

Nova's Solar System Fact-File

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

Join Nova the barn owl on an astronomical mission! Use your science knowledge to complete this fact-file about a planet in our solar system. You will need to describe its position, its movement, and any unique features it possesses.

Word bank: orbit · axis · rotation · spherical · gravity · planet · solar system · Sun

1. Planet Profile: Name the planet you have chosen and describe its position in relation to the Sun. How far is it from the centre of our solar system? (2 marks)

2. Orbital Journey: Explain how long it takes for your chosen planet to complete one full orbit around the Sun. Does this take longer or shorter than an Earth year? (2 marks)

3. Day and Night: Describe the planet's rotation on its axis. How does this movement create the cycle of day and night on that planet? (2 marks)

4. Gravity and Shape: Why are planets like the one you have chosen spherical in shape? Use the word 'gravity' in your explanation. (2 marks)

5. Nova's Extra Fact: Identify one unique feature of this planet (such as its atmosphere, rings, or temperature) that makes it different from Earth. (2 marks)

Extension challenge: Imagine you are a space traveller landing on this planet. Write a short journal entry (4-5 sentences) describing what you see when you look up at the sky.