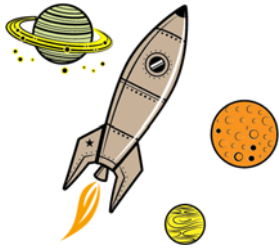


The Center of Solar System



The Sun is the star at the center of our solar system, and it provides the light and heat that make life on Earth possible. It is made mostly of hydrogen and helium gases. Deep inside, the Sun produces energy through a process called nuclear fusion, where hydrogen atoms combine to form helium, releasing enormous amounts of energy. This energy travels outward and reaches Earth as sunlight, which plants use for photosynthesis.

The Sun is so massive that its gravity holds the planets, moons, asteroids, and comets in orbit around it. Without the Sun, our solar system would fly apart into space. Even though it looks small in the sky, the Sun is about 109 times wider than Earth and so bright that we cannot safely look directly at it with our eyes. Scientists study the Sun to better understand space weather, solar flares, and how stars work.

1. What gases make up most of the Sun?
2. What process in the Sun's core creates energy?
3. Why is the Sun important for life on Earth?
4. How does the Sun's gravity affect the solar system?
5. Why should people never look directly at the Sun?
6. About how many times wider is the Sun compared to Earth?
7. What do scientists study about the Sun to learn more about space?