

Nova's Guide to the Solar System

Learning objective: To describe the movement of the Earth and other planets relative to the Sun in the solar system.

Use this writing frame to help Nova the owl explain how our solar system works. Think about the order of the planets and the orbits that keep them in place.

As Nova the barn owl gazes up at the night sky, she observes that the Sun, Earth, and other planets are spherical bodies that exist within the vast expanse of space.

Word bank: orbit · spherical · gravitational pull · axis · rotate · consequently · furthermore · in addition to · stationary

1. The Sun at the Centre: Describe the Sun's position in our solar system and explain why the planets remain in their orbits. Start with: The Sun is a star located at the centre of our solar system... (3 marks)

2. Planetary Motion: Explain the difference between how a planet rotates on its axis and how it orbits the Sun. Start with: Each planet follows a specific path called an orbit, while simultaneously... (3 marks)

3. Earth's Journey: How does the Earth's rotation on its axis create day and night? Start with: Earth completes one full rotation on its axis every 24 hours, which results in... (2 marks)

4. Comparing Planets: Pick two planets and compare their distance from the Sun or their size. Start with: When comparing planets, it is interesting to note that... (2 marks)

5. Conclusion: Summarise why the Sun is vital for life on Earth. Start with: In conclusion, the Sun is essential for life because... (2 marks)

Extension challenge: Research the length of a 'year' on a different planet, such as Mars or Neptune. Write a short paragraph explaining why their years are longer or shorter than an Earth year.