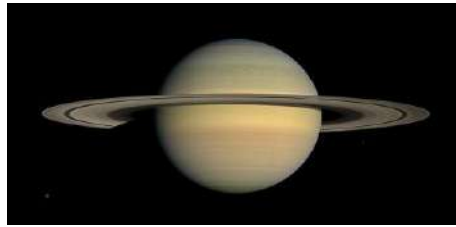


NAME _____

ABOUT SATURN ♄



Saturn is the sixth planet from the Sun and the second largest planet in the Solar System, after Jupiter. Named after the Roman god Saturn, who was the god of the agricultural and harvest. Saturn's astronomical symbol (♄) represents the god's sickle. Saturn is a gas giant with an average radius about nine times that of Earth and takes 29.5 years to orbit the Sun. While only 1/8 the average density of Earth, with its larger volume Saturn is just over 95 times more massive than Earth.

Sixty-two known moons orbit the planet; fifty-three are officially named. *Titan*, Saturn's largest and the Solar System's second largest moon is larger than the planet Mercury and is the only moon in the Solar System to retain a substantial atmosphere. In 2004, the space probe *Cassini* captured radar images of large lakes and their coastlines with numerous islands and mountains.

Saturn is probably best known for its system of planetary rings, which makes it the most visually remarkable object in the solar system. The rings extend from 6,630 km to 120,700 km above Saturn's equator, average approximately 20 meters in thickness and are composed of 93% water ice and 7% amorphous carbon. The particles that make up the rings range in size from specks of dust up to 10 meters. There are two main theories regarding how the rings came to be. One theory is that the rings are remnants of a destroyed moon of Saturn which spread and flattened over time. The second theory is that the rings are left over from the original nebular material from which Saturn formed. It is known that some ice in the central rings comes from the moon *Enceladus*' ice volcanoes.

Questions about Saturn

1. What was Saturn named after? What does Saturn's symbol represent?

2. How does Saturn's mass compare to the Earth's mass?

3. How many moons does Saturn have? What is the largest? What did the Cassini space probe discover?

4. What are Saturn's rings made out of? How did Saturn get its rings?

5. Where does some of the ice of the rings come from?
