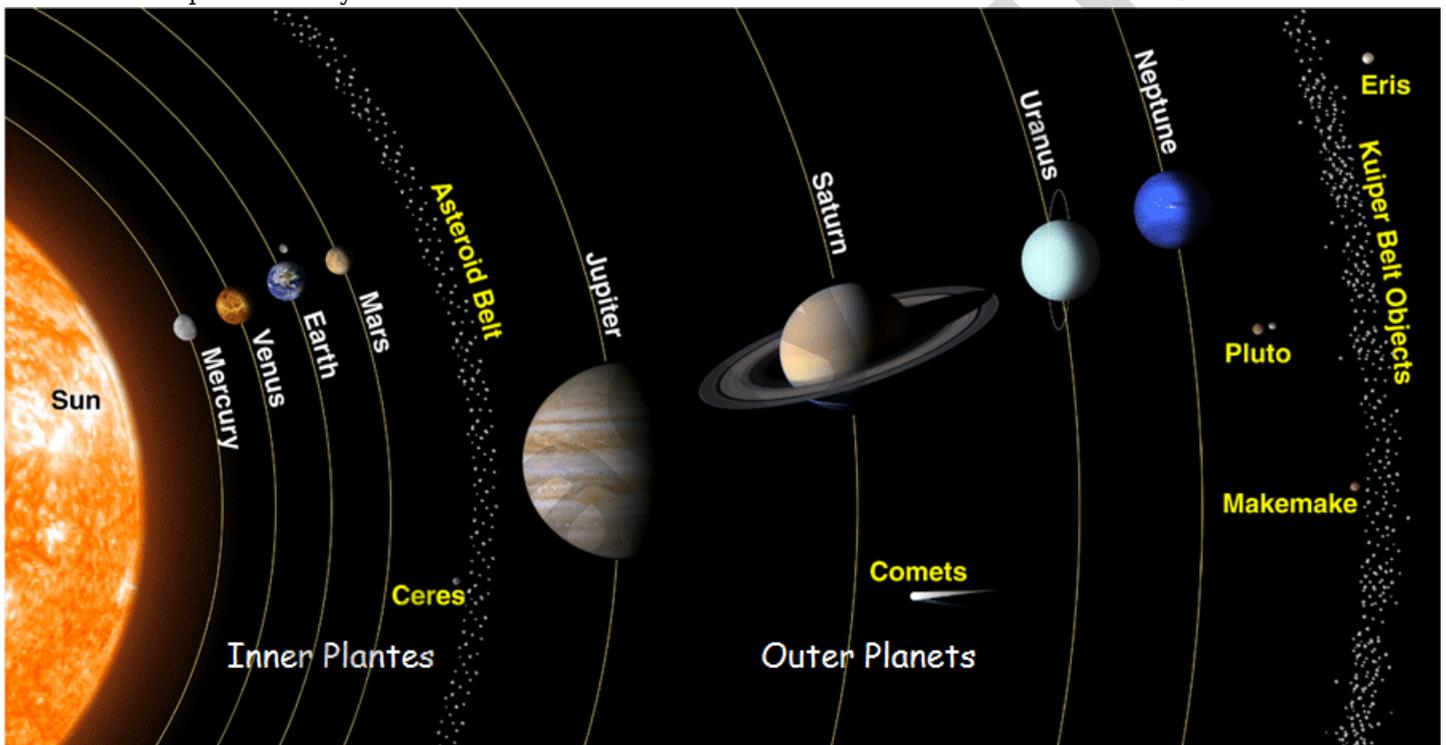


Explain and Write down the similarities between Inner and Outer Planets.

The eight planets in our Solar System are divided into two groups - the inner planets and the outer planets. The inner planets are the first four planets closest to the Sun, which includes Mercury, Venus, Earth, and Mars. The outer planets are Jupiter, Saturn, Uranus, and Neptune. The inner and outer planets are separated by the asteroid belt, which is a region of space where thousands of asteroids can be found. Now let's see similarities between Inner and Outer Planets.

Similarities Between Inner and Outer Planets

1. Both revolve around the sun.
2. Both have moons.
3. Both are spherical in shape.
4. Both orbit on the same planet
5. Both make up the solar system.



Differences Between Inner and Outer Planets

| S.No. | Inner Planets | Outer Planets |
|-------|-------------------------------|--------------------------------------|
| 1 | Closer to the Sun. | Further away from the sun. |
| 2 | Smaller and rockier | Larger and are made up mostly a gas. |
| 3 | Have a solid surface. | Has balls of gas; no solid surface. |
| 4 | Spins slowly | Spins quickly |
| 5 | Have few moons | Has a lot of moons. |
| 6 | Have no rings. | Has rings. |
| 7 | Have a greater density. | Has a smaller density. |
| 8 | Are inside the asteroid belt. | Are outside the asteroid belt. |
| 9 | Have a varied atmosphere. | Have a similar atmosphere. |

| | | |
|----|------------------------|-----------------------|
| 10 | Orbit the Sun quickly. | Orbit the Sun slowly. |
|----|------------------------|-----------------------|

Inner Planets

The inner planets and outer planets are characterized by different features. The 4 inner planets are called terrestrial planets because they have a solid surface and are similar to Earth. These planets are composed of heavy metal, such as iron and nickel and have few or no moons.

Mercury, the smallest planet, has no moons and is comprised mostly of iron and nickel. It is one of the densest planets in the Solar System. Venus, known for its brightness, has a rocky surface similar to the Moon, which is hidden by its thick yellow atmosphere. Like Mercury, Venus has no moon. Earth is a rocky planet with a molten core, an atmosphere that allows life to flourish, and only one moon. The last inner planet, Mars, has two moons called Phobos and Deimos. It is a rocky planet with a red color caused by a high concentration of iron in the rocks that comprise the surface.

Outer Planets

The outer planets, also called Jovian planets or gas giants, are gaseous with no solid surfaces and only liquid cores. The outer planets are so much larger than the inner planets that they comprise 99% of the mass of the celestial objects orbiting our Sun. All of the outer planets have rings, although Saturn's are the most noticeable.

Jupiter is distinctive for a number of reasons. In addition to being the largest and most massive planet, it also has the most moons — 63 discovered so far. Jupiter's rings are very faint and difficult to see. Saturn is best known for its distinctive ring system, which can be seen from Earth by the naked eye. Uranus, which is the only planet to rotate on its side, has 27 known moons. Many satellites have names from mythology, but Uranus's moons are named after characters from the works of Alexander Pope and Shakespeare. Some of the satellites are Titania, Oberon, and Umbriel. Neptune is the last outer planet and the final planet in the Solar System. With only 13 moons, it has the least number of satellites of any of the outer planets.