



GRADE:

GROUP:



Our solar system is one of over 500 known solar systems in the entire Milky Way galaxy. The solar system \_\_\_\_\_ being about 4.5 billion years ago, when a cloud of interstellar gas and dust collapsed, resulting in a solar nebula, a swirling disc of material that \_\_\_\_\_ to form the solar system. The solar system is located in the Milky Way's Orion star cluster. Only \_\_\_\_\_ of stars in the galaxy host planetary systems, and one of those stars is our own sun.

Revolving around the \_\_\_\_\_ are eight planets. The planets are divided into two categories, based on their composition, Terrestrial and Jovian. Terrestrial planets including Mercury, Venus, Earth, and Mars, are primarily made of rocky material. Their \_\_\_\_\_ are solid, they don't have \_\_\_\_\_ systems, they have very few or no \_\_\_\_\_, and they are relatively small.

The smallest and closest to the sun is Mercury, which has the shortest orbit in the solar system at about three Earth months. Venus is the \_\_\_\_\_ planet, with temperatures of up to \_\_\_\_\_ degrees Fahrenheit, due to an atmosphere of \_\_\_\_\_ and extensive lava flows.

Next to this world of fire is a world of water, Earth. The water systems on this planet help create the only known environment in the universe capable of sustaining life.

The last of the terrestrial planets, Mars, might have also supported life about 3.7 billion years ago, when the planet had a watery \_\_\_\_\_, and moist atmosphere. Beyond the four Terrestrial planets of the inner solar system lie the Jovian planets of the outer solar system. The Jovian planets include gas giants Jupiter and Saturn and \_\_\_\_\_ giants Uranus and Neptune. The gas giants are predominantly made of \_\_\_\_\_ and \_\_\_\_\_, and the ice giants also contain rock, ice, and a liquid mixture of water, methane, and ammonia. All four Jovian planets have multiple moons, sport ring systems, have no solid surface, and are immense.

The largest Jovian is also the largest planet in the solar system, Jupiter. Nearby is Saturn, the solar system's second largest planet. Its signature rings are wide enough to fit between \_\_\_\_\_ and the moon, but are barely a kilometer thick.

Past Saturn are the \_\_\_\_\_ Uranus and Neptune. The slightly bigger of these ice giants, Uranus, is famous for rotating on its side. Next to Uranus is Neptune, the outermost planet in the solar system, and also one of the coldest. \_\_\_\_\_ the Terrestrial planets is the \_\_\_\_\_, a flat disc of rocky objects, full of remnants from the solar system's formation. From microscopic dust particles, to the largest known object, the dwarf planet, Ceres.

Another disc of space debris lies much further out, and orbits the Jovian planets, the icy Kuiper Belt. Apart from \_\_\_\_\_, the Kuiper Belt is also home to dwarf planets, such as Pluto, and is the birthplace of many comets. Beyond the Kuiper Belt is the Oort Cloud, a vast, spherical collection of icy debris. It is considered the edge of the \_\_\_\_\_ since that is where the gravitational and physical influences of the sun end.

Our solar system's particular configuration of planets and other \_\_\_\_\_, all revolving around a life-giving star, make it a special place to call \_\_\_\_\_.