Nova’s Galactic Guide: A Journey Through Our Solar System

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

Use this writing frame to help Nova the owl explain how our solar system works. Ensure you use scientific terms like 'orbit', 'axis', and 'spherical'.

High above the Earth, Nova watches the night sky and marvels at the vast, organised dance of the planets orbiting the Sun.

Word bank: orbit · axis · spherical · rotation · gravitational pull · consequently · furthermore · simultaneously · in addition

1. The Sun and the Planets: Describe the position of the Sun and name the planets that orbit it. Start your sentence with: At the centre of our solar system lies... (3 marks)

2. The Earth's Rotation: Explain why we experience day and night. Start your sentence with: The Earth rotates on its axis, which means... (3 marks)

3. The Earth's Orbit: How long does it take for the Earth to travel around the Sun? Start your sentence with: It takes approximately 365 days for the Earth to complete one full orbit, which... (2 marks)

4. Planetary Shapes: What do all the planets in our solar system have in common regarding their shape? Start your sentence with: Scientists have discovered that all planets in our solar system are... (2 marks)

5. Gravity's Role: Why do the planets stay in their orbits? Start your sentence with: The Sun’s immense gravitational pull ensures that... (3 marks)

Extension challenge: Research one other planet in our solar system and write a short paragraph comparing its orbit length to Earth's. Why do you think planets further from the Sun take longer to orbit?