

PLANETS

LET'S TEST OUR KNOWLEDGE

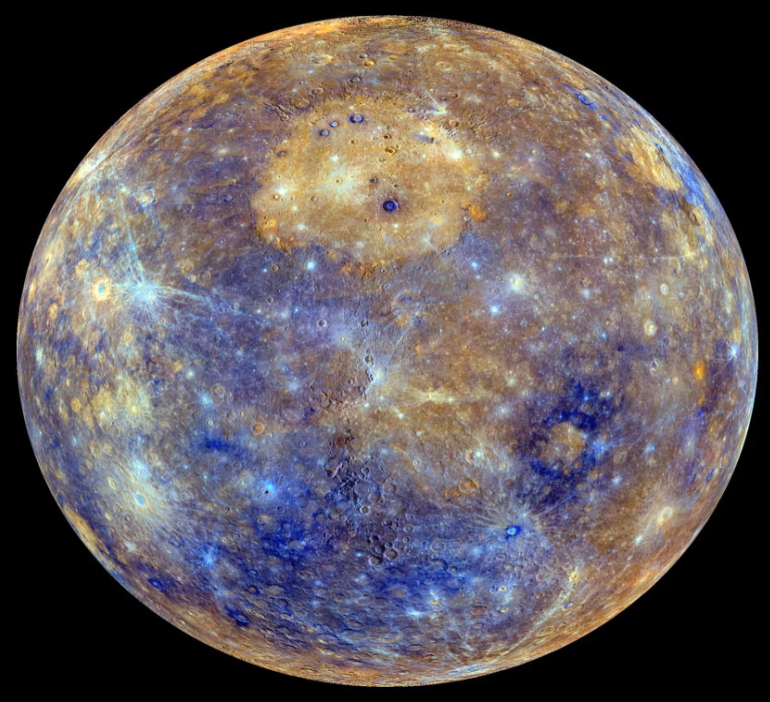
- Mercury is the smallest planet in the solar system.
- Venus is the hottest planet in the solar system because of its thick atmosphere.
- Earth is the only planet in the solar system that can sustain life.
- Mars is also known as the red planet because of its red rusty color.
- Jupiter is the largest planet in the solar system.
- Saturn is so light that it can float in water.
- Uranus is the coldest planet in the solar system.
- Neptune is the only planet in the solar system not visible to the naked eye.

HOW DO PLANETS FORM?

- Scientists think planets, including the ones in our solar system, likely emerge from the giant, donut-shaped disk of gas as well as dust. They start off as dust grains that are even smaller than human hair's width.
- Gravity and other forces cause material within the disk to collide. If the collision is gentle enough, the material fuses, growing like rolling snowballs. Over time, the dust particles combine to form pebbles which evolve into mile-sized rocks. These serve as the planet's building blocks which are sometimes called planetesimals.
- As these planetesimals orbit their star, they clear material from their path, leaving tracks of space empty. At the same time, the star gobbles up nearby gas and pushes the distant material farther away. After billions of years, the disk will have totally transformed, much of it now in the form of new worlds.



ALL ABOUT MERCURY



- Mercury has the shortest planetary revolution of about eighty eight days.
- Mercury rotates so slowly around its axis that one mercurial day is as long as fifty nine earth days.

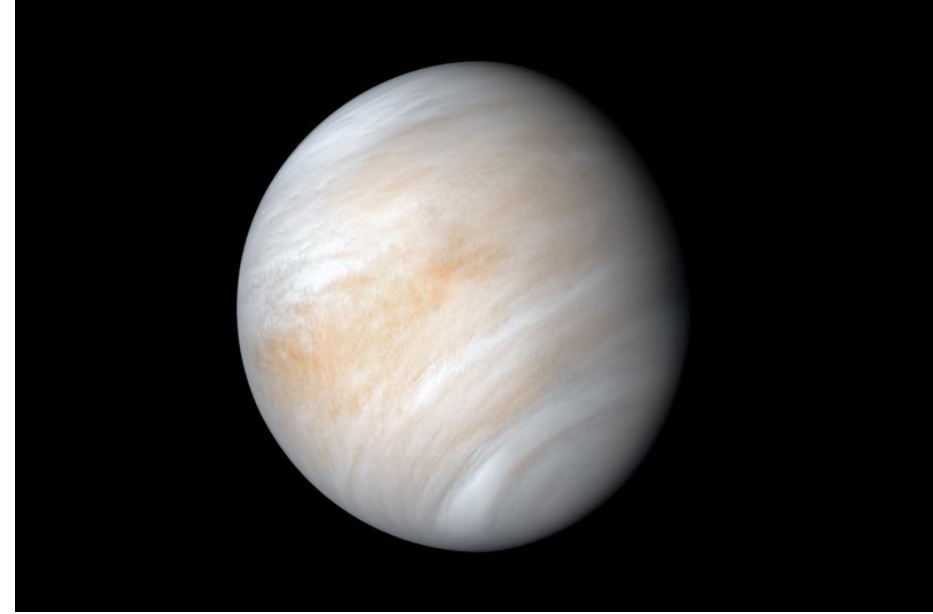
- Mercury has the greatest temperature fluctuations in the solar system.

- In an extremely slow process, Mercury is getting tinier every day. Astronomers believe that this is happening because the planet's iron core is cooling, subsequently reducing its volume.



ALL ABOUT VENUS

- It takes Venus 243 earth days to rotate once on its axis and 224 days to complete one orbit of the Sun.
- Venus orbits the sun in the anticlockwise direction but rotates on its axis in the clockwise direction.



- Venus is sometimes called Earth's sister planet because it has similar to our planet in mass and size.
- Venus is referred to both as the morning star as well as the evening star because it is visible in the sky at sunrise as well as sunset.

ALL ABOUT EARTH



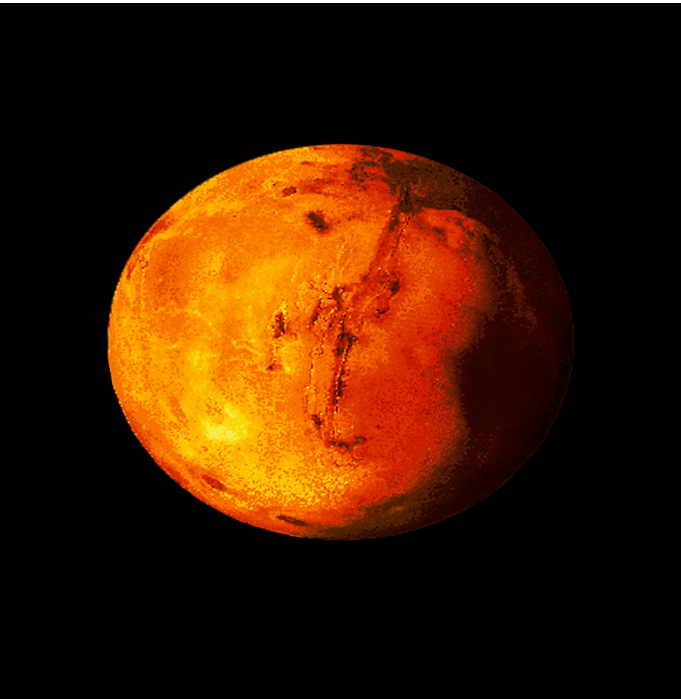
- Earth is the only planet in the solar system that has an atmosphere which is rich in oxygen along with other gases.
- Earth's oceans have approximately twenty million tons of gold in them.

- Earth's gravity is not the same everywhere because our planet is not a perfect sphere.
- Earth's molten core creates a magnetic field that is called the magnetosphere. Without this region, particles from the Sun's solar wind would hit the Earth directly, exposing the surface of the planet to significant amounts of radiation.



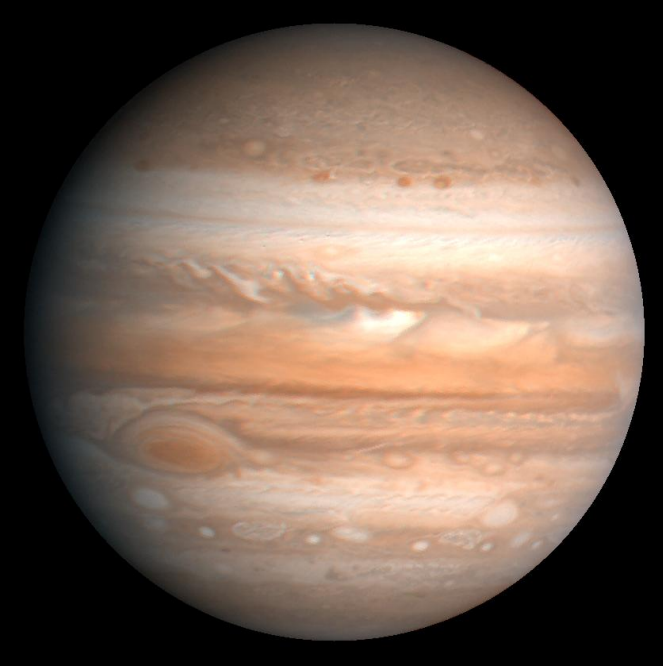
ALL ABOUT MARS

- Mars is home to both the highest mountain, Olympus Mons and the deepest, longest valley, Valles Marineris in the solar system.
- During the day, the martian sky is pinkish red and during the sunset, the martian sky is a blue tint.



- Mars is the only other planet besides Earth that has polar ice caps. In addition to this, water ice has also been found under the Martian ice caps.
- The Mars dust storms are the largest in the solar system, capable of blanketing the planet and lasting for various months.

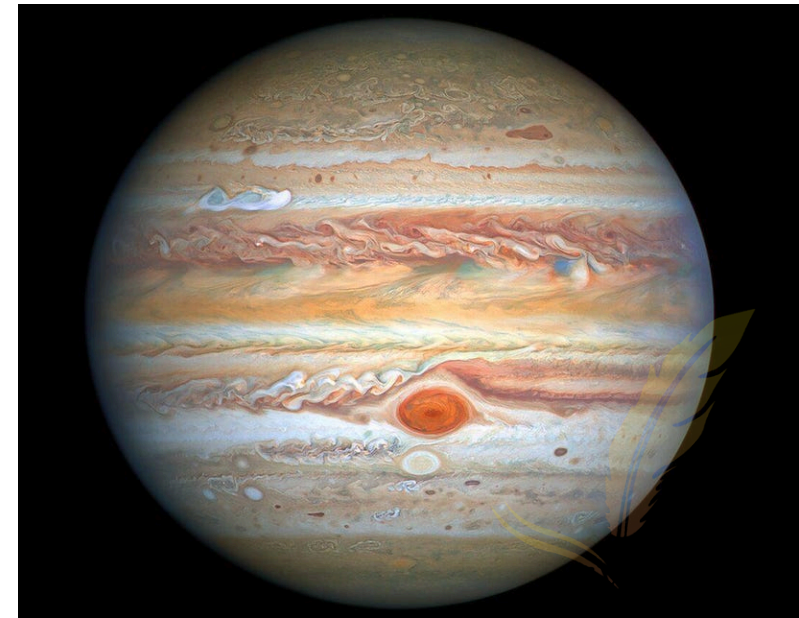
ALL ABOUT JUPITER



- Jupiter's surface has the Great Red Spot, a giant storm that has been observed for more than three hundred years.
- Jupiter is the fastest spinning planet in the entire solar system so it has the shortest day out of all the planets.

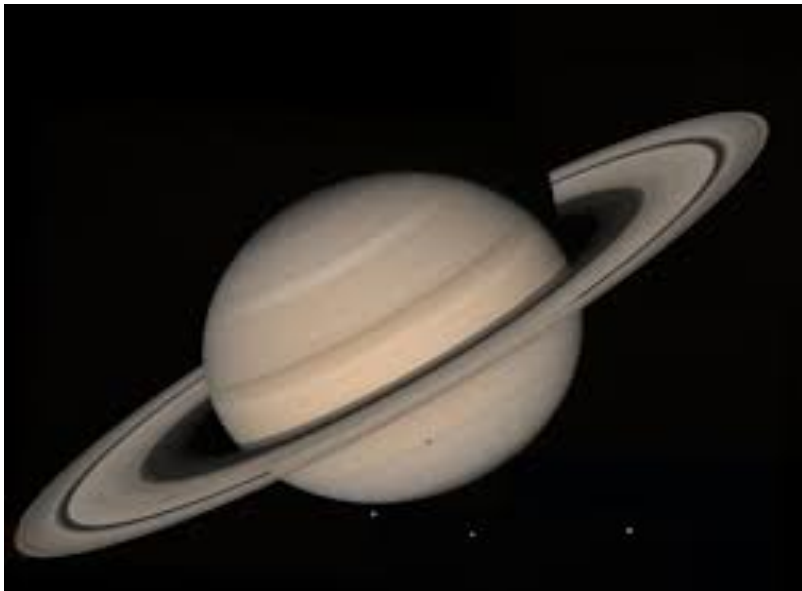
- Jupiter has a thin ring system which was discovered only recently because it is so faint.

- Jupiter's familiar stripes are actually cold, windy clouds of ammonia as well as water floating in an atmosphere of hydrogen as well as helium.



ALL ABOUT SATURN

- Saturn appears a pale yellow color because its upper atmosphere contains ammonia crystals.
- One cannot stand on Saturn because it is a gas giant so it does not have a solid surface.

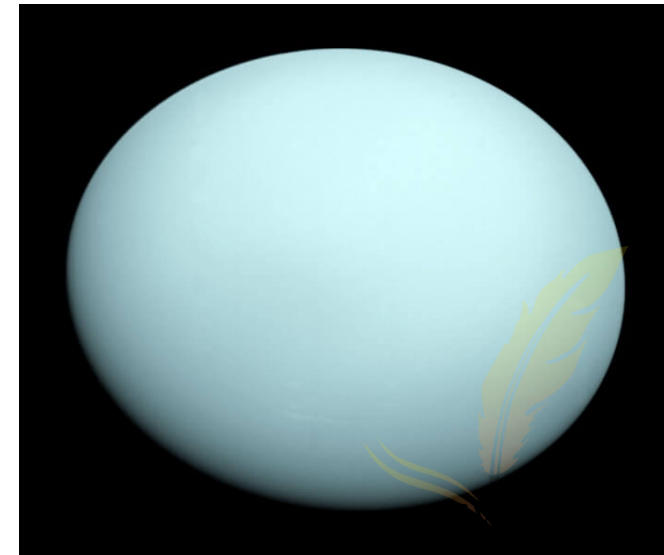


- Saturn is the farthest planet that can be seen with the naked eye.
- The most common nickname for Saturn is “The Ringed Planet” that arises from the large ring system that encircles the planet. These rings are mostly made from ice chunks and carbonaceous dust. They have an impressive length but hardly any width.

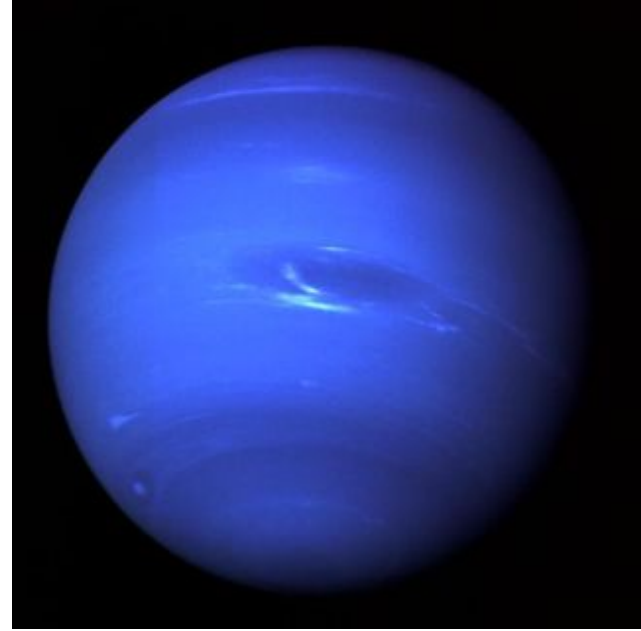
ALL ABOUT URANUS



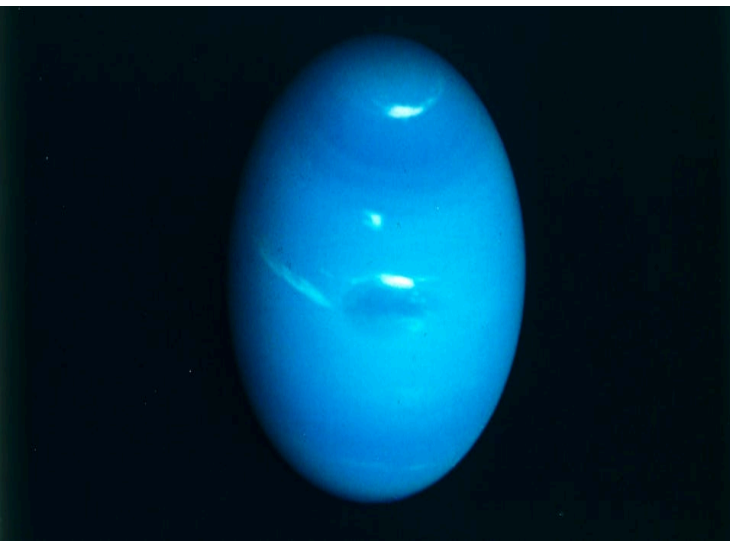
- Uranus was the first planet discovered after the invention of the telescope.
- Uranus appears bluish in colour because methane gas in its atmosphere absorbs all the red light.
- Unlike other worlds, Uranus is tilted so much that it essentially orbits the sun on its side, with the axis of its spin nearly pointing at the star.
- Uranus's strange tilt produces extreme seasonal variations especially at the poles.



ALL ABOUT NEPTUNE



- Neptune has the fastest winds in the solar system.
- Neptune's moon, Triton, is the only moon in the solar system that circles its planet in the opposite direction to the planet's rotation.



- Neptune was visited once by a spacecraft.
- The Great Dark Spot is a huge spinning storm in Neptune's southern atmosphere which is about the size of the entire Earth.

Do you believe
in aliens?

Have you ever seen
any movies about
aliens?

ALIENS

Have you heard
about any UFO
sightings?

Do you think we will
know when we seen
an alien?



ASSIGNMENT

- Choose from the following two topics:
 - Imagine that you are a scientist and you have recently observed alien life on another planet. How will you inform the world about your discovery?
 - Imagine that you discover that your best friend is an alien. What will your reaction be like? What will your next steps be in this situation?
- Your submission can be in the form of any song, poem, drawing, paragraph etc. that you have created and wish to share with the rest of us.
- Submit your assignment by Wednesday evening.

