

Solar system fact sheet

Here's a fact sheet about our Solar System:

1. The Sun:

- Type: G-type main-sequence star (G2V)
- Mass: Approximately 1.989×10^{30} kg
- Diameter: About 1,391,000 kilometres
- Temperature: Around 5,500 degrees Celsius (9,932 degrees Fahrenheit)
- Composition: Mostly hydrogen and helium

2. Inner Planets (Terrestrial Planets):

- Mercury, Venus, Earth, Mars
- Characteristics: Rocky surfaces, smaller sizes compared to outer planets
- Earth is the only known planet with life.

3. Outer Planets (Gas Giants):

- Jupiter, Saturn, Uranus, Neptune
- Characteristics: Mostly composed of hydrogen and helium, with thick atmospheres
- Jupiter is the largest planet, and Saturn has prominent ring systems.

4. Dwarf Planets and Small Bodies:

- Pluto, Eris, Haumea, Makemake, Ceres, and many others.
- Characteristics: Smaller than traditional planets, located mostly in the Kuiper Belt and the asteroid belt.

5. Moons:

- Earth's Moon is the largest moon in the Solar System.
- Jupiter's moon Ganymede is the largest moon overall.

6. Asteroid Belt:

- Located between Mars and Jupiter.
- Contains numerous asteroids, including Ceres, the largest dwarf planet.

7. Kuiper Belt:

- Beyond Neptune's orbit.

- Contains dwarf planets like Pluto, Haumea, Makemake, and others.

8. Oort Cloud:

- Hypothetical region far beyond the Kuiper Belt, containing icy bodies.
- Source of long-period comets.

9. Comets:

- Icy bodies that develop tails when near the Sun.
- Examples include Halley's Comet.

10. Spacecraft:

- Voyager 1 and 2 have exited the Solar System and are in interstellar space.
- New Horizons provided close-up images of Pluto.

11. The Heliopause:

- Outer boundary of the heliosphere, where the solar wind meets the interstellar medium.

12. Kuiper Belt Objects (KBOs):

- Objects orbiting the Sun in the Kuiper Belt.
- Include Pluto and other small icy bodies.

13. Solar System Formation:

- Formed about 4.6 billion years ago from a rotating cloud of gas and dust.
- The Sun formed at the centre, and the remaining material formed planets and other celestial bodies.

14. Planetary Orbits:

- Planets orbit the Sun in elliptical paths.
- Kepler's laws describe the motion of planets.

15. Extrasolar Planets:

- Planets orbiting stars outside our Solar System.
- Thousands have been discovered by telescopes like Kepler.

16. Solar System Scale:

- The Solar System extends to the heliopause, roughly 120 astronomical units (AU) from the Sun.

This fact sheet provides an overview of the key components and characteristics of our Solar System