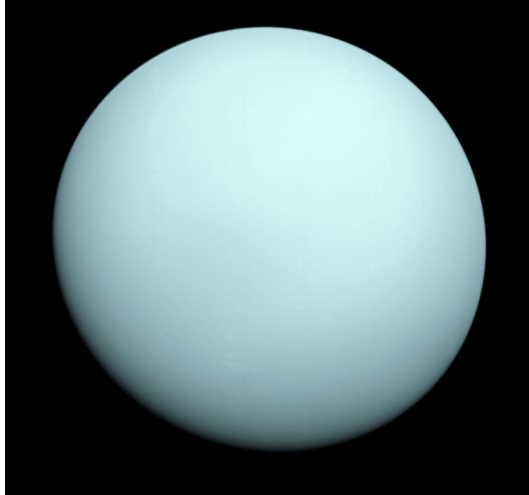
Earth is the only planet which has life on it.

The Earth is tilted. When your part of the Earth is tilted toward the sun, it's summer. When it's tilted away from the sun it's winter.

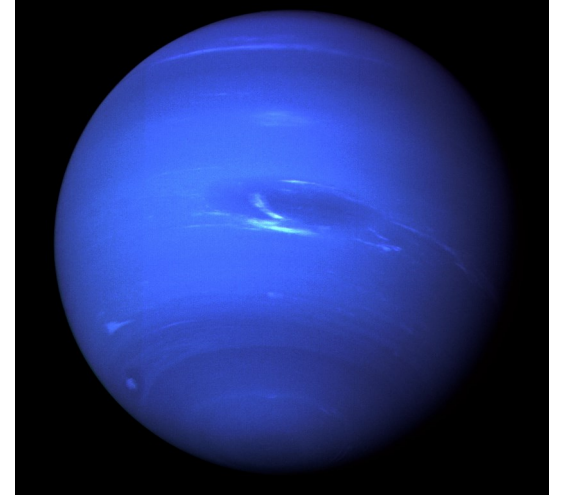
Earth spins counter-clockwise.



**Saturn**



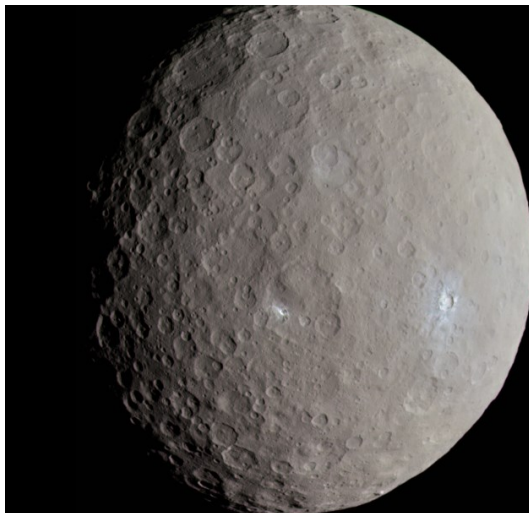
**Uranus**



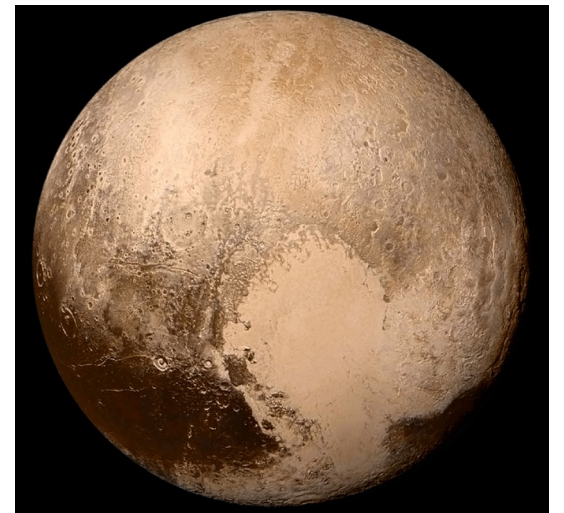
**Neptune**



**Moon**



**Ceres**



**Pluto**

Neptune is the farthest planet from the sun out of the big planets.

Neptune is made up of gas.

Winds on Neptune blow more than a thousand miles an hour.

It takes Neptune 165 years to travel around the sun.

Neptune has a big storm called the Great Dark Spot.

Neptune has at least 13 moons. **Triton** is Neptune's largest moon. **Proteus** is the second largest and **Nereid** the third largest.

Pluto is a dwarf planet. It is in the Kuiper Belt.

Pluto used to be considered a regular planet but scientists now call it a dwarf planet.

Pluto spins clockwise.

Pluto has a moon called **Charon**.

Uranus is tipped onto its side.

Scientists think that a huge space object hit it long ago.

Uranus spins in the opposite direction to Earth.

Uranus is the coldest of the eight big planets.

Uranus has 13 rings.

Uranus has at least 27 moons. One is named **Miranda**.

Uranus is a gas planet.

Ceres is a dwarf planet.

Saturn has thousands of rings. The rings are made up of billions of bits of icy rocks. Some bits are as tiny as dust and others are as big as mountains.

Saturn is a gas planet with no solid surface.

Saturn has at least 53 moons. Saturn's biggest moon is called **Titan**. 4 other moons are **Rhea**, **Iapetus**, **Dione** and **Tethys**.

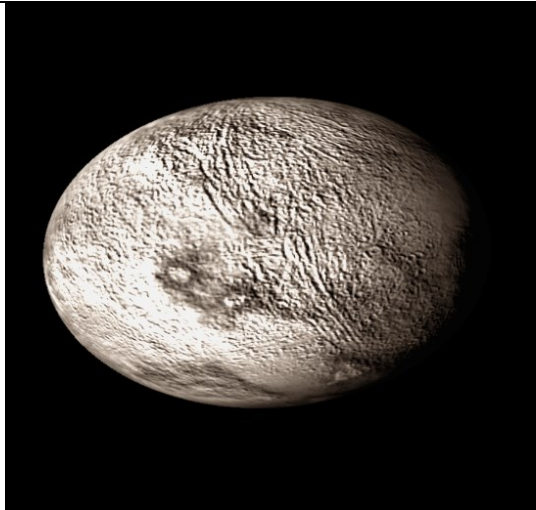
The moon travels around Earth. It takes about 27 days for the moon to go around the Earth.

The moon is actually dark, it looks bright because the sun reflects off its surface.

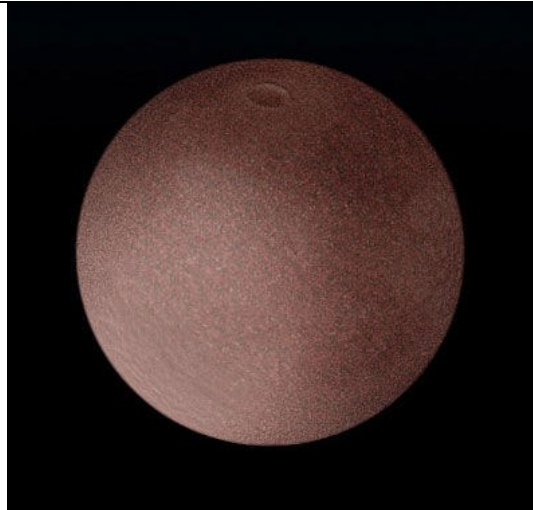
The shape of the moon that we see from Earth changes because the Earth casts a shadow on it.

The same side of the moon always faces earth.

Astronauts landed on the moon 6 times.



**Haumea**



**Makemake**



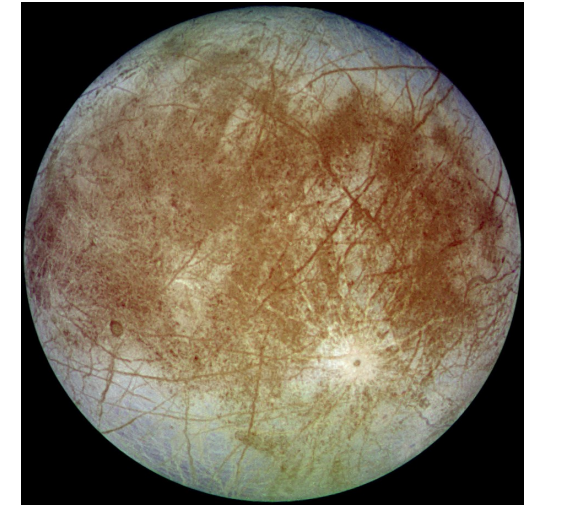
**Eris**



**Phobos**



**Deimos**



**Europa**

Eris is the largest of the dwarf planets.

Makemake is a dwarf planet.

Haumea is a dwarf planet.

It takes Makemake 310 years to travel around the sun.

Haumea is an unusual shape. Scientists think something smashed into Haumea long ago. This may have created Haumea's two moons, Namaka and Hi'iaka.

Europa is one of Jupiter's moons.

Europa may have deep, ice-covered oceans.

Deimos is one of Mars's moons. It is very close to Mars.

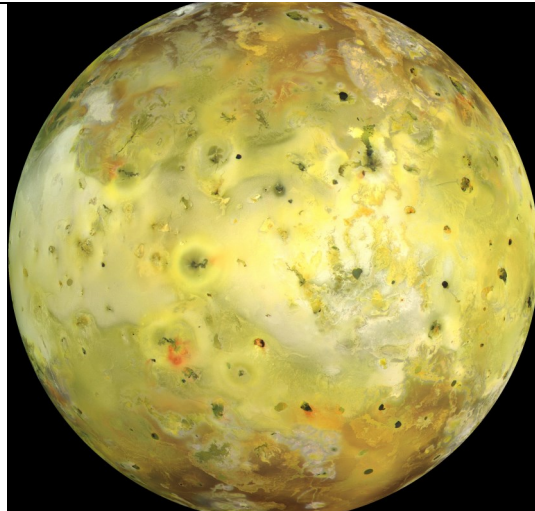
Deimos has a funny shape, like a potato.

Phobos is one Mars's moons. It is very close to Mars.

Phobos has a funny shape, like a potato.



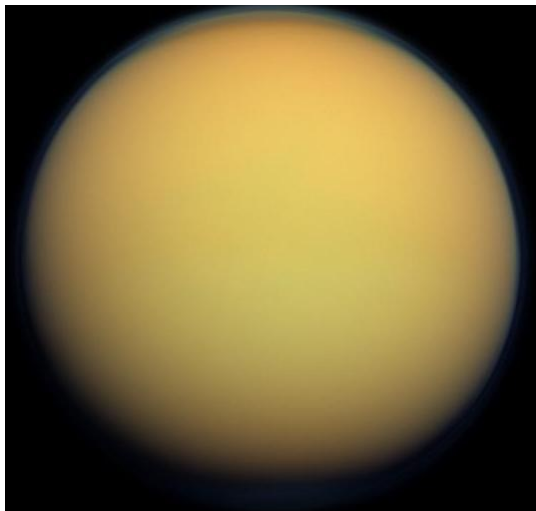
Callisto



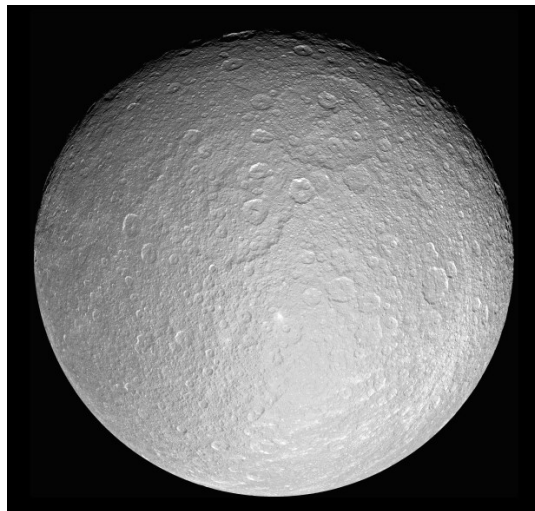
Io



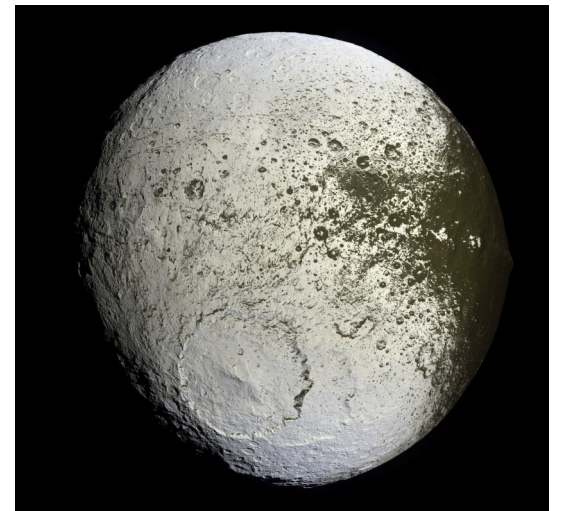
Ganymede



Titan



Rhea



Iapetus

Ganymede is one of Jupiter's moons.  
It is the biggest moon in our solar system.

Io is one of Jupiter's moons.  
Io is covered by volcanoes.

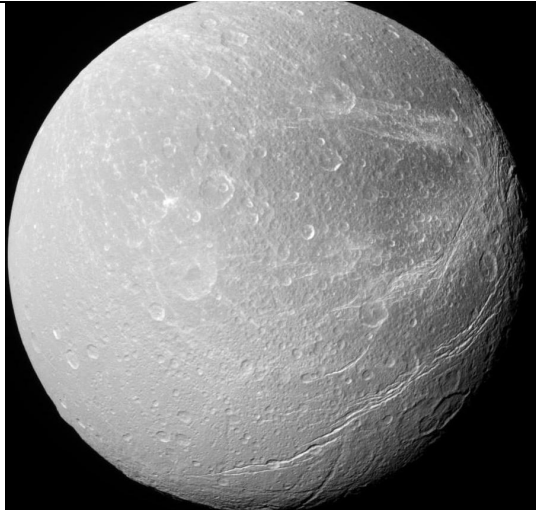
Callisto is one of Jupiter's moons.  
Callisto is about the same size as Mercury.

Iapetus is one of Saturn's moons.

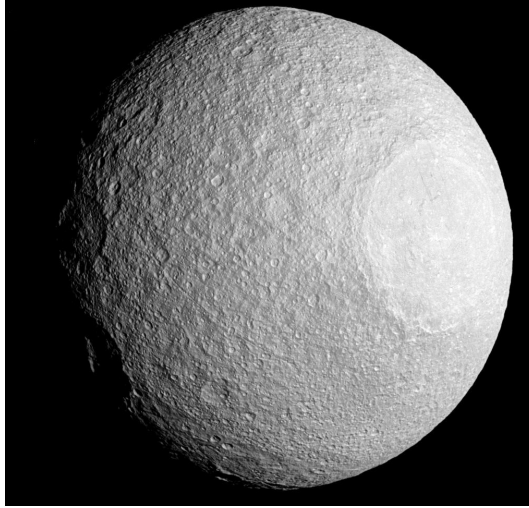
Rhea is one of Saturn's moons.

Titan is Saturn's biggest moon.  
Titan is bigger than Mercury.

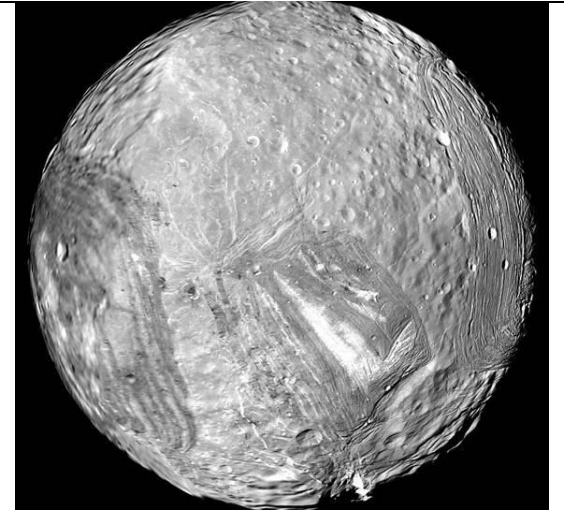




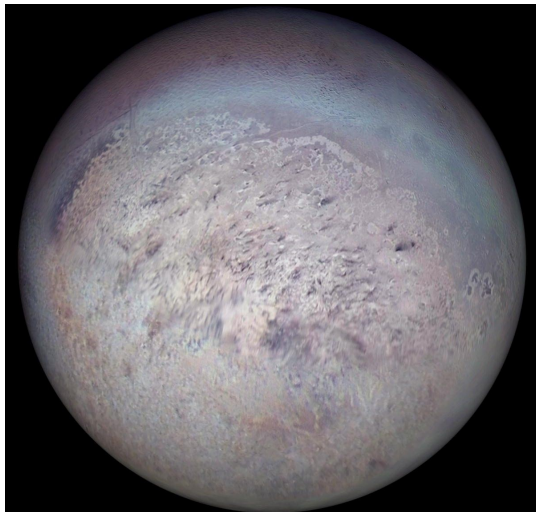
**Dione**



**Tethys**



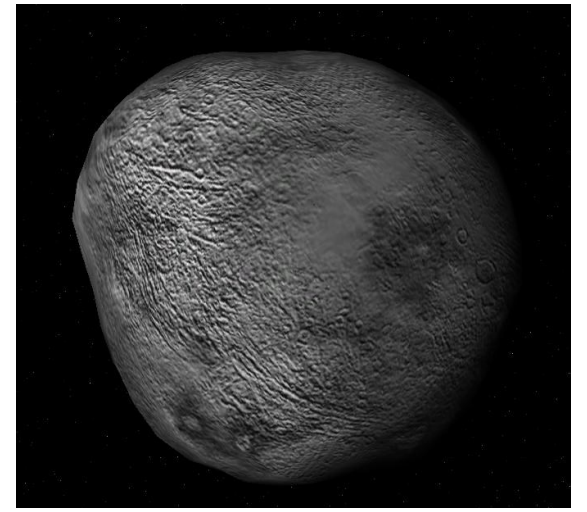
**Miranda**



**Triton**



**Proteus**



**Nereid**

Miranda is one of Uranus's moons.

Miranda has canyons 12 times deeper than the Grand Canyon on Earth.

Tethys is one of Saturn's moons

Dione is one of Saturn's moons.

Nereid is Neptune's third largest moon.

Proteus is Neptune's second largest moon.

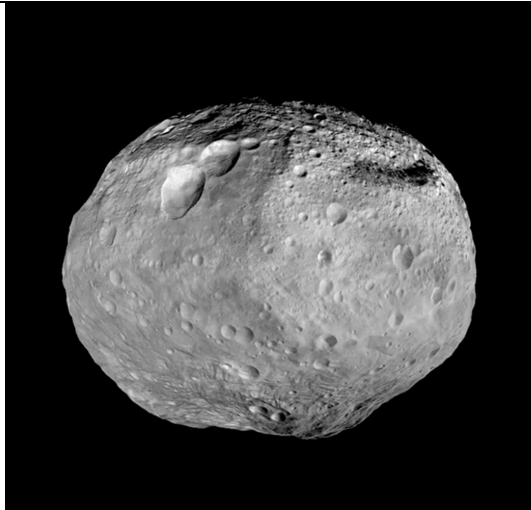
Triton is Neptune's largest moon.

Triton is one of the coldest places in our solar system.

Triton has volcanos that burst and freeze instantly. The gas and dust falls back to the surface like snow.



**Charon**



**Vesta Asteroid**



**Ida Asteroid**



**comet**



**spiral galaxy**



**stars**

Ida is an asteroid. Asteroids are made up of leftover bits and pieces of rock and metal in space that did not become planets or moons.

There are millions of asteroids in our solar system. Many are in the asteroid belt.

Asteroids orbit the sun.

Ida has it's own moon called Dactyl.

Vesta is an asteroid. Asteroids are made up of leftover bits and pieces of rock and metal in space that did not become planets or moons.

There are millions of asteroids in our solar system. Many are in the asteroid belt.

Asteroids orbit the sun.

Charon is Pluto's moon.

The same side of Charon always faces Pluto.

Charon is about half as big as Pluto.

On a clear night you can see 3,000 stars with your eyes. But there are billions more that you cannot see.

Stars are made up of hot gases.

The hottest stars shine blue, the coolest stars shine red.

After the sun, the closest star to Earth is Proxima-Centauri. Light from this star takes 4 years to reach Earth.

A galaxy is a group of stars, gas and dust held together by gravity.

Spiral galaxies are the shape of a pinwheel.

We live in a Spiral galaxy.

A comet is made up of icy gas and rock.

When a comet gets too close to the sun it begins to melt which forms a tail behind it. The tail can stretch for millions of miles.

There are billions of comets in the Kuiper Belt.



irregular galaxy



Helix Nebula



Bug Nebula



meteoroids



Pillars of Creation



elliptical galaxy

When some stars die they explode. A nebula is the leftover star dust after this explosion.

New stars are born inside the nebula. Gas and dust pull together and create young stars.

The Bug Nebula looks like a butterfly.

When some stars die they explode. A nebula is the leftover star dust after this explosion.

New stars are born inside the nebula. Gas and dust pull together and create young stars.

The Helix Nebula looks like an eye.

A galaxy is a group of stars, gas and dust held together by gravity.

An Irregular galaxy does not have a particular shape.

A galaxy is a group of stars, gas and dust held together by gravity.

An elliptical galaxy is the shape of an ellipse.

When some stars die they explode. A nebula is the leftover star dust after this explosion.

New stars are born inside the nebula. Gas and dust pull together and create young stars.

Pillars of Creation is part of the Eagle Nebula.

A meteoroid is a small piece of rock or metal flying through space. It is much smaller than an asteroid.

When a meteoroid enters Earth's atmosphere it begins to burn and glow, looking like a streak or shooting star.

Most burn up before they hit earth but some don't. If they survive and hit earth they are called meteorites.