# Mercury



Figure Mercury from Mariner 10

## How big is Mercury

Mercury is 4879 km across. Mercury's diameter is just less than half the diameter of the Earth. It is the smallest planet in the Solar System. Only dwarf planets like Pluto are smaller. Mercury's small size and its closeness to the Sun sometimes make it difficult to see without a telescope or binoculars. The best time to spot Mercury in the sky is just after the sun goes down at night or shortly before it rises in the morning.

## How long is a year on Mercury

Mercury has the shortest year in the Solar System. It is about 88 Earth days long.

It used to be believed that the same side of Mercury always faced the Sun. In order for this to be true, Mercury would have to take the same amount of time to rotate (spin around) as it does to circle the sun. Through careful observation we now know that Mercury's rotation is somewhat faster than its orbit. Because of the way the orbit and rotation work together, on Mercury, a day is actually almost twice as long as a year.

## What is Mercury Made of

The center of Mercury is made of iron in partly-molten (liquid) form. We know that it is iron at the center because the planet generates a magnetic field. It contains more iron for its size than any other planet in the Solar System. The rest of Mercury, its thick crust, is made of a special type of rock called *silicate rocks*. There are craters near the poles that are constantly in shadow. Some of these craters contain ice. There is a huge crater on Mercury called Caloris Basin. It was formed when a comet hit the planet and *lava* or molten rock filled the impact crater. The round wall of this crater is over 2km tall.

## Mercury Facts



* Mercury orbits around the Sun faster than any other planet.
* Mercury's surface temperature can vary from -180°C (-300°F) to 430°C (800°F). On Earth, the hottest temperature was recorded at 58°C (136°F).
* There may be ice on the top and bottom of Mercury.