

SUMMARY

NCERT Class 6 Science Chapter 12: Beyond Earth

Overview

This chapter takes students on a journey into space, introducing the Sun, Moon, planets, and stars. Understanding basic astronomy helps build scientific curiosity and is useful in general science sections of competitive exams like UPSC, SSC, TNPSC, and school-level Olympiads.

Key Concepts

- **The Sky Above Us**

- The sky appears blue due to sunlight scattering.
- Sunrise and sunset timings vary throughout the year.
- At night, we see stars, planets, and the Moon.

- **The Sun Our Nearest Star**

- The Sun is a huge ball of hot gases and is the closest star to Earth.
- It gives us light and heat, enabling life on Earth.
- It rises in the east and sets in the west.
- The Sun causes day and night by Earth's rotation.

- **The Moon Earth's Natural Satellite**

- The Moon reflects sunlight it doesn't have its own light.
- It changes shape every night: New Moon Full Moon cycle (approx. 29.5 days).
- The Moon has no air or water, so no life exists there.
- Craters and dust cover its surface.

- **The Stars**

- Stars are hot glowing gases, very far away.
- They appear tiny because of distance.
- They twinkle due to atmospheric disturbance.
- Our Sun is a star the only one close enough to appear big and bright.

- **The Planets**

- Planets revolve around the Sun in fixed paths called orbits.

- Planets do not emit light they reflect the Sun's light.
- Our solar system has 8 planets:
 - Mercury
 - Venus
 - Earth
 - Mars
 - Jupiter
 - Saturn
 - Uranus
 - Neptune
- Mnemonic: My Very Educated Mother Just Served Us Noodles
- **Other Celestial Objects**
 - Comets: Made of ice and dust, have glowing tails, appear occasionally.
 - Asteroids: Rocky bodies mainly between Mars and Jupiter.
 - Meteors: Also called shooting stars, they burn up in Earth's atmosphere.
- **Earth Our Unique Planet**
 - Earth supports life due to water, air, and ideal temperature.
 - It rotates on its axis (causes day and night) and revolves around the Sun (causes seasons).
 - Has one Moon.
- **Space Exploration**
 - Scientists use rockets, satellites, and telescopes to study space.
 - India's space agency: ISRO
 - Famous Indian astronauts: Rakesh Sharma, Kalpana Chawla, Sunita Williams

Application-Based Questions Competitive Exams Focus

- **Frequently Asked Concepts:**
 - Moon phases and revolution cycle
 - Sun's role in day/night and life
 - Order of planets in the solar system
 - Differences: stars vs planets vs moons
 - Space science basics (ISRO, astronauts, satellites)
- **Useful for:**

- UPSC/CSAT: General science (space astronomy)
 - SSC, TNPSC, RRB: Solar system and celestial bodies
 - Olympiads & School Quizzes: Space facts and planetary order
 - State Exams: Basics of astronomy and space missions
-

Source: NCERT Class 6 Science Chapter 12

Get NCERT Class 6 Science Textbook PDF (202526 Curiosity): [Click Here](#)