

All About Mercury

- Mercury is the closest planet to the Sun and smallest in our solar system.
- The planet is named for Mercury, the Roman messenger of the gods.
- Mercury spins once on its axis each 59 days and orbits the Sun once every 88 days (1 Mercury year). So Mercury rotates three times in two (Mercury) years, making the length of one day and night 176 Earth days long!
- Mercury has no moon.
- We know very little about Mercury. Only the Mariner 10 spacecraft has visited (1974), taking ~10,000 images – but we've still never even seen half of the surface!
- In general, Mercury's surface resembles that of the Earth's Moon.
- Over half of Mercury's surface is covered with impact craters.
- Mercury has one of the largest impact basins in our solar system - Caloris Basin! It is a huge circular basin about 1300 kilometers (810 miles) in diameter that formed when an asteroid struck Mercury.
- Scientists think Mercury actually shrank as it cooled internally. Long scarps, or cliffs, occur on the surface, interpreted as layers that crumpled and broke and rode over each other as the planet shrank.
- Mercury has an internal magnetic field, similar to but weaker than Earth's. The cause is a mystery – is it because Mercury has such a huge iron core? Because it has a partially molten core?
- Mercury's gravity is about one-third of the Earth's gravity. Everyone would weigh less on Mercury! ☺
- Mercury's atmosphere is so thin that it is barely detectable; any atmosphere is lost from the planet because of solar activity.
- The side of the planet Mercury that faces the Sun gets very hot (greater than +800° F), and the side that faces away from the Sun gets very cold (nearly 300° F below zero!). Its temperature range is so extreme, in part, because there is no atmosphere to help moderate it.
- Sunlight on Mercury's surface is 6.5 times as intense as it is on Earth.
- The MESSENGER spacecraft that left Earth in August of 2004 will go into orbit around Mercury in 2011. It will study the planet and take new pictures from space. MESSENGER will help us learn more about Mercury's formation and geologic history.