

# [Mercury](https://assignbuster.com/mercury/)

Mercury   
Mercury is the closest planet to the sun. It's average distance from   
the sun is approximately fifty-eight million km and it's diameter is 4875 km,   
making it the second smallest planet in our solar system. It's volume and mass   
are about 1/18 that of the earth and it's average density is approximately equal   
to that of the earth. Mercury's magnetic field is one-hundred times weaker than   
that of Earth's. Mercury has the shortest revolution of all the planets in our   
solar system and revolves around the sun in about eighty-eight days. Radar   
observations of the planet show that its period of rotation is 58. 7 days, or   
two-thirds of its period of revolution. That means that Mercury has one and   
one-half days in it's year.

Mercury doesn't have an atmosphere, but it does have a thin layer of   
helium. The helium is actually solar wind that is trapped by Mercury's weak   
gravity. Scientists think that collisions with protoplanets early in the   
history of the solar system may have stripped away lighter materials, making   
Mercury a very dense planet with an iron core extending outwards 4/5 of the way   
to the surface.

Mercury bares a very similar resemblance to our moon because it has a   
lot of craters. The craters, which cover seventy-five percent of Mercury's   
surface, were formed by huge rocks that smashed into the planet's surface. The   
largest crater is called the Caloris Basin and it is 1400 km in diameter and is   
flooded with molten lava. Mercury also has many cliffs that are usually over   
300 miles long and two miles high. The rest of the planet's surface is smooth   
and may have been formed by lava flowing out of cracks in the surface.

Temperatures on Mercury vary greatly because of it's closeness to the   
sun. The surface temperature on the sunlit side is about 430 degrees Celsius,   
while the dark side may reach temperatures of -170 degrees Celsius..

Mercury was a difficult planet to study before the invention of the   
telescope. Even then, you could only see Mercury in the morning and evening.

Then the Mariner 10 was built in the 1970's to go observe Mercury. The Mariner   
10 spacecraft passed Mercury twice in 1974 and once in 1975 and it took hundreds   
of pictures of the planet. After this, the Mariner 10 came too close to the sun   
and is now orbiting the sun.

Mercury has no known moons and it also has a double sunrise at   
perihelion (the point closest to the sun). Mercury also has the widest   
temperature range (500 degrees between coldest and hottest) of all the planets.

But even with all this information, scientists still don't know that much about   
Mercury.