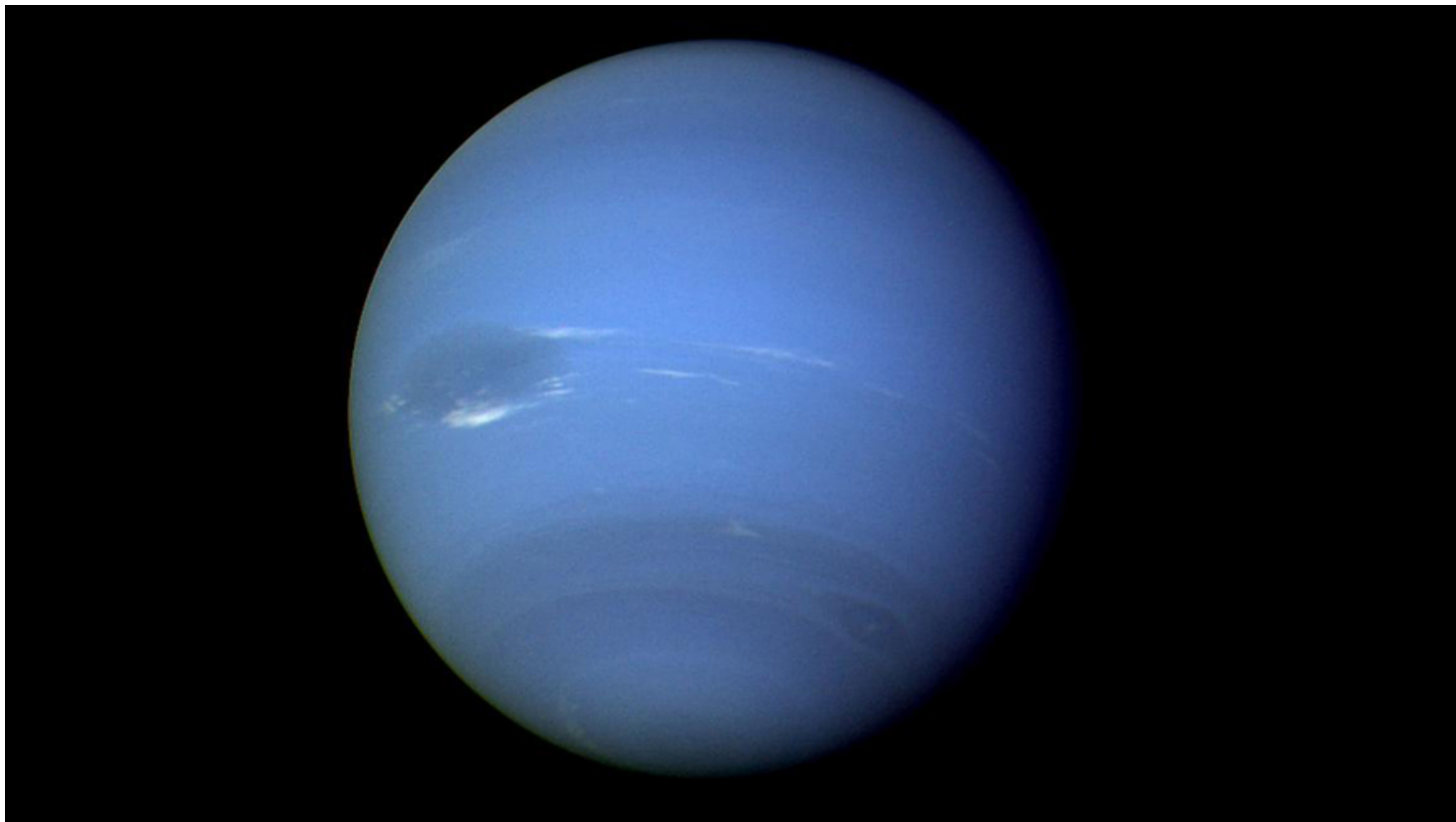


Exploring The Planets: Neptune

By Encyclopaedia Britannica, adapted by Newsela staff on 09.01.17

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Neptune has a deep-blue color. For this reason it was named for Neptune, the ancient Roman god of the sea. Photo from: NASA/JPL.

The last of the eight planets in our solar system is Neptune. This planet is the farthest from the sun. It is more than 2.5 billion miles from Earth, too far away to be seen with the naked eye. Neptune is a huge, stormy world. It has the fastest winds in the solar system.

After Uranus, Neptune was the second planet to be discovered through a telescope. It was the first planet to be found by people searching for one. In the 1800s several scientists were studying Uranus. They noticed that the planet did not move along its orbit exactly as expected. They thought these differences might be caused by gravity, a pulling force, from another planet. So the scientists began looking for a planet beyond Uranus. This was how they found Neptune.

The new planet was named Neptune because of its deep-blue color. Neptune was the ancient Roman god of the sea.

Physical Features

Neptune is nearly as big as its inner neighbor, Uranus. The distance through the planet's center is about 31,000 miles. That makes it about four times wider than Earth.

Neptune is a kind of planet called a gas giant. Jupiter, Saturn and Uranus are also gas giants. These four planets are made up mostly of gases. Neptune is mostly hydrogen and helium gas. It also has a small amount of methane gas. This methane is what makes Neptune appear blue. The planet has no solid surface. However, scientists think that Neptune has hot, thick liquids deep inside it.

Neptune is surrounded by narrow rings made of dust. The rings are not as large as the planet Saturn's.

At least 13 moons orbit Neptune. The planet's largest moon is called Triton. It is nearly as big as Earth's moon. Scientists believe that Triton might have formed as its own planet. However, they think that Neptune's gravity pulled Triton into its orbit.

Orbit And Spin

A year is the amount of time it takes a planet to make one full trip around the sun. An Earth year is 365 days. A year on Neptune is much longer. It lasts about 165 Earth years! That is because Neptune is much farther from the sun than Earth. Its trip around the sun takes much longer.

Neptune spins rapidly. A single day is equal to the time it takes a planet to make a full rotation. That is one complete spin, or turn, of the planet. Earth takes 24 hours to make one full rotation. Neptune only takes about 16 hours.

Observations And Exploration

Neptune is a huge planet. However, it is so far away that it is hard to see without a telescope. In 1846 the scientist Johann Gottfried Galle discovered Neptune using a telescope.

Only one spacecraft has visited Neptune. The U.S. spacecraft Voyager 2 flew by the planet. That was in 1989.

