

asteroid -- a large rock in outer space that orbits the sun (Many asteroids are found in an asteroid belt between Mars and Jupiter.)

astronomer -- a scientist who studies and observes space

atmosphere -- the gases that surround a planet

comet -- a frozen chunk of ice, dust, and gases that orbits the sun (When near the sun, a “tail” of gas and dust particles form pointing away from the sun.)

dwarf planet -- a celestial body that orbits the sun and is massive enough to assume a nearly spherical (round) shape, but does not clear other bodies from the neighborhood around its orbit and is not a satellite of a planet

gas giant -- a large planet made of gases (Jupiter, Saturn, Uranus, and Neptune)

gravitational pull -- The attraction that one object has for another object due to the invisible force of gravity. The gravitational pull of the sun causes the Earth to revolve (orbit) around it. The gravitational pull of the Earth causes the moon to revolve (orbit) around it.

inner planets -- the planets closest to the sun (Mercury, Venus, Earth, and Mars)

moon -- a natural satellite of a planet because it orbits the planet (Planets with moons: Earth, Mars, Jupiter, Saturn, Uranus, and Neptune.)

orbit -- path an object takes when revolving around another object

outer planets -- the planets farthest from the sun (Jupiter, Saturn, Uranus, and Neptune)

satellite -- a natural or manmade object that revolves (orbits) another object of larger size

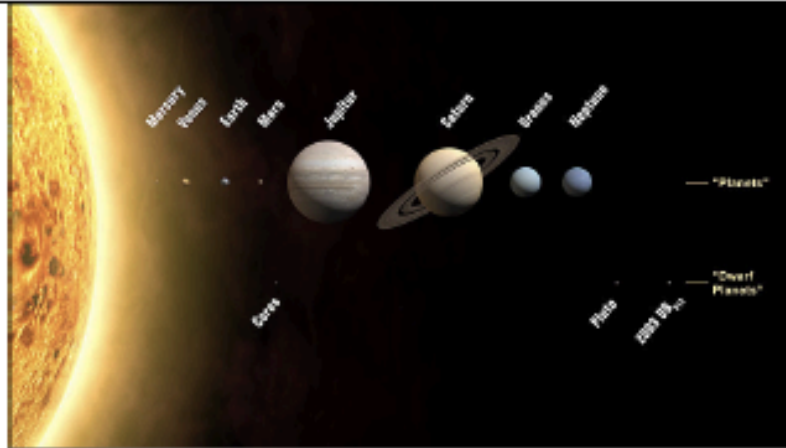
solar system -- a star and all the satellites that orbit it

sun – the central star in our solar system

star – a large ball of glowing gas that gives off thermal (heat) and radiant (light) energy

terrestrial planets – planets made of rocks (Mercury, Venus, Earth, and Mars)

Planets (ordered from the sun)	Planet Facts
Inner Planets (Terrestrial Planets)	
Mercury	The smallest planet in our solar system, Mercury is less than half the size of Earth. It is the closest to the sun and is a small, heavily cratered terrestrial planet. <i>It only takes Mercury 88 days to revolve around the sun. During the day, Mercury is hotter than the hottest desert on Earth (daytime high of 427° Celsius). At night it is colder than Antarctica (night low of 184° Celsius). Mercury is a terrestrial planet because it is made of rock.</i>
Venus	The second planet from the sun, Venus is a terrestrial planet. <i>It has a permanent blanket of clouds that traps so much heat that the temperatures on its surface can melt lead. It is sometimes called the Earth's twin because it is about the same size as Earth. Venus rotates so slowly that a day on Venus is longer than a year on Venus.</i>
Earth	The third planet from the sun is also the largest of the inner planets. Earth's atmosphere, the liquid water, and its distance from the sun makes Earth a haven for life. The Earth has one moon. Earth is a terrestrial planet.
Mars	Mars is the fourth planet from the sun and is a terrestrial planet. <i>Its atmosphere is thin. There is a vast network of canyons and riverbeds. It is known as the "red planet". Scientists hypothesize that Mars once supported a wet, warm Earth-like climate. Mars has two moons.</i>
Outer Planets (Gas Giants)	
Jupiter	Jupiter is the fifth planet from the sun. It is the largest planet in the solar system and is considered a gas giant. Jupiter has no solid surface. <i>Jupiter is so large that all the other planets together could fit inside it easily. Winds move clouds around its atmosphere at high speeds. Scientists think that the Great Red Spot on Jupiter is a storm. Jupiter has 63 moons and a system of at least three thin rings.</i>
Saturn	Saturn is the sixth planet from the sun and the second largest planet in the solar system. Saturn is a gas giant. <i>At one time, scientists thought that Saturn was the only planet with rings. They now know that all four gas giants (Jupiter, Saturn, Uranus, and Neptune) have rings. Saturn has 61 moons.</i>
Uranus	The seventh planet from the sun, Uranus is a gas giant. <i>Uranus has a system of at least 13 rings and at least 27 moons.</i>
Neptune	The eighth planet from the sun, Neptune appears blue through a telescope and is a gas giant. <i>Neptune has dark spots on it that scientists think are storms. Neptune has a system of at least 5 rings and has at least 13 moons.</i>



What about Pluto?

Pluto is no longer included in the list of planets in our solar system due to its small size and irregular orbit. August 24, 2006, Pluto's status was officially changed from planet to dwarf planet by the International Astronomical Union (IAU). Pluto is smaller than seven moons in our solar system and cannot be seen without a telescope.

If Pluto is a dwarf planet are there others?

Other dwarf planets include Ceres and UB313, given the name Eris.

What is the difference between dwarf planets and planets?

A dwarf planet has not "cleared the neighborhood" around its orbit, which means it has not become gravitationally dominant, and it shares its orbital space with other bodies of similar size.

Planets – Smallest to Largest

- Mercury
- Mars
- Venus
- Earth
- Neptune
- Uranus
- Saturn
- Jupiter

Planets – Largest to Smallest

- Jupiter
- Saturn
- Uranus
- Neptune
- Earth
- Venus
- Mars
- Mercury