

# Earth in the Solar System

## Key Ideas

- The solar system consists of the sun; the planets; their satellites, or moons; the asteroids; and the comets.
- There are eight planets: Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus, and Neptune.
- The moon revolves around Earth every 27 days and appears to go through phases.

### GED® TEST TIP

*Some Science Test questions are based on detailed charts similar to the one on this page. Read the question carefully and select only the specific information needed to answer the question.*

The solar system consists of the sun, a star; the planets; their satellites, or moons; the asteroids, sometimes called the minor planets; and the comets. The sun contains more than 99 percent of the mass (amount of matter) in the solar system, and all the other celestial bodies revolve around it, held by the force of gravity.

The eight planets of the solar system include (in order from the sun) Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus, and Neptune. Mercury, Venus, Earth, and Mars are called the **inner planets** because they are relatively close to the sun. They are all small, rocky planets. Jupiter, Saturn, Uranus, and Neptune are called the **outer planets** because of their great distance from the sun. The outer planets are gas giants. Some facts about the planets are presented in the following chart.

The Planets of Our Solar System

Planet	Distance from sun	Diameter	Number of moons	Rotation period (day)	Revolution period (year)
Mercury	36 million mi	3,030 mi	None	59 Earth days	88 Earth days
Venus	67 million mi	7,500 mi	None	243 Earth days	225 Earth days
Earth	93 million mi	7,923 mi	1	23 hr 56 min 4.1 sec	365 days 5 hr 48 min 46 sec
Mars	142 million mi	4,210 mi	2	24 hr 37 min	687 Earth days
Jupiter	484 million mi	88,700 mi	50	9 hr 51 min	11.86 Earth years
Saturn	0.9 billion mi	75,000 mi	53	10 hr 14 min	29.46 Earth years
Uranus	1.8 billion mi	31,600 mi	27	17 hr 12 min	84 Earth years
Neptune	2.8 billion mi	30,200 mi	13	16 hr 7 min	164.8 Earth years

Earth is unusual among the planets in that about 70 percent of its surface is covered by water. It is the only celestial body in the solar system on which life is known to exist. Earth's rocky satellite, the moon, is the fifth largest satellite in the solar system. It has no atmosphere, but it does have some surface ice, which was discovered in 1998. The moon revolves around Earth once every 27 days. During the lunar month, the moon appears to go through a series of **phases**—changes in the proportion of its surface that is in shadow. The cycle of phases takes approximately 29 days. U.S. astronauts landed on the moon in several missions from 1969 to 1972, making it the only celestial body visited by crewed spacecraft.