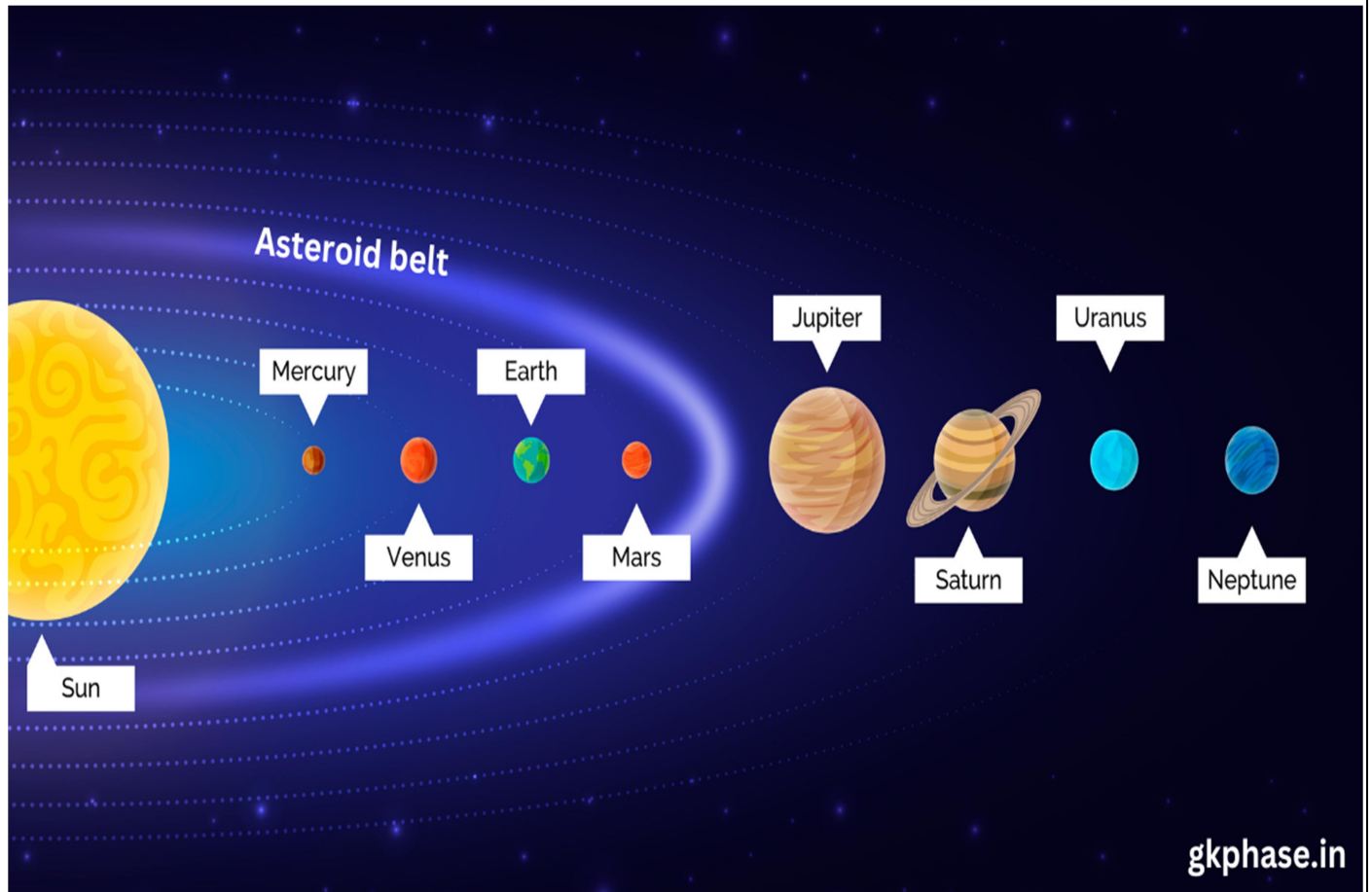


COMPONENTS OF SOLAR SYSTEM

ASTEROIDS



Asteroids are rocky objects that orbit the Sun, mostly found in the asteroid belt between the planets Mars and Jupiter. They are like small planets, but much smaller. Some asteroids are as tiny as pebbles, while others can be as large as mountains. They come in different shapes and sizes. Asteroids are made of rock, metal, and sometimes ice. They can vary in color, from dark gray to light brown. Sometimes, asteroids collide with each other or with planets, creating craters on their surfaces. Scientists study asteroids to learn more about the history of our solar system and to understand how planets formed.

SOME FACTS ABOUT ASTEROIDS

- 1. Rocky Remnants:** Asteroids are rocky objects that orbit the Sun. They are leftover pieces from the early formation of the solar system, which didn't come together to form planets.
- 2. Many Sizes:** Asteroids come in various sizes, ranging from small rocks to objects hundreds of kilometers across. Some are so tiny they look like grains of sand, while others are large enough to have their own moons.
- 3. Asteroid Belt:** Most asteroids are found in a region of the solar system called the asteroid belt, located between the orbits of Mars and Jupiter. This belt is like a cosmic highway filled with millions of asteroids.
- 4. Close Encounters:** Sometimes, asteroids come close to Earth. These are called near-Earth asteroids. Most of them don't pose a threat, but some can potentially collide with our planet. Scientists closely monitor these asteroids to understand their movements and predict any potential impacts.
- 5. Impact Craters:** Asteroids have played a significant role in shaping the surfaces of planets and moons. When an asteroid collides with a celestial body, it creates a crater. Some of the largest impact craters on Earth and the Moon were formed by asteroid impacts.
- 6. Space Missions:** Scientists have sent spacecraft to study asteroids up close. Missions like NASA's OSIRIS-REx and Japan's Hayabusa2 have landed on asteroids, collected samples, and returned them to Earth. These missions help us learn more about the composition and history of asteroids.
- 7. Name Origins:** Many asteroids are named after famous scientists, artists, and historical figures. For example, there's an asteroid named after the famous composer Ludwig van Beethoven (Asteroid 1815 Beethoven) and another named after the astronomer Carl Sagan (Asteroid 2709 Sagan).